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TRENDS/CASES

A space to learn: A community-based approach to meaningful adult learning and literacy in remote Indigenous Australia

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Abstract If young adults in remote Indigenous Australian communities are to acquire the knowledge and skills necessary to participate effectively in mature roles in their own and the wider community, then educators will need to pay attention not only to the provision of schooling and formal adult-literacy tuition, but also to how language, literacy, and technological know-how are acquired through socialization and learning as a lifelong process. In this article, Inge Kral and Jerry Schwab take a social practice approach to reading (and writing) by looking at how Indigenous youth use alphabetic and digital literacies in everyday life and in community settings beyond school. Their proposition is that, in addition to pedagogy, it is meaningful practice across the lifespan that determines competence. Drawing on ethnographic research, Kral and Schwab outline a "learning centre" model, suggesting that it provides a template not only for transformative practice but also for achieving an appropriate blend of formal and nonformal approaches to adult learning in the remote context.

Keywords Indigenous Australia · Youth · Community-based learning · Literacy · Digital literacies

Pushing back against the policy current intended to sweep them into towns and cities, many Indigenous Australians in remote areas continue to hold fast to the lands of their ancestors and remain resident "on country", in small, decentralized communities. The numbers are not insignificant, with about 21% of Australia's 669,000 Aboriginal and/or Torres Strait Islander people—who, together, comprise about 3% of Australia's

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population—living in remote and very remote parts of the country. People remain in these places not as a result of selfish and stubborn "lifestyle choices" subsidized by taxpayers, as former prime minister Tony Abbott claimed in March 2015, but out of obligation and responsibility for homelands that retain social, cultural, and spiritual significance. The cost of this aspiration to remain with family on or near traditional lands can be high, with limited or no access to education and health facilities and often very few opportunities to engage with a larger labour market. English-literacy levels are frequently low in these areas, especially where traditional languages continue to underpin daily life.

Too often in the remote context, the debate over literacy learning focuses narrowly on schools and pedagogical processes. Rarely do these discussions take account of the resources—social, cultural, material, textual, and technological, and, moreover, the "learning spaces"—that enable literacy to flourish beyond instructional, institutional settings and over people's lifespan. Seldom does the literacy debate, with its emphasis on alphabetic literacy, take account of multimodality and the changing nature of literacy in the new media age. And, unfortunately, as we will show later, the requirement to attain outcomes that are often unrealistic or unobtainable (Schwab 2012, 2013) sometimes blind policymakers and program managers in the field of literacy and learning.

Rather than focus specifically on how adults learn to read, in this article we outline our ethnographic approach to research on literacy and learning in remote Indigenous Australia. We draw from two projects on which we collaborated to explore what we believe are exciting new ways to support and enhance learning and literacy, with particular reference to the more remote and less serviced regions of Australia. We begin with an overview of the theoretical foundations of our approach and describe the sociohistorical context of education in the Northern Territory—where we have both worked for several decades—with particular reference to the changing nature of literacy socialization in this region. We then describe some of our key research findings, emphasizing the importance of out-of-school learning, and, in particular, the role of "learning spaces" (Kral and Schwab 2012) in facilitating engagement with text and new media. We conclude with a brief case study focusing on the opportunities and challenges of Learning Community Centres as a model for enhancing learning, literacy, and skill acquisition through a blending of formal and informal approaches to learning.

Theoretical understandings

The foundation for much current thinking around socially mediated or situated learning draws on Vygotsky's sociocultural approach to cognitive development, especially his "activity theory" (Vygotsky 1978). Building on his ideas, many theorists have drawn on anthropology and sociolinguistics in forging a situated and social perspective on participatory learning that broadens notions of learning beyond formal instruction and advances the idea that learning and literacy are purposeful, context-specific, and socially organized practices. The outcome of this is a divide between those who see school as the primary site for learning and others who have developed a social theory of learning (Lave and Wenger 1991; Rogoff et al. 2003) encompassing a view of learning through social practice. The latter emphasize that literacy is not only an instructional process but also a cultural one, and that "everyday practice" is a more powerful source of socialization than intentional pedagogy (Lave 1988, p. 14). In other words, in addition to instruction in school, it is ongoing out-of-school social practice across the lifespan that determines competence. This divide highlights a fundamental distinction between learning and intentional instruction, a core issue for delivering meaningful opportunities for learning in remote Indigenous communities.

This focus on the socially situated nature of learning (Lave and Wenger 1991; Wenger 1998) draws learning out of the conventional confines of formal teaching, prescribed curricula, and attainment of individual outcomes and qualifications, and embraces a notion of meaningful learning that is connected with, and of value and relevance to, the social community to which learners belong. Importantly, it denies the binary of "informal" versus "formal" learning and with it the assumption that if a person is "educated" or "learned" he or she has gone to school. Rather, it asserts that learning is not in the transfer of abstract or even traditional knowledge but in the socially situated production of knowledge. Accordingly, and in our research, we have found it is far more instructive to engage in an exploration of the "'doing' of learning … than focusing on (didactic) teaching as the cause and condition of possibility for learning" (Lave 2011, pp. 144–145). In our experience, learning is "context-embedded"; it is found in the situated *doing* of life.

A growing body of research on everyday cognition and cultural development has documented how people learn across social settings, activities, and life pursuits (Gutierrez and Rogoff 2003; Hutchins 1996; Rogoff 2003). That research also highlights the importance of home and community as settings or spaces for learning and the development of communities of practice surrounding and supporting learning. Since the 1980s, interdisciplinary work has focused on the interactional processes within role relationships, where, through "intent participation" or "legitimate peripheral participation" (Lave 2011; Rogoff and Lave 1984; Rogoff et al. 2003), individuals learn in settings that have no formal instructor, curricular guidance, or established time and place for learning (Kral and Heath 2013, p. 227). This is not to say, however, that learning has no structure or content. Lave and Wenger (1991) describe the situated nature of learning as one embedded within "trajectories of participation in which learning takes on meaning" and where the learner is a member of a sociocultural community, or a "community of practice" (pp. 43–52).

Linguists and anthropologists also increased understanding of the interrelationship between culture, language, and literacy with the application of ethnographic methods to the study of communication (Gumperz and Hymes 1972; Heath 1983). As researchers, we have been strongly influenced by anthropologists (Besnier 1995; Street 1993, 1995; Heath and Street 2008), as well as scholars from the New Literacy Studies (Barton and Hamilton 1998; Barton et al. 2000) and their ethnographic approaches to language and literacy research. Ethnographic studies of literacy stand at the interface between anthropology and sociolinguistics and look at the social practices, social meanings, and cultural conceptions of reading and writing. From this perspective, we cannot understand literacy independently of the social, cultural, political, and historical forces that shape it, nor can we analyze it in isolation from the social practices that surround it and the ideological systems in which it is embedded.

Scholars have also considered how, in contemporary society, our engagement with new technologies is shifting the way in which we engage with learning (Brown 2002; Kress 2007). Street et al. (2009, p. 195) argue that the reality of contemporary communication—embedded as it is now within "screen-based technologies"—is rapidly superseding the focus on "print literacies" in schools around the globe. Indeed, a wide literature (Hull 2003; Kress 2003; Thurlow and Mroczek 2011) has drawn attention to the changing shape of literacy in the globalized world, ushered in by the arrival of digital technologies and the emergence of changing social practice surrounding such technologies and "multimodal literacies" (Hull and Nelson 2005; Kress 2010). We concur, suggesting that in the remote Indigenous domain we need to "widen our definitions of literacy to include digital multimodality and connectivity" (Stornaiuolo et al. 2009, p. 384).

Application of theory to context

In Australia today, it is taken as rote that Indigenous communities are disadvantaged because poor alphabetic literacy (and, increasingly, digital literacy) has a negative impact on multiple facets of people's lives, from employment through to engagement with health and justice systems. Typically, attempts to remedy this situation have focused on school-based literacy initiatives. However, in many Indigenous contexts, such attempts occur where few antecedent social literacy practices may exist at home or in the community, and where the transition from an oral culture to a literate culture may be relatively recent. The results—not surprisingly—are almost always poor. Scholarly research from around the world has persuasively demonstrated that literacy is a situated, yet dynamic, social and cultural process. The research highlights the culturally shaped nature of literacy acquisition and use, especially among newly literate groups. Free of the limiting view of literacy as a set of technical skills taught in school, it is possible to gain a deeper understanding of literacy as a social process enacted in meaningful contexts. In this article, we take a practice approach to literacy that moves beyond literacy instruction in institutional settings and toward a focus on the manner in which individuals and families use spoken and written language in everyday life in community settings. This "social practice" approach addresses the everyday meanings and uses of literacy by particular groups and their conceptions of reading, writing, and other multimodal forms of communication of relevance to their communities.

By drawing on theory from anthropology, sociolinguistics, and the New Literacy Studies, and from theorists who view learning as situated activity, in her ethnographic study of literacy in one remote Indigenous context (Kral 2007, 2012), Kral argues that for literacy to take hold in remote communities it must have meaning and purpose over the changing domains and practices that span a person's life; and this meaning and purpose must, in turn, be transmitted to the following generation. Moreover, literacy learning is not a monolinear process; it is multidirectional and erratic, incorporating both formal instruction and informal acquisition, and the process of acquisition is lifelong and situational. As Kral posits (2007, 2012), in most Western mainstream families, literacy learning builds on the long culture of literacy in Western society and the foundation of formal schooling. It incorporates interactive engagement with other processes, practices and contexts that are meaningful and purposeful at an individual and community level, and there is a synergy between these processes. As she concludes, if literacy is to seep into the remote Aboriginal world as cultural practice then it is critical that we understand more about literacy as a cultural process.

Below, we outline the short history of schooling and formal education in the remote Northern Territory (NT) to illustrate our point that it takes time for the intergenerational transmission of literacy to develop as a cultural process in newly literate contexts.

A short history of indigenous education in central Australia

Schools

Government responsibility for the education of Aborigines in the NT commenced only in the 1950s. Although the Commonwealth Affairs Department had overseen the education of children of Indigenous descent in urban areas of the Territory for some time, overall

responsibility for Indigenous education emerged in tandem with the government's commitment to the policy of assimilation. Prior to the introduction of government schooling, most remote Indigenous children in the NT received no formal Western education or were educated in mission schools. In some communities, government schooling did not begin until the 1970s or even later (Kral and Falk 2004). (In our experience, many parts of remote Australia still have significant numbers of Aboriginal children who are either not enrolled in school or not attending.) In tandem with the progressive Whitlam Labor government's policy of multiculturalism, celebrating Australia's linguistic and cultural diversity, the 1970s saw the introduction of a policy of Aboriginal self-determination that enabled and resourced, in some remote areas, the movement of Indigenous people back to their traditional homelands (Peterson and Myers 2016). At the same time, bilingual education initiatives emerged in government and nongovernment schools in the NT (Disbray et al. 2017), as well as in Western Australia and South Australia. By the 1990s, however, the bilingual programs were under fire as a conservative shift in Indigenous education asserted the primacy of English literacy and the competencies required to function in mainstream society. Subsequently, Australia dismantled the NT Department of Education Bilingual Education Program (Simpson et al. 2009). A discourse of crisis around the literacy "problem"—which attributed unemployment and welfare dependency to poor education and lack of English—soon replaced the earlier language-rights approach to education in Indigenous regions.

The National Literacy and Numeracy Plan (DEETYA 1998) ushered in the era of external benchmark testing and a back-to-basics approach to literacy pedagogy, as well as the subsuming of English as a Second Language teaching under literacy (for more, see Schwab 2012). Although most remote Indigenous students do not speak English as their mother tongue, the 2008 National Assessment Program: Literacy and Numeracy (NAPLAN) test led to their being assessed in accordance with the same developmental pathway for literacy achievement set by students whose first language is English (McKay 2001). As Wigglesworth, Simpson, and Loakes (2011) note, the NAPLAN test, while suitable for most groups of Standard Australian English speakers, is linguistically and culturally unsuitable for Indigenous children, especially those living in remote communities. Moreover, NAPLAN is indicative of the narrow measures of primarily alphabetic literacy that count as literacy in school-based assessments—where such measures of learning are based on what Street (1984) terms the "autonomous conception of literacy" as a set of neutral basic skills.

In remote Australia today, low school attendance and poor retention rates—especially in the secondary years—remain chronic issues. Successive education models for remote youth have not succeeded in improving retention rates (Guenther 2013), making the expectations of participation in mainstream employment unrealistic (Kral 2016). Indeed, in many locations where the experience of education may have been difficult and where the rewards promised by "the system" do not manifest, there is a commonly shared perception—often becoming a localized form of common sense borne out by experience—that school is "for whitefellas", it is not "for us". The result is resistance, sporadic attendance, and even withdrawal. It is particularly acute among adolescent males who have been initiated and see school as something children do. For many young men, there is no value in returning to class; it is a place where they feel no power or control. In this way, they exert what control they can by effectively closing the door on schooling. There is some resonance in this with what Paul Willis (1977) describes in his classic ethnography of working-class youth in England.

Adult education

Adult education, most often in the form of vocational training, was a key element of the federal government assimilation policy of the 1960s. Around this time, adult community education became available through providers such as Batchelor College (later Batchelor Institute) with the delivery of basic literacy and numeracy oriented toward community development. Indeed, many remote communities had a dedicated adult educator. In addition, Tertiary and Further Education (TAFE) and Open College initiatives offering more formal courses commenced in communities.

In the late 1980s, in response to broader global changes, Australia introduced the National Training Reform Agenda (1987–1996). This was the government's effort to reform the vocational education and training system and its linkages to the workplace. (Initiatives implemented since 1990 have included the development of competency standards by industry and associated curriculum development to reflect the competency outcomes, as well as the development of an Australia-wide Standards Framework for vocational education and training credentials. This framework led to a more formal approach to school-work transitions and entry-level qualifications now required for vocational employment.) In the remote context, this meant that Indigenous workers were now expected to meet nationally accredited Vocational Education and Training (VET) requirements.

Paralleling these changes, by the 1990s a national shift from multilingualism and multiculturalism to a focus on the economy was underway, which saw the linking of English-literacy provision to VET outcomes (LoBianco and Wickert 2001, p. 28). These changes collided with the goal of "Aboriginalizing" the workforce, where many Indigenous people were employed without formal qualifications or English literacy.

Over recent times, the emphasis has shifted to a punitive "learn or earn" policy where receipt of welfare payments depends on participation in English-literacy and training courses. This mindset—linking literacy with short-term training and employment outcomes—seems unlikely to change in the near future. The Australian federal government's recently introduced Indigenous Advancement Strategy best exemplifies this approach: it reduces budgets, pooling a vast array of Commonwealth funding streams for Indigenous programs and services; it allocates new grants through a system of competitive application—and only within five strategic priority areas (jobs, land, and economy; children and schooling; safety and well-being; culture and capability; and remote Australia).The educational emphasis is on children and school attendance, and on the provision of vocational training for young people and adults leading to employment, irrespective of the limited labour market opportunities in remote regions.

Socialization into literacy

In spite of the very recent arrival of literacy in remote Indigenous Australia, many policymakers appear to believe it is possible to squeeze thousands of years of Western literacy evolution into a few generations and thus quickly attain commensurability with mainstream benchmarks. Yet, research clearly shows that literacy is a gradual process and, as Street (1984, p. 114) emphasizes, to "eschew such gradualism" tends to lead to the failure of many literacy programs. As many anthropologists and sociologists have found, acquiring the practices, habits, behaviours, and dispositions that underpin literacy

acquisition is dependent on acquiring, transmitting, and reproducing routines or taken-for-granted actions. One may develop such behaviours and practices in school—but also, more importantly, in the social and cultural milieu of the family and community to which one belongs. That is, children, adolescents, and other novices become culturally competent members of their own social and cultural group through socialization into the group's cultural processes, whereby they gain the linguistic and cognitive orientations of previous generations (Duranti et al. 2012; Schieffelin and Ochs 1986).

In other words: cultural practice results from the acquisition and transmission of the cultural tools—the habits, routines, dispositions, and attitudes—of a cultural group, over successive generations.

While we know that one may gain certain vocational skills in a short time-frame, the acquisition of literacy is, by contrast, a process that is lifelong, life-wide, and life deep (Banks et al. 2007). As Heath (1991) posits, being literate involves more than having individual technical literacy; it also depends upon "an essential harmony of core language behaviours and certain critical supporting social relations and cultural practices" (p. 3). In our ethnographic studies of literacy, we have found that it is most likely to be transmitted across the generations where literacy practice is meaningful and embedded in relevant social and cultural practices.

Indigenous youth in remote settings are now experiencing far broader socialization experiences than their forebears. Despite varying experiences of schooling and adult-literacy acquisition across generations and regions, in a manner not unlike young people all over the world, Indigenous youth are entering the flow from the local to the global. Contemporary living is giving them a vast repertoire of symbolic, textual, and media resources to draw on in their communicative exchanges, whether oral, written, or digital (Kral 2016). Hence, youth must acquire the modes of communication and social interaction particular to their own small society. Simultaneously, they are living in a digital globalized world where they must develop and share new understandings of what it means to participate in activities and relationships across linguistic, social, and geographic time and space. To balance diverse life goals and expectations, these young people must acquire a range of linguistic and cultural practices, technological competences, and correspondingly hybrid identities.

We therefore suggest that a complex web of language and literacy socialization experiences factor strongly in determining how Indigenous young people will engage and, indeed, succeed in formal education and other institutional domains across their life course. Reconfiguring approaches to adult literacy in the remote sector in a way that decouples literacy from short-term training for employment outcomes may appear unattainable in the current policy context. It remains, nonetheless, imperative that we broaden our understanding of how and where young people are acquiring the knowledge, practices, and dispositions required to function as competent members of social groups and cultural communities. If remote Indigenous youth are to acquire the knowledge, skills, awareness, and practices necessary to participate effectively in the mature roles in their own, and the wider, community, then we will need to pay attention not only to the provision of schooling and formal adult-literacy tuition but also to how one acquires language, literacy, and technological know-how through socialization and learning as a lifelong process in contexts beyond institutions (Banks et al. 2007). This will require supporting and resourcing non-formal learning settings, especially in locations where engagement with schooling and adult education is, at best, sporadic (Kral 2016).

Alternative learning spaces

In recent years, new insights into learning have been gathered from scholars from a range of disciplines who have investigated various alternative learning spaces (Hill 2008; Ito et al. 2010) and approaches (Barron 2006; Hull and Schultz 2002). Their research suggests that out-of-school learning can provide a locus for situated literacy practices (Barton, Hamilton, and Ivanic 2000) and the development of skills and strategic thinking through participation in creative cultural production (Heath 2004).

In our Learning Spaces research (2007–2010), we (Kral and Schwab) explored the ways in which young Indigenous Australians in remote communities are extending their learning and expanding their language and multimodal literacy practices by embracing digital culture in community-based domains outside of institutional learning environments. These domains—or, as we called them, "learning spaces"—were sites of situated learning and productive activity. They included physical spaces like youth centres or libraries; non-physical spaces like digital networks; and "spaces beyond", such as sports fields, ceremonial grounds, and other outdoors or "on country" environments. Our research revealed that although many young people may be walking away from compulsory schooling and training, they are not rejecting *learning*. Instead, and importantly, they demonstrated that when they have alternative learning opportunities, they participate and succeed. Our research found that these young people are deeply committed to learning; able to speak, and often literate in, one or more languages; fluent in new forms of cultural practice and production; and active participants in the changing modes of communication in the digital age. Furthermore, such approaches call into question the deficit framework for assessing literacy competence among Indigenous youth so commonly found in public discourse (Kral and Schwab 2012).

In these learning spaces, access to resources enables the generation of new modes of cultural production that often incorporate and celebrate Indigenous language and culture. Digital media projects provide a context for young people to engage with multimodal literacies through processes of creative cultural production. Their digital technology practice is reliant on alphabetic literacy skills, through the employment of alphabetic symbols, and left-to-right and top-to-bottom processing. It is also multimodal in the sense that it is possible to integrate words with images, sound, music, and movement in the creation of digital artifacts that do not necessarily privilege linguistic forms of signification but, rather, "draw on a variety of modalities … to create different forms of meaning" (Hull and Nelson 2005, pp. 224–225). As noted by Kral and Heath (2013, pp. 232–233),

> Multimodal practice has benefited from the intuitive meta-textual skills of alphabetic literacy, and yet success in learning through multimodal sources beyond print literacy does not depend on prior success with such textual deciphering. Young learners who have familiarity though not fluency with standardized alphabetic symbols find it relatively easy to mediate their actions through a wide repertoire of visual codes of symbolic structures.

In Indigenous society, where traditional multimodality is at the core of many communicative practices (Green 2014), it is inevitable that youth will create and inhabit learning spaces and embrace the new digital communicative technologies, adapting them for their own creative social purposes and integrating them into their communicative modes. Street and colleagues (2009) have suggested that if "both the multimodal and the sociocultural

are a part of sustained meaning-making then they need to be brought together to explain modern communication" (p. 200). This is indeed evident in many of the communicative practices of remote youth today.

Learning community centres

Recently we explored a community-based approach to adult learning in remote Northern Territory known locally as the Learning Community Centre model. This exploration arose from a collaborative research project involving researchers from the Centre for Aboriginal Economic Policy Research at the Australian National University, adult educational practitioners and administrators from the Batchelor Institute of Indigenous Tertiary Education, community development staff from the Central Land Council (CLC), and representatives of the Warlpiri Education and Training Trust (WETT). Following in the tradition of such interdisciplinary practice and research, especially in anthropology of education, we investigated the factors that led to success in this complex setting, where minimal intergenerational modelling of learning, literacy, and employment practices has occurred.

> Learning Community Centres are, essentially, community-owned and -controlled sites for informal and formal learning; the Warlpiri Education and Training Trust initially established these centres as a high-priority community project. The idea of establishing a collection of Learning Community Centres first emerged out of discussions among Warlpiri people who made a commitment to invest a portion of royalty monies from a commercial mine situated on their traditional lands. Their aim was to invest their own resources in locally determined education and community development programs in their communities. The Central Land Council, working with WETT, facilitated discussions among the member communities and identified a range priorities and educational investment ideas (Schwab 2006).

By mid-2014, a partnership between the Warlpiri Education and Training Trust and the Batchelor Institute of Indigenous Tertiary Education had established Learning Community Centres in the Warlpiri communities of Lajamanu, Willowra, Nyirripi, and Yuendumu (Disbray and Bauer 2016) in central Australia. The Batchelor Institute had also independently established a Learning Community Centre in the Utopia Homelands. Though the needs and interests of local communities would shape each Learning Centre, the founders envisaged these centres to be safe, secure meeting places typically built around training and common rooms filled with computers providing Internet access. They also saw the focus of activity in Learning Centres to be purposefully diverse, involving learning for work; access to computers for banking, emailing, and other personal and essential activities; and storage of and access to family stories, histories, and local cultural information.

Our research focused on two of the Learning Centres. We found that they:

- Created a culture of learning.
- Facilitated access to learning pathways.
- Offered both formal and nonformal modes of learning.
- Catered to group and individual styles of learning.
- Played an important role in the worklife of the community.

Importantly, the Learning Centres offered individuals the opportunity to explore, develop, and practice new skills; to reawaken dormant skills, including reading and writing; and to access new technologies that would enable them to participate in a world beyond the

community. But, perhaps most significantly, they facilitated and validated a culture of learning by creating a space where learning is normal and valuable and for everyone. The impact of this public display of adult engagement in learning and literacy was powerful and transmitted an important message to the next generation. In this way, Learning Centres played a crucial role in fostering practice. They provided a place that supported and valued the insights that came from learning through informal "mucking around" on computers, by socializing people into the norms around learning as a group and individual, voluntary specialization development (Kral and Heath 2013) as well as work practices. Simultaneously, they also allowed users to realize some formal training and employment outcomes. Through this social-practice approach to learning and through having a space for engagement, users were developing a skill base. Though issues of time and resources constrained our research, and we were unable to measure specific changes, interviews and observations made it clear that users' reading and writing skills were enhanced over time as users engaged in activities that were useful and meaningful to them. These gains will be important to document in future. Perhaps the most compelling argument in favour of the Learning Centre model is that they were a good response to a difficult situation, indicating more success than most other options in the remote adult-education sector. What appeared to be small, incremental changes in adult education were, in fact, huge changes in terms of the rapid social transformations that remote Indigenous groups have experienced over only a few decades.

Unfortunately, Batchelor Institute has mostly dismantled or reconfigured the Learning Community Centres due to funding pressures and differing expectations and assessments of the value of diverse outcomes. Essentially, an irreconcilable tension appears to exist between, on the one side, government and educational institution demands for achieving (ever-increasing) targets of training-course completions and subsequent employment, and, on the other side, community desires for access and control over learning spaces where individuals can engage with meaningful learning that may not lead to easily measured enrolments or completions.

Conclusion

In this article, we have described the ethnographic approach to research on literacy and learning that we have taken in the remote Indigenous Australian context. Based on our findings over many years, we consider that literacy learning:

- is not only an instructional process, it is also a cultural process;
- is lifelong and situational; and
- is dependent on access to a range of social, cultural, material, textual, and technological resources and learning spaces.

Our research has uncovered local examples of the profound changes in social practice brought about by the digital revolution worldwide. Importantly, our findings are in conversation with substantial ethnographic inquiry into youth and digital media around the globe, generating a wave of interest in changing learning processes and multimodal communication modes, including alphabetic literacy.

Finally, we believe the Learning Centre model outlined here provides a template not only for transformative practice but also for achieving a subtle blend of formal and non-formal approaches to adult learning in the remote context. It does this by engendering engagement at all levels and facilitating access to all types of resources: social, material,

textual, and technological. We contend that this blending of learning, in fact, reflects emerging patterns of learning in response to new communication technologies and changing employment requirements increasingly found around the globe. Articulating the value of this approach to governments and policymakers is an important challenge for the future.

References

Banks, J. A., Au, K. H., Ball, A. F., Bell, P., Gordon, E. W., Gutierrez, K. D., et al. (2007). *Learning in and out of school in diverse environments: Life-long, Life-wide, Life-deep*. Seattle, WA: The LIFE Center and the Centre for Multicultural Education, University of Washington.

Barron, B. (2006). Interest and self-sustained learning as catalysts of development: A learning ecology framework. *Human Development, 49,* 193–224.

Barton, D., & Hamilton, M. (1998). *Local literacies: Reading and writing in one community*. London: Routledge.

Barton, D., Hamilton, M., & Ivanic, R. (Eds.) (2000). *Situated literacies: Reading and writing in context*. London: Routledge.

Besnier, N. (1995). *Literacy, emotion, and authority: Reading and writing on a Polynesian atoll*. Cambridge: Cambridge University Press.

Brown, J. S. (2002). The social life of learning: How can continuing education be reconfigured in the future? *Continuing Higher Education Review, 66,* 50–69.

DEETYA [Department of Employment, Education, Training and Youth Affairs] (1998). *Literacy for all: The challenge for Australian schools*. Australian Schooling Monograph Series No. 1. Canberra: AGPS.

Disbray, S., & Bauer, R. (2016). A place to learn and work: Yuendumu Learning Centre. Special issue: Learning Communities—Synthesis of project learnings from the Cooperative Research Centre for Remote Economic Participation. *International Journal of Learning in Social Contexts, 19.*

Disbray, S., Devlin, B. C., & Devlin, N. R. F. (Eds.) (2017). *History of bilingual education in the Northern Territory: People, programs and policies*. Singapore: Springer.

Duranti, A., Ochs, E., & Schieffelin, B. B. (Eds.) (2012). *The handbook of language socialization*. Malden, MA: Wiley Blackwell.

Green, J. (2014). *Drawn from the ground: Sound, sign and inscription in Central Australian sand stories*. Cambridge: Cambridge University Press.

Guenther, J. (2013). Are we making education count in remote Australian communities or just counting education? *The Australian Journal of Indigenous Education, 42*(2), 157–170.

Gumperz, J. J., & Hymes, D. (1972). *Directions in sociolinguistics: The ethnography of communication*. New York, NY: Holt, Rinehart & Winston.

Gutierrez, K. D., & Rogoff, B. (2003). Cultural ways of learning: Individual traits or repertoires of practice. *Educational Researcher, 32*(5), 19–25.

Heath, S. B. (1983). *Ways with words: Language, life and work in communities and classrooms*. Cambridge: Cambridge University Press.

Heath, S. B. (1991). The sense of being literate: Historical and cross-cultural features. In R. Barr, M. L. Kamil, P. Mosenthal, & P. D. Pearson (Eds.), *Handbook of reading research* (Vol. 2, pp. 3–25). New York, NY: Longman.

Heath, S. B. (2004). Learning language and strategic thinking through the arts. *Reading Research Quarterly, 39*(3), 338–342.

Heath, S. B., & Street, B. V. (2008). *On ethnography: Approaches to language and literacy research*. New York, NY: Teachers College Press.

Hill, S. (Ed.) (2008). *Afterschool matters: Creative programs that connect youth development and student achievement*. London: Sage.

Hull, G. A. (2003). At last: Youth culture and digital media—New literacies for new times. *Research in the Teaching of English, 38*(2), 229–233.

Hull, G. A., & Nelson, M. E. (2005). Locating the semiotic power of multimodality. *Written Communication, 22*(2), 224–261.

Hull, G., & Schultz, K. (Eds.) (2002). *School's out! Bridging out-of-school literacies with classroom practice*. New York, NY: Columbia University, Teachers College Press.

Hutchins, E. (1996). *Cognition in the wild*. Cambridge, MA: MIT Press.

Ito, M., Baumer, S., Bittanti, M., Boyd, D., Cody, R., Herr-Stephenson, B., et al. (2010). *Hanging out, messing around and geeking out: Kids living and learning with new media*. Cambridge, MA: MIT Press.

Kral, I. (2007). *Writing words—right way! Literacy and social practice in the Ngaanyatjarra world.* Unpublished PhD thesis. Canberra: The Australian National University.

Kral, I. (2012). *Talk, text & technology: Literacy and social practice in a remote Indigenous community*. Bristol, UK; Buffalo, NY; Toronto: Multilingual Matters.

Kral, I. (2016). From the local to the global: Socialisation into adult literacy practice in the remote Indigenous Australian context. In K. Yasukawa & S. Black (Eds.), *Beyond economic interests: Critical perspectives on adult literacy and numeracy in a globalised world* (pp. 61–76). Rotterdam; Boston, MA; Taipei: Sense.

Kral, I., & Falk, I. (2004). *What is all that learning for?: Indigenous adult English literacy practices, training, community capacity and health.* Adelaide, Australia: NCVER.

Kral, I., & Heath, S. B. (2013). The world with us: Sight and sound in the "cultural flows" of informal learning. An Indigenous Australian case. *Learning, Culture and Social Interaction, 2*(4), 227–237.

Kral, I., & Schwab, R. G. (2012). *Learning spaces: Youth, literacy and new media in remote Indigenous Australia*. Canberra: ANU E-Press.

Kress, G. (2003). *Literacy in the new media age*. London and New York, NY: Routledge.

Kress, G. (2007). Thinking about meaning and learning in a world of instability and multiplicity. *Pedagogies: An International Journal, 2*(1), 19–34.

Kress, G. (2010). *Multimodality: A social semiotic approach to contemporary communication*. London and New York, NY: Routledge.

Lave, J. (1988). *Cognition in practice*. Cambridge: Cambridge University Press.

Lave, J. (2011). *Apprenticeship in critical ethnographic practice*. Chicago, IL: University of Chicago Press.

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.

LoBianco, J., & Wickert, R. (2001). Introduction: Activists and party politics. In J. LoBianco & R. Wickert (Eds.), *Australian policy activism in language and literacy* (pp. 13–44). Melbourne: Language Australia.

McKay, P. (2001). National literacy benchmarks and the outstreaming of ESL learners. In J. LoBianco & R. Wickert (Eds.), *Australian policy activism in language and literacy* (pp. 221–237). Melbourne: Language Australia.

Peterson, N., & Myers, F. (2016). The origins and history of outstations as Aboriginal life projects. In N. Peterson & F. Myers (Eds.), *Experiments in self-determination: Histories of the Outstation Movement in Australia*. Canberra: ANU Press.

Rogoff, B. (2003). *The cultural nature of human development*. Oxford and New York, NY: Oxford University Press.

Rogoff, B., & Lave, J. (1984). *Everyday cognition: Its development in social context*. Cambridge, MA: Harvard University Press.

Rogoff, B., Paradise, R., Arauz, R. M., Correa-Chavez, M., & Angelillo, C. (2003). Firsthand learning through intent participation. *Annual Review of Psychology, 54,* 175–203.

Schieffelin, B. B., & Ochs, E. (Eds.) (1986). *Language socialization across cultures*. Cambridge: Cambridge University Press.

Schwab, R. G. (2006). *A report for the Warlpiri Education and Training Trust: Options for education and training*. Canberra: CAEPR.

Schwab, R. G. (2012). Indigenous early school leavers: Failure, risk and high-stakes testing. *Australian Aboriginal Studies, 1,* 3–18.

Schwab, R. G. (2013). "You are boss for me!": A case study in the erosion of Indigenous self-determination in education. In R. Craven, A. Dillon, & N. Parbury (Eds.), *In black and white: Australians all at the crossroads* (pp. 209–226). Ballan, Victoria, Australia: Connor Court.

Simpson, J., Caffery, J., & McConvell, P. (2009). *Gaps in Australia's Indigenous language policy: Dismantling bilingual education in the Northern Territory.* AIATSIS Research Discussion Paper No. 24. Canberra: Australian Institute of Aboriginal and Torres Strait Islander Studies.

Stornaiuolo, A., Hull, G., & Nelson, M. E. (2009). Mobile texts and migrant audiences: Rethinking literacy and assessment in a new media age. *Research directions: Language arts, 86*(5), 382–392.

Street, B. (1984). *Literacy in theory and practice*. Cambridge: Cambridge University Press.

Street, B. V. (Ed.) (1993). *Cross-cultural approaches to literacy*. Cambridge: Cambridge University Press.

Street, B. V. (1995). *Social literacies: Critical approaches to literacy in development, ethnography and education*. London and New York, NY: Longman.

Street, B., Pahl, K., & Rowsell, J. (2009). Multimodality and New Literacy Studies. In C. Jewitt (Ed.), *The Routledge handbook of multimodal analysis* (pp. 191–200). London and New York, NY: Routledge.
Thurlow, C., & Mroczek, K. (Eds.) (2011). *Digital discourse: Language in the new media*. New York, NY: Oxford University Press.
Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
Wenger, E. (1998). *Communities of practice: Learning, meaning and identity*. Cambridge: Cambridge University Press.
Wigglesworth, G., Simpson, J., & Loakes, D. (2011). NAPLAN language assessments for indigenous children in remote communities: Issues and problems. *Australian Review of Applied Linguistics, 34*(3), 320–343.
Willis, P. (1977). *Learning to labour: How working class kids get working class jobs*. Westmead, UK: Saxon House.

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