

**Power
and
Privilege**

**in the
Learning
Sciences**

**Critical and
Sociocultural
Theories of Learning**

Edited by **Indigo Esmonde**
and **Angela N. Booker**



POWER AND PRIVILEGE IN THE LEARNING SCIENCES

Although power and privilege are embedded in all learning environments, the learning sciences is dominated by individual cognitive theories of learning that cannot expose the workings of power. *Power and Privilege in the Learning Sciences: Critical and Sociocultural Theories of Learning* addresses the ways in which research on human learning can acknowledge the influence of differential access to power on the organization of learning in particular settings. Written by established and emerging scholars in the learning sciences and related fields, the chapters in this volume introduce connections to critical and poststructural race theories, critical disability studies, queer theory, settler-colonial theory, and critical pedagogy as tools for analyzing dimensions of learning environments and normativity. A vital resource for students and researchers in the fields of learning sciences, curriculum studies, educational psychology, and beyond, this book introduces key literature, adapts theory for application in education, and highlights areas of research and teaching that can benefit from critical theoretical methods.

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Critical and Sociocultural
Theories of Learning

*Edited by Indigo Esmonde and
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FOREWORD

Critical Learning Opportunities for the Learning Sciences

The learning sciences began with efforts to push beyond the boundaries of traditional cognitive science's focus on individual mental functioning examined largely through experimental and quasi-experimental designs. The avowed focus, articulated in 1992 by Ann Brown, was to study fundamental theories of learning as learning unfolded in real world settings. This early focus included drawing on extant and unfolding theories of learning to design environments—largely in school, but other settings as well—that facilitated robust learning. These efforts led to the evolution of what is now called design-based research (Barab & Squire, 2004). Early work in the learning sciences also included the design of digital tools to support learning. This focus on the mediational affordances of digital tools remains a significant pillar in the breadth of research in the learning sciences.

Learning sciences evolved out of conceptions of the power of inter-disciplinarity—cognitive science, computer science, educational psychology, and linguistics. In many respects, major programs of research in the learning sciences continue to reflect integration across these disciplines. These early foci did not include attention to culture or to issues of differential power within and among communities associated with race, ethnicity, class, gender, sexual orientation, or normative conceptions of ability. The first *Handbook of the Learning Sciences* (Sawyer, 2008) reflects the integration of these disciplines. There is one chapter in the handbook on culture and learning (Nasir, Rosebery, Warren, & Lee, 2006). On the other hand, the handbook chapters clearly reflect the influence of socio-cultural theories of learning in terms of learning entailing more than individual mental functioning, the role of artifacts and intra-group processes, and the idea of learning within and across settings. The chapter by Bransford and colleagues (2006) provides a synthesis of how current fundamental propositions in the

learning sciences conceptualize learning in these ways. In many respects, this chapter—led by John Bransford—who also led the team that produced the National Research Council volume *How People Learn* (Bransford, Brown, & Cocking, 1999)—demonstrates how the field has expanded beyond the largely cognitive focus of the 1999 *How People Learn* volume.

At the same time, several decades before the formal institution of the learning sciences as a field of study at Northwestern University, there was developing a long line of research, certainly inspired by what we might call the Vygotskian revolution, that evolved into what has come to be called cultural psychology (Cole, 1996, 1998). These studies included the classic studies by Scribner and Cole (1981) of the Vai people in West Africa, Lave (1977) of Liberian tailors, Rogoff (1981) of the social organization of learning in a Mayan community, Greenfield (Greenfield & Childs, 1977) of weavers in Mexico, Serpell's (1980) comparative studies of situated differences in approaches to problem solving by children in Zambia compared to children in England, Saxe's (1981, 1988) studies of number systems in Papua New Guinea and children selling candy on the streets of Brazil, Hutchins' (Seifert & Hutchins, 1992) study of the distribution of cognition in how sailors on a naval boat coordinate, and others of learning unfolding in informal contexts as people were engaged in routine everyday practices where learning unfolded through the social organization of the settings and the artifacts and tools available to wrestle with complex problems of learning. Cole's (1996) conception of tools as physical (e.g. hammers) and ideational (e.g. concepts, strategies) proved a useful concept for understanding learning as distributed across people and tools. Rogoff and Chavajay (1995) provide a useful synthesis of this research. It is important to note that most of this research took place outside of the U.S. and Europe. Much of this research was explicitly pushing the boundaries of accepted Piagetian theories of stages of intellectual development as largely intra-mental functioning. In many respects these efforts to examine learning in cultural settings beyond the U.S. and Europe opened an intellectual space for thinking about the centrality of culture in human learning. Without question, these foundational studies in the tradition of Cultural Psychology have become well integrated into how the learning sciences are taught in graduate programs.

This important volume introduces a complementary body of theoretical traditions that have not been widely addressed in the broad family of intellectual pillars that have evolved in the learning sciences so far. The volume raises the question of how our understandings of human learning can and should take into account how differential access to power structures the organization of learning in particular settings. Chapters in this volume introduce connections to critical race theory, critical pedagogy, and critical conceptions of normativity as tools for analyzing dimensions of learning environments and for conceptualizing the challenges learners face as they seek to engage in learning in particular settings. As such, these chapters together push the boundaries of an already inter-disciplinary

field, one that has consistently evolved since its beginnings in the early 1990s. The challenge will be how to institutionalize the integration of these critical orientations into the field—within and across graduate programs; explicit attention in conferences, particularly the International Conference of the Learning Sciences; journals in the field, especially *Journal of the Learning Sciences* and *Cognition and Instruction*, as well as disseminating this expanded conception of the Learning Sciences in other journals; in handbooks; as worthy objects of scholarship for promotion and tenure in the academy; and as conceptual and methodological tools in the design and evaluation of learning environments. The design challenges are significant. Research by Megan Bang, Shirin Vossoughi, Kris D. Gutiérrez, and others reflects design principles that require viewing community constituents as partners in design and evaluation. These challenges, however, should be understood as not merely intellectual. Rather, they are challenges that stand in tension with long-standing meta-beliefs and ideologies about differences across human communities (Lee, 2009). For example, conceptions of race defining presumed normative hierarchies across human communities can be traced not only to the founding of the U.S., the histories of colonialism, and slavery across European countries (Mills, 1997), but to the history of psychology and attendant fields in cognition and human development (Gould, 1981). The expression of race as deficit difference was historically quite explicit, but today continues to surface in more subtle and indirect ways, often locating deficit differences in positionings with regard to poverty. I suspect wrestling with these meta-narratives will require not only intellectual push back but political organizing as well, in the politics of our research associations, our universities, our funding agencies, and equally important, working in and with communities.

I would like to argue that underlying the challenges raised by this volume—namely understanding how issues of power operate with regard to how, what, and where people learn—is the necessity of articulating a set of core propositions and warranting those propositions as they are multiply supported by empirical and theoretical research from across disciplines (Lee, 2008; Lee, 2010):

1. Diversity within and among human communities is the strength that allows the species to survive challenge over time. The ability to adapt is central to human functioning.
2. Humans learn in different ways. There is no single normative pathway.
3. All human communities over time have constructed knowledge systems that facilitate their abilities to adapt and influence their circumstances.
4. Even in the face of the most severe challenges, humans have agency.
5. Central to human functioning are perceptions, emotions, social relationships and attachments, the need to address ego needs for a sense of safety, efficacy, health—as these are coordinated in human cognitive activity, activity that is situated, social, and dynamic.

6. Humans belong to and participate in multiple cultural communities, communities that experience both stability and change, homogeneity and heterogeneity.
7. Human functioning must be understood in the contexts of time (historical, ontogenetic, microgenetic) and as navigations within and across spaces.

These core propositions are foundational to the critiques raised in this volume.

Whether how critical pedagogies seek to examine and design education as a tool for deconstructing and resisting systemic efforts to disempower communities in the tradition of Freire, or how critical discourse analyses document the ways that language conveys positioning (e.g. the language of meta-narratives around deficit and difference, around hypothesized stable and homogenous middle-class practices as resources of power), or how queer theory resists assumptions of normativity with regard to sex and gender identity and orientations, or how a focus on indigenous knowledge systems expands our understanding of how human communities conceptualize relations between humans and the natural world, or how critical race theory articulates the centrality of race in oppressive systems in the U.S.—all challenge assumptions of normativity, of the necessity of homogeneity, all call for understanding how an array of institutions are structured to disempower because differences across human communities are not viewed as both the norm and a necessity.

While many of the chapters are addressing the affordances of sociocultural theoretical and methodological traditions, it is also important to understand the contributions of fields like Black Psychology (Boykin, 1979; Nobles, 1972; Sellers, Shelton, Cooke, Chavous, Rowley, & Smith, 1998), ecological systems theories (Spencer, 2006), and dynamic systems (Fischer & Bidell, 1998) to what we might think of as an evolving revolution in how across fields we seek to understand human learning and functioning. Across the fields addressed in this important volume—critical race theory, critical pedagogy, critical and poststructuralist discourse theories, critical disability studies, queer theory, indigenous knowledge systems—we are moving forward in understanding how humans learn to navigate and resist disempowering social systems, how humans create communities of resilience in the face of challenge, and the range of ways human communities are organized, including how they shift over time, to adapt to challenge and change. These big ideas have and continue to be explored in the other fields I have referenced.

However, moving from theory to practice, from theory to transforming historically rooted and sustained belief systems and the institutional structures that embody such belief systems are the tasks and the challenges at hand. I would argue that building institutions that embody the powerful ideas of resistance and critical sense-making put forward in this volume is one way we as researchers can think about impact and transformation. Whether the African-centred schools I and colleagues in Chicago have built over the last 48 years (Lee, 1994), or the powerful program for high school students from Migrant Families that Gutiérrez,

Vossoughi, and others built at UCLA (Espinoza, 2009), or the school–community partnerships that Moll and colleagues built with the Funds of Knowledge Program (González, Moll, & Amanti, 2004), or Ladson-Billings (2013) most recent work with communities of hip hop artists, moving beyond the walls of the academy to build institutions with long-term presence in communities is an equally compelling program of resistance, expanding the learning sciences beyond the insular walls of the academy.

Carol D. Lee

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INTRODUCTION

Indigo Esmonde and Angela N. Booker

The learning sciences is an interdisciplinary field, dedicated to studying learning and teaching in a wide variety of contexts. Approaches from psychology, cognitive science, neuroscience, education, anthropology, and sociology provide multiple lenses on the field's big questions: What is learning, and how does it occur? What "should" people learn, and how do we know when they have learned it? Which teaching methods, in which contexts, are most likely to bring about "good" learning?

As such, the field is concerned with relations among people, and between people and the practices in which they participate. We study the varied forms of practice and knowledge that shape and support human participation across environments and over time. When we look more closely, we discover that wherever we find social relations, variability of experience and practice, or evaluation of knowledge and learning, we also find dynamics of power. The learning sciences, therefore, must necessarily centre conceptions of equity, diverse experience, and the dynamics of power and privilege expressed in and through learning environments. Yet, the learning sciences possesses limited theoretical underpinnings that make the relationship between power and learning visible, even as the field strives to speak across both a situated, sociocultural tradition and a more individualistic psychological tradition.

Sawyer (2006a) named five "early influences" (p. 5) on the development of the learning sciences: constructivism (as rooted in Piaget's work), cognitive science, educational technology, sociocultural studies, and studies of the nature of knowledge. From this foundation, the learning sciences has developed a strong emphasis on the design of learning spaces (including, but not limited to school classrooms), and the use of technology to support learning.

Issues of power and oppression require more committed attention in the learning sciences. Consider, for example, the two flagship publications representing the “state of the art” of the learning sciences at their time of publication, *How People Learn* (Committee on Developments in the Science of Learning with additional material from the Committee on Learning Research and Educational Practice, National Research Council, 2000) and *The Cambridge Handbook of the Learning Sciences* (Sawyer, 2006b). These two volumes make very few references to issues of power and oppression. An important exception is the *Handbook* chapter *Learning as a Cultural Process: Achieving Equity through Diversity* (Nasir, Rosebery, Warren, & Lee, 2006). But even this chapter was placed in the section entitled Learning Environments, indicating that this material may not be relevant to other sections, including Foundations (of the field), Methodologies, The Nature of Knowledge, or Learning Together.

All contexts are learning contexts, and the authors in this volume take the approach that power is ever-present in learning contexts. Some people might agree with this point, but still maintain that power is not necessarily connected to broader systems of oppression (such as racism, patriarchy, colonialism). For example, in classroom settings teachers wield power over their students, and students may have access to different kinds or levels of power over one another, relating to friendship, popularity, or perceived smartness. These are not obviously related to broad social systems, and yet, if we look beneath the surface, teachers are authorized by the government to teach state-sanctioned curriculum. In the United States, the vast majority of teachers come from the dominant racial group—white people—and from a comfortable economic class (Ball & Tyson, 2011). Again, dissenters might point out that most teachers in the U.S. are women! And what about teachers who are racialized minorities, or from the working class? Do they not wield power? We would reply that this kind of complexity is why we need *theories* of power, to explain how power circulates in contexts, how it aligns with structural oppression, how it challenges oppression, how it is subtle, and explicit, pervasive, and yet often invisible. A final protest might contend that my original statement was too general: Could it really be true that power is present in *all* (learning) contexts? We ask that the reader judge for themselves after reading through the volume (and, yes, we just used “they” as a gender neutral singular pronoun).

The sociocultural tradition offers promise to integrate a critical understanding of power with an analysis of learning. We use the term sociocultural theory to describe the diverse set of theories that are rooted in Vygotsky’s work in the early 20th century, including situated learning theory, cultural-historical activity theory, distributed cognition, and others. Vygotsky was committed to developing a Marxist psychology, one that could explain how the material conditions of labour shape everyday learning and cognition. Since that time, others have taken up critical approaches to studying learning. These range from projects that have demonstrated the deep cognition required for seemingly menial or blue-collar

work (e.g., Sylvia Scribner's study of dairy work, 1985), to projects that codify the development of cultural and racialized identities (e.g., Lee, 2007; Nasir, 2011), to cultural-historical activity theorists who have demonstrated how an analysis of breakdowns within an activity system (often stemming from power imbalances) can support reorganization and generative learning (e.g., Engeström, 2000, studies of medical care). Each of these studies draws from different theoretical resources and applies different concepts to the study of power.

Sociocultural approaches to the study of learning have begun the difficult work of analyzing how historically constructed systems of power and oppression can be understood in the moment-to-moment unfolding of learning. The field could benefit greatly by integrating traditions of critical theory that have largely developed outside of the learning sciences (Lewis, Enciso, & Moje, 2007). While critical theories have made substantial inroads into educational studies as a whole, these theories (e.g., critical race theory, queer theory) have largely not been concerned with the study of *learning*. Increasing numbers of learning scientists are engaged in this critical work, and the time is ripe to expand the field's analyses of power and oppression. This volume advocates a shift from ad hoc approaches to a more shared and deliberate project to grapple with the ways our work is situated and mobilized with regard to power.

In this book, we bring together a variety of theories that address the circulation and operation of power in society, to use as resources for critical sociocultural theories of learning. To aid in the process of integration, Chapter 2 provides an overview of sociocultural theories—their roots, ways of conceiving power, and the different directions that have emerged over the last fifty years. Chapters 3 through 8 address, respectively: critical race theory, poststructural theories of race, critical disability studies (with some additional material on how Vygotsky and his intellectual descendants have conceptualized disabilities), queer theory, settler colonialism studies and indigenous ways of knowing, and critical pedagogy. Inspired by Nasir and Hand's (2006) integrated review of sociocultural theory with research on race and racism, the authors of these chapters were tasked with the following guiding questions:

1. What was the theory developed to explain? What is the history of this theory?
2. What are the key themes, assumptions, or conceptual frameworks of this theory?
3. What methodologies are predominantly used?
4. How does this theory interface with theories of learning? How does this theory help to grow a more critical sociocultural theory of learning, and how can sociocultural theories of learning contribute to the development of the critical theory?

We close with Chapter 9, in which we review the material throughout the book, and put forward principles and unresolved questions towards critical sociocultural theories of learning.

This volume addresses the need for a broad and integrated approach to critical studies of learning, although we make no claims to a single theory that can answer all of our research questions. The theoretical integration and synthesis required is not easy work. These theories have different histories, assumptions, and goals, and the authors in this volume will discuss where the theories fit together and where they do not, which points of tension seem productive and generative, and which tensions have to be resolved to move forward.

Why now? And why the learning sciences, and not educational psychology, or any other field? We believe the learning sciences is uniquely positioned in several ways. First, the learning sciences is already interdisciplinary, so we are already learning to make explicit the assumptions underlying our research, and to work across difference. Second, the learning sciences wields power in the domain of educational policy and practice: educators, policy-makers, granting organizations, turn to the learning sciences for cutting-edge, innovative design work to support learning in a variety of contexts. We can shift the focus away from learning as an individual cognitive endeavour, and help the broader public see that learning is always social, relational, and cultural.

Why does this volume argue that the field as a whole needs to take on this challenge, rather than isolated efforts of those who are interested in questions of power? In part, the answer lies in each of the chapters; they argue, in different ways, that power is always present in learning contexts, and so no learning design can be successful if power is not taken into account. Second, it becomes increasingly difficult for those isolated individuals to persist, when scholarship that addresses power is pushed to the fringes, rejected from flagship journals, or derided as “activism” and not scholarship (an odd way to insult someone, in a field known for its fierce advocacy about productive learning contexts).

We invite the reader to consider how these varied theoretical frameworks can be a resource for the learning sciences. It is our hope that this volume marks the beginning of renewed and vibrant debate about our theories, priorities, conceptualizations of research, and methodologies. Such conversations can only deepen the field’s capacity to work across our differences and develop more powerful and inclusive contexts for learning.

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