

WHAT'S HOT IN LITERACY

LITERACY RESEARCH, PRACTICE AND EVALUATION

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LITERACY RESEARCH, PRACTICE
AND EVALUATION VOLUME 11

WHAT'S HOT IN LITERACY: EXEMPLAR MODELS OF EFFECTIVE PRACTICE

EDITED BY

EVAN ORTLIEB

The Citadel, USA

STEPHANIE GROTE-GARCIA

The University of the Incarnate word, USA

JACK CASSIDY

Texas A&M University-Corpus Christi, USA

EARL H. CHEEK, JR.

Louisiana State University, USA



United Kingdom – North America – Japan
India – Malaysia – China

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ABOUT THE EDITORS

Evan Ortlieb is a Professor and Dean of the Zucker Family School of Education at The Citadel in Charleston, South Carolina, United States.

Stephanie Grote-Garcia is a certified Reading Specialist and Master Reading Teacher as well as Professor at the University of the Incarnate Word. She is the President of the Specialized Literacy Professionals, a special interest group of the International Literacy Association.

Jack Cassidy is a Professor Emeritus at Millersville University in Pennsylvania and is retired from Texas A&M University-Corpus Christi where he was Associate Dean for Graduate Studies in the College of Education. He has previously served as President of the International Reading Association and is a Member of the Reading Hall of Fame.

Earl H. Cheek, Jr. is a Patrick and Edwidge Olinde Endowed Professor Emeritus at Louisiana State University in Baton Rouge, Louisiana, United States.

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ABOUT THE CONTRIBUTORS

Jill Castek is an Associate Professor in the department of Teaching, Learning, and Sociocultural Studies at the University of Arizona. Her research explores the intersection of digital literacies and STEM learning. Her work in disciplinary literacies explores how reading, writing, communicating, and collaborating digitally can support language development, knowledge building, and collaboration.

Megin Charner-Laird is an Associate Professor in the School of Education at Salem State University, where she also co-chairs the programs in educational leadership. Her research, focused on teacher leadership and professional learning, has appeared, recently, in the *American Journal of Education*, *Journal of School Leadership*, and *Educational Administration Quarterly*.

Earl H. Cheek, Jr. is a Patrick and Edwidge Olinde Endowed Professor Emeritus at Louisiana State University in Baton Rouge, Louisiana, United States.

Crystal D. Cook is a Family and Community Engagement Advisor with Shelby County Schools in Memphis, TN. She has served as an elementary and teacher of English Learners (ELs) for 17 years. Her research focus is on family engagement, literacy and language acquisition for ELs.

Edwidge Crevecoeur, Ph.D. is an Associate Professor and Coordinator of ESOL in the Education Department at Flagler College in Florida. She serves as Co-director of Agrilti, Kominote, Alfanèt (AKA), a literacy center in Petit Goâve, Haiti. She earned a doctorate in Applied Linguistics and Bilingual/Bicultural Education from Teachers College, Columbia University.

Allison Swan Dagen is a Professor in the College of Education and Human Services at West Virginia University, where she also serves as Program Coordinator for the Literacy Education/Reading Specialist program. Her interests include effective professional learning for literacy leadership and reading specialist preparation. She was a Lead Standard Writer of ILA Standards 2017.

Samuel DeJulio is an Assistant Professor of literacy in the Department of Interdisciplinary Learning and Teaching at the University of Texas at San Antonio. His work is focused on literacy teacher preparation, particularly on experiences within field-based courses and partnerships with local schools, teachers, and families.

Christina L. Dobbs is an Assistant Professor at the Wheelock College of Education and Human Development at Boston University. Her research focuses on adolescent writing in the disciplines, academic language, and disciplinary

literacy professional learning. Her recent books include *Investigating Disciplinary Literacy* (2017) and *Disciplinary Literacy Inquiry & Instruction* (2019).

Susan Dougherty is an Associate Professor in the College of Education and Human Services at Rider University. She is a former elementary classroom teacher. Her scholarly and professional work focuses on preservice teacher development, family literacy, and preschool and early elementary literacy instruction. She is co-editor of *Pivotal Research in Early Literacy: Foundational Studies and Current Practice*.

Evelyn Ford-Connors is a Senior Lecturer and Literacy Education Program Director at Boston University's Wheelock College of Education and Human Development where she co-directs the Donald D. Durrell Reading and Writing Clinic. Her professional interests focus on classroom discourse, literacy coaching, and the instructional needs of struggling readers and writers.

Janis Harmon is a Professor of Literacy Education at the University of Texas at San Antonio. Her research interests include children's and young adult literature and effective middle school and high school literacy programs with a special emphasis on vocabulary acquisition and instruction and comprehension. She teaches both undergraduate and graduate literacy courses for educators interested in teaching at the middle school and high school levels.

Jacy Ippolito is a Professor in the School of Education at Salem State University. His research focuses on the intersection of adolescent literacy, literacy coaching, and leadership. His recent books include *An UnCommon Theory of School Change* (2019) and *Cultivating Coaching Mindsets* (2016).

Bonnie Johnson teaches courses in Literacy and Curriculum and Instruction at St John's University, New York City. She is the Author, Co-author, and Co-editor of nine books, numerous chapters, articles, and a newspaper column. Her research focuses on social injustices in the early years, word origins, and aspects of figurative language.

Diane Kern is a Professor of English Language Arts and Literacy Teacher Education, School of Education, University of Rhode Island, USA. Her research interests include literacy teacher education, standards for the preparation of literacy professionals. She was Co-chair of ILA *Standards 2017* and currently serves as ILA's National Recognition program coordinator.

Rachelle Kuehl is a recent graduate of Virginia Tech, having earned both a Ph.D. and an Ed.S. in curriculum and instruction and specializing in early literacy practices. She is a former teacher whose articles about reading and writing instruction have been published in the *English Journal*, *Reading in Virginia*, the *Virginia English Journal*, and the *Teacher Educators' Journal*.

Julia B. Lindsey is a doctoral candidate at the University of Michigan School of Education. Her research interests focus on phonics, early reading instruction, and

developing early reading programs and materials that can impact reading outcomes while also engaging children in meaningful, culturally relevant instruction.

Michael Manderino is a Director of Curriculum and Instruction at Leyden High School District 212 in the metro area of Chicago and a graduate faculty scholar at Northern Illinois University. Her research focuses on the intersection of digital and disciplinary literacies. He is Co-author of three books and several articles.

Miriam Martinez is a Professor of Literacy at the University of Texas at San Antonio where she teaches children's literature and literacy courses. Her research has focuses on content analyses of children's literature and the nature of children's literary meaning-making. She serves on the Board of the Children's Literature Assembly.

Heidi Anne Mesmer studies beginning reading instruction and text difficulty, and her work has been published in *The Reading Teacher*, *Reading Research Quarterly*, and *The Educational Researcher*. She is the Author of *Letter Lessons and First Words: Phonics Foundations that Work (PreK-2)* and three other books for reading educators.

Florin M. Mihai, Ph.D., is a Professor of TESOL and the Director of the Undergraduate TEFL Certificate in the Modern Languages and Literatures Department at the University of Central Florida. His research interests and publications focus on language and content-area assessment for English learners and pre- and in-service teacher education.

Kouider Mokhtari, Ph.D., is the Anderson-Vukelja-Wright Endowed Professor of Literacy Education at the University of Texas at Tyler. His research focuses on the acquisition of language and literacy by first and second language learners.

Aimee Morewood is a Professor in Literacy Education in the Department of Curriculum and Instruction, Literacy Studies at West Virginia University, USA. Her research interests include professional learning opportunities, online instruction, and teaching adaptations. She is on the Board of Director for the Association of Literacy Educators and Researchers.

Joyce Nutta, Ph.D. is a Professor of World Languages Education and the ESOL Endorsement and TESOL Ph.D. Track Coordinator at the University of Central Florida. She is devoted to equipping teachers of all subjects and grade levels with tools and techniques that support English learners' academic achievement and language development.

Evan Ortlieb is a Professor and Dean of the Zucker Family School of Education at The Citadel in Charleston, South Carolina, United States.

Jeanne R. Paratore is a Professor Emerita, Literacy Education, at Boston University Wheelock College of Education. She is an elected member of the

Reading Hall of Fame, a former classroom teacher, and reading specialist. Publications relate to grouping, interventions for struggling readers, coaching, integrating multimodal resources in classrooms, and family literacy.

J. Helen Perkins is a Professor of Literacy and the Literacy Coordinator at the University of Memphis. She has served as a reading specialist, classroom teacher, literacy coach, and in various other capacities. Her scholarly work focuses on children of poverty, their literacy promising practices; she has published several articles, book chapters and books.

Yvonne Pratt-Johnson is Professor of Education at St. John's University in New York City. Her research and scholarly work focus on first and second language acquisition, literacy development in first and second language learners, and issues associated with English-based Creoles and the teaching of dialect-different students within a "standard English" instructional context.

Dana A. Robertson is Executive Director of the Literacy Research Center and Clinic and Associate Professor in the School of Teacher Education at the University of Wyoming. He is a former classroom teacher, literacy specialist, and coach. Areas of professional interest include classroom discourse, comprehension, reading and writing challenges, literacy coaching, and teacher professional learning.

Misty Sailors is a Professor of language and literacy studies and department chair in the Department of Teacher Education and Administration at the University of North Texas. Her scholarly work focuses on literacy tools found in classrooms; the professional development of reading teachers and literacy coaches; and literacy program development.

Carine Strebel, Ph.D., is a Teacher Educator, focusing on building pre- and in-service teachers' efficacy in educating English learners. She also serves as a Subject Matter Expert at the University of Central Florida on a National Professional Development Grant. Prior to joining the TESOL field, she taught French and German.

Sue Oakes Verlaan is an Adjunct Professor of secondary ELA instruction and a Student Teacher Supervisor at the University of Alabama in Huntsville. She has co-authored several publications addressing various aspects of the writing process and language learning.

Wolfram Verlaan is an Associate Professor, Department Chair, and Coordinator of the M.Ed. Reading Specialist Program at the University of Alabama in Huntsville. He has authored and/or co-authored numerous publications addressing ELA instruction including articles appearing in the *Journal of Adolescent and Adult Literacy* and *Voices from the Middle*.

Thomas DeVere Wolsey teaches in the Graduate School of Education at The American University in Cairo, Egypt. His research interests include assessment,

language learning, and intersections of these with technology. With colleagues Lenski and Grisham, he wrote *Assessment Literacy: An Educator's Guide to Understanding Assessment, K-12* published by Guilford Press in 2020.

Casey D. Wright is an Early Childhood Educator at Porter-Leath, an NGO in Memphis, TN. She has a high level of experience working with English Language Learners of various age groups in academic settings. She has received numerous awards for her work with early childhood – first grade students.

FOREWORD

Evan Ortlieb

Understanding how to address current trends and issues in literacy education is more important than ever, as local, state, and inter/national legislation and agendas are increasingly recognizing literacy as a foundation for success in all disciplines in education. Learning the languages of mathematics, science, and history is quintessential to content knowledge acquisition and dissemination. As a result, this text not only addresses hot topics in literacy but also features current practices across the globe that foster literacy success in K-12 classrooms.

With its first chapter on digital literacies for disciplinary learning, this volume begins with Manderino and Castek calling for pedagogies that youth deserve. Dobbs et al. showcase promising practices, with extended foci into the home, school, and neighborhood through Johnson and Pratt-Johnson's chapter on early literacy initiatives. Specific suggestions for English Language Learners are explicated in Mokhtari et al.'s chapter that precedes Wolsey's influential work discussing the nuances between assessment, instruction, and learning in K-12 settings.

How adolescent literacy is different today is discussed in Ortlieb and Cheek's chapter before an explicit focus on building purposes and engagement in writing assignments is discussed by Verlaan and Verlaan. Perkins et al. stress the importance of social, emotional, and cultural learning in literacy. Robertson et al. discuss the need to re-conceptualize literacy instruction to accelerate student progress, and Lindsey et al. remind us that core literacies like phonics and phonemic awareness must remain cornerstones of effective literacy instruction.

Educators are always in search of professional development that supports their increasingly diverse learners' language and literacy acquisition in print and digital spaces, as antiquated instructional practices still prevail in classrooms worldwide. Engaging learners in purposeful instruction in skills and strategies is a cornerstone in every classroom. This text provides exemplar models of effective practice involving hot topics in literacy, prompting teachers, specialist, coaches, and administrators alike to be empowered to reconsider and improve their curricular planning and instruction.

HOT TOPICS

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CHAPTER 1

DIGITAL LITERACIES FOR DISCIPLINARY LEARNING: PEDAGOGIES YOUTH DESERVE

Michael Manderino and Jill Castek

ABSTRACT

*Today's digitally connected classrooms have the potential to be places for rich and engaged disciplinary learning. This chapter takes two topics that have been identified in the *What's Hot in Literacy 2019* study, digital literacies and disciplinary literacies, and illustrates their intersections and synergies. Both areas have remained hot and very hot as individual topics. In this chapter, the authors explore the powerful opportunities to harness the learning potential of the Internet to engage learners across disciplines. By forging connections between digital literacies for disciplinary learning, the authors examine practices and develop pedagogies that youth deserve.*

Keywords: Digital literacies; disciplinary literacies; technology; inquiry; learning; knowledge construction; communication

While the shifts toward an increasingly digitally mediated society have been theorized, technology has and will continue to expand and shift. A new technology may be obsolete before a strand of research on that technology is circulated. Technological proliferation has posed new pedagogical considerations for educators and researchers. Access to the Internet along with 1:1 technology has created opportunities and challenges for educators to consider the role of digital learning and literacy development. Most recently, a Pew Internet and American Life survey revealed that 95% of teens reported possessing a smartphone with 45% reporting

they are online constantly and another 44% reporting being online several times per day (Anderson & Jiang, 2018). Such unfettered access to and use of online resources and collaborative platforms create possibilities to use and produce a vast range of materials that can be shared, revised, and remixed. Individuals and groups can connect both locally and globally, and contribute to an ever-expanding base of knowledge. This level of access creates questions of what it means to be literate with digital text and tools. Additionally, wide access to information online creates opportunities to engage with texts long kept vaulted in university libraries and databases reserved for those with university credentials and passwords.

The Internet, online information, and networked communication tools mediate the ways we learn, but the tools to develop knowledge have traditionally been implemented offline and face-to-face. However, the availability of digital texts and tools widens and amplifies opportunities to learn. Currently, digital devices are increasingly used for accessing and sharing information, creating representations of conceptual thinking, and encouraging dialogic exchanges. Internet use and global networking that address these purposes offer a multitude of real-world contexts, in which learners may engage as critical and agentive citizens especially through the use of digital texts, tools, and practices.

DIGITAL LITERACIES

The literacies' practices that are brought to bear on digital texts and tools have been conceptualized and labeled as online comprehension (Coiro, 2011), twenty-first century literacies, new literacies (Leu et al., 2019), web literacies (Belshaw, 2011), and digital literacies (Lankshear & Knobel, 2006). Often, these labels are used interchangeably to reflect the complexity of literacies deployed in digitally mediated environments. In this chapter, we use the term digital literacies to stay congruent with the findings from the What's Hot in Literacy 2019 survey as well as our own work that has been conceptualized using digital literacies. Digital literacies are both multifaceted and multidimensional. Digital literacies are needed to use digital tools to consume, curate, and produce knowledge (O'Byrne, 2018). Learners who are digitally literate need to develop flexible mindsets and competencies to make choices, interact, and engage in an open, networked society (Lankshear & Knobel, 2006; Phillips & Manderino, 2015). Digital literacies also represent the multitude of ways people collaborate, create, and communicate using digital texts and tools. However, we also can be limited in these pursuits without a critically grounded stance toward power dynamics both on and offline. The ways that collaborate, create, and communicate are also shaped by their social contexts. In more formal learning spaces, social contexts are guided by academic norms and conventions that are shaped by disciplinary communities of practice such as science or history.

DISCIPLINARY LITERACIES

One strand of literacy scholarship has focused specifically on how the disciplines (e.g., history, literature, science) impact individuals' ways of knowing, and how

those ways of knowing impact an individual's construction of meaning when interacting with domain-specific texts or in domain-specific contexts. For example, the way that an expert reads a scientific text differs from that of a nonexpert. In other words, readers who are steeped in a discipline such as science use habits of thinking that support the comprehension of the text. A scientist may approach a text skeptically, because she knows that an individual scientific text must be congruent with scientific evidence. A scientist may use a particular text to generate a hypothesis for an experiment or inform her construction of a three-dimensional (3-D) model or. The scientist may also adjust her reading to account for the integrated nature of graphics and text to identify a claim made within the text. Discipline-specific teaching helps learners understand the ways, in which disciplinary texts are constructed and encourages them to employ particular practices when learning from such texts.

A historian, on the other hand, likely approaches a text differently. She may look specifically for divergent perspectives through primary and secondary sources and seek to disrupt a particular narrative based on the historical evidence provided. A historian may also consider who wrote the text and the context, in which it was written to ascertain the veracity of the account as a credible perspective. Finally, a historian may use a set of resources to construct a written argument about the role of a particular event on history. The purpose of these two disciplinary examples is to demonstrate that the goals of the reader and the context/domain in which they are constructed impact how an individual makes meaning from a text.

Disciplinary habits of practice are also situated in classrooms (Wickens, Manderino, Parker, & Jung, 2015). The situated nature of learning within a disciplinary community and how participation in such a community impacts an individual's knowledge construction should be used to design disciplinary literacies instruction. Habits of practice also recognize the wider range of disciplinary practices, including the distinct habits of thinking within a discipline that are needed to develop deep disciplinary knowledge and understanding.

Classrooms have the potential to transform into engaged learning environments, in which students experience authentic disciplinary practices. Disciplinary instruction involves asking questions, constructing meaning from data, generating creative solutions, and reflecting on how to improve these solutions for different contexts. This type of learning occurs through inquiries into solving real-world problems that impact learners and their understanding of the world. In such an environment, students regularly engage in analysis, think for themselves about the information they collect, and share ideas from different perspectives to make sense of the content they find both online and face-to-face.

A FRAMEWORK FOR THE INTERSECTIONS OF DISCIPLINARY AND DIGITAL LITERACIES

One of the reasons both disciplinary and digital literacies are hot is that a tension exists between what is perceived to be most valued by youth (digital literacies)

and what is most valued by teachers (disciplinary literacies). Taken on their own, the focus of digital literacies as youth driven and disciplinary literacies as educator driven, dichotomizes learning as school-based and disconnected from lived experiences. The intersection of digital and disciplinary literacies can be a site to interrogate these dichotomies and suggest more synergistic approaches for teaching and learning.

Both disciplinary and digital literacies are inextricably linked concepts (Manderino & Castek, 2016). Digital texts, tools, and practices are a part of disciplinary knowledge construction and learning. For example, a historian may draw on a digitally curated archive, construct a repository of digitized sources and artifacts, or communicate their interpretations via blogs, YouTube videos, or tweets. The use of digital texts and tools are guided by the disciplinary practices that a historian employs in their work. Whether a primary source is digital or physical, a historian will seek the authorship, context, and intended audience of that source and position it against other sources used in their curated set of texts for inquiry.

Teachers hold several pedagogical goals for their students and have other goals that may be directed from their school or district. Based on the What's Hot in Literacy Survey 2019 (Cassidy, Ortlieb, & Grote-Garcia, 2019), it is evident that both disciplinary literacies and digital literacies are at the forefront of educators and researchers topics that matter in and out of school, particularly for adolescents. We argue in this chapter that while taken on their own both disciplinary and digital literacies are important to conceptualize due to their importance to educators and researchers but perhaps more critical is to conceptualize how they intersect with one another and what their intersection means for educators and researchers.

We share in the chapter how we view the intersections of disciplinary and digital literacies to be critical and provide a framework by which to examine their intersections as a result of their being deemed "very hot" in the 2019 survey (Cassidy et al., 2019). Interrogating the intersections of disciplinary and digital literacies requires an examination of literate practices from multiple perspectives including multimodal meaning-making, knowledge consumption, production, and circulation, widening access to knowledge and knowledge sharing platforms, and issues of power.

Digital Literacies for Disciplinary Learning

Digital literacies are shaped by disciplinary learning. For example, scientific inquiry often includes the construction and testing of a representational model that is driven by scientific principles and concepts (NGSS Lead States, 2013). Examples of scientific models may include representations of the water cycle, cell division, or particle acceleration. Digital tools help learners visualize what they cannot readily see and provide the means to explore these models in a fully immersive way. Virtual reality applications and headsets allow learners to examine digital models from all angles, up close and in the round, as if the object were held in their hands. The construction of 3-D models of cell division, for example, and the use of interactive digital features within these models, may be more

effective at communicating dynamic processes than traditional two-dimensional figures. Moreover, the higher-order thinking processes used to interpret the 3-D models can be more generative and applicable to visualizing related concepts.

Digital literacies also shape the ways that individuals construct and communicate disciplinary knowledge. For example, if a learning goal is to communicate an analysis of a historical event, consideration of the medium is important. One task learners may be assigned may be to write a critical interpretation for the teacher. However, the digital contexts allow individuals to communicate with a wider audience that includes the public. Digital literacies, and the selection of a particular digital tool or medium, shape the possibilities for that knowledge construction and communication. Decisions to blog or create a digital artifact, and decisions about where to share the representation (e.g., on Twitter, Instagram, and blog), all impact the audience that the creator intends to engage.

Print-only resources insufficiently convey the complex and multilayered requirements of disciplinary literacies therefore necessitating the wide range of communication tools available in the digital age. For example, disciplinary and digital literacies are necessary to disentangle and critically evaluate online texts, because authorship, credibility, and accuracy can be veiled in web based resources. Similarly, digital literacies are critical to fully accessing the literacies required for disciplinary learning. As a result, we argue that digital and disciplinary literacies should be thought of as inextricably linked rather than as separate areas of focus. Most disciplinary practices in fields such as science, journalism, engineering, and other careers include digital resources as a part of their inquiry and employ practices such as gathering information, visualizing data, generating visual representations, and communicating. These practices require both digital and disciplinary literacies to read, write, and express ideas in multiple forms. Braiding digital and disciplinary learning uses the Internet's networking and knowledge-building resources toward this end. Likewise, using digital media can help shape learners' understanding of the social and intellectual practices of the discipline.

As the pace of digital innovation continually accelerates, educators at all levels must make space for instructional practices that build on the links between digital and disciplinary learning. To achieve this aim, educators can challenge these predefined spaces bounded by school and help learners find ways to deepen their involvement with online resources, learning materials, and networks. Some schools and communities have made strides in helping students gain access to the Internet both in and out of school by issuing one laptop, Chromebook, or tablet to each student through 1:1 computing. These programs open new avenues for learners, encouraging them to inquire, connect, and create, by providing everyone, students and teachers, access to the digital tools for deeper learning within and across disciplines. However, access is but a part of the larger.

We have argued that the intersection of disciplinary and digital literacies have three potentials to expanding literate practices for youth (Casted & Manderino, 2017). These potentials recognize that teaching and learning with digital technologies require us to think differently about classroom organization. They also introduce practices centered around teaching literacies in ways that cut across

disciplinary boundaries that include (1) creating conditions for leveraging bi-directional expertise; (2) democratizing knowledge production; and (3) expanding inquiry approaches that include both problem posing and problem solving.

Disciplinary literacy has been conceptualized as the practices of experts as the primary cognitive and linguistic behaviors displayed when reading texts in one's discipline such as history or science (Bazerman, 1985; Shanahan & Shanahan, 2008; Wineburg, 1991). One issue with these studies is they assume homogenized literacy practices for all "experts." Whereas Prior (2013) argues that all individuals use disciplinary ways of thinking and being in their lives. In terms of digital literacies, youth often are at the forefront of literate practices that may be leveraged for disciplinary learning. A potential of this intersection is that students and teachers can leverage their expertise in bi-directional apprenticeships rather than assuming a one way relationship that at worst banks disciplinary knowledge (Freire, 1971) or at best apprentices disciplinary thinking (Greenleaf, Murphy, & Schoenbach, 2012) without acknowledging the disciplinary and digital practices youth bring from their lived experiences outside of school or in other disciplines.

A second potential is the democratization of knowledge production and consumption. Access to disciplinary knowledge and the ability to create and share knowledge is essential for an equitable and justice-centered pedagogy. Too often the disciplines can gatekeep knowledge and the means of sharing. However, the Internet as a participatory culture (Jenkins, 2006) shifts who has power and control in a given discipline. Crowd sourcing of information, rapid dissemination of information, and platforms that allow multiple representations of information all have the potential to democratize the disciplines.

The third potential is the expanded use of inquiry for problem posing and problem solving. Inquiry learning is an engaging way to design instruction, one that links problem posing with problem solving. By foregrounding these constructs in instruction, disciplinary and digital literacies are not simply learning tasks to be mastered, but rather tools that help individuals' attempts to solve intellectual and real-world problems. The confluence of digital and disciplinary literacies for these purposes expands opportunities for learning beyond the walls of secondary schools, postsecondary institutions, and formalized learning spaces. Inquiry invites a stance for learning that engages students and transcends both the physical space of the classroom and the temporal confines of the traditional school day and calendar. If we aim to invite inquiry learning across disciplines in ways that will benefit those learners who are often the most marginalized in academic contexts, then we must create opportunities for these types of inquiry practices in classrooms.

WHAT YOUTH DESERVE IN DIGITAL LITERACIES FOR DISCIPLINARY LEARNING

The next section of this chapter makes the claim for three ways to help meet the potentials of digital literacies for disciplinary learning. Potentials will only remain potentials unless we commit to designing and sustaining pedagogies that foreground youth and provide the types of literacies instruction that youth deserve. Position statements about the literacies practices youth deserve are not new