

Theorising the mechanisms and outcomes pathways from boarding school participation for remote Aboriginal and Torres Strait Islander students

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Abstract

Increased focus and attention has been paid in recent years to providing remote Aboriginal and Torres Strait Islander students with access to high quality schooling opportunities. Often, this requires attendance at secondary schooling away from their hometowns or communities, through accessing boarding schools or residential programs. The stated intents of many of these boarding programs often follow themes of providing equitable opportunities for education, improving opportunities for year 12 completion, increasing participation in further and higher education, and improving employment prospects. However, despite a growing body of qualitative-based research on the expectations, transitions and experiences of Aboriginal and Torres Strait Islander students and families engaging with boarding schools, the outcomes of this education are largely unidentified or reported. This paper draws on the work and experiences of a number of authors who have had varied roles as researchers or practitioners in boarding schools and remote education systems. It aims to synthesise findings from studies conducted on boarding in the past 10 years, and through a collaborative process, explore a range of theoretical approaches that may aid in examining the causal pathways and accompanying mechanisms contributing to boarding school outcomes. In doing

so, we propose key areas and directions for future research in this field to inform future and practice.

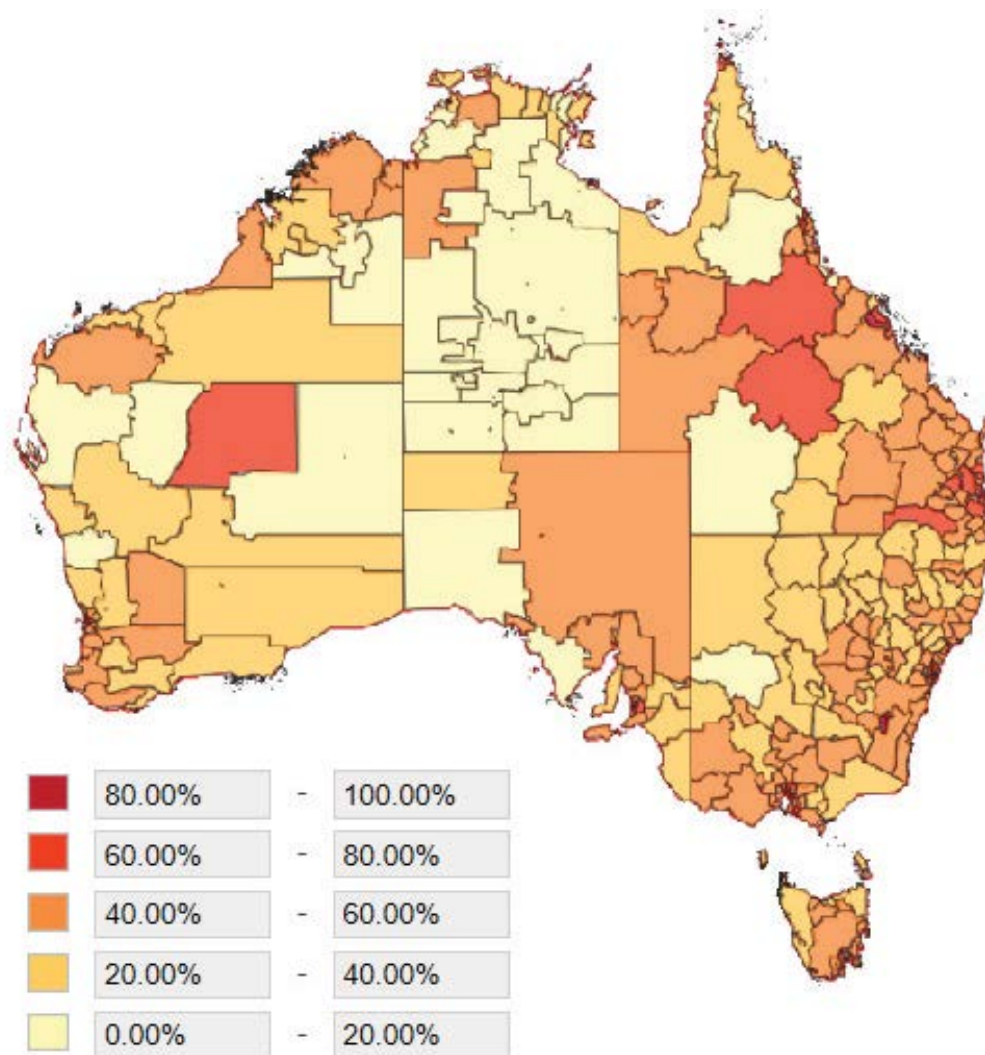
Introduction

The authors of this paper came together through a shared interest in research on boarding schools and Aboriginal and Torres Strait Islander students. We had been working independently of each other on related aspects of boarding school research and/or had been working in a strategic policy area related to boarding schools. Our field of work has been rapidly expanding. Only five years ago, almost no research evidence was available in the area, whereas now a burgeoning body of work is developing. The research work presented in this paper is both synthesis of this burgeoning literature, and an attempt to theorise from our collective understanding of the field. Our focus here is on the Australian context of boarding. We are aware of considerable research in the international literature. However, our concern is to ensure that the local context is considered in our work. Specifically, we will be focusing on boarding as experienced by Aboriginal and Torres Strait Islander students who come from very remote settings across Australia.

Our purpose in this paper is to point to a ‘theory of change’ that emerges from boarding interventions, based on the evidence we have. We are not trying to show ‘what works’ or to create a logic model that leads to successful outcomes. Rather, our work is designed to unsettle the untested tacit assumptions that boarding is a good option (let alone best option) for remote Aboriginal and Torres Strait Islander students who currently do not have access to secondary education in their home communities.

While noting that remoteness is a construct created to describe non-metropolitan places (Guenther et al., 2015; Guenther et al., 2017), this focus is important because accessible and equitable education is not currently available for many secondary students from remote communities. This is in part reflected in the relatively low Year 12 attainment rates in very remote parts of Australia. Figure 1 maps the proportion of 20-24 year-olds who have completed Year 12 or equivalent. It shows that in many very remote regions of Australia, the proportion with Year 12 completion is less than 20 per cent. This compares with a national average of nearly 74 per cent (ABS, 2017), based on data from the 2016 Census.

Figure 1. Per cent of 20-24-year-old Aboriginal and Torres Strait Islander people who have completed Year 12 or equivalent, 2016 Census, Indigenous Areas



Source: (ABS, 2017)

It should be noted at the outset that boarding school education for very remote students is not a major component of the schooling activity that forms 'remote education'. It has however, attracted considerable attention over recent years in the media, particularly from passionate proponents who want to see outcomes for remote students improve (ABC, 2013, 2017; Burin, 2017; Penfold, 2014). In the mainstream media, and in mainstream policy discussions, there is seldom any critique either of the programs, their outcomes or their cost.

Literature

In this literature review our intention is to highlight the current understanding of what the research evidence from Australia tells us about boarding schools and their impact on Aboriginal and Torres Strait Islander students, families and communities. Upon reviewing the literature, clear gaps were evident in policy directions and discussions. We will consider some of those gaps and then consider complexity theory as a lens through which we can view boarding interventions. By describing

boarding as ‘interventions’¹ rather than ‘programs’ we recognise boarding not as a discrete activity but as a collection of processes which may include scholarships, transition support, a boarding facility, a school and several other actors who are involved.

Impacts of boarding schools for remote Aboriginal and Torres Strait Islander students

Outcome for individuals

Given the significance of boarding as a vehicle for access to education, it is not surprising that many contemporary studies report findings related to learning outcomes (Rogers, 2017a), or at least aspirations (Bobongie, 2017). The studies also report that the experience they gain gives them a sense of independence and self-confidence (Rogers, 2017a). Opportunity is another theme that emerges from the literature (Mander et al., 2015). However, whether opportunity translates into pathways to further education, as might be hoped, is questionable (Guenther et al., 2017)—we really do not know what the net benefit of a boarding school education is, compared with a locally-based education. Nor do we know the full extent of non-participation in secondary education in remote communities, though we do know that about 1500 young people in the NT alone are not enrolled in school for one reason or another, and only about one-third of students who enrol are likely to stay the course at their chosen school (Guenther et al., 2016).

Social and emotional wellbeing

Several studies have examined the impact of boarding on resilience and wellbeing of students. Redman-MacLaren et al. (2017) suggest that transition to boarding school can lead to psychosocial stress. Mander and Lester (2017) concur, suggesting that ‘boarding students reported significantly higher levels of anxiety and stress at the end of Grade 8 compared to non-boarding students’ (p. 1). Similarly, O’Bryan (O’Bryan, 2016) finds that attending boarding school diminished community social connectedness for many young people. Consistent with the findings of Gee and others (Gee et al., 2014; Gee, 2016) this had detrimental consequences for their social and emotional health and wellbeing, and in some cases led to suicidal ideation or attempted suicide.

Identity and culture

Several recent studies point to students being challenged with their identity because of boarding participation (Bobongie, 2017; Mander et al., 2015; O’Bryan, 2016; Rogers, 2017a). The ideal of successfully living in ‘two worlds’ (Benveniste, Dawson, et al., 2015) often turns into a vain hope (Hunter, 2015; O’Bryan, 2016). Redman-MacLaren et al. (2017) report that for students excluded from boarding schools: ‘Students who transitioned back to community after... boarding school reported a lower sense of connection to peers and family, and... even lower resilience and psychosocial well-being scores’ (p. 1). Mander (2015) also suggests that parents ‘worried that a sense of cultural disconnection may occur’ (p.178).

The role of schools

The research literature points to schools potentially playing a constructive role in children’s learning and social experiences, potentially supporting the goal of ‘self-determination’ (Benveniste, Dawson, et al., 2015). At the same time, an imbalance of power between mainstream institutions and remote families and communities worked against students’ best interests. Young people and parents have both reported feeling frustrated that their voices are not adequately heard in schools (O’Bryan, 2016). Where schools were unwilling to examine the historic foundations and contemporary expression of school culture, young people reported institutional racism as a constraining their

¹ We are aware that the word ‘intervention’ is often associated with the Northern Territory Emergency Response’. Here we use it generically.

educational endeavours. Other issues affect the student experience of schools, including experiences of interpersonal racism (Mander, 2015; O'Bryan, 2016).

One way of addressing these multiple concerns is through school-community partnerships built on an unwavering commitment to respectful relationship (O'Bryan, 2015). Communication between students, the school and parents is seen as an important factor contributing to success (Benveniste, Guenther, et al., 2014; O'Bryan, 2016), but it is not always a positive experience for parents and children (Benveniste, Guenther, et al., 2015; Mander, 2015). Mobile devices are reported as one way that students can maintain connection with families (Johnson & Oliver, 2014).

Families and choice

Parent choice emerges in some of the literature as a key outcome of boarding. The question for parents is not so much whether to have their children board or not, but which boarding option should be taken (McCarthy, 2016). There is evidence that parents see boarding as an opportunity for their children (Mander, 2015), but there is also evidence to suggest that many remote parents have little understanding of the realities of boarding school life, and are not making informed education choices for their children (O'Bryan, 2016). In a study examining access to boarding for young people from the southern region of Northern Territory, Osborne et al. (In Press) highlight the importance of family support in securing access to boarding programs. They suggest the need for flexible models for accessing and reengaging with both boarding and remote community schooling options. Flexible funding and enrolment programs allow for what they term 'positive attrition' where in general, families viewed an early return from boarding schools as an opportunity for young people to reconnect with family and community and seek another opportunity in time. The narratives reflected a sense of each experience bringing a young person one step closer to success rather than projecting a sense of failure. Families utilised opportunities, often in a sequence over a period of a few years such as locally provided scholarships, metropolitan-based care networks through kin and family friends, and familial networks that afforded access to public and private schooling options, drawing on the capacity of their family networks.

Literature gaps

The research literature has several gaps. We have already noted the absence of a thorough policy review as it relates to boarding.

Further, as suggested in a recent article in the *Conversation* (Rogers, 2017b) we do not have a clear idea of the costs associated with boarding—for the government, families, or other funders. Nor do we know the economic impact of boarding on communities. Is there a net cost or a net gain in economic terms? We know almost nothing beyond the positive media stories about the destinations of boarding students who come from remote communities. We do not know how long they stay at school for, or how many schools they attend over their secondary years. In short there is little empirical evidence to support any policy on boarding—which perhaps explains why there is so little policy. Additionally, there has been little theorising on the rationale for boarding or its outcomes, though this paper is a first attempt to address the latter gap. Likewise, there is little discussion in the research literature on the roles that policy plays. This then makes it difficult to link research to policies.

Policy and strategic directions in boarding for remote Aboriginal and Torres Strait Islander students

Our intention in this section is to review policies related to boarding provision. We do this first by examining Australian Government initiatives, and then state and territory government initiatives. But what is 'policy'? One view of policy, which was in our minds, is that:

As an exercise in authoritative choice, policy is seen as the result of pursuing governmental goals, making decisions and testing their consequences, in a structured process involving identifiable players and a recognisable sequence of steps. (Maddison & Denniss, 2013, p. 6)

There is an alternative view though, where 'government is seen as an 'arena', or a space, in which a range of political actors, all recognised as having a legitimate place at the policy table (stakeholders), interact to produce policy' (Maddison & Denniss, 2013, p. 7). Policy then, can be seen as structured interaction rather than authoritative choice.

Commonwealth policy initiatives

There is surprisingly little written in the academic literature about boarding school policy and its impact on Aboriginal and Torres Strait Islander students in Australia, let alone in remote parts of Australia. Turning to the grey literature, there is almost nothing to suggest what governments' policies on boarding schools are (Department of Prime Minister and Cabinet, n.d.). The *Children and Schooling Programme* (Department of Prime Minister and Cabinet, n.d.) does not mention that it supports boarding schools at all. Brief mentions about boarding are made in the last two Closing the Gap reports (Turnbull, 2016, 2017), in relation to funding through Abstudy, scholarship programs and specifically in 2016 a commitment of \$11.6 million over three years to non-government schools under the Students First approach. Closing the Gap then, may be a driver for educational strategies, but the links to boarding are largely indirect, as Stewart (2015b) suggests. The Indigenous Youth Leadership Programme (IYLP) funded by the Department of Prime Minister and Cabinet is a specific initiative under the Children and Schooling Programme, used by some families to facilitate boarding school education.

Boarding programs attract generous financial support from the Australian Government (Department of Prime Minister and Cabinet, n.d.). For example in 2017, a '1967 Referendum Anniversary \$138 million Indigenous education package' (Department of Prime Minister and Cabinet, 2017a) was announced with considerable emphasis on boarding facility infrastructure development, scholarships and mentoring programs. Further funding for 579 secondary scholarship places in Queensland was announced in November 2017 (Department of Prime Minister and Cabinet, 2017b). The focus on funding as a policy lever, aligns more with a 'structured interaction' approach to policy than 'authoritative choice'.

State and territory policy initiatives

In the Northern Territory, the Indigenous Education Strategy (Northern Territory Department of Education, 2015), in response to the Wilson Review (Wilson, 2014) has one point of one element focused on boarding: Under the vision statement of 'Indigenous students complete schooling well equipped to take up employment, training and higher education opportunities', it commits to providing strong 'transition support' with 'Residential options and transition support are provided to very remote students' (p.8). We are left to induce the rationale for this strategy, perhaps based on Wilson's (Wilson, 2014) *A Share In The Future*, who appears to argue for a rationale based on

viability, not on any particular educational advantage. He argues: 'Despite reservations, there is now a growing view that residential and boarding facilities are a viable solution'. (p. 147).

Choice for parents emerges in some of the government literature in the NT (Northern Territory Department of Education, 2016) as a rationale for policy. The 'transition support' commitment is operationalised through a Transition Support Unit (TSU), which coordinates information and supports boarding school enrolments. It also supports students when they return from community. There is little in the public record about the TSU's achievements. The Queensland Department of Education and Training's *Transition Support Service* has been in existence for much longer than the TSU, and offers similar supports for Cape York and Palm Island students. The efforts of these two state/territory jurisdictions to provide transition support are perhaps more aligned to policy as authoritative choice.

Distilling the policy rationales from a scant amount of evidence is not easy—there have been no independent publicly available evaluations of any of the interventions outlined above. However, in an analysis of literature and media stories carried out by Benveniste et al. (2014), four potential motives were identified to justify boarding policies.

- Motive 1: Government cannot provide secondary education in remote and very remote locations
- Motive 2: Choice for parents: Access to a good education
- Motive 3: Better Opportunities for students: Building social capital
- Motive 4: Practical reconciliation: A two-way exchange

They conclude that:

The imperatives for boarding as represented in the media stories are also about the benefits in terms of opportunity, choice, social capital and knowledge acquisition that would not be possible within students' home communities. The other major imperative is about addressing 'disadvantage' and 'closing the gap'. (Benveniste, Disbray, et al., 2014, p. 11)

Abstudy as a vehicle for access

Abstudy has had a long history of supporting Aboriginal and Torres Strait Islanders students into education. It began in 1969 as the Aboriginal Study Grants Scheme for tertiary education students with the Aboriginal Secondary Grants Scheme (ABSEG) coming shortly after in 1970. It continues today as an enabler for remote students to access boarding schools. It has undergone changes over the decades but 'ABSTUDY continues to be significant in enabling and supporting Aboriginal and Torres Strait Islander peoples in higher education' (Wilson & Wilks, 2015, p. 664) and arguably secondary education too. However, the extent of the uptake of Abstudy among remote students is difficult to ascertain. O'Bryan (2016) suggests that there is considerable churn in the Abstudy funding stream:

In its Interim Report to Parliament on improving educational opportunities for First Australian students (2016), the House of Representatives Standing Committee on Indigenous Affairs found that in 2014, Federal government ABSTUDY benefits were paid to 200 boarding schools on behalf of 4,300 Indigenous students. Of these, approximately one third of students in 'formal boarding arrangements' moved on and off payments during the academic year. (p. 26)

Abstudy policy is 'owned' by the Commonwealth Department of Social Services. The policy is administered by the Department of Human Services who manage the Abstudy payment processing and travel functions. The relative absence of 'authoritative choice' policy leaves strategic directions driven by other interested stakeholders—particularly those who provide scholarships and those who operate boarding facilities—through 'structured interaction'.

Boarding standards

National 'Boarding Standards' were introduced in 2015 (Standards Australia, 2015). The Standards were largely 'designed to provide owners, operators, managers and staff of boarding services with a framework of required topics that need to be addressed in order to deliver a safe, healthy and productive environment for boarders' (CompliSpace, 2017, p. 2). Boarding standards then, arise out of the need for a framework that meets legislative and regulatory compliance requirements rather than as a response to providing a supportive education environment for students. In the Northern Territory, the Education Act (2016) mandates that:

Any person or body providing facilities for the accommodation of students enrolled in a Government school must ensure that the facilities meet any relevant Australian Standard. (Part 5, Division 10, 101)

What this means, in practical terms, is that initiatives under the Northern Territory's Indigenous Education Strategy (a new facility at Nhulunbuy) must comply. It does not mean that non-government providers must conform. Compliance to such standards means additional cost and there is evidence that current funding does not cover the full cost of boarding provision regardless of standards (KPMG, 2016).

Complexity theory as a frame of reference for boarding interventions and their impacts

In trying to understand the overarching context and the impacts of boarding, we have sought to apply complexity theory for some possible explanations. Complexity theory has its origins in systems science (Flood & Carson, 1993). A system is a collection of elements that behave as a whole. Complex systems can be contrasted with complicated, simple and chaotic systems. Simple systems are ordered with predictable cause and effect outcomes. Complicated systems do have a relationship between cause and effect, but require expert analysis because of the number of possibilities available. In complex systems the cause and effect processes are intertwined with non-linear, and unpredictable relationships (Snowden, 2011). In chaotic systems, there is no relationship between input and output and gaining more data or information about the problem or an intervention designed to address the problem won't necessarily help solve the chaotic problem (Head, 2008).

To apply complexity theory to boarding interventions requires new thinking. As we shall see later in the results of our synthesis, there is nothing simple about boarding school interventions. Yet simple logic is often applied, for example to consider what models work best or how transitions can be effected or using scholarships as mechanisms for year 12 completion. Jörg (2011, p. 155) argues for the need 'to escape the danger of linear thinking, by recognizing "the seductiveness of this type of thinking" (Starobinski 2003, p. 265) and start to learn a new kind of thinking about a nonlinear, complex reality (Mainzer 2004, p. 1)'. This is the task we as authors are applying ourselves to.

Methodology

The methodology employed for this paper draws heavily on two processes working together. First it draws on a collaborative synthesis of research literature by a small group of researchers (discussed

earlier). Second, it relies on development of a 'theory of change'. This paper does not report on new research. What it does instead, is offer new knowledge created from the collective understanding of research collaborators and through a process of 'thinking with theory': putting 'theory to work to see how it functions within problems and opens them up to the new...' (Jackson & Mazzei, 2018 Kindle Locations 25149-25150). The point of 'thinking with theory' is to integrate data, theory, texts and philosophy as a process rather than a discrete method. In the task for this paper we apply our thinking/analysis to 'theory of change' by drawing on the multiple sources of our data, our reading, our philosophical understandings and our questions to create new 'assemblages'. This integration will in turn inform the theory and practice related to boarding school interventions for remote Aboriginal and Torres Strait Islander students in Australia. We recognise that the product of this 'collaborative inquiry' (Wyatt et al., 2018) is not a definitive end in itself; rather it is a creative work in progress that will continue to evolve.

Theory of change

Underpinning our 'thinking with theory' process, is an understanding of program theory. A program theory is an 'explicit theory or model of how an intervention... contributes to the intended or observed outcomes' (Funnell & Rogers, 2011, p. xix). Funnell and Rogers suggest that a program's theory has two components, a theory of change and a theory of action. Our focus in this paper is on the theory of change. We consider boarding as the 'intervention', and based on our research, reading and collective observations, we propose both the intended and unintended outcomes of boarding interventions. We are not trying to determine 'what works' or what 'best practice' is. In a complex education system—which we suggest boarding is—'what works' is at best an elusive hope without substance (Biesta, 2007). A theory of change considers what happens (as outcomes) as a result of interactions between context and mechanisms (Pawson, 2013).

Community of practice

In preparing this paper, the authors agreed to work collaboratively using a two-step workshop process during which we shared our thoughts. Most of us had not physically met prior to these workshops, though we were aware of each other's' work. The workshops were mediated through an online collaboration platform called Adobe Connect, and facilitated by the two lead authors (Guenther and Benveniste). In both cases we followed an agenda with clear outputs and outcomes in mind. This approach draws on Wenger's (1998) 'Communities of Practice'. In Wenger's terms our emerging community is defined by mutual engagement, joint enterprise and a shared repertoire. Our common interest in boarding for Aboriginal and Torres Strait Islander students comes from our involvement as professional practitioners or researchers. The joint enterprise is a quest to improve our shared understanding of how and why boarding does or does not work for students. Our repertoire is derived from our shared experiences and observations.

Collaborative synthesising and theorising approach

Given our understanding of boarding as a complex system, our synthesis is necessarily guided by 'holistic thinking' (Patton, 2015, p. 139), where the 'performance of a system is not the sum of the independent effects of its parts; it is the product of their interactions. The product of our 'thinking with theory' process is what could be described as an abductive participatory action leaning synthesis. It is abductive as 'a creative form of reasoning that entails constructing a theoretical explanation of puzzling findings and developing and checking the tentative theoretical categories constituting this explanation' (Charmaz et al., 2018 Kindle Location 14676). It is participatory in the sense that it involves input from the whole of the community of intention (that is, the community of researchers and practitioners described above) or practice. And it is action learning in that it brings 'people together to learn from each other's experience' (Kemmis et al., 2013, p. 11).

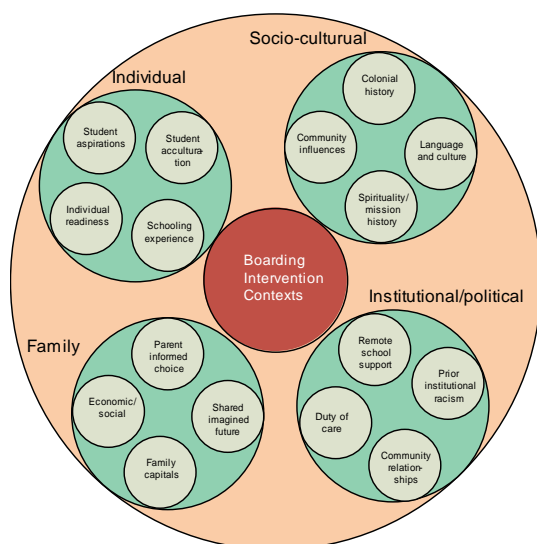
Results

One of the aims of our workshops was to identify the various contexts, mechanisms and outcomes that contribute to and emerge from boarding interventions. Having identified the contexts, mechanisms and outcomes our intent was to construct a theory of change or possibly several theory of change models. In what follows we explain our findings.

Contexts

The context for remote boarding interventions is not an individual student. It includes several elements related to individual students, their families, their community and school, the culture and language of the place, its history, its economy, legislative and regulatory parameters, and less tangible elements such as aspiration, spirituality, racism and acculturation. For the individual student these cannot be deconstructed or compartmentalised. We see context as foundationally important to a positive intervention. Figure 2 is an attempt to itemise the contextual elements of a boarding interventions. The elements are set inside a larger circle as they are inseparable from each other, and while the elements are represented as equally sized circles, they do exert varying degrees of influence on each other and on the intervention, itself.

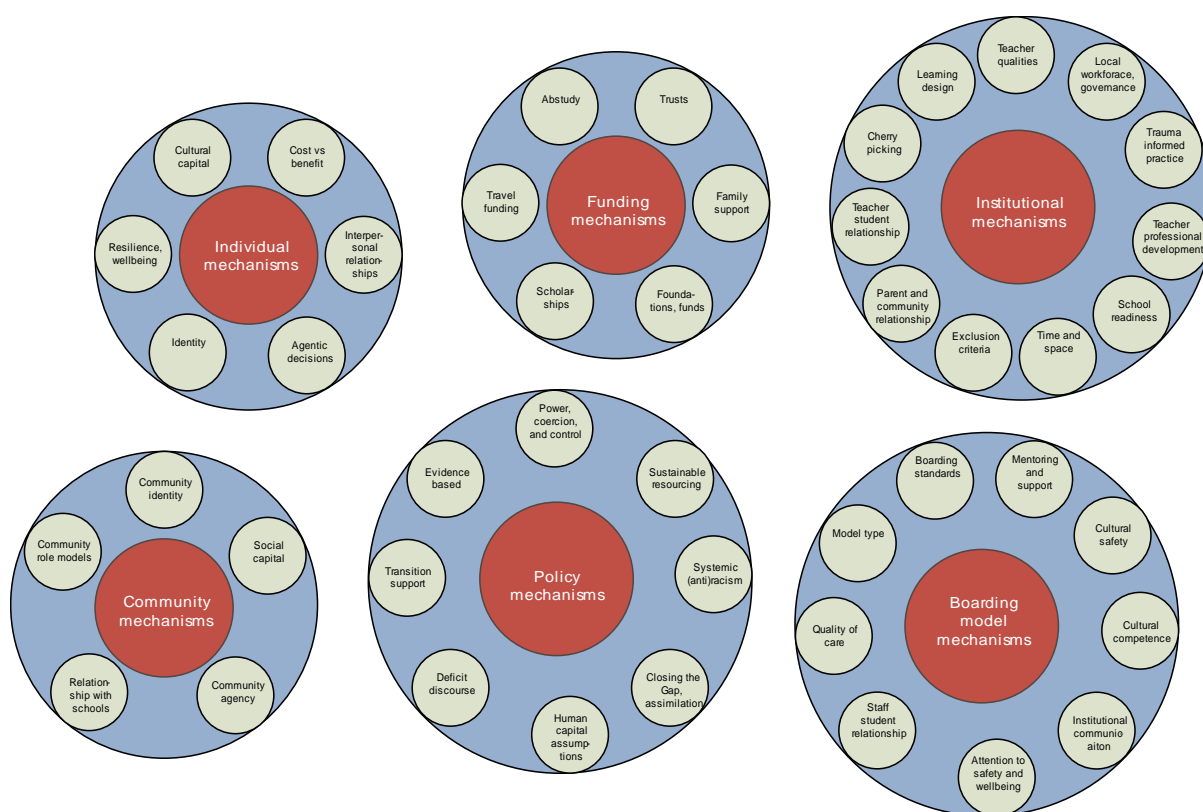
Figure 2. Boarding intervention contexts



Mechanisms

Mechanisms are the vehicles through which outcomes are achieved (or not). As we discussed these mechanisms, we saw six groups that related to the individual, funding, the educational institution, the boarding model, policies and communities. They are represented—quite deliberately—at Figure 3, almost as if they are cogs in a machine. Adjusting one mechanism inevitably affects another (positively or negatively). The point to note from the diagram is that the number of permutations and combinations of the six clusters and the 45 elements is huge. We are careful not to suggest that the larger number of institutional mechanisms identified denotes greater leverage. Rather the number of elements just adds to the complexity. This complexity suggests that a singular focus on models or on funding or on promoting aspiration will not result in a consistent set of outcomes as might be hoped for. The exception may of course be to limit the criteria so that a narrow set of students with the perceived qualities fit for a particular program are ‘cherry-picked’ (Thorpe, 2017) and will meet an equally narrow set of outcomes. This however, is not what we have in mind by intervention. Rather it fits more closely with the definition of ‘program’.

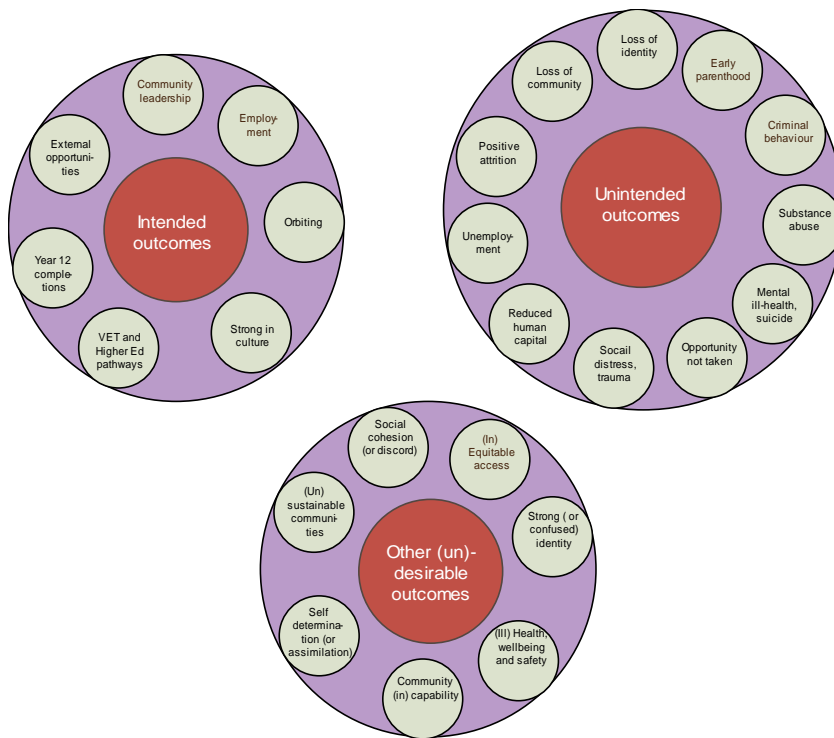
Figure 3. Mechanisms contributing to the boarding intervention



Outcomes

Figure 4 summarises three sets of possible outcomes: intended outcomes, unintended outcomes and other desirable outcomes (not necessarily intended). We could have added a fourth set of undesirable outcomes which would have been the reverse of the desirable outcomes. The intended outcomes are largely derived from our review of the literature. Successful boarding interventions are often described as helping young people complete Year 12, go on to university, gain employment, be prepared as leaders and role models, or access a range of external opportunities that would not have been possible without the intervention. However, there is a dark side of boarding that emerges from our research which is increasingly being highlighted through mostly qualitative evidence. These unintended outcomes include a range of outcomes including mental ill-health, social distress, cultural loss, language loss, missed opportunities, criminal behaviours and identity confusion (noted earlier in the literature review, page 4). It is possible that failure of the boarding intervention could also result in ‘positive attrition’ where the student is encouraged by their experiences to re-engage in other positive education, social or employment alternatives. The other desirable outcomes (with their flipside of undesirable outcomes) relate to the bigger picture impacts of social cohesion, community capability, improved health, wellbeing and safety and self-determination. It is possible that the intervention could result in all three types of outcomes. For example, a student could finish year 12, return to community only to experience social and cultural dislocation, which in turn leads to community dysfunction (as the community comes to grips with who should be held to account for this result). Another possible product of successful completion might be the depletion of human capital in the community—where the student does not return. This may well exacerbate the inequities shown earlier in Figure 1.

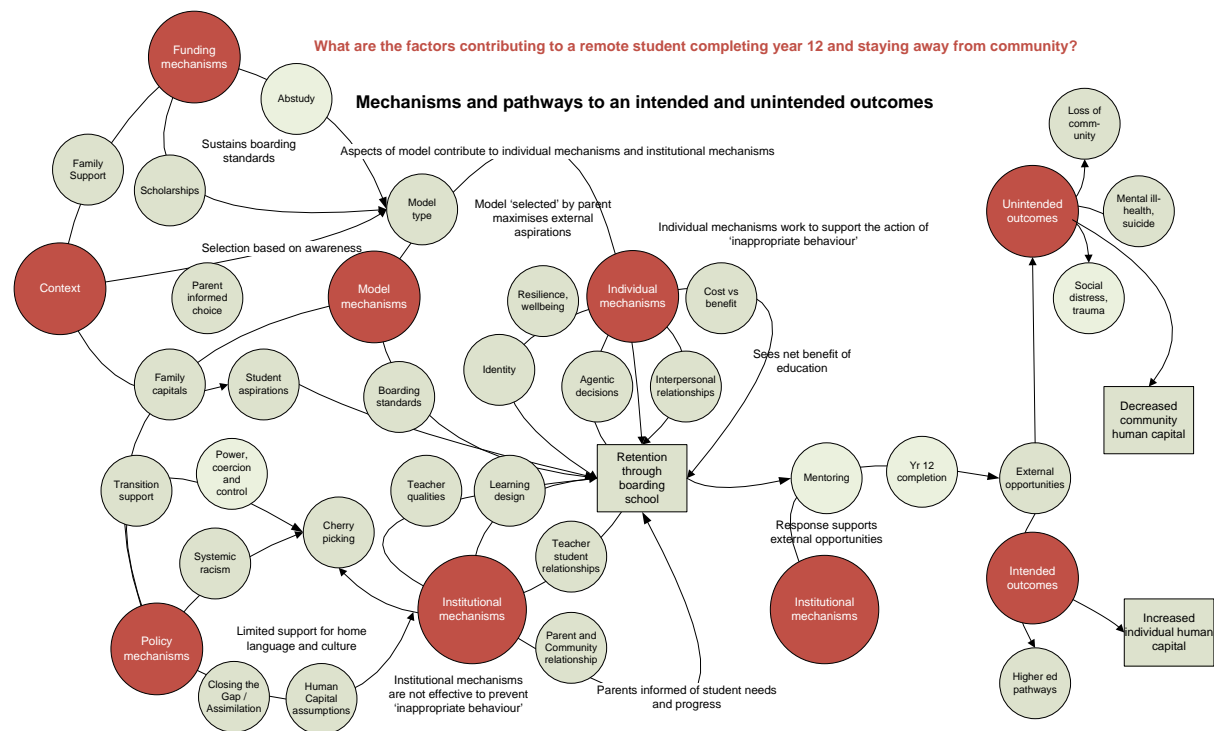
Figure 4. Possible outcomes from boarding interventions



Causal pathway diagrams

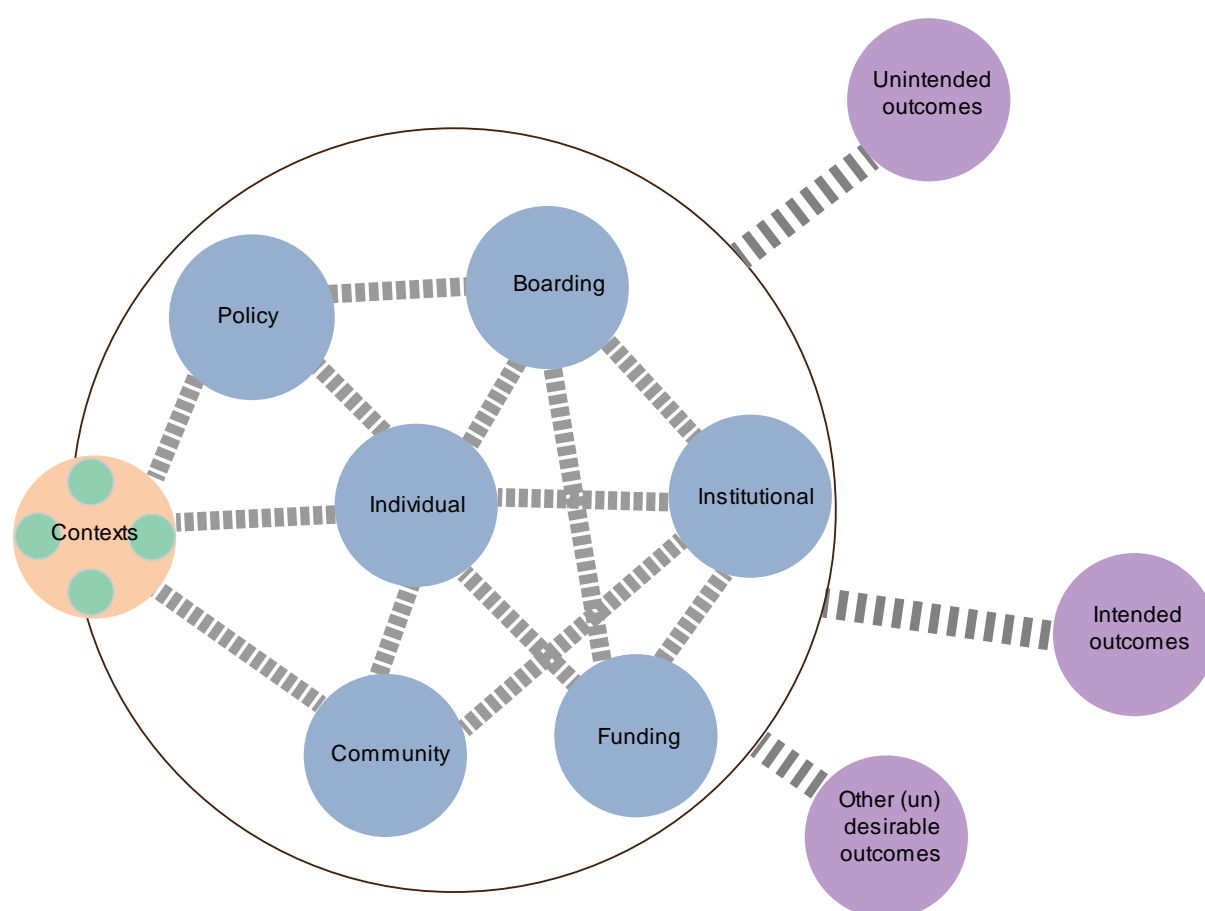
Our first attempts in synthesising the above findings into a causal pathway diagram and accompanying theory of change resulted in something of a confused mess as shown at Figure 5. It fails to work at one level because it attempts to deconstruct the various contextual factors, mechanisms and outcomes towards a kind of linear logic (from left to right). In doing so it fails to recognise the complexity of the system and the inter-relatedness of the elements. However, the diagram demonstrates the messiness of the system and the number of elements that are required to make it work (in this case to complete Year 12 and not return to community).

Figure 5. First attempt at a causal pathway model towards theory of change



Our revised attempt, shown at Figure 6 represents the system as the collection of inter-related mechanisms, interfacing with the contexts. Note here that the context is not part of the system, but rather engages with the system. The various possible outcomes loosely hang off the system, but again, are not part of the system, which is the 'intervention'. They are connected to the system with dotted lines to show their connection but also the uncertainty of their achievement or not. As noted in the literature, this is the nature of a complex system: it is non-linear, it's outcomes are uncertain and the relationships between the elements are unpredictable. The other important feature of a complex system is that to effect change, the system needs to be treated as a whole, not as sequentially connected elements.

Figure 6. Revised synthesis of key mechanisms and relationships towards a theory of change



Discussion

Articulating the theory

Informed by our findings we summarise the theory of change in the following terms:

1. Intended and desirable outcomes will be more likely when the system mechanisms work together in mutually supportive ways;
2. Unintended and undesirable outcomes will be more likely when the system mechanisms work independently of each other; and
3. Improving the likelihood of desirable and intended outcomes will happen when the actors in the context and within the mechanisms work together to negotiate and agree on the required processes and agree on the intended outcomes.

The first two statements are truth propositions based on the assumption that the intervention works as a complex system—and our synthesis of evidence suggests it does. The third truth proposition flows from this assumption but perhaps precedes the first—if there is no agreement on what constitutes the intended outcomes then it will be impossible for the intervention to increase the likelihood of success. It may be that some desirable outcomes become intended outcomes and vice versa. If we take a realist informed approach to the theory (Pawson, 2013), we could further unpack the above statements to ask, under what circumstances and for who will the system work (and why) to achieve desirable and intended outcomes.

The problem with this theory of change though is that we have very little evidence to support it, particularly in terms of how the various elements work together. We have patchy evidence about

outcomes, and patchy evidence about some of the mechanisms that may or may not work to achieve outcomes. For example, we do have some evidence about the role of residence (Benveniste, Dawson, et al., 2015; Benveniste, Guenther, et al., 2014) or the institutions and models supporting students (Hunter, 2015; O'Bryan, 2016; Osborne et al., In Press) or on structures that promote racism and inequity (Mander et al., 2015; O'Bryan, 2016). We have some evidence on the role of transitions and wellbeing (Bobongie, 2017; Redman-MacLaren et al., 2017) and individuals' cultural strength (Rogers, 2017a). We also have some understanding of the significance of the students' contexts and the role of families (Benveniste et al., 2016; Mander, 2015; McCarthy, 2016).

There is no evidence that points to 'best practice' as might be anticipated by some proponents (for example AIEF, 2015). 'Best practice' implies direct cause and effect, and assumes uniformity of context, and clear lines of control from inputs to outcomes. Biesta (2007) makes a good case to argue that 'what works' does not work in education systems. While the simple logic of 'best practice' is as Jörg (2011) suggests 'seductive' it fails to consider diversity within the system. AIEF have fallen into this trap (Stewart, 2015a). Boarding Standards (Standards Australia, 2015) are similarly seductive. While the Standards do set a benchmark but the point is, they do not have an articulated evidence base, and because they are a standalone mechanism will almost certainly lead to as many unintended and undesirable outcomes as intended ones and may therefore lead to harm.

Policy and silos

We also noted that documented strategic policy on boarding for remote students is scant—consistent with a 'structured interaction' (Maddison & Denniss, 2013) approach to policy which we described earlier. We noted in the literature that Australian Government policy is built around funding of initiatives, but rationales for these initiatives beyond wanting to help young people get a good education or 'closing the gap' (Department of Prime Minister and Cabinet, 2017b), are difficult to deduce.

It is then left to other organisations and schools to promote their interests, usually through financial support. Many programs are built on personal experiences of success and overcoming adversity (see for example ABC, 2017) and this may blind proponents to possible outcomes that do not fit with their narratives of success. These organisations and initiatives add to the array of elements in the complex system. However, in the absence of any clear policy from government (as 'authoritative choice') these elements will tend to a state of disorganisation and therefore limit the likelihood that the system as a whole can improve. We see the importance of a policy environment that recognises the interconnected nature of the system and encourages processes that are mutually supportive.

Harnessing the energy

As researchers and practitioners, we see potential for evidence to fill many of the knowledge gaps that exist. One of the key research questions that we could be asking is 'how can the mechanisms and elements of the system best work together to achieve an agreed set of intended outcomes?'. The converse question could well be asked as well: 'how can we avoid achieving unintended outcomes from boarding school strategies?'. Answering these will require involvement of a broad coalition of stakeholders. At a more pragmatic level, it would be helpful to know how well existing programs are working and how effective they are in achieving equitable outcomes for students.

Notwithstanding the positive outcomes for some students, given what we do know about the negative outcomes for boarding school students, schools, communities and families, there is an ethical imperative to ensure that failures are not perpetuated. Also, while we might get to a position where we can be more confident about positive outcomes for remote students, a further ethical

challenge relates to how to best meet the educational needs of those who do not go to boarding schools, and those who return to their communities having apparently failed.

What is evident though from a research perspective, is that there is considerable interest in the issues of boarding, and as evidenced by this paper, considerable goodwill to engage in a coordinated way. While five years ago there was both a dearth of policy and an absence of evidence, there is at least now a growing body of research evidence—about 20 papers written in the last five years.

Conclusions

In this paper, we as authors have attempted to do something that has not previously been done: articulate a theory of change for boarding interventions for remote Aboriginal and Torres Strait Islander students. We have drawn together the threads of existing evidence from research in Australia, identified gaps in the evidence and proposed, and considered six mechanisms that contribute to outcomes, with 45 elements in what we identify as a complex system.

We have put forward three propositions that underpin our theory of change model: 1) Intended and desirable outcomes will be more likely when the system mechanisms work together in mutually supportive ways; 2) Unintended and undesirable outcomes will be more likely when the system mechanisms work independently of each other; and 3) Improving the likelihood of desirable and intended outcomes will happen when the actors in the context and within the mechanisms work together to negotiate and agree on the required processes and agree on the intended outcomes.

In examining the causal pathways through boarding to outcomes we can confidently conclude that without a carefully coordinated and considered approach, a mixed bag of outcomes is likely for individuals, communities and families. The research evidence we have shows that this carefully considered approach must take account of the contexts students come from and engage with aspirations of communities and parents. It must work holistically with students to ensure their safety and wellbeing is prioritised. Institutions and strategic initiatives must be designed to be ethical, equitable and inclusive.

We have found almost no literature critiquing policy (and little that describes it). We have found no evidence of independent evaluations of boarding interventions. What evidence we have found leads us to conclude that the system needs considerably more work before it will work well for most students from remote communities who are directed to an away-from-community education. We have also found a willing coalition of researchers and practitioners who are keen to contribute to this important field of work.

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