

# Humanizing Digital Literacies: A Road Trip in Search of Wisdom and Insight

*Jennifer Rowsell, with Anne Burke, Rosie Flewitt, Han-Teng Liao, Angel Lin, Jackie Marsh, Kathy Mills, Mastin Prinsloo, Deborah Rowe, Karen Wohlwend*

Children do so many things with technology: They swipe, trace, drag, tap, turn the volume up and down, click, enlarge, read, make videos, and need little to no assistance to do so. Yet, digital literacies tend to be generalized as if they are universal in nature and equal in access. This is not the case. Digital literacies vary widely, and they are so tied up with being human and with idiosyncratic habits and uses that they imply different things for different people. To illustrate their multifarious and complex character, in this column, I embark on a road trip to visit international researchers to showcase how they take up the notion of digital literacies in all of their diversity (see Figure 1).

Our relationships with technology are always in a state of becoming (Ellsworth, 2005). Although some people are devoted to technology, other people use it intermittently, and some people fear or even vilify it. Digital literacies are many things all at once—highly visible, globally dispersed, differentially proportioned, socially participatory—not to mention that they make us think in a multitude of ways.

Given its connected, mobile nature, technology can be regarded as placeless and context-free when, in fact, like all things and people, technologies are informed by contexts as much as contexts are informed by technologies. Prinsloo (2005) recommended a view of technologies as placed resources to avoid universalizing the contexts where they are used. He spoke specifically of new literacies scholars who tend “to treat as given the processes of signification and meaning making involved, which on closer examination turn out to be considerably more complex and variable than they suggest” (p. 89). The notion of place-based technologies fosters an awareness that technologies may be pervasive but the specific types of devices are variable, which, of course, can result in different kinds of reading and writing practices for different purposes and interactions.

With a hope of localizing and humanizing digital literacies, I set out on a journey to visit scholars

around the world to garner wisdom and insight from their research. My criteria for choosing these nine scholars rested on their work in the area of early childhood literacy, their situated accounts of digital literacies, and their spectrum of perspectives. Needless to say, this is not a thorough and comprehensive review. Instead, these are telling examples of contextually informed work across varied populations. I offer these brief vignettes to tease out a series of challenges for literacy educators and to set an agenda for further conversations and developments in the field.

## A Digital Literacies Road Trip

I began my trip with Karen Wohlwend, whose widely cited works on children, popular culture, and new media offer a particular lens on digital literacies.

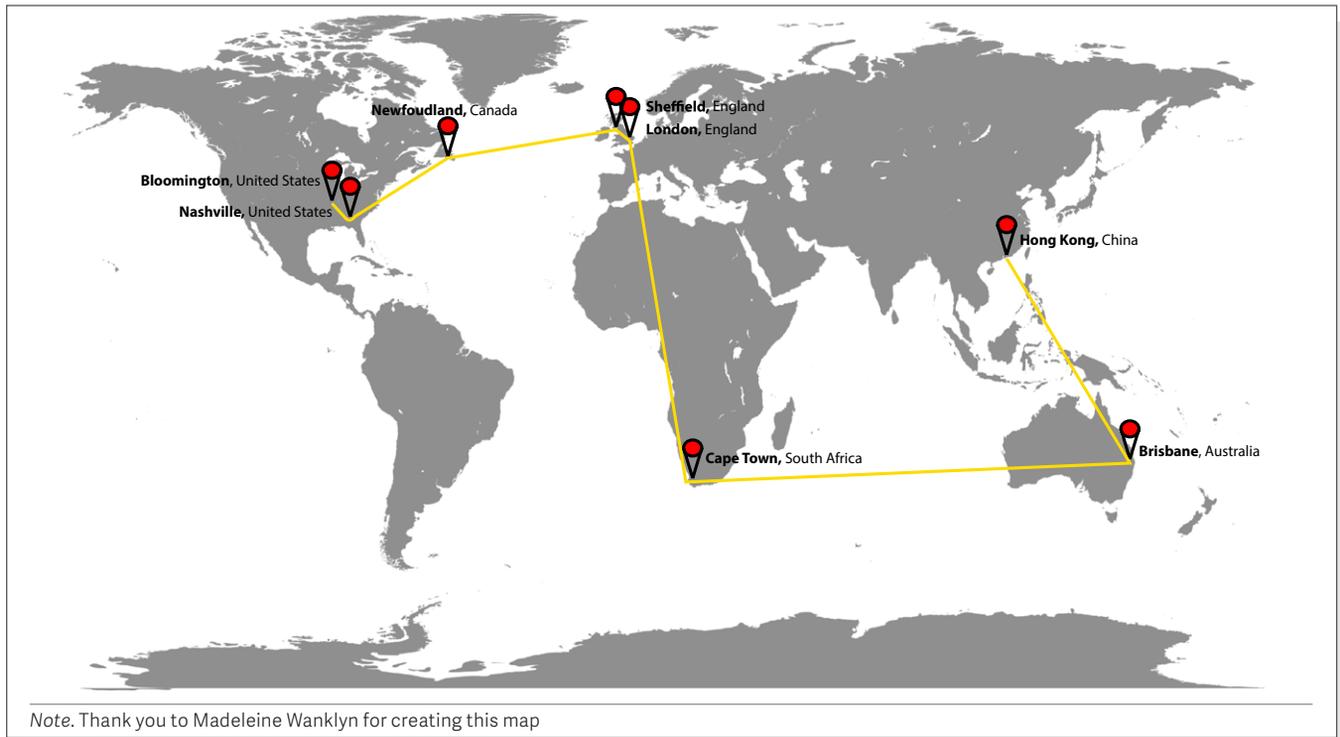
### **USA: Play Literacies With Toys, Popular Media, and iPad Puppets**

*Karen Wohlwend, Indiana University Bloomington*

How should teaching expand for young learners who think in 3-D animation rather than 2-D book formats? During five years of literacy playshop research (Wohlwend, 2011, 2013, 2015), I’ve worked with preschool, kindergarten, and first-grade teachers as well as university teacher education students to develop literacy curricula that include digital filmmaking, animation apps, iPad puppetry, and dramatic play with popular media toys. In this research, children use smartphones and tablets to produce films with dolls, action figures, and friends in live-action videos, or they create digital cartoons with photo cutout avatars of themselves to star in simple puppet shows, animated by multiple hands crowding together on a single touchscreen.

Video analysis of players’ actions and films reveals surprising complexity in children’s co-authored

**Figure 1**  
**The Route of My Digital Literacy Road Map**



interactive stories on iPads with touchscreens and icon-based apps with minimal print (e.g., PuppetPals). For example, I recently conducted a study in a preschool classroom that showed how easily recognized photo puppets from favorite media stories (e.g., Anna, Elsa, and Olaf from Disney's *Frozen*) enabled children to use a familiar narrative to coordinate their characters' actions. Meanwhile, touchscreen navigation (e.g., taps, squeezes, swipes) enabled quick revisions to the emerging story (e.g., addition, deletion, sizing, movement of characters). Children negotiated tensions among their individual moves in a fluid action-packed scene and the need to keep friends at the table and maintain their shared play. Play moved between on-screen and offscreen action as children manipulated digital avatars and actual toy figurines, burst into song, recited remembered snippets of dialogue, and imitated characters' voices. In this way, digital technology enabled more cohesive and collaborative moments of storytelling than children could produce with their own handmade puppets or drawings, which held little meaning for peers.

These findings resonate across my research: When allowed to play and access popular media and technology knowledge as literacy resources and cultural expertise, children use realistic snippets

of dialogue, elaborately detailed settings, credible character personalities, and logical plot organization from their repertoires of familiar films, television programs, video games, or apps.

**Insight 1.** Few researchers capture play with as much zeal as Wohlwend, and it shines through her research with young children. What I learned from my visit with her is the unconstrained mobility and fluidity children have as they make, play, design, and produce texts and draw on media stories and ecologies to do so. Literacy in this instance is embodied, modally rich, and always productive and participatory.

### **USA: Composing E-Books With iPads and Digital Cameras**

*Deborah Rowe, Vanderbilt University, Nashville, Tennessee*

What can touchscreen tablets help teachers and students do that they cannot do easily otherwise? This is a question my colleagues and I have been exploring in our research (Rowe & Miller, 2015; Rowe, Miller, & Pacheco, 2014). We wondered how new technologies like iPads and not-so-new technologies

like digital cameras could expand the learning possibilities for 4-year-olds who were learning English as a new language at school and who were also emergent writers. We wanted to design digital composing opportunities supporting children's use of their heritage languages while they were learning to write and speak English, and that created opportunities for children and families to incorporate their home and community experiences into school literacy activities.

Working with prekindergarten teachers, we invited children to compose e-books using iPads equipped with writing, drawing, and book-making apps. iPads offer new kinds of opportunities to compose with photos and voice recordings. During e-book composing, we capitalized on these digital features by using images as anchors for conversation and composing and by inviting children to record e-book narrations in both of their languages.

For the first several months, we invited children to use the iPad's built-in camera to take photos in the classroom or to draw pictures using drawing apps. Once children were familiar with digital composing, teachers sent home inexpensive, kid-friendly digital cameras. Children took photos at home, at community events, on family shopping trips, and much more. Home photos were loaded into the iPad at school and used for e-book composing. Working with children at the iPad center, we adjusted the following participation structure as needed:

1. Invite children to take a photo in the classroom, select a photo from home, or draw a picture.
2. Support children's photography or drawing.
3. Engage children in conversation about the image.
4. Invite children to write a message about the image.
5. Talk about children's messages or suggest possible messages.
6. Support children's emergent writing.
7. Invite children to record an oral narration in English and in their heritage language.
8. Support children's oral narration.
9. Re-view, re-listen, and reread the composition.
10. Share the e-book with others.

To encourage multilingual composing, we worked with parents and community members to create

demonstration e-books featuring narrations recorded by familiar adults in all the languages spoken in the class.

Our research showed that children easily transferred page-based writing and drawing skills to the touchscreen. As expected, photos provided concrete visual anchors for conversation when teachers and children were not fluent speakers of the same languages. Home photos and multilingual voice recordings allowed children and families to share experiences and languages used outside of school and created culturally relevant texts for use in school instruction. E-book composing provided authentic reasons for writing and created interested audiences at school and at home. Perhaps most exciting was that e-book composing provided an avenue for two-way sharing of expertise, information, and languages between home and school.

**Insight 2.** From Rowe, I learned about traversing modes to practice different literacy strands. In asking language learners to move from images to words to oral retellings to moving images, Rowe and her team foster flexibility in the channels children use to make meaning. Add to this the English learner piece, which to me is a gap in literature in the areas of multiliteracies and digital literacy.

### ***Canada: A Is for App, Not Apple***

*Anne Burke, Memorial University, St. John's, Newfoundland*

My research study examines how children use technologies to shape their engagements during early childhood. In particular, my research considers what devices they use and how much they use them, culminating into a consideration of how young children's use of digital technologies affects their development of literacy, such as reading, writing, and visual composing. Considering that there is a significant research gap regarding the usefulness of digital technologies among young children (as well as many fears and stereotypes), this project will shed light on the importance of digital devices in the stimulation of multiliteracies and, in particular, multimodal aspects of learning. The research comprises mixed methods: case studies, along with purposive and convenience sampling, and surveys and statistical data. In essence, this project aims to shed light on the importance of the relationship between children, family, digital technologies, preschools, and literacy in the modern world.

Considering that modern usage of tablets, smartphones, computers, and so on among young children is unprecedented, many educators may feel uninformed about the ways children use these technologies. Teachers can integrate digital technologies that children are familiar with, such as tablets, into the classroom setting to facilitate children's literacy. More important is the selection of learning apps and the literate abilities that are being developed at home as a part of this early literacy knowledge. I see the research as twofold: the potential to contribute to children's understanding of technology and language, as well as the teacher's understanding of these in various learning contexts, and the process of engagement. Educators and administrators are challenged to rethink traditional modes of teaching, allowing them to integrate into the classroom not only different ways of thinking but different, globally oriented ideas; with digital technologies, children and teachers have access to a plethora of ideas, beliefs, cultures, and resources.

Younger children are using more videos and images produced at home and in other spaces of play to supplement traditional forms of language arts in schools. Digital tools, alongside traditional early language materials, may promote equal opportunities for children of all socioeconomic backgrounds. This study celebrates how children's use of digital technology is not just for play and amusement. When used in a collaborative learning approach, it becomes a new and exciting way of thinking about traditional classroom literacy practices.

**Insight 3.** Burke taught me about the need for teachers and students to have meta-awareness of what technology best suits the literacy task. Technologies cannot be created equal, and Burke's research probes deeper into the affordances and constraints of different technologies from tablets to wearable devices to sound editing software. Taking seriously McLuhan's (1964) "the medium is the message," the means by which we make meaning is fundamental to what gets expressed and represented. Burke's work animates this belief and makes it a part of the digital literacies experience.

### **UK: Communication, Literacy, and Diverse Technologies**

*Rosie Flewitt, UCL Institute of Education, London*

As a nursery practitioner many years ago, I became fascinated by how different children adapt to the challenges of communicating in this new

environment and how they go about exploring the many activities, books, and toys on offer. As my research developed, the digital revolution was reshaping everyday communicative practices, offering new challenges and possibilities for early learning. In a fast-changing communicative landscape, I began to explore how young children growing up in today's world develop a range of communicative and literacy skills across digital and print media.

In one study conducted with colleagues (Flewitt, Kucirkova, & Messer, 2014; Flewitt, Messer, & Kucirkova, 2015), we worked with children and their teachers to investigate the potential of mobile touch technologies such as iPads for early learning in nursery, primary, and special education. The teachers in each setting researched suitable apps to support curriculum goals and then developed a range of carefully planned literacy activities using iPads. These activities ranged from helping children develop specific skills with phonics or spelling apps to using iPads more creatively to make photographic and video diaries of their indoor and outdoor learning. In this study, we found that incorporating iPads into classroom learning stimulates children's motivation and concentration; enables home and school learning experiences to be brought together; and offers rich opportunities for communication, collaborative interaction, independent and inquiry-led learning and for children to achieve high levels of accomplishment in literacy. One striking finding across the settings was that iPad-enabled literacy activities motivated the reading and writing of children who had previously been reluctant to engage in literacy activities. Although planning the use of iPad-based literacy activities is time consuming and requires practitioners to master technical skills for their effective use, all the teachers we worked with came to value the opportunities iPads offer to deliver curriculum guidelines in new ways and to give all children equitable access to touchscreen technologies. And guess what? They get children talking, too!

Through this work, I have come to understand how contemporary literacy practices require even very young children to make meaning with a highly varied repertoire of signs and symbols across traditional and digital media.

**Insight 4.** From Flewitt, I was reminded of my own experience in early years contexts (Rowell, in press) watching young children move around and engage in sundry literacy activities. Like Flewitt, I recognized that some children had learned behaviors with tablets because they had them at home

and that other children were experimenting with what tablets can do because it was their first time using them. Flewitt succinctly describes how children learn through a spectrum of modes and texts and how agile they are with these varied repertoires of signs and symbols.

### **UK: Children's Cultural Worlds**

Jackie Marsh, University of Sheffield

About 20 years ago, I began to research the cultural interests of young children, exploring how these interests could inform literacy curricula to enhance motivation and engagement. My research has consistently followed children's interests and popular cultural practices and, inevitably, as children's interests began to focus on digital technologies, I followed them into that area. Charting children's passions in this way means I have studied a rather eclectic range of digital literacy practices over time, including young children's use of virtual worlds, their creation of machinima (e.g., films made in virtual worlds), their viewing of peer-produced videos on YouTube (such as unboxing videos) and, more recently, their use of augmented reality apps. Throughout these projects, I have focused on issues relating to children's voice and agency as they express these through playful and creative activities.

Central to this research has been collaboration with teachers who have a strong understanding of the need to place children and their interests at the center of the curriculum—a truly child-centered education. That is not to suggest that children should be denied access to new and unfamiliar experiences; rather, we need to start with an understanding of the child and his or her passions, then find a way to build these into an exciting and challenging literacy curriculum that is both familiar *and* strange.

An example of this was a project conducted alongside Peter Winter, who was a gifted teacher at Montenev Primary School in Sheffield. Children love to read, talk about, and play monsters, and so this theme was the center of a project in which young pupils learned to code using Scratch to create their monster sprites and games, created 3-D monsters using CAD software, used websites such as Voki to create and vocalize monster poems, and made monster animations and short films. Children came to the sessions full of ideas for their creations from the many monster stories they had seen at home, such as the films *Monsters, Inc.* and *Shrek*, and the sessions enabled the children to encounter texts they may not have been familiar with, such as Lewis Carroll's

poem "Jabberwocky." Winter wove both canonical and popular references together seamlessly, all the time using as his pedagogical touchstone the children's own life experiences and interests. Through these means, children developed the kinds of literacy skills so important for the digital age—ability to read and write traditional print but also code, edit still and moving images, sync animations with music, and so on.

Enabling children to share these creations with parents and the wider public through social media sites such as blogs and Twitter was common practice for Winter, thus offering meaningful audiences for the children's work. This, to me, is the essence of excellent practice in relation to the digital literacy curriculum: Start with the cultural interests of children and take them on playful learning journeys that celebrate, challenge, and extend their lifeworlds.

**Insight 5.** From Marsh, I have consolidated an understanding of taking detailed field notes of children's engagements with texts, of the strength of longitudinal work in homes and schools, and of charting children's textual and multimodal pathways.

### **South Africa: Placing Digital Literacies**

Mastin Prinsloo, University of Cape Town

My research engages with questions of how digital media are encountered and used at home, in schools, and out of school by children, youths, and adults. I am less interested in the design intentions of the makers of digital hardware and software and more interested in what might be called the social life of digital media, the ways that their uses are shaped and distinctive with regard to their embedded uses by situated users in particular settings. I study digital media use by children, youths, and teachers as *placed resources* and I am interested in understanding and attempting to explain variations in their use, particularly by children and teachers who are from social and linguistic minority or non-middle-class backgrounds. I see such variations as shaped in particular by the differences that children, youths, and teachers of various sorts bring to the use of digital media and differences in what people are up to more broadly when they are using digital media. My research features accounts of individuals and groups who improvise with the technologies that they have and who use these resources in ways that are novel and that, in particular cases, are sometimes less than successful. Rather than being

simply accounts of deficit or disadvantage, however, these studies open up the space for an understanding of how people take hold of digital media resources in out-of-school settings and how these resources work in educational settings.

My recent research, along with students and colleagues, has included a contrastive study of the uses of digital media at home by children from professional-class and underclass families in South Africa. The research shows that social class differences among African children take on globalized cultural dimensions by way of language practices and online media practices, which sharpen differences between middle-class children and poorer children. The children of professionals absorbed the cultural capital that English-language resources, digital hardware, and unlimited broadband Internet connectivity in their home afforded them by way of connections to global middle-class cultural flows. In contrast, the children of unemployed parents living in a shack settlement outside Cape Town played with the Internet-connected cell phones of their parents, but such play did not provide any access to more global resources of information and entertainment—partly because the children did not share the sociocultural backgrounds or linguistic resources that are typically taken for granted on websites designed for children and partly because the parents saw little point in allowing their children free access to play with digital resources.

**Insight 6.** Prinsloo has carved out a niche in new literacies for situating and uncovering instantiated ideologies in digital literacies, such as social class, race, culture, and power, which give us pause to think about differential access and taken-for-granted notions about who has access to technologies and who does not.

### ***Australia: Indigenous Ways of Literacy***

*Kathy Mills, Queensland University of Technology, Brisbane*

I have been greatly inspired by participatory community research with the Indigenous school community of South East Queensland. Foundational to Indigenous communities in Australia is a recognition that language and literacy practices are deeply interconnected with the epistemologies and ontologies of cultures. Language and how it is used and taught is not value neutral; it is integral to one's view of knowledge, identity, and beliefs. This perspective seeks to illuminate cultural frames of reference for literacy practices, recognizing the different

value ascribed to diverse language forms, extending beyond written words to, for example, the somatic or bodily forms of meaning that are communicated through Indigenous dance (Mills, 2016).

Together with the Indigenous principal and teachers, we are exploring Indigenous ways to multimodal and digital literacy that embed the valued epistemologies, the beliefs about knowledge, of the community. Central to the multimodal literacy approach with this community is building strong transgenerational relationships between the Indigenous elders, Indigenous teachers, and the students as valued knowledge is passed from past to future generations through language and digital heritage practices. Digital heritage practices, such as recording ancestral dreaming stories, have also become a vital part of sustaining the stories, values, and knowledge of Indigenous peoples (Mills, 2014).

Distinctive features of this approach to teaching literacy practices is the integration of Aboriginal and Torres Strait Islander artwork, music (e.g., didgeridoo, Indigenous language songs, body paints), history, local Indigenous languages, dance, and rituals such as yarnning circles. The students participate in contemporary digital text production activities: digital storytelling, video, blogging, and e-book creation, among many other reading and writing practices. The digital stories share Indigenous narratives and knowledge at school events, including sharing beyond the school to outreach to other educational and community networks.

Knowledge themes in the teachers' literacy units have included Indigenous sacred spaces, connections to places, birth totems (connections to animals of significance to Indigenous people), dreamtime stories or lore, Indigenous humor, Indigenous pride, and perspectives of the early colonization of Australia and land rights. Indigenous schooling is successful when the students develop a strong sense of their Indigenous cultural identities, and multimodal communication is a vibrant part of this Indigenous community.

The preparatory and year 1 students (ages 5–6) listened to stories told by an Indigenous elder who visited the classroom. Each child selected an Aboriginal dreamtime story connected to his or her personal birth totem. After learning about their totem and relevant dreamtime story, the students retold it using drawings and handwritten words on paper that the teacher photographed. With adult assistance, the students used online Smilebox software to present their digital stories as musical e-scrapbooks (Mills, 2014). Although these 5- and

6-year olds enjoyed the novelty of the task, more importantly, they were able to articulate the significance of these stories to their Indigenous family, community, and people. The students have also used iPad apps such as Tellagami to create digital narrative poems about their cultural history.

The literacies of the dominant, Eurocentric societies that are typically emphasized and normalized in school curricula and assessment are value-laden, whether constructed with or without digital media. The enactment of digital literacy practices across cultures needs to align with, and flow from, the dynamic ways of knowing and meaning making of communities. What is needed is reflection on the historical and contemporary valued knowledge and identities of the community—the epistemic and ontological frames of reference—that can usefully guide both how and what children practice as digital literacy at school both today and for the future.

**Insight 7.** From Mills, I got an in-depth perspective of technology as a lived practice shaped around culture and social practices. Working with Aboriginal families and educators, Mills considers how technology affords greater expression of meanings and stories by asking children and adults to combine modes (e.g., moving images, words, and animation) on-screen to share narratives. Mills reveals the meaning-making potential of technologies like iPads by using apps to design narratives and taking advantage of the participatory nature of tablets to share stories and reflections.

### **China: Cross-Locale Trips to Get Out of Information Filter Bubbles: A (Cross-Cultural) Digital Literacy Training Curriculum**

Han-Teng Liao, United Nations University Institute on Computing and Society,<sup>1</sup> Macau; and Angel Lin, University of Hong Kong

The technical notion of *locale* in computing refers to a set of parameters that defines the user's language, region, and other preferences such as language scripts. The theoretical notion of *locale* in social theories, on the other hand, refers to “the use of space to provide the settings of interaction, the settings of interaction in turn being essential to specify its *contextuality*” (Giddens, 1986, p. 118). Integrating these two senses of the word *locale*, we argue that a set of practical knowledge surrounding the ways in which locales shape our digital networked experience

should be integrated into the school curriculum in a systematic way to help both teachers and students first to recognize the existence of information filter bubbles, then to understand the underlying mechanism, and finally to embark on what we called cross-locale digital trips by switching one's locale settings on one's computer. Based on working knowledge that can be followed and practiced by everyday Internet users, we propose a digital literacies curriculum that includes the following components: (a) country codes, language codes, and language tags: understanding the global regime of country, language, and locale recognition in the digital networked environment; (b) website, software, and content localization and internationalization business and practices; and (c) new skills for individual users to switch between locales to experience different uses of online space that are specified by its country and language context.

The concept component should deliver the role of languages and countries in setting interactions online. The skill component should deliver the technical and social skills for users to switch such settings in their browsers, major online platforms, and so forth. The curriculum should help young students be aware of and act upon these “settings of interaction” to foster multilingual, cosmopolitan learning and thinking. It will contribute to the efforts to make “think global, act local” more than just a slogan—an everyday cross-cultural, multilingual, digital experience and practice. The ways in which the proposed curriculum can be implemented and evaluated are also being investigated.

**Insight 8.** From Liao and Lin, I acquired an appreciation for students to apply mobility and spatiality skills within literacy teaching and learning. That is, ask students to think global and act local by having students set their devices on different geographies and to think in relation to the different communities.

### **Taking Stock of My Travels**

Visits to digitally informed literacy research sites show that, although there is a need to resist rigid, static notions of digital literacies that start to recede into autonomous models, we also need generative terms and conceptual frameworks to inform lesson plans and units and to conduct research on, with, and about technology. Gone are the days in which we could deny that digital literacies are pretty much the same as print literacies. Gone are the days of

**Table 1**  
**Generative Terms and Concepts**

Term	Concept	Possible literacy skills
Glocal play	Fostering cosmopolitan dispositions by existing in the global while living in the local	Reading, writing, representing, coding, visualizing, metalinguistic awareness
Multimodal narratives	Designing and producing multimodal stories that involve three or more modes	Viewing, representing, mapping, designing, editing, talking, writing
Online and offline curation	Gathering information across different text genres and sources to produce a text	Reading, writing, viewing, summarizing
Converged remix	Combining texts to display, juxtapose, or blend them into another text	Reading, viewing, editing, visualizing, reconstituting, designing
Material connections	Making meanings from media sources through different sets of materials and text genres	Visualizing, editing, reading, writing
Modal choice	The art of finding the right mode to design and produce a text	Viewing, visualizing, mapping, designing, writing, talking

ignoring differential access to technologies. And, I think, gone are the days in which digital literacies are rendered generic. But are there helpful, practical insights to help literacy teachers? Yes, there are some guiding principles.

Captured in Table 1 are some of the lessons that I have learned from my travels, with concepts that inform each researcher's lesson.

Thinking across the postcard vignettes in this column, there are vestiges of all of these terms and concepts. *Glocal play* (combining *global* and *local*; Luke & Carrington, 2004) figures largely in so many of them: Prinsloo's excavation of the affordances of technologies, Liao and Lin's efforts to insist on more of a cosmopolitan look at digital literacies by existing in other localities in global cyberspace, and Mills's culturally infused multimodal research in Indigenous communities. All of these studies put people and places at the heart of digital literacies. Every vignette is multimodal: Flewitt encourages educators and researchers to synchronize children's multimodal sensibilities with formal learning; Burke reminds us to be aware of what technologies offer and to complicate their use and applications so people choose the right, most appropriate technology for the task. All of the vignettes entangle online and offline worlds: both Marsh and Wohlwend have illustrated for years that children move fluidly between virtual and physical worlds and that they do so comfortably and enthusiastically.

It is clear from each researcher that digital texts and technologies seldom exist in solitude; rather,

they are converged with other texts (e.g., through hyperlinks, with embedded videos) or technologies (a smartphone is far more than a phone; it has apps, a camera, a calendar, an alarm clock, etc.). Many of the vignettes depict the close relationship between reading and writing or reading and design and production: Rowe captures multimodal repertoires in play as language learners materialize stories on iPads; Mills shows how stories can be told on paper, on tablets, and through oral retellings. Finally, and most important in my view, all nine researchers remind us that there are always two or more modes involved in literacy work and how essential it is for our students to use the most effective mode (e.g., image, word, hypertextual) to express and communicate a message.

This column, hopefully, goes some way in nuancing the concept of digital literacy because the column is about digital literacy, and it is less of a term and more of a concept. In future columns, I hope to pursue each of these lines of inquiry in more depth, and I encourage readers to send me their stories, suggestions, and provocations.

#### NOTES

I would like to thank Cathy Burnett of Sheffield Hallam University for her helpful feedback as I wrote my first column as the Digital Literacy department editor.

<sup>1</sup>The United Nations University Institute on Computing and Society is a new research institute at the intersections of information and communication technologies and international development focusing on the key

challenges faced by developing societies through high-impact innovations in computing and communication technologies. The institute is nurturing three inaugural research labs: Digital Peace Lab, Gender Tech Lab, and Small Data Lab.

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### The department editor welcomes reader comments.



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