

abstract: Active learning forms a common teaching method within information literacy instruction. Commitment to participatory models of teaching and learning requires critical vigilance, however, particularly given changing information environments and broader educational priorities. This theoretical paper interrogates active learning and its prevalence within library instruction. Literature from library and information science (LIS), education, educational technology, and development studies is used to consider active learning in relation to self-protective information behaviors, the performance of learning, nonparticipatory and resistant activity, technological risk, and questions of inclusion. This discussion invites readers to acknowledge the complexity inherent in adopting active learning for contemporary settings.

Introduction

t is difficult to imagine attending a library instruction conference or reading a recent information literacy (IL) textbook that does not advocate for active learning instructional techniques. Defined as "an educational approach in which teachers ask students to apply classroom content during instructional activities and to reflect on the actions the have taken,"1 active learning is valued for its role in advancing IL outcomes. Its benefits include improving motivation and engagement as well as helping learners to retain content. The emphasis on involving "students in doing things and thinking about the things they are doing"² means that active learning is also prized for its contribution to the IL project. It facilitated a shift from standards-based to constructivist modes of instruction, in which learners construct their own knowledge by participating in and reflecting on experiences. While participatory and student-centered teaching has helped to transform librarian educational practices, including in the authors' own instruction work, there has been little attempt to critically interrogate the prominent role that active learning plays within IL classrooms. This oversight is problematic because it risks positioning active learning as an intrinsic good, worthwhile for its own sake, an act of faith that librarians rarely question.³ Neglecting to challenge active learning may

portal: Libraries and the Academy, Vol. 21, No. 4 (2021), pp. 749–771. Copyright © 2021 by Johns Hopkins University Press, Baltimore, MD 21218. also undermine educational endeavors by failing to examine the impact of technological interventions and changing educational priorities on learning practices as well as broader questions of power, identity, and agency.

This paper draws upon these ideas to examine the concept of active learning and its employment within IL instruction. This examination is driven by the belief that a commitment to active learning requires critical vigilance to maintain inclusive and equitable

... a commitment to active learning requires critical vigilance to maintain inclusive and equitable educational opportunities. educational opportunities.⁴ Along these lines, the paper forms an initial attempt to instigate a more "rigorous reflexivity"⁵ about the purpose and goals of active learning, including the ways in which +can be unethical and unjust or, on the other hand, liberatory. The paper starts by presenting a short overview of active learning and how participatory models of education have been adopted within librarian practice, including in teaching and learning

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interventions and institutional IL documents. The paper will then use literature from LIS, education, educational technology, and development studies to explore active learning in relation to key themes, including self-protective information behaviors, the performance of learning, nonparticipatory and resistant activity, technological risk, and questions of inclusion. The paper concludes with a discussion of issues that are raised within this examination of active learning and the implications for classroom practice. Findings will interest teaching librarians who engage in L instruction as well as LIS educators and professional associations involved with librarian education and training initiatives.

What & Active Learning?

Active learning has been traced to a variety of origins, including Socrates and the Socratic method.⁶ It has most commonly been associated, however, with the work of John Dewey, who claimed that learning is "something which the individual does when he studies. It is an active, personally conducted affair."⁷ Stressing that learning happens through the active manipulation of the environment, Dewey also highlighted the need to create a connection between prior experience and new knowledge. These ideas position active learning at the heart of constructivist learning theory, which has the underlying premise that learners construct understanding through connecting new and previously acquired knowledge.⁸ The emphasis on social engagement also links active learning to social constructivist learning theory⁹ and critical pedagogy,¹⁰ both of which understand learning as taking place through dialogue and social interaction. Both approaches also center discovery and inquiry rather than absorption of content and urge learners to play a dynamic rather than a passive role in learning. Activity is further underscored by the

... learning is shaped through shared social interplay or engagement in the tasks and projects of a community. recognition that learning is shaped through shared social interplay or engagement in the tasks and projects of a community.

Active learning became popularized in United States higher education through a series of influential education reports published in the

1980s.¹¹ Set up to explore how standards could be maintained within rapidly expanding systems of higher education, these reports led to the emergence of active learning as an antidote to a perceived decline in educational achievement.¹² One of the main reasons for the sudden popularity of active learning is its reputed benefits. It represents a move away from transmission-based educational models, which view teaching as the act of transmitting knowledge from teacher to student. For Charles Bonwell and James Eison, who summarized early literature on the topic in 1991, active learning promotes achievement, enhances motivation, and changes student attitudes.¹³ The ability to clarify and discuss lecture content in groups is further seen to increase comprehension and retention. In 2008, Bradford Bell and Steve Kozlowski found that participation accords learners control over and responsibility for their learning.¹⁴ In their investigation of over 200 studies, Scott Freeman, Sarah Eddy, Miles McDonough, Michelle Smith, Nhadozie Okoroafor, Hannah Jordt, and Mary Pat Wenderoth further demonstrate that active learning boosts exam success rates. These attributes, they note, will lead to increased retention and persistence among STEM learners.¹⁵ The evidence has not, however, been conclusive, with a number of studies admitting that learning gains may be small¹⁶ and that research may be flawed.¹⁷ Research has also noted student resistance to the use of active learning strategies within the classroom.¹⁸ These issues have led to the growth of the "second generation" of active learning research, which aims to explore how and for whom active learning works,19 including whether it reduces gender gaps20 as well as differences in achievement between advantaged and disadvantaged students.²¹

Since the 1990's, active learning has gained renewed popularity through higher education's growing focus on student success. Concern about institutional quality as well as ongoing achievement gaps has ded to the identification of engagement as a key

determinant of graduation and retertion rates.²² The emphasis on engagement, defined as "participation in educationally effective practices, both inside and outside the classroom,"²³ has bolstered interest in active learning; as Charles Graham, Tonya Tripp, Larry Seawright, and George Joeckel point out, the two concepts emerge from

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the same accelemic roots.²⁴ The connection is made even clearer by George Kuh, who defines his well-known concept of high impact practices—methods that are especially effective in achieving desired learning outcomes, increasing retention, and encouraging engagement—as active learning.²⁵ Active learning also forms one of the scales upon which engagement is measured in the U.S.-focused NSSE (National Survey of Student Engagement).²⁶ These popular perspectives have increased the spread of active learning principles within higher education.

Active Learning and Information Literacy

IL Instruction

Active learning plays an important role within IL instruction literature. Information literacy teaching practices often look different from those of disciplinary teaching faculty;

librarians are typically afforded only one class session in which to work with learners, and they are expected to cover a wide range of topics.²⁷ As a result, early library seminars were commonly characterized by lecture-style teaching coupled with didactic and teacher-focused tool-based demonstrations.²⁸ Gradually, as higher education dabbled with more student-centered educational models, librarians became increasingly dissatisfied with standard classroom practice. Librarians had complained as far back as 1886 that students learned little or nothing from their lectures.²⁹ In the late twentieth century, the growth of the Internet³⁰ as well as an influx of diverse learners³¹ seemed to render transfer models of education ineffective. Consequently, the 1990s brought a newfound engagement with more active modes of teaching. These techniques included small group discussion;³² the jigsaw method, in which each student's part, like each piece of a puzzle, is essential to put together a clear picture³³ brainstorming; and mind mapping. which

Librarians employ increasingly sophisticated active learning techniques in their classes, including problem-based activities, in which students work as a team to solve complicated problems rooted in the real world creates diagrams of relationships between ideas or other pieces of intermation.³⁴ Since then, student-centered learning methods have continued to evolve. Librarians employ increasingly sophisticated active learning techniques in their classes, including 21.2.

problem-based activities, in which students work as a team to solve complicated problems rooted in the real world;³⁵ unstructured search time;³⁶ and walking tours.³⁷ More recently, teaching librarians have turned to digital technologies, such as online treasure hunts³⁸ and classroom response applications.³⁹

Growing engagement with these methods is linked to reports of increased satisfaction when active learning techniques are adopted, both on the part of the learner and the librarian. For Danica Domicar, Bojana Boh Podgornik, and Tomaž Bartol, benefits of active learning include the development of higher order cognitive skills.⁴⁰ Jeanetta Drueke notes that the introduction of participatory learning opportunities results in the incorporation of more relevant library research into students' final projects.⁴¹ Librarians further credit active learning with an overall increase in learner comfort and confidence. Susan Cooperate in and Elizabeth Kocevar-Weidinger indicate that new models of learning lead to students being "more likely to venture a guess, to share an opinion, to correct one another, to demonstrate confidence, and to feel less self-conscious about mistakes."42 For others, the introduction of active learning addresses learner performance; they view student-centered education as a solution for learners who are "sleepy or fidgety, prohibitively silent or overly chatty, bored or distracted."43 Thus, active learning classrooms are seen as an enjoyable way to capture the attention of "passive, uninterested, and unresponsive" students as well as a "hook" to increase interest in library seminars.⁴⁴ Active learning strategies are also understood to encourage responsibility for learning among students who lack motivation.45

Much of the literature is based upon anecdotal evidence, and few studies have implemented rigorous methods of assessment to evaluate the contributions of studentcentered teaching to IL education. Exceptions include Brian Detlor, Lorne Booker, Alexander Serenko, and Heidi Julien, who employed a standardized test and interviews to demonstrate that active IL instruction led to decreased anxiety, improved self-efficacy, and greater efficiency.⁴⁶ Anthony Holderied, similarly, saw a four-point increase from pre- to posttest performance in an active learning environment.⁴⁷ In contrast, other stud-

ies have demonstrated limited benefit from active learning within the library classroom.⁴⁸ Alanna Ross and Christine Furno cautioned librarians about the complexity of assessing active learning, including the need for careful distinction between student performance and general satisfaction or affective responses.⁴⁹ The lack of assessment may also explain why, unlike other higher education literature, few studies have explored student reactions to active learning. An exception is Buffy Hamilton's work in a school library, where she notes that students saw an active learning exercise as "overwhelming" and felt it pushed them out of their comfort zone.⁵⁰ Recognizing that these activities disrupted many of

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her students' traditional notions of schooling, Hamilton concludes that to be effective in the classroom, active learning must be well-scaffolded, carefully moving students by progressive steps toward greater understanding and increased independence in learning.

Institutional Documents

Beyond instruction, active learning plays a prominent role within professional guiding documents, including early framing work and more recently released materials. The 1989 American Library Association (ALA) "Presidential Committee on Information Literacy: Final Report," for example, positions real-world problem-solving as a useful educational strategy within increasing information-rich societies. Simultaneously, it warns of the difficulties of employing "prevailing [passive] teaching styles" at a time of rapid and constant change.⁵¹ Foroing active learning principles, the authors call for learning that is "active and integrated [rather than] passive and fragmented" and a model of education that moves away from merely giving learners information. These ideas have since been developed through a number of professional documents, including the 2008 "Standards for Proferencies for Instruction Librarians and Coordinators," which asserts that "the effective instruction librarian creates a learner-centered teaching environment by using active, collaborative, and other appropriate learning activities,"⁵² and the 2011 "Guide-Slines for Instruction Programs in Academic Libraries," which highlights that "instruction should employ active learning strategies."53 The positioning of active learning as one of the criteria by which the performance of instruction librarians is assessed further entwines concepts of participation and engagement within IL narratives.

The value accorded to active learning is also traced through its inclusion within IL standards. Active learning is specifically mentioned in the United Kingdom's ANCIL (A New Curriculum for Information Literacy) model, where it is described as playing a "vital part of developing information literacy" and creating a "fruitful environment" for student transformation.⁵⁴The authors further designate "active and assessed" as one of

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the six key principles that construct the ANCIL curriculum.⁵⁵ Principles of active learning can also be traced within the Association of College and Research Libraries (ACRL) and metaliteracy frameworks. The ACRL Framework for Information Literacy for Higher Education understands students as having a "greater role and responsibility" within learning, which indicates a shift from passive to active influence on learning scenarios. The document lists associated dispositions and knowledge practices that individuals developing information literacy will exhibit, including such self-driven actions as to

The metaliteracy model embraces active engagement by highlighting the important role that learners play in producing, sharing, and creating information in a digital environment. recognize, seek, use, manage, monitor, determine, resist, persist, and transfer.⁵⁶ The theory of threshold concepts, ideas that open up new levels of understanding,⁵⁷ underlies the ACRL Franework. According to this theory, learners may find themselves immobilized or in a liminal state of transition between one stage and the next until they engage with threshold concepts, another illustration of the impor2.4.

tance that is accorded to activity within IL models. The mediteracy model embraces active engagement by highlighting the important role that learners play in producing, sharing, and creating information in a digital environment.⁵⁸

IL Research

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Research that explores how information literacy manifests within everyday settings further reinforces an emphasis on active engagement. Studies that take a practice theory approach, for example, note that information literacy only exists through the performance of social, creative, and embodied a tivities that are produced through a learner's engagement within an information environment.⁵⁹ The active role that learners play in shaping their information landscape, as well as the emphasis that sociocultural theory places upon participation,⁶⁰ draws attention to the need to design IL teaching activities that scaffold active participation within relevant community practices. Studies that employ a phenomenographic approach, investigating variation in people's understanding of information literacy, similarly highlight the important part that activity plays within these experiences.⁶¹

Activity is also accentuated within specific strands of IL research; studies that examine social inclusion, for example, demonstrate that a learner's ability to actively "connect and engage with the information of a community" plays a vital part in promoting well-being.⁶² The recognition that learners mediate transition through their active negotiation of community norms further links participation with transformation and the development of expertise.⁶³ IL research methods that center the learner's role in collecting and interpreting data, including photo voice or photo-elicitation, techniques that combine photography with stories or use it to generate discussion, provide an additional indication of the important role of activity within IL practices.⁶⁴

Active Learning: An Interrogation

The previous sections have demonstrated that active learning is intricately entwined with IL research and instruction; engagement and participation are almost universally seen as contributing positively to learning. The paucity of empirical work, as well as changing information environments, means that we must continue to revisit and examine assumptions related to classroom practice. We cannot merely accept active learning as an intrinsic good.⁶⁵ The next sections will use literature from the fields of LIS, education, educational technology, and development studies to interrogate active learning and the n prominent role it plays within the IL classroom. This literature highlights some areas of tension, including self-protective information behaviors, nonparticipatory and resistant cation activity, technological risk, and questions of inclusion.

Self-Protective Information Behaviors

LIS research that examines self-protective information behaviors, such as information avoidance and secrecy, challenges the prominent role that active learning plays within IL education. Self-protective information behaviors refer to observed methods of self-care

adopted by individuals in informationseeking processes.⁶⁶ Typically seen within health contexts, these behaviors are adopted as a coping strategy or when the measurement of benefit does not outweigh the risk.67 Information avoidance, for example, refers to "avoiding specific topics in interaction, avoiding situations where information may be presented, or selectively attending to information."68 Such evasion may enable learners to regulate uncertainty

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or to preserve well-being during a time of stress rather than merely avoiding information that conflicts with their internal states.⁶⁹ Similarly, Suzanne Miller's theory of monitoring and blunting mustrates that while "monitors" may prefer to be actively aware of information in a high-stress scenario, "blunters" use distracting behavior to mediate the stressful event, preferring to seek information after the situation has passed.⁷⁰ From an active learning perspective, a failure to recognize that learners adopt strategies of selective ecosure⁷¹ and withdrawal⁷² based on complex sociocultural, emotional, or cognitive needs⁷³ means that participation-focused teaching could disrupt self-care or the reflexive strategies that learners have developed to mediate the affective dimensions of learning. Similar self-protective information behaviors are captured by Elfreda Chatman's theory of information poverty, which proposes that marginalized people employ secrecy and risk assessment in response to everyday concerns.74 Secrecy may be invoked, for example, when a person distrusts the exchange of information or the system or person offering it; withholding or selectively sharing information allows individuals to protect themselves from "unwanted intrusion."75 In doing so, they assert control and agency over a situation and mediate perceived threats to their own and their community's well-being, including uncertainty whether an information provider will be supportive or judgmental.⁷⁶ People who are marginalized or who see themselves as outsiders will likely engage in these behaviors due to social norms that render information networks and providers

Active learning techniques, which demand interaction, could be seen as an attempt to assert control over marginalized learners. untrustworthy or the risk of disclosure too high. Chatman also states that information activities involve risk assessment, determining whether it is safe to reveal facts about oneself.⁷⁷ These ideas are picked up in Amelia Gibson's work that illustrates how Black and Latina preteens use silence to assess the risk of disclosure.⁷⁸ Active learning techniques, which demand interaction, could be seen as an aptempt to assert control over marginalized learners.

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Instructors who fail to acknowledge these power differentials could also perpetuate marginalization by maintaining and perpetuating barriers to information access.

The Performance of Learning

Education research provides another illustration of the need to critically interrogate the role that active learning plays within the IL classroom. One of the unexpected consequences of integrating active learning into higher education as been the demonization of nonparticipatory forms of engagement. As Ann Medaille and Janet Usinger point out, "For instructors who value dialog and see it as a critical aspect of their pedagogy, silence in the classroom may be somewhat unsettling."⁷⁹ The push to eradicate teacher-centered ideologies can also obscure the value of "silent basening, private study, individual reading and writing . . . and solitary thinking," all of which form the basis of meaningful study practice.⁸⁰ The delegitimizing of "sulet, private, non-verbal and non-observable" activities further risks positioning less vocal students as deviant, deficient, or in need

The idea that learning must be both observable and recordable means that active learning may shut down alternative educational models. of remediation.⁸¹ A similar view has already been demonstrated in literature that characterizes normal approaches to learning by international students as uncommon or inappropriate.⁸² More problematically, the hum of participatory activity positions learning as a public rather than a private event; as

Bruce Macfarlane points out, a right to reticence is not permitted in an active learningfocused environment.⁸³ The idea that learning must be both observable and recordable means that active learning may shut down alternative educational models. These developments further risk entwining teaching with the surveillance of students' "emotional and development expression."⁸⁴ Such an idea is echoed in the twenty-first century drive to implement learning analytics, the gathering and analysis of data about students to assess their academic progress and improve learning outcomes.⁸⁵

LIS research draws attention to the important role that seemingly more passive information activities play within the development of knowing. More specifically, growing interest in corporeality, which demonstrates how information literacy is shaped and experienced through a person's body rather than purely centered on performative

loquaciousness,⁸⁶ illustrates the vital role that silent and nonverbal practices play within the development of knowing. Along these lines, Annemaree Lloyd's studies of information literacy in the workplace found that copying and mimicking, which have the stigma of being linked to plagiarism in a higher education context, enable ambulance officers and firefighters to attune themselves to shared understandings of practice.⁸⁷ Observing, a similarly passive activity, may help refugees and undergraduate language learners to build understanding within unfamiliar information environments.⁸⁸ Storytelling, which has implications of silent listening, is another practice that has been portrayed as problematic within active-learning ideologies. Yet, in offering a way for emergence services workers to deconstruct work events and institutional narratives,⁸⁹ storytelling plays a vital role in helping newcomers to access tacit and experiential knowledge that might not otherwise be available to them. Demonstrating that IL practices do rot merely center on what Macfarlane refers to as participative performativity,⁹⁰ these ideas raise questions about whether the push to integrate active learning strategies drives out other educational methods with advantages of their own. forp

Nonparticipation in Learning

The concept of nonparticipation forms another way to critically engage with the prominence that is accorded to active engagement within D instruction. One of the main reasons that active learning has such an influential role within social constructivist models of education is the positioning of learning as a process of participation; learning

is mediated through increasingly knowledgeable engagement in the activities of a communit From this perspective, participation helps to construct the change in identity that lies at the beart of transformative learning.92 As Etienne Wenger points out, however, individuals define memselves through the practices in which they do not engage as much as through those in which they do.93 In other words, nonparticipation may not always constitute a form of disengagement or indicate a lack of motivation. Instead, it serves as a highly reflexive and purposive

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activity that plays a vital role in the elaboration of identity. The line between peripheral and marginal is subtle.⁹⁴ Nonparticipation can also be understood as imposed through structural constraints or as forming a shield from traumatic research, as Jessie Loyer's examination of indigenous information literacy suggests.⁹⁵ The recognition that a lack 💪 of engagement may be strategic illustrates how enforced active learning techniques may deny the complex ways in which learners negotiate and construct new ways of knowing.

Lurking provides another example of how active learning is complicated by a close examination of the varied ways in which people build understanding. Defined by Sheizaf Rafaeli, Gilad Ravid, and Vladimir Soroka as passive participation that is characterized by persistent but silent visits to a community, lurking has traditionally held negative connotations.⁹⁶ Lurkers have been labeled as free riders and a barrier to the monetization of content, as well as inhibited, needing to be managed, or having untapped potential.⁹⁷

From the perspective of situated learning theory, however, which holds that learning occurs best in the context in which it will be used,⁹⁸ lurking constitutes a form of peripheral participation. It is an important (and legitimate) step in the process of moving toward

Active learning techniques based upon vocal or visible participation within a new context could block legitimate modes of community engagement rather than lead to learning gains.

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expert understanding and engagement within community activities.⁹⁹ In effect, lurking serves as a normal way in which newcomers observe, acclimate, and build confidence within complex new community ecologies, a way to "honor voices from afar."¹⁰⁰ Active learning techniques based upon vocal or visible participation within a new context could block legitimate modes of community engagement rather than

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lead to learning gains. The opprobrium accorded to lurkers further hints at how a failure to understand these strategies can easily lead to problematic processes of othering, labeling people from another group as inferior.

The concept of resistance provides an additional challenge to principles of active learning. For decades, teachers and educators have diagnosed student resistance as a disciplinary issue that requires remediation or correction.¹⁰¹ Scholars in educational psychology and sociology increasingly recognize, however, that resistance forms a communicative act that students adopt as a self-defense mechanism as well as a means to seek more significant learning opportunities.¹⁰² These ideas reframe resistance as a legitimate and healthy response in the face of inadequate or marginalizing educational structures. Thus, Catherine Savini delicately trace how resistance can be linked to mental health issues and a decision to choose self care and coping mechanisms over performance as

IL classrooms that are inhospitable to indigenous student identities may inspire learners to resist rather than conform. the idealized learner.¹⁰³ Learners without any other means of criticism or agency may opt for resistance as a result of injustice and prejudice; what Herbert Kohl terms as "not-learning" can be seen as "confronting social, sexual, and economic oppression in schools and in society."¹⁰⁴ These ideas are picked up by Loyer, who notes how IL classrooms that are inhospitable to indigenous student identities may inspire learners to resist rather than conform.¹⁰⁵

From this perspective, a decision to employ active learning techniques could ignore the numerous nuanced elements that impact learning settings.¹⁰⁶ Putting the blame for "bad" behavior on students rather than on teaching practices provides further evidence of how a failure to acknowledge learner experiences can lead to marginalization and othering.¹⁰⁷

Risk and Technology

The recognition that participatory learning strategies may expose learners to risk in an increasingly hostile technological environment forms still another way in which active learning can be interrogated. Active learning often goes hand in glove with technology;

the use of digital tools and spaces is seen to embed values of collaboration and participation within teaching activities.¹⁰⁸ As educators have started to point out, however, the employment of open and digital tools for teaching purposes also unintentionally introduces some risks and tensions.¹⁰⁹ One hazard is exposure to surveillance and tracking, the harvesting and linking of personal data made possible through engagement online¹¹⁰ with "data-hungry private and governmental entities."¹¹¹ The use of commer-

cial Web tools makes students more vulnerable to online targeting as well as digital redlining, the misuse of data to exclude and exploit specific groups of people.¹¹² Another more serious issue is the risk of online abuse. As Ben Harley points out, when educators ask students to engage in digital research, they invite "a whole myriad of actors to participate."¹¹³ Research demonstrates that women and people of color are particularly at risk of digital

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harassment and silencing,¹¹⁴ while Tara Robertson points out how the creation of online content has the potential to impact a person's future career and life.¹¹⁵ These issues are not clear-cut; Tressie McMillan Cottom's examination of Black and Latinx study groups demonstrates that "privacy can compound students' marginality rather than ameliorate it."¹¹⁶ The far-reaching and long-term impact of online activities illustrates how the na-ive employment of technology for active learning purposes has the potential to expose learners to unsolicited problems.

Problems are not limited to the open Meb. Research that demonstrates how legal information providers sell data to immigration enforcement agencies illustrates how library technology can expose learners to similar levels of surveillance, particularly people at risk of detention or harassment by U.S. Immigration and Customs Enforcement (ICE).¹¹⁷ The potential for tracking and targeting can also be seen within library catalogs, where the use of Google Analytics means that 97 percent of the libraries in the Association of Research Libraries (ARL) have been found to leak patron data.¹¹⁸ There are even privacy implications to popular tools such as LyndaLibrary, a subscription database that offers technology training resources.¹²⁰ The use of active learning strategies that employ these technologies may subject learners to surveillance that directly contradicts core library values of confidentiality and intellectual freedom. A preponderance of rules and regulations means that libraries could be considered as places of surveillance.¹²¹ Within IL instruction, for example, the typical emphasis on numbers and types of acceptable research paper sources can be linked to a wish to scrutinize and control. A growing recognition of the extent to which library technologies track and survey students raises important questions about the moral and ethical legality of employing these tools within the active-learning classroom.

Inclusion and Structural Inequality

Lastly, the prominent position that active learning occupies within IL education can be contested through a careful examination of its assumed benefits, including inclusion and power-sharing. Inclusion often forms a key rationale for the implementation of active

learning strategies in the classroom; the creation of opportunities for learners to become actively engaged in higher education is seen as democratic as well as an important component of widening participation. As Stephanie Springgay and Sarah Truman point out, however, an approach that encourages taking part may seem to promote equality and diversity but can also be critiqued for failing to interrogate the systemic structures and structural inequalities that marginalize or hinder student participation in the first place.¹²² Opportunities to participate in classroom games, for example, may do little to recognize or dismantle the trauma that the indigenous students in Loyer's study face within the confines of Western knowledge structures.¹²³ In fact, the assumption that active learning techniques promote inclusion could even be understood as undermining attempts to address marginalization by creating what Heather Sykes labels as an "absent presence,"¹²⁴ or a situation in which the inclusion of marginalized groups "naturalizes and neutralizes ongoing oppression and debilitation."¹²⁵ Taken to the extreme, these ideas recast active learning as a way of managing or pacifying dissent rather than the transformative experience that it is assumed to be.¹²⁶

Similar critiques are also reflected in literature that has started to question the "tyranny" of a "participatory orthodoxy" within development studies.¹⁷ Ideas of participatory development emerged through a recognition of the flaws within top-down, outsiderdriven approaches to humanitarian and poverty reduction work. Participatory develop-

... the reliance of instruction upon librarian-designed standards and frameworks means that active-learning strategies are, in fact, based upon access or interaction rather than participation, with its implications of power-sharing. ment focuses, instead, on expanding the control or influence that people have over interventions that affect them.¹²⁸ As contributors to Bill Cooke and Uma Kothari's edited volume point out, however, participatory development can also be critiqued for reinforcing the interests of the already powerful as well as overriding legitimate existing processes. These ideas suggest 2.4.

that active learning cannot always be idealistically linked with the resolution of exclusion and disadvantage. Nico Carpentier has traced how the concept of participation, which he uses to designate the collaborative co-deciding of content, policy, or technology, has been conflated with access, which refers to people's presence within a context, and with interaction, which indicates their ability to produce content.¹²⁹ From an IL perspective, the cellance of instruction upon librarian-designed standards and frameworks means that active-learning strategies are, in fact, based upon access or interaction rather than participation, with its implications of power-sharing.¹³⁰ These differences are nuanced, and Carpentier suggests that access and interaction are often important conditions of participation.¹³¹ This framing provides a further illustration of how active learning cannot be seen as inherently democratizing. Educators must continue interrogating these narratives if the emancipatory goals of teaching are to be met.

Discussion

Findings from this study demonstrate how, on closer inspection, active learning creates unexpected issues within the IL classroom. More explicitly, these ideas can be connected to the position of both learners and information literacy within teaching and learning discourses.

One prominent issue that is revealed when active learning is examined through a critical lens is the continued and underlying positioning of the individual as the primary site of learning. The decision to implement active learning strategies often emerges from a wish to improve learner performance; classroom engagement strategies are employed to fix issues with individual motivation and determination as well as to encourage the development of self-reliance and responsibility.¹³² In framing student engagement in terms of personal characteristics and attitudes, learning is positioned as uniquely shaped through human agency rather than as something that is constrained and enabled through sociocultural dimensions of practice. These ideas are problematic because they fail to acknowledge that participation resides in the flow of everyday life learners cannot be characterized as "float[ing], distinct, in container-like contexts of education."133 These notions also disregard the social, material, and temporal resources that shape access to educational opportunity. Such resources influence have students participate within teaching and learning settings. In contrast, when learning is understood as unfolding through material, social, and temporal interaction active learning becomes reimagined as the means to scaffold "the fine-grained micro steps of situated practice."¹³⁴ These ideas speak to the continued importance of studying information literacy sociologically or considering the broader dynamics of practice rather than viewing it only in terms of individual achievement.

Assumptions about the individual shape of practice also raise questions about the influence that market-oriented perspectives, which claim "most areas of everyday life as potential sources of profit generation,"135 have upon the ways in which educators think about and understand active learning. LIS researchers increasingly trace the influence of neoliberal thought upon IL instruction, including the replacement of learner interaction with technological interventions¹³⁶ and the creation of abbreviated and "bite-size" training opportunities¹³⁷ Along these lines, a push to integrate visible student engagement in the classroom could be linked to a growing culture of "presenteeism," the organizational values that force employees to maintain the appearance of working long hours.¹³⁸ Public and observable forms of participation or the need to be seen as "doing" learning could further be connected to the fetishizing of productivity and performativity, where individual performance is used to measure quality. The values that active learning is seen to develop can also be held up to critical inspection. As Lesley Gourlay points out, a focus on building responsibility and individual self-reliance could enforce virtues specific to Western culture,¹³⁹ while "indirectly reinforcing the marketised view that the student carries sole responsibility for their learning as a customer who makes a financial investment for personal gain."¹⁴⁰ These influences, which reward competitiveness as well as social surveillance, highlight the socially constructed nature of teaching narratives while further illustrating the need to critically interrogate the goals of IL instruction.

An examination of active learning also draws attention to classroom power structures, another aspect of IL instruction that is surprisingly neglected. Librarians often seem to lack influence on campus, either due to their marginalized status within the academy or their typical role as a guest lecturer.¹⁴¹ Nonetheless, classroom structures afford librarians an amount of control. As the title of Cooke and Kothari's 2007 book infers, tyranny, or the unjust exercise of power, can be seen as a counterintuitive yet potential consequence of participatory forms of education.¹⁴² Gourlay similarly hints at these issues through her positioning of active learning, with its perceptions of benignity, as virtually unassailable.¹⁴³ Cooke and Kothari's focus lies with development studies, but many of their critiques could be applied to a classroom setting. Participatory facilitators could be seen as controlling or subordinating learners by overriding legitimate learning practices while further reinforcing the "interests of the already powerful" through the

... instruction research needs to move beyond a constant revision of teaching approaches to instead engage with broader questions related to community and classroom power relations.

establishment of normative (and, by implication, deviant) understandings of acceptable learning practices.¹⁴⁴ Creating the potential for "unjustified exercise of power" these issues must be seen as emerging from the concept of participation itself rather than through a practitioner's operationalization of active learning strategies.¹⁴⁵ From an IL perspective, these ideas suggest that instruction research needs to move 2.4.

beyond a constant revision of teaching approaches to instead engage with broader questions related to community and classroom power relations. These issues include a consideration of learner choice and bargaining power, as well as concerns related to self-censorship, risk, educational surveillance, and the ethics of classroom confidentiality and anonymity.

Conclusion

In this paper, the authors have drawn upon research from LIS, education, educational technology, and development studies to interrogate active learning and the prominent role it plays within IL instruction. This approach has highlighted potentially problematic issues related to active learning, including the obscuring of self-protective learner actions, the exposure of learners to risk, and, potentially, the overblown benefits of participation. These criticisms may lead some to believe incorrectly that the authors oppose active learning and advocate for a return to transmissive pedagogies and modes of education. As educators, the authors remain committed to the employment of active and participatory techniques within classrooms. A dedication to participatory education requires critical vigilance, however. Teaching librarians and LIS educators alike must continue to explore and draw attention to issues that may be masked through a heedless acceptance of active learning orthodoxies.

One of the most important actions that teaching librarians can take is to examine the theoretical foundations on which much IL-focused active learning research is based.

Unlike disciplinary faculty, who typically cite John Dewey, Jean Piaget, and Lev Vygotsky in their justification of student-centered models of education, the literature review for this paper demonstrated that librarian-authored literature tends to incorporate the work of Benjamin Bloom and David Kolb and the highly criticized concept of learning styles as the basis for curricular change.¹⁴⁶ While these concepts remain popular, they have been challenged for pigeonholing learners and focusing attention on isolated individual processes rather than situated social interaction.¹⁴⁷ Further research should

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interrogate the theoretical influences that librarians employ in their exploration of active learning as well as how these ideas constrain the development of active learning opportunities. IL research should also engage with the frequently overlooked origins of active learning in Dewey's thought and constructivist theory. The onus that much

active learning research places on the individual student, for example, erases the supportive role that Dewey assigns to the teacher, while the establishment of fixed IL outcomes downplays students' ability to shape how they choose to participate within systems of higher education.¹⁴⁸ The emphasis

... the establishment of fixed IL outcomes downplays students' ability to shape how they choose to participate within systems of higher education.

higher education.¹⁴⁸ The emphasis on what students do rather than what they bring to the classroom further negates a constructivist focus on prior experience.¹⁴⁹

More specifically, teaching librarians can address the issues raised through an unchallenged use of active learning in the IL classroom. To consider questions related to self-protective information behaviors and nonparticipatory or resistant activity, teachers could approach learner actions or inactions as an opportunity to gain insight into students and their experiences of the classroom, rather than viewing reactions as disruptive or as symptoms of deficiency. This approach would ensure a learner's "right to compare, to choose, to rupture, to decide"¹⁵⁰ as well as signaling that the teacher is committed to protecting learners' dignity and humanity.¹⁵¹ As Paolo Freire reminds educators in *Pedagogy of Freedom*, teaching is uniquely shaped and conditioned by culture and society and therefore cannot be perceived as neutral. The variability of experiences that shape the learners who enter our classrooms means that any teaching method will be received differently by each. Teachers who approach resistant or participatory actions as a form of insight or a communicative act will be better equipped to learn about individual students and their situation and will be closer to realizing the type of teacher coherence that lies at the heart of critical education.¹⁵²

Questions of technological risk and inclusion could be addressed through inviting students to examine what the cost of taking part is, whether that is forfeiting privacy or surrendering personal data, rather than demanding student participation on any given digital platform. Inviting interrogation of platforms and their governance facilitates

individual choice of how one might opt to take part in a classroom and gives space for understanding that those costs may be higher for some than for others. Working alongside

Teachers who approach resistant or participatory actions as a form of insight or a communicative act will be better equipped to learn about individual students and their situation learners to critically reflect on the consequences of participating in one's learning, whether beneficial or harmful, would further move teachers closer to the critical education Freire imagined by inviting learners to deal "critically and creatively with reality." As they do so, they may "discover how to participate in the transformation of their world."¹⁵³ Such an approach would continue moving teaching librarians toward a reciprocal relationship with learners as well as an inquiry-driven stance toward learning.

2.4.

To conclude, rather than opposing active learning as an impactful teaching strategy, the authors

argue that IL instructors who wish to use these methods in their classrooms must be deliberate in investigating what participation means for the learners with whom they work. Such a stance requires that educators do not merely shelter behind popular support for participatory models of education but, instead, critically engage with the implications of their pedagogical strategies and actions. Active learning originally emerged from a wish to reexamine inherited teaching practices and center the fearner. This paper demonstrates that this project remains unfinished yet is more important than ever if educators are to provide inclusive and equitable learning opportunities.

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