Open Scholarship of Teaching and Learning
osotl.org
ISSN 2752-4116

2026, Vol. 5(2) 184-207
© The Author(s)

An open pedagogy partnership to challenge the hidden curriculum in an undergraduate research classroom

Andjela H. Kaur[1] and Jennifer Jarson[1]

Abstract

This paper examines how open pedagogy can challenge the hidden curriculum in undergraduate research classrooms. The hidden curriculum teaches unspoken lessons about power, knowledge, and social norms through institutional practices that shape how students understand research and inquiry. Undergraduate research classrooms are critical sites where the hidden curriculum's implicit lessons are present and must be addressed. Librarian-faculty partnerships can develop strategies to make visible the tacit knowledge systems typically hidden from undergraduate researchers. This paper shows how open pedagogy enables a learning environment in which the implicit lessons become visible through redesigning the physical classroom space, reframing classroom behaviors, and restructuring the course with an open syllabus and guided journals. These strategies are rooted in transparency, student agency, and collaborative knowledge creation and are highly transferable to a variety of teaching and learning contexts.

Keywords

hidden curriculum, undergraduate research, open pedagogy, open syllabus

[1] Penn State University, Pennsylvania, USA

Corresponding Author:

Andjela H. Kaur, College of Health and Human Development, Penn State University, Lehigh Valley, 2809 Saucon Valley Rd., Center Valley, PA 18034

Email: avk6433@psu.edu

Introduction

The hidden curriculum constitutes a significant dimension of educational experience that operates beyond the formal instructional program. It encompasses the implicit lessons and values that schools transmit through their social organization, institutional practices, and everyday interactions within educational settings (Bowles & Gintis, 1976, 2002; Eisner, 2002; Koutsouris et al., 2021).

In the United States, many undergraduate programs require students to complete at least one course focused on research skills. These courses usually review the major research methodologies and often require students to design and carry out a small-scale research project of their own. Such courses are not confined to laboratory settings, to research-intensive disciplines, or to the final year of study. In his influential report on high-impact educational practices, Kuh (2008) identified undergraduate research (UR) as one of ten practices associated with deeper learning and greater student engagement. He observed that, although research experiences had been most prominent in the sciences, colleges and universities were increasingly offering them in all disciplines. The aim of undergraduate research courses, as Kuh described it, is to give students direct experience with open and contested questions, empirical observation, current research technologies, and the excitement of working toward answers that matter. Kuh also recommended that every student take part in at least two high-impact practices: one early in college and one later, within the major. Consistent with this recommendation, research methods courses in the United States now appear across the social sciences, health sciences, humanities, and professional programs, and students may take them as early as their first or second year.

Participation, however, remains uneven. Kuh (2008) found that first-generation students and students of color were less likely to take part in high-impact practices, even though these students often gained the most when they did. More recent data suggest that the gap persists. In one national survey, 42.7% of recent college graduates reported taking part in UR, either through a course-based project or a mentored experience. Only 23% of seniors responding to the 2020 National Survey of Student Engagement reported doing so (Miller et al., 2025).

As a field in pedagogical research itself, UR also recently entered a new phase in the United States. Nath (2026) notes that several decades of evidence have shown that engagement in undergraduate research strengthens student learning, persistence, professional identity, and readiness for graduate study and employment. As a result, the central question is no longer whether it benefits students, but how institutions can sustain high-quality research experiences for all of them. As UR has become embedded across institutions and disciplines, it has developed into what Nath calls a "UR ecosystem" which is “the interconnected educational, organizational, and institutional elements that collectively support students, faculty, and administrators in creating, sustaining, and evaluating authentic UR experiences” (Nath, 2026, p. 5).

Given its important position in the ‘ecosystem’ of knowledge production, the undergraduate research classroom can be understood as a particularly significant site for teaching the hidden curriculum’s lessons. In it, students come not only to learn from research done by others, but also actively participate in the process of knowledge production, and in this process must often navigate a hidden curriculum of unstated norms and expectations, which can reinforce existing inequities in who benefits from

research experiences (Haeger et al., 2018; Miller et al., 2025). As the producers of new knowledge, students put in practice both the lessons from the explicit and the implicit curriculum. One might thus say that the research classroom provides the space and the means not only for epistemic production but also for an institutionalization and enforcement of the hidden curriculum in higher education.

Our paper describes an attempt to uncover and challenge the hidden curriculum in an undergraduate research course co-taught by a disciplinary faculty member and a librarian at a large research university. Collaboration between disciplinary faculty and librarians is widely recognized as an important component of effective education in research skills and information literacy, bringing together complementary expertise in disciplinary knowledge, research practices, and information literacy (Association of College and Research Libraries [ACRL], 2016; ACRL, 2025). The literature offers myriad examples of instructional models through which librarians and faculty may work together to support students' development of research skills and information literacy, ranging in time of contact, depth of collaboration, and degree of integration into a course or curriculum (e.g., Bene & Murphy, 2022; Hoffman, et al., 2017; Mounce, 2010; Stöpel, et al., 2020). Our own collaboration evolved through several of these models. We began several years ago with the so-called ‘one-shot’ information literacy session, a typical form of collaboration at United States universities wherein a librarian visits the classroom once a semester to introduce students to the library and/or information resources that relate to their research activities. In subsequent iterations of the same course, we moved to a two-session instruction sequence during which the librarian taught basic and advanced information-seeking skills. Next, our collaboration grew into an embedded librarian model for half of the semester, and ultimately to this co-taught semester-long course.

Throughout our planning process and the initial iterations of our collaboration, it became increasingly apparent that the disciplinary faculty and librarian brought complementary perspectives to examining the hidden curriculum of higher education and, more specifically, undergraduate research. Faculty bring knowledge of the disciplinary conventions and expectations that shape research within a field. Librarians encounter students across disciplinary and institutional contexts as they navigate information systems and research processes, providing insight into recurring challenges and assumptions in undergraduate research that may be less visible within a single disciplinary context (Hensley & Davis-Kahl, 2017; Hensley et al., 2023). This cross-disciplinary perspective can illuminate research practices and information-related expectations that students are often expected to acquire without explicit instruction. Bringing these perspectives together allowed us to identify the tacit knowledge, assumptions, and practices embedded in the course and to consider how they might be made visible to students. In this sense, our collaboration enabled us to examine not only what students were asked to learn, but also the often-unspoken ways of knowing, researching, and creating knowledge that underlie those expectations.

The growing depth of our partnership reflects our evolving understanding of the collaborative, sustained, and integrated instructional effort required to make the hidden curriculum visible as well as the degree to which the hidden curriculum in the undergraduate research classroom is centered around information practices. As a librarian-instructor team, we approached this task from the intellectual traditions in research and information literacy pedagogy, biobehavioral research methodology, and the scholarship on teaching and learning. Through this iterative process, we developed

pedagogical strategies that explicitly name and demystify the tacit knowledge systems that often remain invisible to undergraduate students navigating their first sustained research experiences.

In what follows, we examine the literature on the hidden curriculum and its implications for undergraduate research. We consider how open pedagogy's commitments to transparency, collaboration, and student agency can disrupt these implicit lessons. Drawing on a semester-long co-taught course, we describe a set of pedagogical interventions designed to make the hidden curriculum visible. Finally, we consider the implications of this approach and offer practical recommendations for educators seeking to foster more transparent and equitable research learning environments.

Hidden curriculum

Eisner (2002) provides a foundational framework for conceptualizing curriculum; he asserts that schools provide three curricula: explicit, implicit, and null. The explicit curriculum consists of published goals and objectives that schools “offer” and “are prepared to provide” to students (p. 88). The null curriculum refers to what is not taught but nonetheless affects students. While the null curriculum limits curiosity and personal abilities of individual students, the implicit curriculum “socializes students to values” that are a part of the structure of the classroom and school (p. 88). Furthermore, it prepares students for the world, especially the world of work, by training them in behavioral and intellectual compliance through reproducing institutional landscapes that mirror and reinforce broader societal power dynamics. Eisner explains “Schools prepare most people for positions and content that in many respects are quite similar to what they experienced in schools as students: hierarchical organization, one-way communication, routing - in short, compliance to purposes set by another” (p. 91). These implicit lessons, or “unpublicized features of school life” (Jackson, 1968, p. 17), become internalized as common sense rather than recognized as particular ways of organizing social life (Jackson, 1968).

Literature on the hidden curriculum dates back for decades. The investigations of the phenomenon come from many disciplines and the findings are diverse. Today, it may even be possible to speak of a vibrant scholarly landscape in a field of hidden curriculum studies. A bibliometric study (Nuryana et al., 2023) analyzed 285 peer-reviewed articles on hidden curriculum research from 1980-2020 using the Scopus database. Publications grew from 34 documents annually in the 1980-2005 period to 33 documents in 2019 alone, indicating increasing scholarly interest. The study pointed to several different mechanisms through which implicit educational messages are transmitted within schools. First, school relationships encompass the interactions among teachers, students, and organizational structures that function as “a microcosm of the social value system” (p. 3), reflecting broader societal power dynamics and hierarchical arrangements. Second, socialization processes include both formal and informal activities—such as extracurricular programs, peer interactions, and school culture—that “contribute to the maintenance of the class structure” (p. 4) by shaping students' understanding of social roles and expectations. Third, intentional differences categorized as ‘hidden’ represent deliberate but unstated choices by educators or institutions to emphasize certain values or messages without explicitly including them in the formal curriculum. These mechanisms often produce “unintended outcomes, which are sometimes not anticipated by curriculum developers” (p. 4), meaning that while some aspects may be consciously

designed, many effects occur without explicit planning yet still systematically influence student attitudes, behaviors, and future social positioning. By bringing these implicit processes into conscious awareness, educators can better align their teaching practices with their stated values and create more equitable learning environments (Nuryana et al., 2023).

While many scholars agree that the hidden curriculum exists, they offer divergent interpretations of its role and impact. Those who advocate for the benefits of the hidden curriculum, contend that learning to work within hierarchical structures, meet deadlines, compete respectfully, and accept institutional authority represents valuable preparation for 'real world' conditions, and thus offers to students much more than mere ideological indoctrination. Drawing on the philosophy of education put forth by early twentieth-century sociologist Emile Durkheim, an early proponent of the benefits of the hidden curriculum, Dreeben (1968) argues that it is through schooling that "pupils learn to accept principles of conduct, or social norms, and to act according to them" (p. 44), and therefore learn to accept authority and rules needed to navigate a hierarchical system of the workplace. While through schooling students become better prepared for the world they live in, they also uphold the "occupational and political institutions [which] would be less viable if they lacked the requisite human resources; specifically, large numbers of persons possessing capacities that enable them to cope with the requirements of participating in these institutions" (p. 93). This view makes obvious the impetus of the hidden curriculum to align the experience, and perhaps the purpose, of schooling with the experience of life as it is enabled by the existing labor relations.

More recent proponents treat the hidden curriculum as a useful pedagogical tool. They argue that removing all structure, authority, and competition from educational settings would leave students poorly prepared for the realities of their careers and civic lives, and could disadvantage them in competitive environments. The most developed version of this argument comes from the health professions, where the hidden curriculum has been studied most closely and where scholars have begun to emphasize its benefits alongside its harms. In a scoping review of the positive influences of the hidden curriculum on medical students, Meyer et al. (2025) identified role-modelling, supportive team environments, institutional culture, and the experience of navigating ambiguity as means by which students are socialized into the norms, values, and survival strategies of their profession. Similarly, in scoping review, Parra Larrotta et al. (2025) found that nearly all the 29 studies they reviewed reported at least one positive outcome of the hidden curriculum, most often professional identity formation, ethical development, and empathy. Students in these studies reported that the formal curriculum alone had not prepared them for the demands of clinical work. Howick et al. (2024) went further, proposing that educators deliberately design an "empathic hidden curriculum" (p. 526) rather than leave its lessons to chance, and Brown et al. (2020) found that the hidden curriculum generally supported students' professional identity formation. Even negative clinical experiences could strengthen that identity when students were given tools to reflect on them. The authors argue that educators cannot, and perhaps should not, shelter students from the realities of practice, and should instead equip them to interpret those realities constructively. Yet even this literature acknowledges costs. Parra Larrotta et al. (2025) found that more than half of the studies they reviewed also documented harms, including reinforced hierarchy, emotional detachment, and conflict between the values taught and the values modeled. Mackin et al. (2019) found that only a minority of

trainees described the hidden curriculum's influence on their professional development as positive.

Narayanan (2009) extends the case for intentional socialization beyond the classroom, arguing that academia–industry partnerships strengthen higher education institutions by enhancing teaching, research, and student outcomes through shared resources, real-world applications, and curriculum development. In this model, the "curriculum as a whole is structured to enhance the profile of a student and provide the necessary fundamentals so that the student is able to meet the challenges of the workplace and in a larger context, contribute to the society" (Narayanan, 2009, p. 343). While Narayanan seemingly makes the hidden curriculum explicit and proposes to align it with the formal curriculum, what remains unspoken in this account of mutually beneficial classroom–workplace partnerships is that the success of the joint venture depends largely on students' cooperative embrace of their role in this coproduction of knowledge, and of the hierarchies of power in the societies they inhabit.

Authors who regard the hidden curriculum as an impediment to quality education view it as a mechanism of social control. These scholars examine how the organizational structure of educational institutions reinforces hierarchical relationships. In hierarchically organized schools, students occupy the bottom rung of the ladder and are expected to behave accordingly, often completing tasks that hold no intrinsic meaning for them but are required in order to "cope with school successfully" (Eisner, 2002, p. 90). As students internalize these hierarchies through their daily educational experiences, they are prepared to accept similar power dynamics in their future workplaces and social roles. In their broad analysis of the United States (US) education system, Bowles and Gintis (1976, 2002) examine the relationship between school and workplace and argue that "educational institutions reflect and reinforce the hierarchical divisions of labor in capitalist society" (Bowles & Gintis, 1976, p. 203). Consequently, the hidden curriculum teaches students to comply with hierarchical structures like those found in the workplace. Schools accomplish this by structuring social interactions and individual rewards to replicate the environment of a firm, and "by socializing people to function well, and without complaint, in the hierarchical structure of the modern corporation" (Bowles & Gintis, 2002, p. 1).

Additionally, scholarship has shown that the hidden curriculum operates not only through institutional structure but also through everyday practices that students actively interpret. Portelli (1993) traced the many meanings attached to the term and argued that what counts as ‘hidden’ depends on who is looking, so that exposing the hidden curriculum is itself a necessary part of educators' work. Sambell and McDowell (1998) found that assessment is a particularly powerful carrier of hidden messages. Students reinterpret even innovative assessments designed to encourage deep learning through the lens of their earlier experiences of schooling, so that the lessons they actually take away can differ sharply from those their instructors intended.

The historic tension between supporters and critics highlights a crucial challenge for educators. While the explicit curriculum may provide necessary content knowledge and promote the innovative and critical thinking skills that industry demands, the tacit lessons of the hidden curriculum can undermine those very goals. Moreover, the unspoken teaching of uncritical obedience erodes a fundamental purpose of education: to prepare students for the world, not just the workplace. Biesta (2009) makes this case in

arguing that education serves three interrelated functions: qualification, or the acquisition of knowledge and skills; socialization, or induction into existing social and professional orders; and subjectification, or students' development as independent persons capable of acting on, and not merely within, those orders. He warns that an age of measurement has narrowed attention to what can easily be counted, crowding out the question of what education is for. A hidden curriculum that rewards compliance serves socialization at the expense of subjectification, and thus at the expense of the critical, engaged citizenship that higher education claims to cultivate.

Understanding the hidden curriculum empowers both instructors and students to critically examine the unspoken messages embedded in educational structures and to co-create intentional and transformative educational experiences (Nuryana et al., 2023). Orón Semper and Blasco (2018) argue that the hidden curriculum cannot simply be eliminated. Instead, it becomes visible when educators attend not only to what students are doing but to who they are becoming, a process grounded in the teacher–student relationship. Tolman (2013) points to one practical route: sharing power with students through genuine collaboration in decisions about how learning is structured and assessed, so that the hierarchies of the classroom become something students and instructors examine and negotiate together rather than an order students must silently accept.

But the lessons of the hidden curriculum may reach further than the workplace. Beyond training students for the labor market, the hidden curriculum may serve as a mechanism of social reproduction, preparing students for predetermined positions within larger economic structures. Apple (2004) suggests that educational environments socialize students into identities aligned with market demands rather than with critical citizenship. In this view, the hidden curriculum predominantly serves hegemonic interests, preparing students for their predetermined roles in society while maintaining structural inequalities. Because the hidden curriculum communicates the rules of civic engagement in university environments and in economic life without stating them, it also determines who is able to learn those rules at all. Byrne (2022) shows how sharply this sorting can fall along lines of disability. Students with autism, he argues, often experience the unwritten social expectations of higher education as a "social unknown" (p. 144): implicit norms governing seminar participation, group work, and interactions with faculty that other students absorb without instruction but that are never made explicit to those who do not intuit them. As a result, students with autism may be disadvantaged not by the academic content of their courses but by a curriculum no one acknowledges teaching. Byrne's analysis suggests that the hidden curriculum reproduces inequality not only by preparing students for different positions but by quietly defining which students count as capable of succeeding in the first place.

Further, the hidden curriculum often communicates the rules of civic engagement in university environments and economic life. For example, Harper and Hurtado (2007) document how campus racial climates communicate messages about belonging that disproportionately impact minoritized students. Their study demonstrated the disconnect between official institutional values and the lived experiences of students. The authors term this disconnect as “institutional negligence” (p. 16)—while universities publicly espouse diversity commitments, they provide no structured guidance for cross-racial engagement. This negligence teaches students that despite official rhetoric, meaningful racial dialogue is not actually prioritized. Similarly, Thomson (2011) shows how hidden

curriculum in STEM disciplines contributes to gender disparities, with institutional cultures often implicitly signaling that women are less suited for these fields. The same could be said for minorities (Sheikh et al., 2023). Due to a “general social agreement not to see” it (p. 2), higher education institutions covertly transmit dominant cultural values, reinforcing existing social hierarchies and power structures (Margolis et al., 2001).

While this insidious process operates through seemingly neutral academic practices that reward compliance, normalize competitive individualism, and naturalize hierarchical authority structures—all while presenting these workplace values as objective educational standards rather than as contested ideological constructs serving particular interests—some authors highlight its potential to transform the classroom and a society. Cotton et al. (2013) suggest that awareness of hidden curriculum can empower both educators and students to challenge institutional norms and foster critical consciousness. In their more recent work, Bowles and Gintis (2002) have updated their analysis of hidden curriculum, acknowledging that while schools reproduce inequality, they are also sites of contradiction and potential transformation. Their study challenges conventional assumptions about meritocracy in higher education by suggesting that educational credentials may function more as markers of social conformity and workplace readiness than indicators of enhanced intellectual capacity. This distinction opens up a space to raise awareness about the hidden curriculum and outlines a promising way out of its grip.

Consensus vs conflict in higher education undergraduate research classroom

Any attempt at critical engagement with the role and impact of the hidden curriculum must include a closer examination of the notions of consensus and conflict and the ways they play out in education. The tension between the two concepts is evident in the literature and reflects the debate whether schools primarily function to maintain existing social and economic structures through student compliance, or whether they can serve as sites of critical engagement where students develop the capacity to challenge and transform these very systems (Apple, 2012; Bernstein, 2000; Bourdieu & Passeron, 1990; Bowles & Gintis, 1976; Giroux, 2020; Margolis et al., 2001). This dichotomy is important because it sets conditions for the advancement or discouragement of student epistemic agency. If students come to school in order to quietly comply with the demands of the work a professor sets for them, their engagement with knowledge production is, at best, limited by the professor's demands and, at worst, alienates them from the very product of their epistemic labor. If students attend schools in order to develop their capacity to think critically, their curiosity and agency may mature as well, but they may also detest the discomfort that comes with thinking about or experiencing a conflict. In either case, students engage with information availed by the explicit, implicit, and null curricula, though the epistemic outcomes of the process are rather different. Namely, their effort either reproduces the hierarchies that have diminished their own agency, both as students and as future workers, or it poses a challenge to the existing epistemic and social hierarchy they are a part of. Examining how the hidden curriculum functions within research pedagogy, we can better understand how educational institutions simultaneously claim to foster critical thinking while systematically undermining the conditions necessary for genuine intellectual autonomy and collaborative knowledge production.

Given the increasing inclusion of UR at the universities in the US, the tension between consensus and conflict is evident also evident in undergraduate research classrooms, where the hidden curriculum not only shapes student behavior but sometimes actively misrepresents the very process of knowledge creation. The hidden curriculum in research classrooms creates a learning environment characterized by several problematic features. First, a rigid emphasis on procedural knowledge and formulaic approaches to research gives more value to methodological conformity than intellectual curiosity or creative inquiry. Such practices reinforce the false notion that there exists only one legitimate approach to creating new knowledge, rather than acknowledging the diverse, conflicted, and power-laden nature of knowledge construction (Apple, 2013). This misguided approach creates what Apple (2004) identifies as an "ideology of consensus" (p. 22). In essence, ideology of consensus masks the inherently conflictual nature of epistemic creation and portrays it as an emotionally and intellectually neutral process. The ideology of consensus thus successfully obscures the view on the epistemic enterprise as a contested terrain shaped by diverse interests and perspectives. Overall, rather than preparing students for authentic scholarly engagement, these environments often reduce complex, contested epistemic processes to formulaic procedures that mask the inherently collaborative and conflictual nature of research (Apple, 2004, 2013; Chinn & Malhotra, 2002; Windschitl et al., 2008).

Second, evaluative structures reward students who successfully reproduce established knowledge paradigms while penalizing those who challenge dominant perspectives or introduce alternative epistemologies. Through grading systems that distinguish 'winners' from 'losers', students internalize competitive individualism and learn to accept their position within established hierarchies. The process extends beyond academic content to encompass behavioral training in punctuality, deference to authority, and tolerance for routine tasks that may lack inherent meaning—all essential qualities for obedient future workers. Classroom power dynamics position instructors as unquestionable authorities whose evaluative judgment separates winners from losers, thereby reinforcing the illusion that knowledge production constitutes a unidirectional and consensual process. Students, on the other hand, from the position of less power, often internalize competitive individualism, viewing peers as rivals rather than collaborators in the knowledge-creation process.

Lastly, student-researchers exhibit specific behaviors that reflect the pervasive influence of the hidden curriculum in higher education. Students learn to prioritize following rules over critical engagement, demonstrating dutiful compliance with instructor demands without questioning underlying assumptions or power dynamics at play in research classrooms; as Eisner (2002) put it, classrooms are primarily teaching students "to provide the teacher with what the teacher wants or expects" (p. 89). Additionally, students frequently practice hierarchical deference to authority, seeking instructor validation and approval rather than trusting their own intellectual judgment. These behaviors effectively train them to function within top-down workplace management structures in which autonomous critical thinking faces discouragement, if not outright punishment (Bowles & Gintis, 1976, 2002). As Gintis and Bowles (2002) empirically showed, foregrounding compliant behaviors results in limiting students' mobility in labor markets.

In response to this literature, we conclude that research classrooms require fostering the inverse of the ideology of consensus, the opposite of the top-down evaluative practices, and an anti-dote to dutiful student-worker behaviors. Critical engagement throughout

epistemic production requires that students question assumptions and challenge power dynamics while actively contributing their perspectives to knowledge construction. Collaborative learning promotes resource and insight sharing, with students viewing peers as co-investigators rather than competitors in a zero-sum environment (Tolman, 2013). Intellectual autonomy develops student confidence in their judgments while encouraging engagement with authority based on substantive reasoning rather than hierarchical position. Discursive conflict may result in a consensus, but it may not. Research classrooms, thus, must represent learning environments that foreground exploratory inquiry, emphasize multiple pathways to knowledge, and reward intellectual risk-taking rather than mere methodological conformity. Inclusive evaluation systems that recognize diverse forms of excellence and validate alternative epistemologies that challenge or expand dominant perspectives must also be in place. Democratic group dynamics should be developed to facilitate the co-construction of knowledge through dialogue that acknowledges the contested nature of academic discourse and invites multiple voices into the conversation. These pedagogical interventions require theoretical foundations and systematic frameworks to effectively challenge the entrenched patterns of the hidden curriculum that continue to shape student behavior and institutional culture in higher education research contexts. Open pedagogy may offer such a theoretical framework for these transformative approaches and environments.

Open pedagogy

Open pedagogy emerges from a rich educational tradition that spans progressive, democratic, and critical pedagogical movements. Its intellectual lineage traces throughout John Dewey's progressive education philosophy (1899, 1916) which championed accessible and democratic learning in early 20th-century America. Drawing on Dewey, the Open Classroom Movement of the 1960s-70s emphasized student choice and exploration (Cuban, 2004; Kohl, 1969). Further, Paulo Freire's critical pedagogy positioned learners as co-creators rather than passive recipients of knowledge (Freire, 2000). In contemporary contexts, these learner-centered principles have evolved to encompass open educational resources (OER), democratizing access to knowledge and empowering learners to actively engage with freely available educational materials. This evolution reflects both technological advancement and pedagogical innovation, creating new possibilities for collaborative knowledge creation.

Drawing from Clinton-Lisell's (2021) systematic review and DeRosa and Jhangiani's (2017) foundational work, open pedagogy can be understood as both “an access-oriented commitment to learner-driven education and as a process of designing architectures and using tools for learning that enable students to shape the public knowledge commons of which they are a part” (DeRosa & Jhangiani, 2017, para. 14). Building on this theoretical background and enlivening the spirit of progressive education, we designed our own working definition of open pedagogy to guide our collaborative work in undergraduate research class.

Open pedagogy is a broad term for the theory and practice of democratic and inclusive teaching and learning which foregrounds epistemic egalitarianism through deliberate transparency, learner empowerment, and collective process. It prioritizes exploratory inquiry and uncovers multiple pathways to knowledge creation.

In our view, open pedagogy positions students to participate in shaping their educational experience. In an undergraduate research classroom, it makes visible the hidden

curriculum of institutionalized knowledge production. Consequently, open pedagogy enables students to design research projects that elevate their own interests and experiences. As a pedagogical philosophy that emphasizes transparency, accessibility, and collaborative knowledge creation, open pedagogy aligns with the goals of fostering critical engagement, collaborative learning, and intellectual autonomy while providing the structural foundation necessary to sustain educational practices that challenge traditional hierarchies and expand epistemological boundaries.

Our challenge to hidden curriculum with open pedagogy

We implemented open pedagogy in an upper division undergraduate course with third- and fourth-year students that met weekly for 15 weeks. The course focused on both teaching and learning about the US foster care system and gaining research skills. In our planning sessions and during class sessions, we referred to the first component as the content-knowledge and the latter as the process-knowledge. Over 15 weeks, the class worked toward the final product, which brought together the two foci of the course: through an iterative approach, each student was expected to develop a well-rounded problem statement and generate meaningful research questions inspired by the content-knowledge. The description of the final product did not call for any length requirements; it did not prescribe any steps or checklists about the research process; and it did not offer a list of possible topics.

Instead, in the first class session, we described our views on the significance of revealing the hidden curriculum in higher education, the importance of intellectual risk-taking, and the value of open pedagogy. As the core text for the course, we assigned the second season of the podcast *This Land: How a String of Custody Battles over Native Children Became a Federal Lawsuit that Threatens Everything from Tribal Sovereignty to Civil Rights* (Nagle, 2021). Lastly, we emphasized the power of multidisciplinary perspectives to broaden any research inquiry and suggested that, as they developed their research problems, students would benefit from seeking out a wide variety of sources. During the first class meeting, we also made our plan to challenge the hidden curriculum in this course transparent to students. We explained that we intended to do this through three broad components: redesigning the physical classroom space; intentionally challenging classroom behaviors enforced by the hidden curriculum; and structuring the course with pedagogical tools that work in favor of collectivistic knowledge production and against procedural technicalities.

Redesigning the physical classroom space

Classrooms in higher education are powerful sites for enforcing institutional hierarchies, shaping not only how knowledge is transmitted but also who holds authority in the learning process. The top-down organization is obvious in the physical environment as well, since “buildings that we build do at least two things: they express the values we cherish and once built, they reinforce those values” (Eisner, 2002, p. 97). The ways most classrooms are designed (with tables and chairs arranged in rows and facing forward) show that schools value efficiency and explicit instruction more than anything else. Rather than maintaining the conventional forward-facing rows that position the instructor as the singular authority, we arranged seating so that we could all sit around a single central space, physically representing the equal importance of all voices in our knowledge-building community. This configuration eliminated the ‘front’ of the classroom, destabilizing the instructor's privileged position and creating a shared focus

that communicated our belief that the research process involves collaborative inquiry rather than solely following a single prescribed method of inquiry. In other words, our classroom followed a configuration typical of active learning classrooms (ALCs), which are designed without a fixed front of the room (Brooks, 2012; Baepler et al., 2016). Removing this focal point destabilized the instructor's privileged position and created a shared focus, communicating our belief that research is a process of collaborative inquiry rather than adherence to a single prescribed method. By transforming the physical environment in this way and by discussing this transformation with students, we explicitly made visible and challenged the typically unspoken norms of academic hierarchy, creating a space that aligned with and reinforced our commitment to open pedagogy.

Challenging classroom behaviors enforced by hidden curriculum

Once situated in a more egalitarian physical space, we intentionally promoted anti-hidden curriculum behaviors that support students' development as researchers. For example, we insisted on a first-name basis. By using first names rather than formal titles, we sought to disrupt traditional status hierarchies that implicitly teach students to defer to credentialed authority rather than engage critically with ideas regardless of their source. This was consistent with what we observed, and it is supported in the literature. Terms of address carry meaning that students read closely. Graduate students have rated faculty addressed by first name as more approachable and helpful than those addressed by formal title (McDowell & Westman, 2005, as cited in Foster, 2023). Foster (2023) found that student evaluations were consistently higher across sixteen sections of the same course when the instructor asked to be called by her first name rather than "Dr." plus her last name. In a follow-up experiment, the same preference raised ratings overall, and students perceived instructors who used their first names as friendlier and less strict. Foster attributes these effects to the sense of psychological closeness between instructor and student. In research settings, naming is itself part of the hidden curriculum that undergraduate researchers must decode. Miller et al. (2025) recommend that faculty make the "name conversation" (p. 7) explicit and explain the reasoning behind their preference, so that students do not misread differences in naming practices as signs of favor or disfavor. Making this convention explicit blurs the boundary between ‘expert’ instructors and ‘novice’ students, creating a more authentic community of scholars with different but equally valuable perspectives.

At the same time, the freedom to relinquish a title is not equally distributed. Takiff et al. (2001, as cited in Foster, 2023) found that women professors who used "Dr." were perceived as less accessible than men who did, which places women faculty in a bind between being seen as high-status and being seen as approachable. In Foster's (2023) experiment, the penalty for using a formal title was largest for Black male instructors. Wu et al. (2024) found that a full professor who used a first name was perceived more favorably than a graduate assistant who did the same, suggesting that informality benefits most those whose authority is already secure. Students' own backgrounds matter as well: Miller et al. (2025) note that some students find addressing faculty by first name deeply uncomfortable because of the cultural norms they bring to the classroom. A first-name policy can therefore disrupt one hierarchy while leaving others intact, and it works best when instructors acknowledge this openly as part of making the hidden curriculum visible.

Further, we welcomed constant contact by deliberately making ourselves accessible outside scheduled class times through multiple communication channels. This

accessibility strategy challenged the hidden curriculum's implicit message that learning occurs only within designated institutional timeframes and spaces. By modeling openness to ongoing dialogue and multiplicity of ideas, we demonstrated that learning need not be confined to the limits of arbitrary academic schedules, university-designated spaces, and professional titles. Instead, we validated students' authority to initiate substantive conversations on their own time.

In student-initiated discussions, we positioned ourselves as interlocutors rather than assessors and we habitually deflected questions that would position instructors as gatekeepers of knowledge and managers of epistemic production. When students would ask “Can I do this? Is it okay if...?”, we encouraged them to experiment with possible answers without seeking instructor approval first. Such withholding of permission created space for authentic intellectual risk-taking and reinforced students' agency in determining their own research directions. This approach was, of course, situated within the particular context of our course: we were not working in a research environment in which health, safety, and related considerations required more directive authority. In contexts where such concerns are present, more didactic instruction may be both necessary and appropriate. Additionally, when engaging with students and our own ideas, we often used the think-aloud approach, a pedagogical strategy that makes instructors' thinking transparent to students. By uncovering the typically hidden intellectual work that produces scholarly outcomes, we were revealing the messy, non-linear nature of research inquiry; we demonstrated that productive struggle is an inherent part of knowledge construction (Kapur, 2016; Petersen & Kruse, 2023). Through exposing our own doubts, uncertainties, false starts, and reconsiderations, we challenged the hidden curriculum's misportrayal of academic expertise as an effortless quest for knowledge guaranteed to yield success.

These intentional disruptions of conventional classroom practices sought to create an environment where the invisible structures of academic hierarchy became obvious and contestable. Restructuring physical space, redefining instructor-student relationships, modeling authentic intellectual labor, and democratizing access to knowledge, allowed us to transform the classroom environment from a site of hierarchical reproduction into a space of collaborative inquiry.

Structuring the course

While spatial redesign and behavioral modifications set up the learning environment conducive to our aim to teach this course with the hidden curriculum in the open, we understood that the structural pillar of the course—the course syllabus—also needed to be reconstructed. In the US, the syllabus typically outlines the topics, materials, learning expectations for students, assignments, and grading and other relevant policies. Scholarly investigations of syllabi are increasingly common and reveal the need to critically examine these documents as artifacts that reflect instructor positionality and institutional values. Critical analyses of syllabi frequently expose Eurocentric perspectives through readings and materials that marginalize non-white, non-male voices, particularly in fields where white male authors have historically dominated the canon (Mattner, 2021). However, perspectives on how to address these issues vary considerably. Some scholars advocate for critical pedagogical approaches that empower students to interrogate syllabi themselves, viewing reflection as a metacognitive activity that challenges both students and instructors to question whose positions are reproduced and whose voices are centered (Mattner, 2021). In contrast, others emphasize

the instructor's responsibility to proactively redesign syllabi using equity-minded practices—such as demystifying academic norms, welcoming marginalized students, validating their ability to succeed, and representing diverse racial and ethnic experiences in course materials—before students ever encounter the document (USC Race and Equity Center, 2024). These divergent approaches reflect broader debates about whether syllabi should primarily serve as tools for student empowerment and dialogue or as pre-constructed instruments of institutional control.

In a scoping review, Gauthier et al. (2025) examined the conceptualization and utilization of course syllabi. Their identification of the multiple levels at which a syllabus operates (i.e., classroom, program, and institution) and the central functions it serves (teaching, learning, and administrative) points to its many uses as well as the tensions that are brought about by the interconnected nature of these uses and their different stakeholders. As a result, Gauthier et al. suggested the need for discussion on how to "effectively leverage this tool [...] to preserve faculty and student agency at the classroom level" (p. 15). Understanding these multifaceted functions provides essential context for why scholars increasingly advocate for critical examination of syllabi as sites where institutional power, pedagogical values, and student equity intersect. As these documents simultaneously reflect and shape power dynamics between instructors, students, and institutions, we introduced students to the open syllabus. We conceived of our open syllabus as an instrument for collaboration and collective engagement among students and instructors in order to center student agency and empowerment.

Open Syllabus

The term 'open syllabus' often refers to a project that collects and analyses publicly accessible syllabi to explore trends in assigned materials (Open Syllabus, n.d.). Yet the concept is also used in open pedagogy to point to the pedagogical design and implementation of the syllabus motivated by values and principles of open education. As such, the syllabus can be conceptualized as a site for collaboration in which students are invited to participate in order to promote student engagement and agency. For example, Nelson (2019) suggests starting a course with a proposed syllabus with initial learning objectives that is then completed through "collaborative syllabus writing" (para. 8). Gooblar (2019) describes this approach as the "blank syllabus" (p. 54), where students fill in course elements left blank intentionally—by selecting additional course readings, writing course policies, or designing course assignments. While these collaborative approaches share common ground in their commitment to student participation, they differ considerably in the degree of control transferred to students. Matusov (2025) offers his students a spectrum of syllabus options from which they can select the option that best aligns with their motivations for being in the course, including differentiated options for "open syllabus" and "opening syllabus" (p. E4) , Matusov conceptualizes the "open syllabus" as an option where "students can make *all* decisions about their own education--what to study, how to study, with whom to study, and when to study--including their final grade" [italics added] (p. E4). Matusov's "opening syllabus" shares characteristics with the aforementioned examples, wherein the instructor makes "initial decisions about the organization of the class and then gradually transfer[s] responsibility to the students" (p. E4-E5). This modified version aims to introduce an option in which students are engaged in some decision making but recognizes some students' desire for more support.

These different approaches to syllabus design reflect instructors' beliefs about who should control learning. Whether instructors redesign syllabi themselves, invite students to critique them, or give students decision-making power, each approach recognizes that syllabi shape power dynamics in the classroom. We conceived of our open syllabus as an instrument for collaboration and collective engagement among students and instructors from the very first class meeting. In our preliminary version of what would become an open syllabus, we made initial decisions about the organization and structure of the class to reflect our commitment to challenging the hidden curriculum; we also proposed assignments and course policies, and informed students about policies as mandated by the institution. Yet our preliminary syllabus was characterized by a high degree of adaptability and flexibility. We invited students to suggest changes to the elements of the syllabus that were in our control, with particular focus on course assignments.

In the first class meeting, for example, we facilitated an activity to invite students to determine the point value of each assignment. Students worked in pairs to review and discuss the information about the assignments that we had posted in our learning management system. Each pair then explained the assignment to the class, invited ideas on possible revisions, and proposed the point value for it. The class then discussed the proposals and collectively decided on the point value for each assignment. No revisions were suggested at that time, but everyone understood that changes to the syllabus could be brought up at any time during the semester consistent with our open approach and with the academic freedom that allows faculty in US higher education to modify their courses as they see fit. The open spirit of the syllabus and the course allowed us to co-construct with students the weight and value of that work. By assigning points to the assignments together, we aimed to plant the seed of student agency from the start.

The assignments we introduced were interconnected and evolved layers to help students work incrementally toward a final inquiry project. This process-based framework was intended to help support their independence in defining the what and how of their work. The open framework included space throughout the course for students to redesign assignments to align with their curiosity and their process. At the end of each class session, we allotted time for students to each rewrite their next assignment and design their own list of tasks for the following week. During this class activity, students were invited to share ideas about their planned steps and to elicit peer feedback on them. The self-designed assignments and task lists greatly varied from student to student, making it obvious that each was tailored to the needs of students' own process of developing their final projects, consistent with our open pedagogical approach. For example, in planning an early-stage assignment to pursue their general curiosity about the US foster care system, one student decided to focus on a film analysis, another decided to informally speak with distant family members who had some experience with adoption, and another planned to comb social media for first-person testimonies about biracial fostering. The variety of the assignments that students created with the input of the collective signaled to all that the production of knowledge is indeed a community effort and that uniformity is not expected but that differences can be appropriate and productive.

Guided Journals

While the open syllabus maximized flexibility and freedom for students to chart the course of their individual semester-long inquiry projects, we started our class meetings with discussion on the assigned episode of the 'core text' for the course: a freely available podcast, season two of *This Land: How a String of Custody Battles over Native Children*

Became a Federal Lawsuit that Threatens Everything from Tribal Sovereignty to Civil Rights (Nagle, 2021). In nine podcast episodes averaging 39 minutes per episode, journalist Rebecca Nagle investigates stories of fostering Native American children and the legal disputes leading up to the 2023 Supreme Court deliberations of the Indian Child Welfare Act (1978) that upheld the law. The in-depth, real-world stories and podcast format offered an accessible and compelling entry point into content-knowledge. The issues the podcast raised provided a foundation for lively group discussions on the core topics of the course.

Further, the podcast also aligned with our ambitions to teach research fundamentals and illuminate the research process. By progressively and iteratively developing a problem across a sequence of episodes, Nagle modeled what we were asking students to do with their own evolving assignments. Moreover, while presenting her findings, she often digressed in the descriptions of the research process that substantiated her investigative work. Her storytelling made obvious key research concepts, practices, and attitudes such as refining research questions, situating research questions in context, considering the position of the researcher and navigating ethical considerations, weighing and balancing sources, and more. The podcast, thus, served as a foundation on which students could scaffold their own inquiry. Further, the podcast reinforced open pedagogy in this course by making visible habits of inquiry that are so often invisible to students. Such transparency supported students' reflection on and development of their inquiry habits and practices with respect to their projects.

To further entice critical engagement with the information given in the podcast and encourage open classroom conversations, we developed a formative journal assignment for each episode. The wide use of reflective journals in teacher education programs suggests the utility of reflective journals as a mechanism to promote students' awareness and stimulate dialogue both internally for the student and between student and instructor (Lindroth, 2015). Further, a scoping literature review conducted by Lindroth (2015) indicated that some students may need instruction or support to reflect purposefully, while Whitver and Riesen (2019) emphasized that reflective writing should be structured intentionally and with direct instruction on how to reflect. Working in the context of research skills and the library instruction classroom, Whitver and Riesen (2019) further highlight the value of reflection writing as a way to promote metacognition about learning that facilitates transfer across contexts. Additionally, Moussa-Inaty (2015) saw improvement in the depth and quality of students' reflective writing after using reflection guiding questions, and Etscheidt et al. (2012) used a multileveled approach, with multiple and scaffolded opportunities for technical, deliberative, and critical reflection, to help students develop their reflective practice. Drawing on these insights, we designed our formative journal prompts to scaffold students' reflective thinking to guide students' attention to key aspects of each episode with the goal of building a framework for thinking critically about the podcast and its relationship to their own inquiry process.

We saw the journals as tools for moving students from information consumption to planning, monitoring, and regulating their production. We created two types of reflective prompts—'listening' and 'investigation'—to help students identify and interrogate the typically invisible norms and expectations of academic research. Listening prompts directed students' attention to key aspects of each episode. They focused on content, process, sources, and evaluation. For example, as a way to listen for process, one prompt asked, "What questions does the host ask (implicitly or explicitly) to introduce the story?"

This question was designed to help students recognize how journalists frame inquiry at the outset of an investigation, making visible the strategic questioning that drives research forward. Investigation prompts, on the other hand, focused on transferring or applying students' listening takeaways to their own inquiry process. These prompts guided students to: develop their topics in light of the podcast content, deepen or challenge their topics, and operationalize an inquiry mindset to inform their information seeking. For example, in light of the attitudinal and conceptual model established by the podcast, one prompt asked, “What additional angles/perspectives do you need to find in order to confirm and/or challenge your convictions?” This question aimed to push students beyond confirmation bias by prompting them to actively seek out diverse viewpoints that could both support and complicate their emerging understanding of the topic of their final project. (See table 1 for additional examples of prompts).

Table 1. Examples of ‘listening’ and ‘investigation’ prompts in guided journals

Category	**Type**	**Sample**
‘Listening’ prompts	Content	What problem(s) are described in this episode?
Directed students’ attention to key aspects of each episode	Process	What questions does Nagle ask in this episode implicitly and/or explicitly to introduce the story?
	Sources	What kinds of information (i.e., sources) are used in this episode?
	Evaluation	Focus on one source that Nagle uses. How is the information in this source triangulated/corroborated?
	A mix	Create a “thinking map” of this episode to highlight its flow, main points, threads, and takeaways. Use any format that you like (e.g., a traditional outline, a concept map, a flow chart, or other visual representation).
‘Investigation’ prompts	Develop topic	How are the questions about your research interest evolving after listening to this episode?
Promoted students’ application of listening takeaways to their own inquiry process	Deepen/challenge topic	How do you want to further complicate your research interest/problem?
	Operationalize inquiry mindset	What additional angles/perspectives do you need to find in order to confirm and/or challenge your convictions?

Students made robust use of the journals before each class and their ideas and comments, surfaced through their journals, served as the foundation of each class discussion. By beginning each session with themes, questions, and insights drawn directly from students' journal entries, we reinforced the weight of their ideas and foregrounded

their role in leading the discussion and structuring the class, as well as in driving their inquiry process forward. In this way, the journals functioned as a bridge between individual reflection and collective meaning-making. Moreover, because students could see how their written reflections shaped the direction of class conversations, the journals became effective tools for employing transparency of process. This transparency worked bidirectionally: students gained insight into how instructors curate and facilitate discussion, while instructors gained a window into students' evolving thinking and questions. As a result, the journals enabled us to use their ideas and comments for productive in-class discussion that was genuinely responsive to their learning needs and intellectual curiosities, rather than following a predetermined script.

These practices, taken together, demonstrate that challenging the hidden curriculum requires sustained attention to the multiple dimensions through which institutional power operates—and that such challenges can open meaningful possibilities for more equitable and authentic forms of learning. When students are invited to participate in shaping the terms of their own education, the syllabus transforms from a static contract into a living document that reflects shared values, negotiated expectations, and genuine partnership in the learning process. This transformation is at the heart of open pedagogy: a commitment to making learning more transparent, participatory, and oriented toward student empowerment rather than institutional control. The following recommendations are offered for instructors and librarians who wish to adapt this approach in their own undergraduate research courses. Each recommendation describes a practice we used and the conditions that may shape how it works in other institutional contexts:

- **Make the librarian–faculty partnership co-teaching, not a guest visit.** Build the librarian into course design, the syllabus, and assessment from the start, with shared ownership of the research-process units. Librarians hold much of the tacit knowledge the hidden curriculum conceals, including the understanding that scholarship is a conversation and that authority is constructed and contextual (Association of College and Research Libraries, 2016), and sustained co-teaching can model collaborative knowledge-making in a way a one-shot session cannot; whether the partnership can be replicated depends on how institutions count librarian teaching in workload and promotion, and on how grading authority is shared between partners.
- **Redesign the physical space to redistribute authority.** Use movable seating, shared work surfaces, and no fixed ‘front of the room,’ so that where people sit signals shared inquiry rather than transmission from an expert. Room layout is one of the most visible carriers of the hidden curriculum and can be changed at low cost, though flexible arrangements interact with students' access needs and comfort with being visible (CAST, 2024), depend on whether faculty control room assignments, and have the most effect when paired with changes in teaching practice (Woo et al., 2022).
- **Name classroom norms and behaviors out loud, then invite students to question them.** Explicitly discuss what ‘participation,’ ‘asking a good question,’ ‘not knowing,’ and ‘using sources’ mean in academic research, and where those expectations come from. Making unwritten expectations explicit has been shown to benefit first-generation and other underserved students (Winkelmes et al., 2016), and pairing that explicitness with opportunities for students to propose

changes to the norms distinguishes it from teaching students to conform to dominant academic behavior, recognizing the cultural knowledge students already bring (Yosso, 2005).

- **Use an open, co-constructed syllabus.** Leave some readings, policies, assignment options, or deadlines open for students to shape, and treat the syllabus as a living document revised during the semester. Co-construction puts student agency into practice and lets content follow students' research interests (Bovill, 2020), within the limits set by the instructor's grading role, fixed learning outcomes, and available class time, which is why it helps to state in advance which elements are negotiable and which are fixed.
- **Use guided journals to surface tacit learning.** Give structured prompts at key points in the research process, such as choosing a topic, hitting a dead end, or encountering an authority you disagree with, and ask students to reflect on what they learned about how knowledge is made, not just what they found. Journals capture metacognitive shifts that papers and posters do not and can serve as program assessment evidence (Moon, 2006), and choices about grading, privacy, and public sharing (for example, low-stakes completion grading, private-by-default entries, and opt-in sharing) shape how candid students are and how much instructor time responses require.
- **Treat these strategies as transferable principles rather than a fixed package.** Transparency, student agency, and collaborative knowledge creation can carry across institutions, while the specific practices may change substantially at institutions with large enrollments, contingent faculty, or no library partnership, so partial adoption reflects adaptation to local conditions.

Conclusion

The hidden curriculum transmits implicit lessons about power, knowledge, and social norms through everyday institutional practices that shape how students understand knowledge production. Undergraduate research classrooms become critical sites where these implicit lessons are enacted as students transition from learning about research to producing knowledge. Challenging the hidden curriculum requires deliberate, multifaceted intervention at both material and pedagogical levels. Librarian-faculty partnership can be a critical component of that intervention, providing the complementary perspectives needed to identify, interrogate, and make visible the tacit knowledge systems and research and inquiry practices that typically remain hidden from undergraduate researchers. Our implementation of open pedagogy demonstrates how this collaborative approach can translate that recognition into pedagogical practice. Open pedagogy's emphasis on student agency, collaborative knowledge creation, and transparency provided the theoretical framework for making visible traditional power structures embedded in academic practice. The flexibility of open pedagogy and the ubiquity of the hidden curriculum make this approach transferable to a variety of teaching and learning contexts.

References

Apple, M. W. (2004). *Ideology and curriculum* (3rd ed.). Routledge Falmer. https://doi.org/10.4324/9780203487563

Apple, M. W. (2012). *Education and power* (2nd ed.). Routledge. https://doi.org/10.4324/9780203143124

Apple, M. W. (2013). *Can education change society?* Routledge. https://doi.org/10.4324/9780203083550

Association of College and Research Libraries. (2016). *Framework for information literacy for higher education*. https://www.ala.org/acrl/standards/ilframework

Association of College and Research Libraries. (2025). *Characteristics of programs of information literacy that illustrate best practices: A guideline*. https://www.ala.org/acrl/standards/characteristics

Baepler, P., Walker, J. D., Brooks, D. C., Saichaie, K., & Petersen, C. I. (2016). *A guide to teaching in the active learning classroom: History, research, and practice*. Stylus.

Bene, R. E., & Murphy, J. E. (2022). Co-Teaching as mentors: Maximizing instructor and librarian collaboration for teaching information literacy skills. *Papers on Postsecondary Learning and Teaching, 5*, 75–85. https://doi.org/10.55016/ojs/pplt.v5Y2022.73254

Bernstein, B. (2000). *Pedagogy, symbolic control, and identity: Theory, research, critique* (Revised ed.). Rowman & Littlefield. https://doi.org/10.5040/9798216401735

Biesta, G. (2009). Good education in an age of measurement: On the need to reconnect with the question of purpose in education. *Educational Assessment, Evaluation and Accountability, 21*, 33–46. https://doi.org/10.1007/s11092-008-9064-9

Bourdieu, P., & Passeron, J.-C. (1990). *Reproduction in education, society and culture* (2nd ed.). Sage.

Bowles, S., & Gintis, H. (1976). *Schooling in capitalist America: Educational reform and the contradictions of economic life*. Basic Books.

Bovill, C. (2020). *Co-creating learning and teaching: Towards relational pedagogy in higher education*. Critical Publishing.

Bowles, S., & Gintis, H. (2002). *Schooling in capitalist America revisited*. Sociology of Education, 75(1), 1-18. https://doi.org/10.2307/3090251

Brooks, D. C. (2012). Space and consequences: The impact of different formal learning spaces on instructor and student behavior. *Journal of Learning Spaces, 1*(2).

Brown, M. E. L., Coker, O., Heybourne, A., & Finn, G. M. (2020). Exploring the hidden curriculum's impact on medical students: Professionalism, identity formation and the need for transparency. *Medical Science Educator, 30*(3), 1107–1121. https://doi.org/10.1007/s40670-020-01021-z

Byrne, J. P. (2022). Perceiving the social unknown: How the hidden curriculum affects the learning of autistic students in higher education. *Innovations in Education & Teaching International, 59*(2), 142–149. https://doi.org/10.1080/14703297.2020.1850320

CAST. (2024). *CAST universal design for learning guidelines version 3.0*. http://udlguidelines.cast.org

Chinn, C. A., & Malhotra, B. A. (2002). Epistemologically authentic inquiry in schools: A theoretical framework for evaluating inquiry tasks. Science Education, 86(2), 175–218. https://doi.org/10.1002/sce.10001

Clinton-Lisell, V. (2021). Open pedagogy: A systematic review of empirical findings. *Journal of Learning for Development, 8*(2), 255-268. https://doi.org/10.56059/jl4d.v8i2.511

Cotton, D., Winter, J., & Bailey, I. (2013). Researching the hidden curriculum: Intentional and unintended messages. *Journal of Geography in Higher Education, 37*(2), 192-203. https://doi.org/10.1080/03098265.2012.733684

Cuban, L. (2004). The open classroom. *Education Next,* 4(2). https://www.educationnext.org/theopenclassroom/

DeRosa, R. & Jhangiani, R. (2017). Open pedagogy. In Mays, E. (Ed.), *A guide to making open textbooks with students*. Rebus Community. https://press.rebus.community/makingopentextbookswithstudents/chapter/open-pedagogy/

Dewey, J. (1899). *The school and society*. University of Chicago Press.

Dewey, J. (1916). *Democracy and education: An introduction to the philosophy of education*. Macmillan.

Dreeben, R. (1968). *On what is learned in school*. Addison-Wesley.

Eisner, E. W. (2002). *The educational imagination: On the design and evaluation of school programs* (3rd ed.). Prentice Hall.

Etscheidt, S., Curran, C. M., & Sawyer, C. M. (2012). Promoting reflection in teacher preparation programs: A multilevel model. *Teacher Education and Special Education, 35*(1), 7-26. https://doi.org/10.1177/0888406411420887

Foster, M. M. (2023). Instructor name preference and student evaluations of instruction. *PS: Political Science & Politics, 56*(1), 143–149. https://doi.org/10.1017/S1049096522001068

Freire, P. (2000). *Pedagogy of the oppressed* (30th anniversary ed.). Continuum.

Gauthier, G., Banner, J., & Winer, L. (2025). What is the syllabus for? Revealing tensions through a scoping review of syllabus use. *International Journal for Academic Development*, 31(3), 479-498. https://doi.org/10.1080/1360144X.2025.2465363

Giroux, H. A. (2020). *On critical pedagogy* (2nd ed.). Bloomsbury Academic. https://doi.org/10.5040/9781350145016

Gooblar, D. (2019). *The missing course: Everything they never taught you about college teaching.* Harvard University Press. https://doi.org/10.4159/9780674242470

Haeger, H., Fresquez, C., Banks, J. E., & Smith, C. (2018). Navigating the academic landscape: How mentored research experiences can shed light on the hidden curriculum. *Scholarship and Practice of Undergraduate Research, 2*(1), 15-23. https://doi.org/10.18833/spur/2/1/7

Harper, S. R., & Hurtado, S. (2007). Nine themes in campus racial climates and implications for institutional transformation. In S. R. Harper & L. D. Patton (Eds.), *Responding to the realities of race on campus (New Directions for Student Services*, no. 120, pp. 7-24). Jossey-Bass. https://doi.org/10.1002/ss.254

Hensley, M. K., & Davis-Kahl, S. (Eds.) (2017). *Undergraduate research and the academic librarian: Case studies and best practices*. Association of College and Research Libraries.

Hensley, M. K., Fargo, H., & Davis-Kahl, S. (Eds.) (2023). *Undergraduate research and the academic librarian: Case studies and best practices* (volume 2). Association of College and Research Libraries.

Hoffman, N., Beatty, S., Feng, P., & Lee, J. (2017). Teaching research skills through embedded librarianship. *Reference Services Review, 45*(2), 211–226. https://doi.org/10.1108/RSR-07-2016-0045

Howick, J., Slavin, D., Carr, S., Miall, F., Ohri, C., Ennion, S., & Gay, S. (2024). Towards an empathic hidden curriculum in medical school: A roadmap. *Journal of Evaluation in Clinical Practice, 30*(4), 525–532. https://doi.org/10.1111/jep.13966

Jackson, P. W. (1968). *Life in classrooms*. Holt, Rinehart and Winston.

Kapur, M. (2016). Examining productive failure, productive success, unproductive failure, and unproductive success in learning. *Educational Psychologist, 51*(2), 289–299. https://doi.org/10.1080/00461520.2016.1155457

Kohl, H. R. (1969). *The open classroom: A practical guide to a new way of teaching*. New York Review/Vintage.

Koutsouris, G., Mountford-Zimdars, A., & Dingwall, K. (2021). The 'ideal' higher education student: understanding the hidden curriculum to enable institutional change. *Research in PostCompulsory Education, 26*(2), 131–147. https://doi.org/10.1080/13596748.2021.1909921

Kuh, G. D. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter*. Association of American Colleges and Universities.

Lindroth, J. T. (2015). Reflective journals: A review of the literature. *Update: Applications of Research in Music Education, 34*(1), 66-72. https://doi.org/10.1177/8755123314548046

Mackin, R., Baptiste, S., Niec, A., & Kam, A. (2019). The hidden curriculum: A good thing? *Cureus, 11*(12), e6305. https://doi.org/10.7759/cureus.6305

Margolis, E., Soldatenko, M., Acker, S., & Gair, M. (2001). Peekaboo: Hiding and outing the curriculum. In E. Margolis (Ed.), *The hidden curriculum in higher education* (pp. 1-20). Routledge. https://doi.org/10.4324/9780203901854

Mattner, C. (2021). Critiquing the syllabus: Inviting student assessment of standardized curricula. *Teaching Citational Practice: Critical Feminist Approaches, 1*, 11-17. https://journals.library.columbia.edu/index.php/citationalpractice/article/view/8652

Matusov, E. (2025). Why do students choose the option of the open syllabus in a conventional university? *Dialogic Pedagogy: A Journal for Studies of Dialogic Education, 13*(1), E1-E16. https://doi.org/10.5195/dpj.2025.695

Meyer, R., Archer, E., & Smit, L. (2025). The positive influence of the hidden curriculum in medical education: A scoping review. *Medical Science Educator, 35*, 1817–1826 (2025). https://doi.org/10.1007/s40670-025-02380-1

Miller, S., Moore, J. L., Weaver, A., Grant, T., Campagna, K., & Bellot, A. (2025). Demystifying the hidden curriculum of undergraduate research: Insight from students-as-partners. *Perspectives on Undergraduate Research and Mentoring, 13*(1).

Moon, J. A. (2006). *Learning journals: A handbook for reflective practice and professional development* (2nd ed.). Routledge.

Mounce, M. (2010). Working together: Academic librarians and faculty collaborating to improve students' information literacy skills: A literature review 2000–2009. *The Reference Librarian, 51*(4), 300-320. https://doi.org/10.1080/02763877.2010.501420

Moussa-Inaty, J. (2015). Reflective writing through the use of guiding questions. *International Journal of Teaching and Learning in Higher Education, 27*(1), 104-113.

Nagle, R. (Host). (2021). *This land: How a string of custody battles over Native children became a federal lawsuit that threatens everything from tribal sovereignty to civil rights* (Season 2) [Audio podcast]. Crooked Media. https://crooked.com/podcast-series/this-land/

Narayanan, T. R. (2009). Academia–industry partnership: an impetus for strengthening teaching and research in higher education institutions. *Current Science, 96*(3), 343-346.

Nath, N. (2026). Building an undergraduate research ecosystem: Access, assessment, and institutional innovation. *Scholarship and Practice of Undergraduate Research, 9*(4), 5–6. https://doi.org/10.18833/spur/9/4/7

Nelson, A. (2019, March 19). *Collaborative syllabus design: Students at the center*. Open Pedagogy Notebook. https://openpedagogy.org/course-level/collaborative-syllabus-design-students-at-the-center/

Nuryana, Z., Xu, W., Fajaruddin, S., Al-Omari, A. A., Tasir, Z., & Hamami, T. (2023). Mapping global research on hidden curriculum: The potential benefits for future agenda in educational developments. *SN Social Sciences, 3*, Article 127. https://doi.org/10.1007/s43545-023-00714-7

Open Syllabus. (n.d.). *What is open syllabus?* https://blog.opensyllabus.org/about-os

Orón Semper, J. V., & Blasco, M. (2018). Revealing the hidden curriculum in higher education. *Studies in Philosophy and Education, 37*(5), 481–498. https://doi.org/10.1007/s11217-018-9608-5

Parra Larrotta, S., Hernández Rincón, E. H., Niño Correa, D., Jaimes Peñuela, C. L., & Romero Tapia, A. E. (2025). Effects of the hidden curriculum in medical education: Scoping review. *JMIR Medical Education, 11*, e68481. https://doi.org/10.2196/68481

Petersen, G., & Kruse, J. (2023). Research is messy: Teaching students to expect non-linear research. *College & Research Libraries News, 84*(2), 59-63. https://doi.org/10.5860/crln.84.2.59

Portelli, J. P. (1993). Exposing the hidden curriculum. *Journal of Curriculum Studies, 25*(4), 343–358. https://doi.org/10.1080/0022027930250404

Sambell, K., & McDowell, L. (1998). The construction of the hidden curriculum: Messages and meanings in the assessment of student learning. *Assessment and Evaluation in Higher Education, 23*(4), 391–402. https://doi.org/10.1080/0260293980230406

Sheikh, K., Nieusma, D., Zhu, Q., & Rea, S. C. (2023). How the hidden curriculum reveals the enculturation experience of underrepresented students in engineering. *2023 IEEE Frontiers in Education Conference (FIE)*, College Station, TX, USA 2023, pp. 1–8. https://doi.org/10.1109/FIE58773.2023.10343275

Stöpel, M., Piotto, L., Goodman, X., & Godbey, S. (Eds.). (2020). *Faculty-librarian collaborations: Integrating the information literacy framework into disciplinary courses*. Association of College and Research Libraries.

Thomson, C. (2011). The importance of schooling. In Munn, M. (Ed.), *Unlocking potential – perspectives on women in science, engineering and technology* (pp. 44-54). The Smith Institute. https://sciencewithart.ijs.si/pdf/Unlocking_Potential.pdf

Tolman, A. O. (2013). True collaboration: Building meaning in learning through sharing power with students. In O. Kovbasyuk & P. Blessinger (Eds.), *Meaning-centered education: International perspectives and explorations in higher education* (pp. 145-158). Routledge.

USC Race and Equity Center. (2024). *Equity-minded syllabi review guide*. https://race.usc.edu/wp-content/uploads/2024/08/Syllabus-Review-Guide-Update-082124.pdf

Whitver, S. M., & Riesen, K. K. (2019). Reiterative reflection in the library instruction classroom. *Reference Services Review, 47*(3), 269-279. http://dx.doi.org/10.1108/RSR-04-2019-0023

Windschitl, M., Thompson, J., & Braaten, M. (2008). Beyond the scientific method: Model-based inquiry as a new paradigm of preference for school science investigations. *Science Education, 92*(5), 941–967. https://doi.org/10.1002/sce.20259

Winkelmes, M.-A., Bernacki, M., Butler, J., Zochowski, M., Golanics, J., & Weavil, K. H. (2016). A teaching intervention that increases underserved college students' success. *Peer Review, 18*(1/2), 31–36.

Woo, C. W., Whitfield, T. S., Britt, L. L., & Ball, T. C. (2022). Students' perception of the classroom environment: A comparison between innovative and traditional classrooms. *Journal of the Scholarship of Teaching and Learning, 22*(1), 31–47. https://doi.org/10.14434/josotl.v22i1.30735

Wu, R., Gardner, M. J., & Todd, P. R. (2024). Cam or Professor Lee? How instructor seniority and address term influence student perceptions in the United States. *Higher Education Quarterly, 78*, e12533. https://doi.org/10.1111/hequ.12533

Yosso, T. J. (2005). Whose culture has capital? A critical race theory discussion of community cultural wealth. *Race Ethnicity and Education, 8*(1), 69–91. https://doi.org/10.1080/1361332052000341006