Responding to the call: arts methodologies informing 21st century literacies

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Abstract

With the advent of digital technologies, a new adventure began. How the world works has changed, and we cannot go back. Digitally savvy children born in the digital age (i.e., DigiKids) are interacting with and responding to rich, curatable multimodal communications as part of their daily-lived experience. For DigiKids, traditional text-based literacy is of diminishing significance as they exercise a wide range of new literacy practices and capacities. Having more the mindset of the artist, they engage in the world of expression and communication, weaving together linguistic, visual, aural, gestural and spatial features to form coherent compositions. Nevertheless, national curriculæ reformers, teachers and parents generally fear neglecting traditional text-based literacy skills and consequently struggle to optimise DigiKids' digitally savvy literacy practices and capacities. However, practices employed in arts methodologies (e.g. ceramics, theatre, and music) offer a key resource to conceptualise new practices beyond traditional textbased literacy, and to situate our new post-literacy (i.e. epiliteracy) theory. To navigate the transition from traditional text-based literacy to epiliteracy, the metaphor of the archetypal Hero/Heroine's Journey is used to describe, chart and comprehend the tensions, trials and transformations as we respond to the call of epiliteracy in the 21st century.

Key words: arts methodologies, multimodal literacies, epiliteracy, DigiKids, 21st century literacy

Introduction

Twenty first century literacy: a transformational journey

New media (i.e. digital technologies) comprise a vast array of modes, formats, processes and platforms in a web of global networks. Multimodal compositions such as websites, e-books, digital games and applications, wikis, blogs and massive open online courses (i.e., MOOCs) are the literacy artefacts that characterise this new media age. They are transforming how we individually and collectively conceive of, communicate and function in the world. The nature of these multimodal compositions brings together linguistic, visual, aural, gestural and spatial features in new patterns and relationships to create meaning. Furthermore, as multimodal compositions, they function within an individual's lived experience of their daily life. Multimodal ways of constructing, negotiating and communicating meaning are increasingly pervading our lives, both online and off, requiring a new understanding of what it means to be literate in the 21st century.

Literacy as multimodal and embedded in lived experience is the foundation of an emerging paradigm. This new paradigm engages us in a set of dynamic, responsive, contextualised (i.e., situated in lived experience) practices for negotiating meaning. These practices arise from an individual's agency in curating the web of their present and past-lived experiences, according to personal requirements and preferences (Lave and Wenger, 1991; Zimmerman, 2014). The term we have adopted for this new paradigm of literacy in a digitally networked multimodal world is epiliteracy. The Latin prefix, epi-, carries the connotation of after (Merriam-Webster, 2013), in this instance, after or post literacy. Epiliteracy sustains and nurtures psychosocial, cultural, spiritual and political integrity through new *epiliterate* practices that supersede those of traditional text-based literacy. It is not rule bound (without mutual agreement), criterion-based or norm-referenced. Conceptually, epiliteracy promotes systemic, relational and curatable (i.e. just-in-time, relevant, able to be personalised or customised and internalised) practices as we navigate, negotiate and interpret meanings using digital communication modalities (e.g. interactive video and audio). Previously, curation was the purview of mass media organisations (Kung et al., 2008). As with the transition from oracy to the age of literacy, the transition to epiliteracy brings new ways of thinking, acting, being, belonging and becoming (Peers and Fleer, 2014).

The nature of the epiliteracy experience is familiar to the arts practitioner who engages in exploring, creating and communicating through arts methodologies such as drama, music and visual arts. In a multiliteracies paradigm the arts are constructed as ways of knowing (meaning-making) and communicating, hence using language systems (New London Group, 1996). The grammars of these languages are usually described in terms of design elements, principles and conventions. These are employed in arts methodologies in the sense of a speaker who uses vocabulary, intonations, word choice, pacing and other relevant principles, elements and conventions of the oral communication modality. Arts practitioners and other epiliterate individuals using new media incorporate visual, gestural, spatial and aural features in which *elements* (e.g. line, shape, form, value, space, colour and vector) are animated by design *principles* such as rhythm, balance, emphasis/contrast, proportion, gradation, harmony/unity, variety and movement to create multimodal *compositions* (Callow, 2013; Dinham, 2014). Such compositions in both traditional arts and new multimodal contexts engage the creator and the interpreter in building personally relevant, evolving, systemic narratives in which elements within the system operate in concert with one another.

Studio habits of mind, such as engage and persist, observe and reflect are employed by the arts practitioner in meaning-making and in negotiating idiosyncratic interpretations within sociocultural, historical and political contexts (Hetland et al., 2007). Fundamentally different from the mindset required for static textbased literacy, these habits of mind also characterise the dynamic, responsive, situated practices of the epiliterate individual. Given this, stronger curriculum links with arts methodologies may prove fruitful for the development of *new* epiliteracy pedagogical practices (Chalk, 2007; Dinham, 2014; Huber, 1995).

The Hero/Heroine's (Protagonist's) Journey (i.e. the Journey), also familiar to arts practitioners, affords us a metaphor for the iterative reflective process of learning cycles evident during the transition from literacy to epiliteracy (Figure 1) (Laycoff and Johnson, 1980; Murdoch, 1990; Schmidt, 2001; Taylor, 2012; Vogler, 2007). In the Journey, the protagonist pursues an *adventure* (i.e. undertakes a journey), creates or learns something new, is irrevocably *transformed* and cannot return to their pre-Journey state. A paradigm shift has occurred (see Kuhn, 1977). The protagonist returns to the *Ordinary World* with new understandings and skills for enhancing the quality of everyone's life. On our Journey, epiliteracy arises from and contributes to daily-lived experiences through the interweaving of design elements,

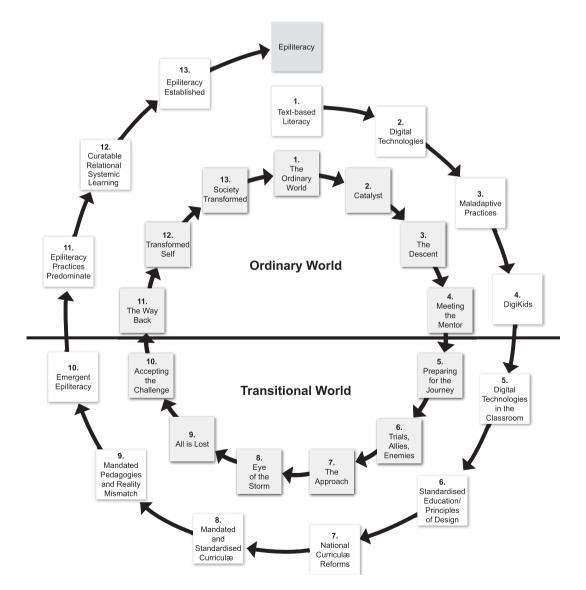


Figure 1: The Hero/ine's Journey (inner circle) is a metaphor to describe our transition from text-based literacy to epiliteracy (outer spiral) (adapted from Murdoch, 1990; Schmidt, 2001; Vogler, 2007) This figure is available in colour online at wileyonlinelibrary.com/journal/lit

principles and conventions to offer a means and language by which to identify, situate and enact epiliteracy, thereby transforming us *and* society. As with validation of Galileo's heliocentric solar system and reactions to what was then considered heretical, society is irrevocably *transformed*. We cannot return to flat earth thinking.

As we navigate, negotiate and interpret our epiliteracy world, the continual negotiation of our (cyber-techno) identities, social and cultural practices is mediated via technologically sophisticated multimodal compositions such as websites, blogs, wikis, Facebook, Twitter and Instagram (Davies, 2009; Luke and Luke, 2001). Unlike the shift from oracy to literacy in which written dialects of oral languages developed their own, often different, grammars, epiliteracy involves forming ensembles of linguistic, aural, gestural and spatial features (e.g., traditional text, videos, audio, and hyperlinks) akin to musical compositions, works of art and theatre (Crystal, 2003; Kress, 2003). Each of these features of dynamic, curatable multimodal compositions is a semiotic system of communication with its own language conventions of signs and symbols (i.e., grammars). Epiliteracy, which integrates the grammars of these semiotic systems, encompasses all transitional terms (e.g. multiliteracies, multimodal literacies, and new literacies including digital and cultural). Like the protagonist, we cannot return to the Ordinary World and the illusory familiarity of traditional text-based literacy.

Ordinary world

Illusion of the familiar: traditional text-based literacy world

In the printed world, information and content are curated, packaged and presented, fait accompli, for distribution and sharing with third-party consumers (i.e. readers). Standardisation, encapsulated in narrative conventions, is critical (Vogler, 2007). Unprofitable, non-standard offerings are irrelevant and likely to be marginalised if published. The defining artefacts are static, mass-produced books and materials. Exceptions to this standardisation were Choose your own Adventure novels, such as The Cave of Time (Packard, 1979). They challenged convention by providing several alternative endings. They were nascent signs of an epiliteracy world in which individuals are the agents of their experiences and learning, which they create and curate by favouriting, zooming in and out, and visiting related, hyperlinked information (e.g. definitions and elaborated content) (Gee and Hayes, 2011; Hetland et al., 2007). Curation is now a personal, dynamic, post-publication practice. The user manipulates content and appearance (e.g. font size) according to personal preferences and, as avatars (i.e. virtual alter egos), they simultaneously facilitate connection, interaction and engagement in the virtual and augmented (i.e. both real *and* virtual) digital technology worlds of cyberspace.

Catalyst

A call to adventure: digital technologies

Digital technologies, catalysts for change, call us to adventure. They engage us in "[epi]literate social practices while altering as well as making less necessary or valuable older literate social practices (like spelling correctly, reading books, and writing personal letters to distant family members and friends)" (Albers and Harste, 2007, p.7). Our traditional text-based literacy practices are challenged, and we are flailing. Intermediate language describes our experiences afforded by digital technologies (Gee and Hayes, 2011). An outdated mindset from older literate social practices accommodates new artefacts (e.g. text heavy PowerPoints in instructional mode) rather than engaging the new mindset inherent in the epiliteracy paradigm. The Journey narrative tells us a permanent language, borne of common usage, rather than mandated (e.g. see La Ve République, 1994), will arise from an epiliteracy mindset to replace intermediate language. Epiliteracy is increasingly practised in more dynamic, interactive, diverse and complex contexts requiring creative and interpretative understandings, new permanent language, and propensities to stay in play (Crystal, 2003; McGonigal, 2011). As we learn to stay in play with the play (Caputo, 1987, p.239), we are transformed. Already, epiliterate individuals, not printing houses or publishers, curate text, image, music, voice and *traversals* such as links, to create ensembles or compositions that are systemic in nature, social and experience-dependent (Kress, 2003).

Epiliteracy practices, such as those evidenced in games and when accessing standard sets of social networking links attached to popular social media websites, are already in common usage as socially and culturally accepted ways of communicating (Gee and Hayes, 2011). Digital gaming exemplifies the epiliteracy mindset of the arts practitioner. Gamers interact at the threshold of a dynamic digital world in which personal agency, innovation and originality are critical corequisites of fluidity and fleet of foot and mind. The gamer's identity is (re)negotiated as they interact with the game world and other gamers to produce experiences (e.g. gamers write the games as well as consume/ play them), take risks and curate the gaming interface to suit personal learning and playing preferences (Gee, 2005; Perry and DeMaria, 2009).

As personal agency drives progress, learning experiences arise *on demand*, *just-in-time*. They are the result of preceding actions or inactions and choices relative to the goal of the game rather than incidental or exported by teachers to be imported by learners, *justin-case* (Hetland et al., 2007). Gamers encounter pleasantly frustrating challenges which encourage ongoing engagement and consolidate their learning in a timely fashion (Gee, 2005). Context supports interpretation (i.e. meaning-making is situated in the gamer's lived experiences: real, virtual and augmented). A systems mindset facilitates exploration, lateral thinking and rethinking of goals, and problem solving by accessing and using smart tools (i.e. features of play gamers manipulate in the game world and game) and distributed knowledge of a cross-functional team (e.g. gamers collaborate with other gamers) to achieve the game's narrative goal as virtual characters (i.e. avatars) act, be, belong and become in ways gamers cannot in the real world. Typically, through a process of trial and error, a culture of low consequence risk taking facilitates a gamer's performance prior to competence (Gee, 2005). The epiliteracy mindset of gamers challenges the status quo of a static text-based literacy world.

The descent

Refusal of the call: maladaptive practices

Despite the relentless march of epiliteracy, an allegedly raging literacy turf war continues unabated (Hurst, 2013; Smith, 2012). Imbued with an outdated mindset, school policy makers and curriculum writers appear reluctant to comprehensively embrace epiliteracy practices despite them being intrinsic to how DigiKids communicate and make meaning (Prensky, 2001a, 2001b). Although digital technologies are increasingly present in classrooms, they tend to be employed within the old literacy paradigm as *add-ons* rather than as integral lived experiences. This situation is exacerbated by potential negative impacts of digital technologies described across a range of social, emotional, intellectual and cultural scenarios echoing the early perceived impacts of television (Apperley and Walsh, 2012; Bandura, 1977). It seems many teachers (and parents) are unsure of how to meaningfully appropriate digital technologies (e.g. videos and games) as epiliteracy practices (see Apperley and Walsh, 2012; Kent and Facer, 2004). These are unsustainable, maladaptive responses typical of this stage of the Journey. The protagonist reaches the threshold and falters, refusing the call. A clash of cultures between DigiKids' and digital immigrants' (i.e. people born before the advent of digital technologies) perspectives is evident (Prensky, 2001a, 2001b).

Meeting the mentor

Culture clash: DigiKids ahoy!

Epiliteracy experiences provide new perspectives as they (re)frame and transform one's negotiated *self* within and across social and cultural contexts over time (Chalk, 2007; Huber, 1995; see also Davies, 2009). Games, social media, smart phones and tablets are integral epiliteracy experiences even before DigiKids start school (Zimmerman, 2014). These epiliteracy experiences mean DigiKids think differently from and clash with the standardised, precurated third-party consumer culture of their digital immigrant parents and teachers (Prensky, 2001a, 2001b). Fortunately, DigiKids already mentor digital immigrants as they navigate, negotiate and curate their experiences in cyberspace (i.e. the virtual/interactive/augmented interface) and face-to-face (i.e. embodied) (see Chalk, 2007; Huber, 1995). Most teachers would be familiar with the multimodal experiences, knowledge, skills, expertise and agency DigiKids bring to the classroom. They intuitively mentor their peers and their digital immigrant teachers, irreversibly (re)framing their identities and roles and those of their teachers (Gee and Hayes, 2011).

Since the first dance, ritual, rock painting, chant, and music making, we have navigated, negotiated, interpreted and made meaning of our experiences. These artistic and ancient forms of knowing are reconfigured in multimodal compositions typical of the epiliteracy world. Embodied, like the dancer, the lived experiences of epiliteracy are intensely personal and social, felt as a pulse, quicker breathing, perspiration, laughter (Wagner, 1998). Consider the dancer who enters the virtual world of the performance space and lives the dance, sees it danced, interprets a gesture on screen or in an embodied situation. In this lived experience, the dancer is both the dance *and* the dancer. Likewise, gamers are attracted to videogames such as The Sims (Electronic Arts Inc., 2014), Angry Birds (Rovio Entertainment Ltd, 2014) and Minecraft (Mojang, 2014) because of the lived experiences they afford (Chiapello, 2013; Gee and Hayes, 2011). Increasingly, gamers' epiliteracy experiences show a blurring of the boundaries between the embodied and the virtual (e.g. Ingress, NianticLabs@Google, 2014) in ways that mirror the experiences of arts practitioners (Dinham, 2014; Farrow and Iacovides, 2014). Their experiences are transformative as new patterns, relationships, understandings and skills emerge (Leu et al., 2004).

Likewise, DigiKids, as epiliterate agents, curate language, still and moving images, music and sound as they personalise multimodal compositions (Bull and Anstey, 2013; Zimmerman, 2014). Curation dynamics are idiosyncratic and what is learned today may or may not be relevant tomorrow or intercontextually (i.e., in or to other contexts). Multimodal compositions such as websites and games, as epiliteracy experiences, inform and transform DigiKids' narratives about who they are, how the world works and their agency in it (i.e., how experiences may be patterned and which practices and responses are meaningful) (Gee and Hayes, 2011; Huber, 1995). In games, for example, epiliteracy is inherent in "the process by which a designer creates a context, to be encountered by a participant, from which meaning emerges" (Salen and Zimmerman, 2004, p.41). These new epiliteracy experiences and practices "alter substructures of language and sensibility" (McLuhan, 1962, np), as did the Journey into literacy following the advent of the printing press. For DigiKids, they are embarkations on passionate, open-ended journeys into *knowing the world* and how it works (see Freire, 2003; Huber, 1995). Destinations (i.e. outcomes) cannot be predetermined as learning is emergent (Dinham, 2014; Mitra, 2012) rather than pre-curated *faits accompli* for latent third-party consumers.

With access to digital technologies and the internet, children living in dire poverty in rural India and other parts of the world have latently become DigiKids and successfully embarked on journeys into epiliteracy without third-party intervention. They have taught themselves foreign languages and how to programme digital technologies, their learning comparable to the best-educated students (Mitra, 2012). Similarly, student-curated learning in the Butterflies Project (Mintz, 2004) in New Delhi, projects in São Paulo, Brazil, such as Escola Lumiar (Huber, 2003) and Politeia Escola Democrática (Sumie, 2007), and Windsor House School in Vancouver, Canada (Hughes, 2002) demonstrate the potential agency children have in curating their own learning in this new world of epiliteracy in and out of classrooms.

Preparing for the journey

Crossing the threshold: digital technologies in the classroom

Digital technologies are present in many classrooms, so the threshold to epiliteracy has been crossed. However, it is problematic to respond to the advent of new media by *adding on* technological artefacts such as eBooks or embracing animated forms of communication (e.g. comics) within existing literacy curriculæ as seen in this transitional phase of the Journey. This approach does not acknowledge the ways in which technology is systematically (re)shaping identities and how we conceive, think, act and envision our place in the world (Davies, 2009; Dinham et al., 2007).

It is at this point in the Journey narrative where arts methodologies have the potential to inform epiliteracy practices, teaching and learning (Dinham, 2014). However, while design principles provide context using conventions of semiotic grammars, design elements are the content of our communication. They are not the communication, any more than musical scales constitute a sonata or stage directions a theatrical performance. Likewise, phonemes, syllables, and morphemes (i.e. the smallest units of meaning, such as post in *post-ed*) are the linguistic content of (oral and static text-based) language (Fromkin et al., 2011). Without context, content may carry multiple, contradictory meanings (e.g. row, wound, and their, there and they're, etc.). Using design elements, principles, and conventions, epiliteracy practitioners arrange and orchestrate (i.e. compose) elements 49

of multimodal compositions informing us how to communicate as we navigate, negotiate, and interpret the meanings of grammar conventions across the range of semiotic systems (Barton, 2013). In our epiliteracy world, we need to consider the content of our communications and meaning-making within the contexts of new *media* (as intrinsic to) *the message* (McLuhan, 1964). Digital immigrants, many of whom are teachers, have been instrumental in creating this world. Without them, there would be no digital world into which DigiKids could be born, so we are committed to this Journey and all its challenges. With mentoring from DigiKids, teachers are well placed to embrace digital technologies and the opportunities and challenges of epiliteracy practices.

Trials, allies and enemies

Standardised education and the principles of design

The road of trials looms large and challenges are many as educators operate in an epiliteracy policy and practice vacuum (see Hurst, 2013; Smith, 2012). Extant standardised education policies and pedagogical movements emphasise decontextualised high-stakes, criterionbased (e.g. standards), norm-referenced (e.g. benchmarks) learning focused on acquiring static content and transmitted (historical) practices (Smith, 2012). Although these measures are intended to provide comparative evidence of learning and performance as indicators of success and failure, the variables they purport to measure are intrinsically complex (Beridansky, Cronnel and Koehler in Kalantzis and Cope, 2012; Smith, 2012). Their lens is suited to a standardised industrial model of text-based literacy, not epiliteracy. This standardised approach is akin to teaching basic (fundamental) oratory practices whilst ignoring reading and writing in the 20th century.

Static text-based literacy lends itself to such spurious latent measures of student progress and concomitant quasistandardised, evidence-based pedagogies (e.g. DEECD, 2007; Dulfer et al., 2012; Kohn, 2000; Wyn et al., 2014). These measures are an anathema to an epiliteracy world, which engages us in dynamic open-ended, highly portable, interactive interfaces in which stasis is fleeting at most (Gee and Hayes, 2011). Rigid structures are eschewed for reflexive, free-flowing, layered, interactive, curatable compositions. Feeling, knowing, understanding and meaning-making are found in the acts of creation, reflection and interpretation. Meaning is fluid and embedded in encounters. Learning experiences are open-ended (Dinham, 2014). This situation invites us to rethink how we develop, learn and teach *epi*literacy. Now, decoding linguistic content of words (i.e. phonemes, syllables and morphemes) appears misleading, misguided and tangential to the interpretive processes of epiliteracy. Like arts practitioners, DigiKids need to navigate, negotiate and interpret meanings of multimodal compositions rather than

decode static texts (Bourriaud, 2006). This shift is yet to be appropriately reflected in national curriculæ reforms.

The approach

Responding to the call: national curriculæ reforms

The passing of the familiar brings angst about falling standards and illiterate, unemployable youth. Paradoxically, the future lies within those *falling* standards and *illiterate, unemployable* DigiKids. Standards have moved. Literacy and employment demands have also moved. These changing circumstances drive national curriculæ reform agendas (e.g., ACARA, 2014; CCSSI, 2014; DfE, 2014; NRP, 2000) and are reflected in statements such as the Melbourne Declaration (MCEETYA, 2008). Most curriculæ reforms, though, are yet to fully embrace the epiliteracy mindset of DigiKids.

National curriculæ reforms, typically, are embedded in an outdated mindset, whereby epiliteracy practices are sidelined in deference to a traditional text-based literacy mindset (e.g., "The study of English as a system helps students to understand how language functions as a key component of social interactions across all social situations", ACARA, 2014, p.19). The challenge for teachers is to embrace epiliteracy embedded in sociocultural interactions, not to be *studied*, to be learned about or as a tool for learning but as lived experience through which students come to understand themselves, their agency and their world (Van Manen, 1997). *Learning about something* premises a transmission model of disconnected learning inherited from an omnicognisant (i.e. know all) age of oracy. Likewise, requiring children to understand how... national identities are shaped (ACARA, 2014, p.19) is an example of disconnected just-in-case learning. Without living different national identities (improbable) it is unlikely to be meaningful to students with limited experience of the wider world.

By embracing an epiliteracy mindset, akin to that of arts practitioners, teachers have antecedents to emulate (e.g., see Freire, 2003; Omand, 2014; Shann, 1987). In the contemporary context, digital technologies have recast their practices across new modes of expression in which learning is contingent on preceding choices and/or inaction, just-in-time (e.g. see Expeditionary Learning, 2014; Huber, 2000; Netherwood et al., 2006). These educators and their students negotiated with each other to create lived experiences as contexts for learning (e.g. documentary making and mapping local community). These experiences bear the hallmark of a range of arts methodologies practices used just-intime to encourage sustained personally relevant, individually curated learning with mentoring if, as and when sought by the learner. Until schools are *lived* epiliteracy experiences, rather than fleeting experiences of digital technology add-ons to fulfil mandated curriculæ and assessment priorities, DigiKids' frustration will not abate (see Gatto, 2009).

Eye of the storm

Backlash: mandated and standardised curriculæ

Benchmarking and mandated curriculæ in Australia, the United Kingdom, the USA and elsewhere focus on the content of curriculum (see ACARA, 2011; CCSSI, 2014; DfE, 2014). Epiliteracy practices, at best, are Information Communication Technology capabilities in the service (ACARA, 2014, np) of the curriculum, hardly appropriate for an epiliteracy world. Although epiliteracy practices are demanded by DigiKids, employers and espoused educational goals (MCEETYA, 2008; NCEE, 2008), the old guard (i.e. the first wave of digital technology users) may sense an overwhelming tidal wave of change. Fighting for survival in the eye of a storm, as stakes get higher, outcomes more fraught and curriculum mandates more onerous, they resort to being gatekeepers saving DigiKids from the perceived perils of digital technologies and epiliteracy (Apperley and Walsh, 2012; Prensky, 2001a, 2001b).

All is lost

Failure and failure: mandated pedagogies and reality mismatch

Unsurprisingly, many feel lost (see Smith, 2012). The perceived failure, though, may actually be an artefact of how we choose to measure student progress. Educational practices (e.g. spelling lists) belonging to an industrial model of learning, bear little resemblance to the dynamic daily lives of students, teachers or parents (Kent and Facer, 2004). Epiliteracy directly challenges this prevailing view of humanity, learning, failure and progress (de Freitas and Maharg, 2011). Complex multimodal systems of an emergent epiliteracy world demand a DigiKids' mindset (Gibson, 2011). With DigiKids available to mentor us on our Journey into this new world, all is far from lost as we accept the challenge of epiliteracy,

Accepting the challenge

Emergent epiliteracy

DigiKids, as progenitors of epiliteracy, are already profoundly epiliterate. Models of their epiliteracy practices are available to review, interpret and recast to our needs. Rather than there being new literacies *to learn and apply* as suggested in national curriculæ documents, the virtual and augmented realities of multimodal compositions *are* epiliteracy *to be lived*. We continue to find new ways of being epiliterate including new kinds of games such as *Portal*, a videogame based on aperture science (Valve Corporation, 2007) and ways of interacting, learning and communicating using social media, digital apps and a plethora of new digital technologies (Zimmerman, 2014). In this context, pedagogies driven by movements championing *Back to Basics* (e.g., back2basics, 2014; NRP, 2000) with a focus on linguistic content of words and texts are out of place. They have become *just-in-case*, exclusionary, decontextualised exercises in language articulation (see Cambourne, 1988; Cumming-Potvin, 2009). They are the antithesis of epiliteracy. It is now for digital immigrants to accept the epiliteracy challenge.

The way back

Our onward journey: epiliteracy practices predominate

In our epiliteracy world, communication emerges from, and contributes, to the complex interweaving of multiple modalities for expressing and interpreting meaning including images, text, videos, audio recordings, immersive and interactive experiences (New London Group, 1996). It is for us, now, to show our willingness to find our way back (or forward?) and, as arts practitioners, DigiKids and gamers do, to stay in *play with the play* (Caputo, 1987, p.239). Our epiliteracy experiences inform and transform us and our society (including schools and pedagogies) as befitting this complex dynamic epiliteracy world.

The transformed self

Curatable, systemic and relational learning

Learning in this epiliteracy world is increasingly accessible and democratised (Gee and Hayes, 2011). Epiliteracy experiences are intrinsically transformative, open-ended, dynamic, responsive and intercontextual (Chalk, 2007; Huber, 1995). In an epiliteracy world, as amateur experts (e.g. amateur astronomers), we develop and share a deep distributed knowledge (i.e. spread around the group) of personally interesting topics in passionate affinity spaces (e.g. online family history or education communities). Together, we contribute to crowdsourced funding for community projects (e.g., see Paramanathan et al., 2014), discoveries (e.g. new planets and other stellar objects with Galaxy Zoo, Zooniverse, 2014, and Disk Detective, NASA, 2014) and many other endeavours (Gee and Hayes, 2011). New experiences afforded by epiliteracy are fertile with possibilities for transforming individuals, learning, pedagogies and society (de Freitas and Maharg, 2011). We can no longer expect to communicate or teach using practices more relevant to oracy and/or traditional text-based literacy alone (Mitra, 2012). Our world is epiliteracy. We live it. We learn it. We teach it.

Society transformed

A new world: epiliteracy established

Epiliteracy frees the protagonist (i.e. us as progenitors of our own Journeys) to proactively design and curate lived experiences rather than receive them precurated ready for consumption. DigiKids naturally employ methodologies of the arts practitioner as they orchestrate elements, design principles and conventions of semiotic systems (i.e. the grammars). Subsequent generations of DigiKids, in the absence of digital immigrants, will firmly establish epiliteracy as the default for being, communicating, relating and learning. Consequently, we need to commit ourselves to the Journey we initiated and remind ourselves failure does not mean failure to be a success. Failure, as part of a trial and error risk taking process, is expected as we learn to, stay in the play, perform before we are competent and problem solve for our success and that of our children. Our learning will emerge as we freely navigate, negotiate and interpret our epiliteracy world (de Freitas and Maharg, 2011).

Conclusion

Inhabiting the epiliteracy world

As we engage in emergent epiliteracy practices, we are changing our mindset and that of society (Mitra, 2012). How the world works and our agency in it have shifted. The archetypal Journey narrative informs us of the nature of our transformative Journey into this new world of epiliteracy in which practices inherent in arts methodologies frame our practices (Figure 2). We are called to the adventure we initiated. Still, for many digital immigrants, the prospect of what lies ahead is daunting. We have to rethink how we act, be, belong and become the people and the teachers who fully inhabit this epiliteracy world. DigiKids, who know no other world, are available to lead this journey. By responding to the call to adventure we initiated with the advent of digital technologies, we can actively (re)(co) create and interpret our identities, our agency and our worlds as proactive democratic epiliterate citizens.

Whilst in the *eye of the storm* as curriculum authorities' mandates impact heavily on schools and teachers, it may still be possible to sustain an epiliteracy mindset in the classroom. (It is not possible, nor desirable, to *teacher proof* even the most scripted literacy programme!) The key is in designing curatable, open-ended learning experiences in which DigiKids and teachers cooperatively live, interact with and practice democratic values of epiliteracy. Digital technologies afford access to a global network in which DigiKids can participate (e.g. MOOCs, research projects such as *Murder under the Microscope*, DEC, 2014) and contribute to crowdsourced discoveries as readers,

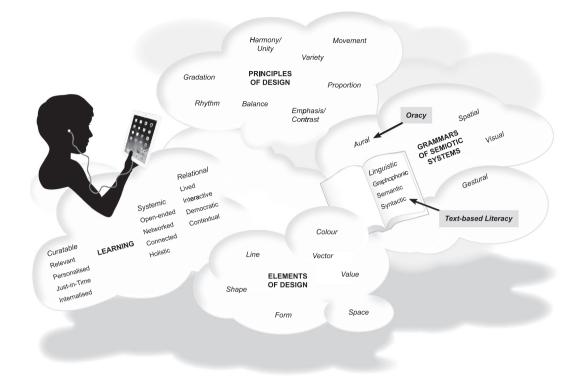


Figure 2: The epiliteracy world This figure is available in colour online at wileyonlinelibrary.com/journal/lit

writers, artists, viewers, mathematicians and scientists. The nature of these engagements is richly informed by arts methodologies and includes drafting, scripting, choreographing, designing, creating, compiling, producing and responding. Learning is facilitated and integrated through blogging, aural and pictorial representations and compositions (e.g., podcasts, vodcasts and mashups).

A DigiKid's mindset demands negotiable, interpretive epiliteracy practices even in mandated, scripted literacy contexts. Additionally, there are several hours in the day when students can be unrestrained epiliteracy practitioners. DigiKids *are* responding to the call, curating their own learning and contributing to their own development and that of their peers, teachers, parents, schools and communities (Mitra, 2012). They are transformed, individually and collectively and, with their mentoring, digital immigrants will likewise be transformed as will teaching, learning, schools and education (de Freitas and Maharg, 2011; Mitra, 2012). Practices, intrinsic to arts methodologies, are central here as we, with DigiKids, *respond to the call* of this epiliteracy adventure.

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