

Aboriginal Pedagogy: Integrity in Academic and Cultural Practice

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Received Feb. 2023

Accepted for publication March 2023

Published May 2023

Abstract

Dr. Yunkaporta offers a possibility for all teachers to reach for holistic education's full potential. His analysis is specific to his unique Australian Aboriginal culture in a world of diverse cultures. He suggests, however, that it may be useful as a basis for inquiry for all educators, especially allowing Indigenous teachers, scholars, and community members to express abstract ideas about customary processes they have previously been unable to articulate in English. This empowering process can result in a way to liberate Indigenous teachers and learners, and others, from the colonising heuristics of settler scholarship.

Keywords: *Aboriginal pedagogy, Indigeneity, education theories, decolonizing education*

The Status of Indigenous Pedagogies

Aboriginal pedagogy, while enjoying brief periods of buzz-word status to add some spice to policy and syllabus documents, has struggled to find a place in the academy as a serious research topic, both in Australia (Hughes, More, and Williams 2004) and internationally (Battiste 2002). It has been misaligned with the pseudo-science of Learning Styles Theory, which was debunked decades ago (Curry 1990) but persists in the mythologies of progressive education.

Unfortunately, the 'woo-woo' factor of native wisdom has attracted the laziest scholars and practitioners, who like to throw Indigenous knowledge into their basket of 'alternative' education theories like Learning Styles Theory, as a fig leaf for their indolence and a vehicle for their intellectual and cultural bypass.

While some common features of Aboriginal pedagogy that align with Western pedagogies have been acknowledged, such as place-based (Marker 2006) and narrative pedagogies (Egan 1998), it has been largely dismissed in the academy, while paradoxically being embraced by education

institutions as a tokenistic, exotic add-on in curriculum (e.g., Yunkaporta 2010). The topic is occasionally revived when it is found that customary Indigenous practices of knowledge transmission and production align with aspects of 'hard science' such as Neuroscience (Yunkaporta and Bilton 2020). However, I am only aware of one large-scale empirical study ever having been conducted, which was commissioned by an Australian government agency, and I am unable to reference this as I had to sign an NDA before viewing it.

In the global south, many of us find ourselves sublimating our traditional processes of knowledge transmission through compulsory engagement with the education institutions of the Anglosphere. Our customary learning practices are misaligned with the cognitive orientation favoured in Western schooling, which tends to be individualistic and reductionist, isolating variables from the contexts in which they are used as well as from other interconnected variables (Bender and Beller 2016). Students are prepared to become industrial workers who focus only on the work to be done, rather than the purpose and context for which that work is important, and even in the sciences variables tend to be

isolated (Denny 1983). There is an overwhelming focus on print literacy as a method of knowledge production that allows ideas and even words themselves to exist in isolation (Havelock 1982).

Mismatched Cognitions

Schooling fosters an independent orientation that gives rise to analytic cognition characterised by taxonomic and rule-based categorisation, a narrow focus in visual attention, dispositional bias in causal attribution and use of formal logic in reasoning (Varnum et al. 2010). This field-independent reasoning is often at odds with the customary cognitive practices of Indigenous people, which have been described variously as high context (Samovar and Porter 2004), field dependent (Murdoch 1988) or as distributed cognition (Arnau et al. 2013). An example of how this impacts perception in learning contexts is that students with an independent orientation will attend focal objects in visual scenes first, while students with an interdependent orientation will attend to the background first (Rhode, Voyer, and Gleibs 2016). The former tends to sequence events and objects from left to right, while the latter sequence from east to west in alignment with solar movement, so may only exhibit a left-to-right orientation while facing south (Evans 2009). This orientation has implications for teaching print literacy in Indigenous communities failing to comply with, or actively resisting, industrial development and schooling.

Adaptive, complex, and constantly evolving cognitive practices in oral cultures are characterised in structure and protocol by revolving feedback loops that are navigated, negotiated, and understood collectively (Murdoch 1988). The logic cycle of those loops is reflected even in the grammar of Australian Aboriginal languages, for example, in the frequent use of negated antonyms (Sayers 1976).

Language structure has been found to be an indicator of field-dependent cognition in many cultures, for example, in Korea, where background information precedes the subject and is usually placed at the beginning of a sentence to establish context (Rhode, Voyer, and Gleibs 2016). It is misleading however to binarize Indigenous and non-Indigenous cognition arbitrarily as high or low context, considering the variance within communities as well as the fact that distributed cognition is not limited to Indigenous cultures. Indeed, it has been found in Scottish communities and other non-Aboriginal groups around the world

(Murdoch 1988), including many Russian communities in which the common variables do not include biology or Indigenousness.

One common variable is child-rearing practice that involves multiple carers, breast-feeding on demand, constant body contact, in-arms time, presence in adult activities with high levels of sensory motor stimulation, non-restrictive clothing and equipment, and no set routines for feeding, sleeping and toilet (Iliev and Ojalehto 2015). This reflects customary and contemporary child-rearing practices in Australian Aboriginal communities (Martin 1993).

Another variable in the retention of field-dependent cognition is the degree to which a culture has managed to avoid in recent centuries the intervention of the Catholic Church in the restructuring of families and communities to better facilitate wealth extraction from individuals, and the subsequent Protestant innovation of religious learning as an individualistic endeavour. This restructuring of societies to transition from collective to individual orientations (reducing relational ways of knowing) was further enabled by print literacy, which physically rewires the human brain in catastrophic ways (Henrich, Heine, and Norenzayan 2010). Individuals entirely inhabiting this culture of occupation are not bound by the same community obligations, orientations and protocols that characterise the knowledge production and transmission practices as the rest of us (Porsanger 2004) and this cultural orientation impacts cognitive processes.

Cognitive Diversity

A resurgence of interest in cognitive linguistics in recent decades has produced extensive research indicating an undeniable link between language, culture and cognition (Hunt and Banaji 1988; Evans 2009; Sharifian 2017). While previous resistance to these ideas has been necessary to defend the foundations of disciplines that initially tested only middle-class European subjects based on the supposition that cognition is universal, it is now widely accepted that cognitive processes are modified by the environment in which we grow up, the languages we speak and the cultural patterns directing our attention (Bender and Beller 2016; Cibelli et al. 2016). Indeed, while the cognitive orientation favoured globally in education is oriented towards WEIRD (Western, Educated, Industrialised, Rich, Democratic) cultures, this only represents the neurology of a minority of humans on this planet (Henrich, Heine, and Norenzayan 2010).

Much of the research in this area has comprised oversimplified pseudo-science, of the 'Eskimos have 50 words for snow' variety – unhelpful but popular generalisations that divide different cultural forms of cognition into a binary of Western and non-Western paradigms (Varnum et al. 2010). However, the boundaries between these binaries are far more complex, fluid and subject to variation than these popular divisions suggest.

Multiple factors are recognised both as indicators and influencers of different cognitive orientations, including historical factors like economic change. For example, social changes brought on by globalisation in places like China (Rhode, Voyer, and Gleibs 2016) and Chiapas in Mexico (Greenfield, Maynard, and Childs 2003) have resulted in a transition from interdependent to independent cultural orientations with a resultant shift from customary holistic cognition to analytical cognition.

There is considerable variation both between and within populations, particularly in Australian Aboriginal and Torres Strait Islander communities shaped by multiple generations of policies that continue to impact our lives, from extermination to protectionism to assimilation to welfare to self-determination. Additionally, for Indigenous people engaging with compulsory education, a 'double personality' is common – a shift in self-schema that is activated when code-switching between cultures, requiring a corresponding cognitive shift from interdependent to independent cognition (Rodríguez-Arauz et al. 2017).

In these complex, dynamic contexts of cultural continuity and discontinuity, consideration of multiple variables indicating different cognitive orientations (including language, environment, social patterns, cultural practice and economic activity) is desirable, particularly in designing pedagogies aligned with lived cultures that are neither static nor unified. It is important not to essentialise cultures or view them as stable entities in this work, but to recognise that they are fluid products of a history that is continuously unfolding (Iliev and Ojalehto 2015).

Therefore, it is not possible to design or discover a universal Indigenous pedagogy framework to apply across all education institutions. The diversity of our cultural contexts, languages and experiences of colonisation precludes us from producing generalisable and replicable heuristics, which may explain our difficulties in securing validation of Aboriginal pedagogy as a serious area of study in the academy. However, there are certainly clear commonalities between

the diverse pedagogies of Indigenous and other non-WEIRD cultures, which account for most of the human beings on the planet.

Wik Pedagogies

For the remainder of this article, I share aspects of my Wik community's cognitive orientation and identify potential areas of correlation with other Indigenous cultures, drawn from a local research project identifying ways to adapt oral culture processes for print-based learning contexts (Frazer and Yunkaporta 2021). The findings of the project reported here are indicators of pedagogical practice found in an analysis of Wik Mungkan language, which were later validated through observation and narrative data.

Wik pedagogy is seldom a discrete practice, but involves embedding multiple disciplines, fields, and modalities in every experience of knowledge transmission. Visual and tactile learning are incorporated in the process of listening/learning in a kind of pedagogical synaesthesia. Non-verbal modalities are central, including gestures and body language, alongside place-based narratives that are walked as well as spoken. The process of becoming *ma' kuunchang*, a master in the crafting of traditional objects, involves both intense scaffolding and learner autonomy to achieve a state of inhabiting the ontology of the teacher, observing so closely in relation that the self-other boundary between instructor and learner becomes blurred. A haptic relation with place also extends to the tools used, which become part of the embodied neural processes of the learner.

While much cultural activity is divided according to gender, these general patterns are present in both male and female learning processes, revealing a learning cycle involving:

- demonstration and observation
- scaffolded and cooperative learning embedded in relationships with people and place
- explanation and deep listening enfolding narratives
- memorisation employing place-based metaphors and visual schema
- demonstration of deep thinking and understanding through the production of purposeful products in real-life contexts

The term *ngaantam-ngeeyan* means to think, understand, realise, believe, decide, or evaluate. The incorporation of

ngeeyan (listen) indicates the cultural importance of listening and orality in knowledge transmission, and the role this plays in Wik pedagogy and cognition. This aligns with Watson's (2003) insight that many Central Australian Indigenous people believe that hearing 'is the medium of intelligence' (54). This is a common feature of many Indigenous Australian languages, for example, in Gamilaraay where *binna* (ear) is equated in the language with cognition and memory (Ash, Giacon, and Lissarrague 2003). In Wik Mungkan, there is an authority implicit in *ngeeyan* terms, an obligation for learners to show respect for knowledge holders, as in *aak ngeeyan* and *wik ngeeyan* meaning respecting and obeying.

The link between cognition and listening can also be found in idioms about memory, containing the word *kon* (ear). *Kon-ngathan* and *kon pur'* are about forgetting, while *konangam pi'-pi'an* means remembering and *kon thayanathan* means to remind. A person with a good memory is called *kon thayan* (strong ear), while a person with a learning disorder is called *weenth*, which is also the word for deaf. However, while respect and obedience may be considered an important protocol for learning and listening, this does not mean the learner has no agency.

The Wik Mungkan word for learning is *maman*, which also means to hold, touch, take from or accept what is offered. *Wik maman* (language learning) has the sense of 'picking up' a language, rather than passively learning through drills and repetition. A pedagogical orientation can be discerned here in what seems to be an attitude to learning and knowledge as something to be held, accepted discerningly by autonomous learners who play an active role in the transaction. As indicated by the terms involving *ngeeyan*, a good learner must be a good listener. The sense of agency inferred by *maman* suggests that this learner would need to be an active listener rather than passive recipient of information. *Pith mut* means the sense or meaning of words (combining the words for 'dream' and 'tail'), which is part of the phrase *pith mut ngeeyan*, meaning to understand, but more specifically to follow the meaning of what is said, which requires active engagement on the part of the listener. It also suggests an orientation to making and discerning meaning through words and language via connection with a rich practice of sensemaking connected to a spiritual reality - the 'tail of a dream.'

Basic decoding of print into sound without meaning or context would therefore result in disruptive dissonance for a

learner with this cultural orientation to language learning. Pedagogical techniques are indicated by more than these kinds of inferences, however, with several terms specifically naming different kinds of knowledge transmission. For example:

- *Kon-aathan* is to train an animal using stimulus-response methods. This is the most basic pedagogy, mostly involving abrupt verbal commands and positive or negative reinforcement – similar to the default pedagogy employed by modern education and training institutions.
- *Ma'-aathan* (*ma'* meaning 'hand') is to show how to do something, teach practically using the hands, lend a 'helping hand' in a way that echoes Vygotskian scaffolding pedagogies.
- *Mee'-aathan* (*mee'* meaning 'eye') means to show, or to teach through demonstration with the learner as an active observer.
- *Thaa'-aathan* (*thaa'* meaning 'mouth') means to teach with words, especially in the teaching of language.
- *Aath*, when combined with *wuntan*, means to share, swap, exchange knowledge and things. *Aathan* is combined with different body parts to describe several Wik pedagogies. It means to spread, like a bushfire spreads, and is used to describe actions proceeding from one point to another, as in walking from place to place, sewing and even reading a text from top to bottom. The significance of *aathan* being used to describe print-based activities not only indicates a continuity of pedagogical practice from ancient to contemporary contexts, but also highlights the importance of specific procedural sequences in Aboriginal culture during acts of knowledge transmission.

The cultural process of proceeding from one clearly defined point, step, or location to the next is an orientation that can be seen in the singing of the country through song lines (narrative maps naming the sacred places of ancestral journeys in the Dreaming). Cultural processes encoded in these songs and stories are also explicit procedural texts that give instructions in sequence (Riley 2016). This indicates a cultural preference for explicit pedagogy and procedural learning.

Learning Through Culture, Not About It

Although this analysis is specific to a unique Indigenous culture in a world of diverse cultures, it may be useful as a

basis for inquiry allowing Indigenous teachers, scholars, and community members to express abstract ideas about customary processes they have previously been unable to articulate in Standard Australian English. This empowering process can result in an incipient meta-language for describing local pedagogies, liberating Indigenous teachers and learners from the colonising heuristics of settler scholarship (Yunkaporta and McGinty 2009). The ability to describe and implement Aboriginal pedagogies that may be used to teach any content as knowledge of our relations to all things in creation, rather than merely including cultural content and history in isolation, may be the key to transforming education systems for the benefit of all students and communities.

But while cultural content is easily expressed and shared in curriculum, cultural processes are often far more nebulous and difficult to describe. Culturally specific ways of thinking, knowing, and learning are often invisible to those who use them (and the outsiders who observe them), as are the cognitive frameworks of a dominant culture that must be mastered by minority cultures for economic inclusion. The key principle in utilising Aboriginal pedagogies is that Indigenous perspectives are better provided through process rather than content alone, that students must learn *through* culture rather than *about* culture, even while studying mainstream content and acquiring essential skills needed for surviving the intrusions and rigours of the global marketplace (Yunkaporta and McGinty 2009).

Many elements of Wik pedagogy may be generalisable to other Indigenous groups, such as the tendency for listening to be equated with understanding and cognition, which was noted earlier in the chapter to be a feature of many Aboriginal languages and cultures. It was also noted that narrative, place-based and group-oriented approaches to knowledge transmission are widely recognised as common features of Indigenous pedagogies generally. These may be points of reference to help others begin identifying similar patterns in the design of localised learning frameworks.

Indigenous languages and cultures can provide more than additional Indigenous content for inclusivity in a curriculum that is already overstuffed with mandated content. Our languages and cultures can provide rigorous processes and innovative frameworks for pedagogies and methodologies – the possibility of learning through culture from an Indigenous perspective, rather than about culture from a colonised perspective.

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Author Bio

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