



Volume 7 | Issue 2

Article 6

July 2023

Staffing remote schools: Perennial failure

Sally Knipe Charles Darwin University, sally.knipe@cdu.edu.au

Christine Bottrell REDThreads Research and Development, cebottrell@gmail.com.au

Follow this and additional works at: https://digitalcommons.usf.edu/jger

Part of the Elementary Education Commons, Indigenous Education Commons, and the Other Education Commons

This Refereed Article is brought to you for free and open access by the M3 Center at the University of South Florida Sarasota-Manatee at Digital Commons @ University of South Florida. It has been accepted for inclusion in Journal of Global Education and Research by an authorized editor of Digital Commons @ University of South Florida. For more information, please contact digitalcommons@usf.edu.

Recommended Citation

Knipe, S., & Bottrell, C. (2023). Staffing remote schools: Perennial failure. *Journal of Global Education and Research*, *7*(2), 183-198. https://www.doi.org/10.5038/2577-509X.7.2.1197

Staffing remote schools: Perennial failure

Authors

Corresponding Author

Sally Knipe, College of Indigenous Future, Education and Arts, Charles Darwin University, Ellengowan Drive Darwin, Northern Territory 0810, Australia

Abstract

Educational and socioeconomic disadvantage in remote communities, and the inadequacies of government action to bring about significant change needs to be addressed. This article presents a descriptive study examining the complexities of staffing remote and very remote schools in Australia with appropriately-qualified teachers. The findings of analysis of data from the Australian Bureau of Statistics (ABS) on behalf of the Australian Government through the National Schools Statistics Collection (NSSC) indicate that the majority of students in remote schools in Australia live, and are educated in, Indigenous communities in three jurisdictions. This raises concerns of unacknowledged and unacceptable discrimination. Complexity within the current approach to resourcing of remote and very remote schools in Australia, especially in relation to economies of scale are explored. The analysis of existing data was discussed, and how this may be used to address the perennial failure to develop quality decisions, particularly in areas of resourcing in remote and very remote schools.

Keywords

descriptive research, teacher recruitment, Australia, Indigenous education, isolated education

Revisions

Submission date: Aug. 25, 2020; 1st Revision: Mar. 10, 2021; 2nd Revision: Oct. 18, 2021; 3rd Revision: Feb. 21, 2022; 4th Revision: Jul. 24, 2022; Acceptance: Aug. 16, 2022

Creative Commons License

$\odot \odot \odot$

This work is licensed under a Creative Commons Attribution-Noncommercial 4.0 License

Staffing Remote Schools: Perennial Failure

Sally Knipe¹ and Christine Bottrell²

College of Indigenous Futures Education and the Arts Charles Darwin University, Australia ¹sally.knipe@cdu.edu.au

REDThreads Research and Development, Australia ²cebottrell@gmail.com

Abstract

Educational and socioeconomic disadvantage in remote communities, and the inadequacies of government action to bring about significant change needs to be addressed. This article presents a descriptive study examining the complexities of staffing remote and very remote schools in Australia with appropriately-qualified teachers. The findings of analysis of data from the Australian Bureau of Statistics (ABS) on behalf of the Australian Government through the National Schools Statistics Collection (NSSC) indicate that the majority of students in remote schools in Australia live, and are educated in, Indigenous communities in three jurisdictions. This raises concerns of unacknowledged and unacceptable discrimination. Complexity within the current approach to resourcing of remote and very remote schools in Australia, especially in relation to economies of scale are explored. The analysis of existing data was discussed, and how this may be used to address the perennial failure to develop quality decisions, particularly in areas of resourcing in remote and very remote schools.

Keywords: descriptive research, teacher recruitment, Australia, Indigenous education, isolated education

Introduction

Staffing schools with appropriately-qualified teachers is considered the most important requirement for the education of students, yet for schools in remote locations this has been unattainable. Over a considerable period, extensive research has been undertaken concerning the needs of students attending schools in remote and very remote locations in Australia, with staff recruitment and staff retention identified as a significant, persistent, and perennial problem (Boylan & McSwan, 1998; Cuervo, 2012; Human Rights and Equal Opportunity Commission, 2000; Naylor & James, 2015; Roberts, 2004).

The environment facing school leaders and communities in relation to the staffing of remote schools is dynamic. However, in Australia the challenges facing governments and the profession are unique, but on a scale that is manageable. Remote schools require teachers to be able to teach across age levels (primary/secondary), teach in more than a single subject area, and contribute to a school's out-of-hours requirements. Most research reports concerning education in remote Australia identified the need for staff qualified to meet these professional benchmarks and be prepared to take on a longer-term commitment than is the usual practice for schools in other geographical locations (McConney & Price, 2009; Weldon, 2015).

Difficulties in the provision of a teaching workforce for isolated schools is not unique to Australia and is experienced in other English-speaking countries such as Canada (Landertinger, 2021), the United States of America (Miller, 2012; Panizzon, 2011) and Scotland (Scottish Government, 2019). Comparisons across international education systems illuminate the complexities brought of systems and geography, and similarly distribution patterns revealed shortages of educators for remote locations, which differed across education systems (McKenzie et al, 2005: Sullivan et al, 2018). The unique social dynamics of countries, states, territories, and regions further impaired the value or usefulness of comparisons (Handal et al., 2018).

Teaching in remote and very remote locations requires a teacher who is not only qualified and experienced, but who also has an appropriate and realistic understanding of a particular school and the community context, including the possibilities and the limitations. However, rather than attending to unique requirements of a school location most recommendations have focused upon ways to improve the current practice of recruitment of inexperienced newly-accredited teachers; that is, to maintain current practice rather than explore different options.

Perennial Issues in Recruitment Practices

On-going concerns regarding community resources that are inadequate and serious deficiencies in teacher recruitment were recurrent themes; however, there were shortcomings in the scope and understanding of issues pertaining to remote and very remote education that must be addressed. First, was insufficient distinction between types of schools, such as secondary, primary, F-10/12 schools (F = F oundation Year or the first year of primary school), and inadequate acknowledgement of differences in school location, size, and student composition. In Australia most schools in remote locations are primary schools, with next in number F-9/10 schools and then F-12 schools, yet research literature often omitted details of the difference in schools in a particular area. In Australia, there are a larger number of primary schools in remote localities, indicating that when decisions are to be made regarding staffing, the needs of primary education require a higher profile than is currently given.

Second, greater account should be given to issues of governance of schools in remote locations. Education, constitutionally, has been the responsibility of state/territory governments and funding for government schools comes from these jurisdictions. Each state and territory government in Australia is legally responsible for, and has control over, public education, whereas there are two different non-government school systems: the Catholic system and a system of *independent* schools, partially funded by the Australian Government. Non-government schools have been largely self-managed and self-governed, and non-government schools have comprised a minority of schools in remote locations (Hinz, 2010; Zanderigo et al., 2012).

Third, the characteristics of provincial and isolated communities and the role of schools provided to the students in those communities have been well documented in the research literature. However, descriptions of school community contexts tended to use a deficit approach, in that much greater emphasis was given to the deficiencies of communities and little attention to positive aspects of living in these isolated communities. Often, insufficient attention has been given to vast differences between the locations of communities and a wide variety of needs (Beach et al., 2019; White & Kline, 2012).

Fourth, a consistent and recurring issue in research reports identified staff recruitment as a perennial problem, which indicated that little has changed over a considerable period. The practice of appointing beginning teachers seems not to have been questioned, and strategies were embedded into improving teacher education programs to better equip new teachers for teaching in remote settings, along with incentives for recruitment, rather than considering alternate approaches (Mosse & Bottrell, 2015; Naylor & James, 2015).

Fifth, most schools in remote and very remote areas are small primary schools, the majority of which are government schools that have been the responsibility of state/territory governments. Further, there was a preponderance of remote schools is located in three jurisdictions of Australia: Queensland, Northern Territory and Western Australia, and a large percentage of students in these isolated schools are Indigenous students. Clearly, the focus of research concerning remote schools should place greater scrutiny on the two states and one territory where the majority of students living in remote communities reside, and to acknowledge more forcefully that disadvantage for isolated students largely affects Indigenous students, a point not recognized sufficiently in the research literature (Guenther et al., 2019; Wilson, 2014).

Although not large in number, due to the wide diversity of remote schools and communities, research studies concerning these localities need to clarify the settings of the schools under investigation, clarify parameters and acknowledge limitations in generalizing from research findings to other communities. Not doing so in research implies students and communities in isolated locations are a homogenous group (Beach et al., 2019).

Methods

Every year a national school census has been undertaken by the ABS on behalf of the Australian Government and is referred to as National Schools Statistics Collection (NSSC). These data have provided a profile of the nation's schooling system, which has included scholastic year of students, number of teaching staff, school types, student age, retention rates, attendance, and progress rates.

The data presented in this article drew on the NSSC data from the ABS (2018). A descriptive research methodology was applied to illustrate trends in the nature of remote and very remote schooling in Australia, the type of school by sector, and school populations by state and territory in Australia. Using existing data in this way can more fully describe a situation and highlight concerns regarding a prevailing issue (Fox & Bayat, 2007).

The Accessibility and Remoteness Index of Australia (AIRA) was used as a basis for this research. AIRA is an objective way to determine Remoteness Areas in Australia, and geographically divides Australia into five classifications *Metropolitan/ Inner Regional/Outer Regional/ Remote/ Very Remote* (Australian Bureau of Statistics [ABS], n.d.). Based on accessibility to services, towns were given a score on 'the road distance to service towns of different sizes' (Queensland Government Statistician's Office, 2019). A town with a 'remote' classification, for example, was deemed to have 'very restricted accessibility to goods, services and opportunities for social interaction' (Queensland Government Statistician's Office, 2019). This classification system has been used in social science and population research and is a means of defining and classifying service centers, including schools.

Regional, Remote and Very Remote School Jurisdiction

Extensive research, for example, Panizzon, 2011; Roberts, 2004, White & Kline, 2015, has been undertaken concerning the needs of schools located in remote and very remote areas of Australia: a large land mass with three quarters of the population living in coastal cities. Australia is a large island continent the size of continental United States of America not including Alaska and Hawaii, with just over 25 million people, three quarters of which live in the coastal areas, two thirds of whom are located in the southeastern area of the continent. Australia reflects the worldwide drift toward urban living that reduces provincial populations and exacerbates challenges to the provision of services to remote communities (Parliament of Victoria Committee, 2017; Sullivan et al., 2018). In Australia, remote students are found in a variety of locations from coastal tourist communities with a fluctuating population, mining towns, a fishing village, agricultural service centers, and remote provincial settlements on Indigenous lands and communities in desert and tropical settings. Understandably, it is difficult for research studies to span the range of regional and remote communities in Australia, which may explain why research focused upon more populated localities that would be defined as outer regional or provincial, and where schools were more accessible.

In 2018, there were nearly four million students in schools in Australia, with two-thirds of students attending schools run by state or territory governments (ABS, 2018). Over 74,000 students were designated as attending schools in remote or very remote locations, with over 60,000 attending government schools and nearly 14,000 students attending non-government schools. Geographically, the largest state, Western Australia, occupies about one-third of the continent (975,920 sq. miles/2,527,621.6 sq. kilometers). Queensland (670,500 sq. miles/1,736,587.03 sq. kilometers), the next largest state geographically is more decentralized than any other state in Australia and is effectively two regions: a northern region with a spread of towns and the southern region that has a more densely populated capital city area.

The Northern Territory (525,620 sq. miles/1,361,349.55 sq. kilometers) is classified as a regional area with a population of 247,900, Indigenous people make up 40.0% of the total population, and students classified as very remote in the Northern Territory out-number students classified as remote. Table 1 shows the total school populations by state and territory, and percentages of school populations, provides a national context and indicates the differences between the population density of states and territories in Australia.

| NSW | Vic | Qld | SA | WA | Tas | NT | ACT | Total AUS |
|-----------|---|---|---|--|--|---|--|---|
| 798,022 | 619,533 | 552,558 | 174,153 | 280,624 | 56,789 | 29,620 | 43,191 | 2,554,490 |
| 65.5% | 63.8% | 67.3% | 64.9% | 67.1% | 71.1% | 73.1% | 60.9% | 65.7% |
| NSW | Vic | Qld | SA | WA | Tas | NT | ACT | Total |
| 420,677 | 352,070 | 267,870 | 94,274 | 137,234 | 24,256 | 10,921 | 27,732 | 1,335,046 |
| 34.5% | 36.2% | 32.7% | 35.1% | 32.8% | 29.9% | 26.9% | 39.1% | 34.3% |
| NSW | Vic | Qld | SA | WA | Tas | NT | ACT | Total |
| 1,218,699 | 971,603 | 820,428 | 268,427 | 417,858 | 81,045 | 40,541 | 70,923 | 3,889,523 |
| 31.3% | 25.0% | 21.1% | 6.9% | 10.7% | 2.1% | 1.0% | 1.8% | 100.0% |
| | 798,022 65.5% NSW 420,677 34.5% NSW 1,218,699 | 798,022 619,533 65.5% 63.8% NSW Vic 420,677 352,070 34.5% 36.2% NSW Vic 1,218,699 971,603 | 798,022 619,533 552,558 65.5% 63.8% 67.3% NSW Vic Qld 420,677 352,070 267,870 34.5% 36.2% 32.7% NSW Vic Qld 1,218,699 971,603 820,428 | 798,022 619,533 552,558 174,153 65.5% 63.8% 67.3% 64.9% NSW Vic Qld SA 420,677 352,070 267,870 94,274 34.5% 36.2% 32.7% 35.1% NSW Vic Qld SA 1,218,699 971,603 820,428 268,427 | 798,022 619,533 552,558 174,153 280,624 65.5% 63.8% 67.3% 64.9% 67.1% NSW Vic Qld SA WA 420,677 352,070 267,870 94,274 137,234 34.5% 36.2% 32.7% 35.1% 32.8% NSW Vic Qld SA WA 1,218,699 971,603 820,428 268,427 417,858 | 798,022 619,533 552,558 174,153 280,624 56,789 65.5% 63.8% 67.3% 64.9% 67.1% 71.1% NSW Vic Qld SA WA Tas 420,677 352,070 267,870 94,274 137,234 24,256 34.5% 36.2% 32.7% 35.1% 32.8% 29.9% NSW Vic Qld SA WA Tas 1,218,699 971,603 820,428 268,427 417,858 81,045 | 798,022 619,533 552,558 174,153 280,624 56,789 29,620 65.5% 63.8% 67.3% 64.9% 67.1% 71.1% 73.1% NSW Vic Qld SA WA Tas NT 420,677 352,070 267,870 94,274 137,234 24,256 10,921 34.5% 36.2% 32.7% 35.1% 32.8% 29.9% 26.9% NSW Vic Qld SA WA Tas NT 1,218,699 971,603 820,428 268,427 417,858 81,045 40,541 | 798,022 619,533 552,558 174,153 280,624 56,789 29,620 43,191 65.5% 63.8% 67.3% 64.9% 67.1% 71.1% 73.1% 60.9% NSW Vic Qld SA WA Tas NT ACT 420,677 352,070 267,870 94,274 137,234 24,256 10,921 27,732 34.5% 36.2% 32.7% 35.1% 32.8% 29.9% 26.9% 39.1% NSW Vic Qld SA WA Tas NT ACT 1,218,699 971,603 820,428 268,427 417,858 81,045 40,541 70,923 |

 Table 1. Total Differences Between School Population State/Territory

Note. NSW = New South Wales, Vic. = Victoria, Qld = Queensland, SA = South Australia, WA = Western Australia, Tas = Tasmania, NT = Northern Territory, ACT = Australian Capital Territory, AUS = Australia

Since the 1970s, increasingly the Australian Government has assumed responsibility and funding for non-government schools (Catholic and Independent). State and territory governments have had

little control over remote schools that are non-government. However, authors who have undertaken research investigations into remote schools have failed to make clear that their focus is limited to government schools and little research has have included non-government schools in their data. Most schools in remote areas are government administered and government funded; therefore, recommendations for change have implications for departments of education at the state and territory level.

Non-government schools are independent and self-governing and therefore responsible for their students' attending schools in remote locations; however, government schools have responsibility for the majority of students who attend schools in remote locations. It is often unclear in research studies if schools were government or non-government, nor is there appropriate acknowledgement of differences between the needs of various locations, or between research studies undertaken in different states and territories. The disparity in population, location and community needs has created a constraint when attempting to impose a simplistic solution. Responsive approaches designed to address diverse demands for staffing in Australian school locations must be flexible enough and appropriate for diverse contexts within the different states and territories.

In 2018, there were 8,995 schools in Australia, of which 6,315 (70.2%) were Government schools; non-government schools made up the remaining 2,680 (29.8%). Catholic schools numbered 1,713 (19.0%) and 967 (10.8%) were independent schools (ABS, 2018). There are three types of schools: Primary schools (F-6), Secondary Schools (7-12) and Combined Schools, which provide primary and secondary education from one administrative site, such F-10, or F-12 years. Historically and administratively, continuing to organize schools based on primary and secondary levels reflects entrenched teacher preparation and employment models, rather than the educational needs of students in the twenty-first century. Little has been done to address staffing for remote schools as teachers are limited to the sector in which they are qualified (primary or secondary), despite growth in the number of combined schools, not only those located in remote regions, but across Australia (ABS, 2018; Productivity Commission, 2012).

In 2018, data showed that two-thirds of schools (69.4%) in Australia were Primary schools, with the remaining one-third of schools consisting of Secondary schools and Combined schools, made up of roughly equal numbers (15.7% and 14.9%, respectively). Three quarters of Government schools were at the Primary level (75.7%), with Government and Catholic sectors having predominantly Primary schools (75.75% and 72.7% respectively), and the Catholic sector having slightly more Secondary schools (16.5% to 18.9% respectively), and slightly more Combined Schools (8.4% to 7.8% respectively) than the Government sector, as outlined in Table 2.

| Sector | Primary | Secondary | Combined | Total |
|---------------------------------------|---------|-----------|----------|--------|
| Student number in Government Schools | 4,778 | 1,043 | 494 | 6,315 |
| Percent | 75.7% | 16.5% | 7.8% | 100.0% |
| Student number in Catholic Schools | 1,246 | 323 | 144 | 1,713 |
| Percent | 72.7% | 18.9% | 8.4% | 100.0% |
| Student number in Independent Schools | 216 | 48 | 703 | 967 |
| Percent | 22.3% | 5.0% | 72.7% | 100.0% |

On the other hand, the independent sector consisted predominantly of Combined Schools (72.7%), which was significant, in that, independent schools totaled 10.8% of all schools in Australia but provided more than half (52.4%) the total number of Combined Schools in the country. This trend

differed markedly to both government schools and schools from the Catholic system, as illustrated in Table 2.

The trend in the pattern of certain school *types* reflects the historical development of compulsory schooling in Australia, which began with the establishment of a government primary education system in the later years of the nineteenth century. New funding models for school education in the last quarter of the twentieth century provided growth in the non-government school sector and accounts for the current trend in the number of schools by sector. Prior to the introduction of compulsory education and greater government regulation, a mix of inter-denominational or denominational schools provided education to colonial outposts for Indigenous children, as well as children of convicts and free settlers. In Queensland, for example, the first denomination schools were Catholic, although the Church of England established the first boarding school in the Darling Downs in the mid-1800s (Campbell & Proctor, 2014).

Two states account for the majority of students in Australian schools. Table 3 indicates the marked differences between the total school population of states and territories and between the Government sector and non-government sector. This pattern reflects the difference in the location of the general population, with the majority being located in the southeast section of the country, which in terms of states constitutes New South Wales (including the ACT) and Victoria.

Remote Students: Where Are They?

The most populous states of New South Wales and Victoria had 56.0% of all school-aged students in Australia, but only 7.6% of the total number of students attended schools in remote/very remote localities. This served to illustrate the disparity between schools, between jurisdictions and between government requirements in terms of providing community resources for particular localities. Western Australia had 32.2% of all remote/very remote students, Queensland had 24.2% of all remote/very remote students and the Northern Territory had 22.7% of remote/very remote students in Australia. This was a combined total of 79.1% as outlined in Table 3.

| Table 5. Differences | Detween | number | of Ken | iou and | I VCIY | Remote | , Stude | mis by s | State/ I CIIII | JU, |
|--|-----------|---------|---------|---------|---------|--------|---------|----------|------------------|-----|
| State/Territory | NSW | Vic | Qld | SA | WA | Tas. | NT | ACT | Total AUS | |
| Total no. of students | 1,218,699 | 971,603 | 820,428 | 268,427 | 417,852 | 56,789 | 81,045 | 44,0541 | 3,889,523 | |
| Total no. of remote & very remote students | 5,048 | 568 | 18,04 | 8,804 | 24,048 | 989 | 16,912 | 0 | 74,416 | |
| Total percent of remote & very remote students | 6.8% | 0.8% | 24.2% | 11.8% | 32.3% | 1.32% | 22.7% | 0.0% | 100.0% | |

Table 3. Differences Between Number of Remote and Very Remote Students by State/Territory

Note. NSW = New South Wales, Vic. = Victoria, Qld = Queensland, SA = South Australia, WA = Western Australia, Tas = Tasmania, NT = Northern Territory, ACT = Australian Capital Territory, AUS = Australia

The Northern Territory presented a unique situation because, with no metropolitan city, the Northern Territory was classified, according to the ABS remoteness classification (ABS, n.d.), as regional. Nearly half the population were Indigenous people, with 40.0% of students designated as attending remote or very remote schools, and of that number around 5,000 students were classified as remote whereas over 7,000 students were classified as very remote. When these significant numbers of students were considered, the Northern Territory demonstrated a seriously unaddressed need.

The different settings of remote and very remote students must be considered regarding the context of school education issues pertinent to states and the Northern Territory. Further, in remote and

very remote schools across Australia, there were significant numbers of Indigenous students who already experienced endemic disadvantage, and this was exacerbated by the hindrance of remoteness.

According to ABS Data (2018), the total number of students in Australia classified as Remote or Very Remote represented 2.3% of students attending government schools and 1.03% of students attending non-government schools from an area classification as *Metropolitan/ Inner Regional/Outer Regional/ Remote/ Very Remote* (ABS, n.d.). Table 4 outlines the number and percentage of students in each state and territory attending schools in remote locations.

| Government | NSW | Vic | Qld | SA | WA | Tas. | NT | ACT | Total |
|---------------------------------------|---------|---------|---------|---------|---------|--------|-----------|--------|-----------|
| Very Remote | 1,167 | 0 | 7,414 | 1,896 | 7,768 | 283 | 7,700 | 0 | 26,228 |
| Percent | 4.4% | 0.0% | 28.2% | 7.3% | 29.6% | 1.1% | 29.4% | 0.0% | 100.0% |
| Remote | 2,953 | 535 | 7,558 | 5,362 | 12,649 | 565 | 4,842 | 0 | 34,464 |
| Percent | 8.6% | 1.6% | 21.9% | 15.5% | 36.7% | 1.6% | 14.0% | 0.0% | 100.0% |
| Total | 4,120 | 535 | 14,972 | 7,258 | 20,417 | 848 | 12,542 | 0 | 60,692 |
| Percent of students in remote schools | 6.8% | 0.8% | 24.6% | 11.9% | 33.6% | 1.4% | 20.7% | 0.0% | 100.0% |
| Total no. of students | 798,022 | 619,533 | 552,558 | 174,153 | 280,624 | 56,789 | 29,620 | 43,191 | 2,554 |
| Total percent of remote students | 0.5% | 0.08% | 2.7% | 4.2% | 7.3% | 1.5% | 42.3% | 0.0% | 2.3% |
| Non- Government | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | Total |
| Very Remote | 173 | 0 | 880 | 141 | 1,171 | 0 | 1,194 | 0 | 3,559 |
| Percent | 4.86% | 0.0% | 24.7% | 3.96% | 32.9% | 0% | 33.5% | 0.0% | 100.0% |
| Remote | 755 | 33 | 2,195 | 1,405 | 2,460 | 141 | 3,176 | 0 | 10,165 |
| Percent | 7.6% | 0.3% | 21.59% | 13.8% | 24.2% | 1.4% | 31.24% | 0.0% | 100.0% |
| Total | 928 | 33 | 3,075 | 1,546 | 3,631 | 141 | 4,370 | 0 | 13,724 |
| Percent of students in remote schools | 6.76% | 0.2% | 22.4% | 11.3% | 26.4% | 1.0% | 31.8% | 0.0% | 100.0% |
| Total no. of students | 420,677 | 352,070 | 267,870 | 94,274 | 137,234 | 24,256 | 10,921 | 27,732 | 13,35,046 |
| Total Percent of remote students | 0.2% | 0.009% | 1.1% | 1.6% | 2.6% | 0.6% | 40.0% | 0.0% | 1.03% |
| | | | | | | | al Austra | | 3.889.523 |

Table 4. Differences in Remote and Very Remote Student Count (Government and Non-Government Schools)

Note. NSW = New South Wales, Vic. = Victoria, Qld = Queensland, SA = South Australia, WA = Western Australia, Tas = Tasmania, NT = Northern Territory, ACT = Australian Capital Territory

From a total number of students (2,554,490) in Government schools there were 60,692 (2.3%) students designated as attending school in remote and very remote locations in Australia, and only 13,724 (1.03%) students of the total number of students (1,335,046) in non-government schools designated as attending schools in remote and very remote areas. Considering the small percentage of students designated as attending school in remote areas, perhaps it is timely to consider the approach to the staffing of these schools from a different perspective.

A New Approach Required

On-going research findings, challenges to recruitment, and retention of educators in remote and very remote Australia, success stories of change and access to data provided context for modifying the existing approach to staffing in isolated locations in Australia. Research and evaluation, plus evidence of outdated practices, indicated many aspects of government strategies relating to non-metropolitan Australia require review, particularly those around the provision and division of services. In education, practices specific to teacher recruitment for the staffing of remote and very remote schools in Australia, requires review as well as the approach to pre-service teacher preparation programs, including the qualification of teachers who are Aboriginal and Torres Strait Island people. Several reports and research findings have identified teacher recruitment as an on-going concern for the staffing of schools in provincial and remote locations (Boylan & McSwan,

1998; Cuervo, 2012; Hasley, 2018; Human Rights and Equal Opportunity, 2000; Naylor & James, 2015; White & Kline, 2012).

All young children have the right to a basic education in order to acquire fundamental skills in literacy and numeracy. Most schools in remote areas were primary schools, so if these schools were not staffed adequately, regardless of other forms of resourcing, then these children are at risk of not gaining their rightful start in life, namely a basic education. The performance of students from remote and very remote schools on national and international testing would support this position (Australian Government, 2018). The employment of Indigenous support staff in schools has proven to be successful in some remote schools, and the systematic delivery of culturally competent professional development opportunities would provide greater levels of equity for remote school communities.

In the same vein, Indigenous Australian students deserve equal opportunities for a basic education (Bradley et al., 2007; Guenther & Osborne, 2018). Most schools in very remote areas of Australia were primary schools so young people in these areas were also having their rights denied with the continual appointment of inadequate or inexperienced teachers, including an appropriate representation of teachers who are themselves Aboriginal and Torres Strait Island peoples (Landertinger et al., 2021). While some Australian universities offered specific Indigenous initial teacher education programs, such as Charles Sturt University and James Cook University, this initiative was not widespread.

Innovation to teacher preparation programs should broaden scope as distinct from the current restrictive programs based on historically driven student age brackets, such as primary teaching or secondary teaching. With the growth of F-9/10/12 schools designed to address compulsory as well as post-compulsory schooling from the early years to the senior years of secondary school, initial teacher training, as well as professional learning, has not evolved in response to this structural change. Changes to the method and content of teacher preparation is required to inject greater flexibility and range into how teachers are qualified and equipped to meet the challenges of twenty-first century education (Knipe, 2015). Subsequent to teacher preparation, further required action relates directly to the recruitment of teachers to remote schools based on community need.

Teacher Recruitment

Teacher Experience and Background

It is well-documented that remote and very remote schools have specialist and above average needs. and require different resources (Downes & Roberts, 2018; Guenther & Osborne, 2018; Lassig et al., 2015). Additionally, abundant research existed to show that a teacher is considered to be a most important resource for a school (Hattie, 2012; Jimerson & Haddock, 2015; SeWoog, 2018). In these schools, quality learning and teaching requires educators with more resources and experience than a graduate teacher is expected to bring to their first teaching role. Various reasons have been identified as barriers for teachers seeking and accepting positions in provincial and remote locations. Inappropriate selection processes, negative perceptions of non-urbanized communities, and lack of facilities have been identified as influential in recruiting teachers (Kelly & Fogarty, 2015). The development of strategy and practice, which is uniquely aligned to the recruitment and retention of teachers in remote and very remote schools, requires a shift of focus

to the recruitment of experienced teachers, together with continued emphasis on decentralization of recruitment, investigation into broadened and place sensitive incentives, examination of standards, tailored mentor programs, and supported leadership schemes.

The attraction and retention of staff to remote and very remote schools required a focus on the identification of individual applicants who hold values congruent with the community in which they will live and work. This means that teachers have an understanding of the inherent value and rewards of living in such a community, and consequently hold a positive perception of the communities. Teachers with these characteristics were more likely to be effective teachers in remote and very remote areas compared with those who feel they are *missionaries* or *adventurers* (Organisation for Economic Co-operation and Development [OECD], 2019). A shift from recruiting inexperienced teachers to an emphasis on teachers with a minimum of five years teaching experience who meet high standards, could be considered. This experience contributes to teacher applicants who have a *track record* for potential school communities to consult, and individuals more confident in what they are seeking, more skilled and flexible in managing the breadth of education and social demands of remote and very remote schools, and ultimately less likely to resign or leave after a short period of time.

The move to staff country schools with beginning teachers was fostered when state governments began to train teachers at institutions such as teacher's colleges. In states like NSW, the establishment of teachers' colleges in non-metropolitan locations, such as Armidale, occurred as early as the 1920s. The government considered that this strategy might assist in overcoming the issue of staffing schools in regional and remote communities. The logic behind this approach supported the notion that, if teachers were trained in situ, they could experience the needs of non-metropolitan schools, and would be better prepared and therefore more willing to stay and teach in such localities (Green & Reid, 2012). This thinking continues to underpin some of the current initial teacher preparation initiatives across states and territories, a strategy that is focused on *attracting staff* rather than a long-term plan of *keeping staff*.

Programs such as Teach for Australia, for example, have placed approximately sixty nine percent of those undertaking teacher preparation in regional and remote schools in 2021 (Teach for Australia, n.d.). Other programs such as Beyond the Range, offered grants to support those in initial teacher education degrees to undertake professional experience placements in designated provincial locations across Queensland (Teach Queensland, n.d.). An array of similar strategies has been used in other Australian states and territories. The intent is to place pre-service teachers in non-urban school localities to provide a positive experience in the hope that as graduating teachers they are willing to accept a teaching position in difficult-to-staff-locations, such as schools in remote or very remote areas. These types of practicum opportunities are designed to raise awareness and provide benefits to those in teacher preparation programs, while offering opportunities to experience different types of schools and locations they may have not encountered.

However, under current staffing practices, appointing recently graduated teachers to school locations in remote and very remote locations is problematic and potentially contributing to other staffing issues associated with retention and attrition (OECD, 2019). In particular, language used in research appears to dwell on the deficiencies of regional and remote school communities and

governments seek to remediate deficiencies through teacher recruitment 'bribes' and 'incentives' to make up for the 'sacrifice' teachers will make in moving to these communities (OECD, 2019).

Considerable research over the past two decades identified the attrition rate of Australian teachers leaving the profession in the first five years of between 30.0% to 50.0% (OECD, 2019). While these results stem from a complex mix of reasons, a review and adjustment of teacher recruitment policies, in relation to context, could be a catalyst for a significant shift in staffing processes and the development of alternative approaches.

Selecting experienced teachers who can cope with the demands and challenges of remote and very remote schools, who have a clear understanding of what is expected, and who are also deemed by the school to be suitable, was an alternative approach to be included in staffing practices. The method in place for Independent Public Schools to staff schools in Western Australia goes some way towards this concept. Drawing from a pool of experienced staff to address school enrolment would implement recommendations from previous research and is a model advocated for by the OECD (2019), to address equity issues and the under-achievement of students (Kelly & Fogarty, 2015).

Funding and reporting expectations were different for government and non-government schools across Australia. Government schools were financed primarily by the states and territories with funding considering a range of factors, such as the number of enrolments, school location and student profile. Parent contributions and fees were then added dependent on the school and the broader school community. Non-government schools were funded from parents in the form of school fees as well as some funding from the Australian Government (Productivity Commission, 2018).

Government schools rely on state and territory funding, however the issues of 'efficiencies' arise when schools face challenges in attracting qualified and experienced teachers. Present recommendations place a high emphasis on the recruitment of pre-service teachers who came from regional or remote areas, with a view to them returning to a similar location once qualified. This viewpoint was based on generalizations regarding the level of influence a teacher's background has in relation to recruitment strategies, especially regarding remote schools (Plunkett & Dyson, 2011). This is a complex area of teacher qualification and recruitment, and research conducted in larger and more densely populated states lacks relevance in findings applied to sparsely populated locations. Further, it is also marginalizing already under-represented groups in higher education (Gale & Parker, 2017; Smith et al., 2015).

Research examining the long-term impact of disadvantage for those students from various equity groups, such as remote, Indigenous, and low socio-economic status, into post-compulsory education, training, or employment, was scarce (Southgate, 2017). There was also limited research differentiating student cohorts from isolated schools and locations. In Australia, *The Generation Z: Leaving school* study, goes some way towards examining the trajectory of young people in the post-compulsory school environment (Longitudinal Study of Australian Youth, 2019). The impact of disadvantage requires greater attention from all tiers of government in addition to targeted research, which can inform recruitment and retention of educators in remote Australian locations.

Several studies identified individuals from provincial and remote areas undertaking teaching qualifications in regional and metropolitan universities, yet these studies were rarely interrogated in relation to returning to less urbanized locations, as well as retention rates. There were also several individual and contextual characteristics, which interact and impact on a remote pre-service teacher returning to a remote or regional area after four to five years studying in a metropolitan location. Some research indicates that while many young people may leave regional and remote areas to meet post-compulsory education needs, many leave and do not return (Hasley, 2018; Naylor & James, 2015). Significantly, in research, the opportunities and experiences for individuals from remote and very remote areas of Australia are not necessarily differentiated from those of inner and outer regional locations. This seemed to be based on an assumption that a teacher living or raised in an urban area would not be attracted to what is sometimes referred to as a tree change. The recruitment of teachers to remote areas seemed not to be considered as a viable strategy to attract experienced teachers from metropolitan locations. For remote and very remote schools in Australia, staff recruitment should be based on a teacher's personal and professional suitability, and preference for remote living; shared values of living within a remote community; clear understanding of the advantages and disadvantages of remote education and importantly adequate professional experience, orientation, and support (Handal et al., 2018; White & Kline, 2012).

Those who live and work in remote communities possessed an understanding of the range of advantages and disadvantages of a remote community; regrettably, considerable research appeared to dwell on the deficiencies of these communities. Use of a deficit-model approach, with minimal attention to the advantages of living and working in remote locations, most approaches to school staffing sought to remediate the perceptions of the situation through teacher recruitment 'bribes and incentives', which make up for the *sacrifice* teachers make in relocating to these communities. Most states and the Northern Territory offer incentive, both financial and non-financial, ranging from additional pay to additional leave entitlements, in order to accept a teaching position in provincial and remote communities. In Queensland, for example, the range of inducements includes financial benefits, which depended on the remoteness of the school, subsidized accommodation, relocation expenses and transfer points (Teach Queensland, n.d.). Western Australia offered additional leave, flexible working arrangements, re-location allowance and financial benefits (Department of Education, n.d.). These benefits, along with the points systems used by some education departments, reinforced the concept that remote and very remote locations are less than desirable areas.

Community Needs

Research concerning remote communities also drifted toward a deficit model, in that these communities are described in terms relative to urban living, and what is needed to remediate deficiencies (Downes & Roberts, 2018; Human Rights Commission, 2000). Generally, the Australian public viewed remote communities, with perspectives that are *different from* rather than *less than* the perspectives of urban communities; instead of taking a more spatial *integrational* focus as advocated by Beach et al. (2019). Research conducted in regional and remote places needed to ensure that location is acknowledged more specifically, recognizing the values of the community: such as, an Aboriginal and/or Torres Strait Island community, a specific or mixed agricultural community, mining industry, fishing, tourism. Examining and communicating these locations provided place context from both a communal and geographical position. The qualities

of isolated communities, and the way interrelated connections affect the lives of children and young people, were often undervalued (Mosse & Bottrell, 2015; White & Kline, 2012). Context specific research in remote schools means each community was presented less in comparison with urban communities, with more space provided to identify how each is aligned with different educational needs.

Taking a less homogenized approach to research and investing in a more transparent recruitment process for remote communities and schools was constructive. This would enable educators to be matched to community values during the recruitment process rather than generating difficulties because of mismatched expectations or poor-quality communication during the recruitment and induction phases.

Conclusions

For schools in Australia, like many other countries, staffing is considered the most important asset in the education of students. Repeatedly, in remote and very remote schools adequate staffing and retention of staff has been identified as most difficult to achieve. Generally, teaching staff are assigned to a regional, remote, or very remote school, sometimes with incentives such as scholarships to encourage retention. At present, educators in remote and very remote Australia were possibly not recruited based on their shared values with remote living, nor to their adaptability or suitability for living in isolated communities. The cost of high teacher turnover was more than a monetary one: it was a serious human and education loss to a school, a community, and especially to students.

Research over the past thirty years has documented educational and socioeconomic disadvantage in non-urban communities (Cuervo, 2012; Human Rights and Equal Opportunity Commission, 2000; Naylor & James, 2015; Roberts, 2004). As a result, the perennial inadequacies of governments to bring about improvement and address the difficulties of staffing remote schools have remained an on-going issue. Students living in remote and very remote locations faced serious disadvantage due to inadequate policies and practices of education and resourcing, which when coupled with the unevenness of community contributions to schools in remote locations, can be further exacerbated.

This study has highlighted the on-going deficiencies in teacher recruitment practices as well as shortcomings in the scope and understanding of issues pertaining to staffing regional, remote, and very remote schools. The authors have, however advocated, for a change in approach, offering suggestions for a new direction.

Theoretical Implications

The results of this study concurred with previous research (Beach et al., 2019; White & Kline, 2012) regarding the lack of attention focused on the differences between the locations of communities. Despite substantial and robust research concerning the deficiencies of education in regional and remote communities, and various government initiatives to remediate the situation, significant change has not occurred over the past two decades. Shortcomings in approaches to qualifying teachers who are flexible in teaching across the stages of schooling, as well as attracting and retaining teaching staff, remain significant issues. Research focused on regional and remote

localities needs to identify the settings of the schools, clarify parameters, and acknowledge the limitations in generalizing research findings from one *place* to other communities.

Practical Implications

Research indicated that a worldwide drift from provincial living to urban locations will further aggravate the problems of service provision in remote communities. Australia and Canada, for example, have majority urban populations in a very large land mass with smaller isolated Indigenous communities located in the very remote regions of the country. In Australia, the failure to introduce effective policies and approaches for staffing isolated schools, was decried. Data presented in this article indicated that most students in very remote locations are in Indigenous communities concentrated in three states, and these raised concerns of unacknowledged discrimination.

Clearer distinctions need to be made between inner and outer regional schools, and remote and very remote schools, because access and distance is persistent, and has a significant impact on those living in isolated communities. Further, localities with a larger population enables economies of scale and this affected the provision and availability of resourcing. There is, however, readily available national descriptive data which identified remote and very remote schools in Australia. Most of these schools are primary schools, or schools with a predominantly primary and a middle year cohort (F-9), which could productively partner in targeted research. The findings of research informed by national descriptive data provides a rigorous reference point, and a base from which planning for the resourcing and staffing of remote and very remote schools can grow, including the type and nature of teachers required.

A graduate teacher qualified to teacher across primary and secondary education would be an asset in staffing schools in remote and very remote locations. Some universities have taken up this challenge and are qualifying teachers with one or two secondary teaching areas, as well as primary education. More universities, especially those in judications with a high number of remote and very remote schools, could assist in qualifying more teachers with an F-12 qualification (Knipe, 2015).

Limitations and Further Research

This study has described the on-going issues regarding the staffing situation for remote and very remote schools in Australia, using data from NSSC. As a descriptive study this research has not attempted to identify the cause or causes for this situation, only that the problem has existed for some time, with the authors advocating a need to rethink the approach taken.

Research designed to examine the differences between regional and remote/very remote communities is urgently required. Research that identifies differences between remote and very remote schools was more useful to identify individual characteristics and eliminated the practice of generalizing comparisons between non-metropolitan schools. This approach also applies to remote/very remote schools and regional (inner and outer) schools.

Research not conducted from a metrocentric stance, and which rigorously and richly examines and identifies *difference from*, rather than reinforcing entrenched deficiencies of a remote and very remote place, can positively transform perceptions. Teacher recruitment programs focused on the

teacher's congruence with remote or very remote living have a much greater chance of enhancing learning and teaching outcomes, as well as greater staff retention, either in an isolated school, or remote community setting.

References

- Australian Government. (2018, March). Through growth to achievement: Report of the review to achieve educational excellence in Australian schools. Commonwealth of Australia. https://www.dese.gov.au/download/4175/through-growth-achievement-report-review-achieve-educational-excellence-australian-schools/18691/document/docx/en
- Australian Bureau of Statistics. (n.d.). *The Australian statistical geography standard (ASGS) remoteness structure*. Retrieved May 5, 2019, from https://www.abs.gov.au/websitedbs/d3310114.nsf/home/remoteness+structure
- Australian Bureau of Statistics. (2018). 4221.0 *Schools Australia, 2018*. http://www.abs.gov.au/ausstats/abs@.nsf/mf/4221.0
- Beach, D., Johansson, M., Ohrn, E., Rönnlund, M., & Per-Ake, R. (2019). Rurality and education relations: Metrocentricity and local values in rural communities and rural schools. *European Educational Research Journal*, 18(1), 19-33.
- Boylan, C. R., & McSwan, D. (1998). Long staying teachers: Who are they? *Australian Journal of Education*, 42(1), 1-12.
- Bradley, S., Draca, M., Green, C., & Leeves, G. (2007). The magnitude of educational disadvantage of Indigenous minority groups in Australia. *Journal of Population Economics*, 20, 547–569. http://www.doi.org/10.1007/s00148-006-0076-9
- Campbell, C., & Proctor, H. (2014). The history of Australian schooling. Allen & Unwin.
- Lassig, C., Doherty, C. A., & Moore, K. (2015). The private problem with public service: Rural teachers in educational markets. *Journal of Educational Administration and History*, 47(2), 117-139. https://doi.org/10.1080/00220620.2015.996863
- Cuervo, H. (2012). Enlarging the social justice agenda in education: An analysis of rural teachers' narratives beyond the distributed dimension. *Asia Pacific Journal of Teacher Education*, 40(2), 83-95. http://www.doi.org/10.1080/1359866X.2012.669829
- Department of Education. (n.d.). *Teacher housing and transport assistance*. Government of Western Australia. Retrieved August 25, 2019, from https://www.education.wa.edu.au/teacher-housing-and-transport-assistance?page=6
- Downes, N., & Roberts, P. (2018). Revisiting the schoolhouse: A literature review on staffing rural, remote and isolated schools in Australia 2004-2016. *Australian & International Journal of Rural Education*, 28(1), 31-54.
- Fox, W., & Bayat, M. S. (2007). A guide to managing research. Juta.
- Gale, T., & Parker, S. (2017). Retraining students in Australian higher education: Cultural capital, field distinction. *European Educational Research Journal, 16*(1), 80-96.
- Green, B., & Reid, J. (2012). A new teacher for a new nation? Teacher education, 'English', and schooling in early twentieth-century Australia. *Journal of Educational Administration and History*, 44(4), 361-379.
- Guenther, J., & Osborne, S. (2018). Red dirt education leaders 'caught in the middle': Priorities for local and nonlocal leaders in remote schools. *The Australian Journal of Indigenous Education, 49*(1), 57-69. http://www.doi.org/10.1017/jie.2018.17
- Guenther, J., Lowe, K., Burgess, C., Vass, G., & Moodie, N. (2019). Factors contributing to educational outcomes for first nations students from remote communities: A systematic review. *Australian Educational Researcher*, 46, 319 – 340. http://www.doi.org/10.1007/s13384-019-00308-4
- Handal, B., Watson, K., Petocz, P., & Maher, M. (2018). Choosing to teach in rural and remote schools: The zone of free movement. *Education and Research Perspectives*, 45, 1-32.
- Hasley, J. (2018, December). *Independent review into regional, rural and remote education*. Commonwealth of Australia. https://www.docs.education.gov.au/node/50281
- Hattie, J. (2012). Visible learning for teachers: Maximizing impact on learning. Routledge.
- Hinz, B. (2010, June 1-3). Australian federalism and school funding arrangements: An examination of competing models and recurrent critiques [Conference presentation]. Canadian Political Science Association Conference, Montreal, Canada.

- Human Rights and Equal Opportunity Commission. (2000, March). *Emerging themes: National inquiry into rural and remote education*. Commonwealth of Australia.
- https://humanrights.gov.au/sites/default/files/content/pdf/human_rights/rural_remote/emerging_themes.pdf Jimerson, S., & Haddock, A. (2015). Understand the importance of teachers in facilitating student success:
- Contemporary science, practice & policy. School Psychology Quarterly, 30(4), 488-493.
- Kelly, N., & Fogarty, R. (2015). An integrated approach to attracting and retaining teachers in rural and remote parts of Australia. *Journal of Economic and Social Policy*, 17(2), 1-17.
- Knipe, S. (2015). A generic teacher education program that meets contemporary schools' needs. In S. Groundwater-Smith, & N. Mockler (Eds.), *Big fish, little fish; Teaching and learning in the middle years* (pp. 223-235). Cambridge University.
- Landertinger, L., Tessaro, D., & Restoule, J. (2021). "We have to get more teachers to help our kids": Recruitment and retention strategies for teacher education programs to increase the number of Indigenous teachers in Canada and abroad. *Journal of Global Education and Research*, 5(1), 36-53. https://www.doi.org/10.5038/2577-509X.5.1.1066
- Longitudinal Study of Australian Youth. (2019). *Generation Z: Leaving school*. Commonwealth of Australia. https://www.lsay.edu.au/__data/assets/pdf_file/0037/8352586/Gen-Z-leaving-school-infographic-A3-print-version_final.pdf
- McConney, A., & Price, A. (2009). Teaching out-of-field in Western Australia. *Australian Journal of Teacher Education, 34*(6), 86-100. http://www.doi.org/10.14221/ajte.2009v34n6.6
- McKenzie, P., Santiago, P., Sliwka, P., & Hiroyuki, H. (2005). *Teachers matter: Attracting developing and retaining effective teachers*. OECD.
- Miller, L. C. (2012). Situating the rural teacher labor market in the broader context: A descriptive analysis of the market dynamics in New York State. *Journal of Research in Rural Education*, 27(13), 1-31.
- Mosse, J., & Bottrell, C. (2015). The importance of place in evaluation of STEM partnerships between Universities and Schools in rural, remote and regional Australia. *The Australasian Journal of University-Community Engagement*, 10(2), 19-43.
- Naylor, R., & James, R. (2015). Systemic equity challenges: An overview of the role of universities in student equity and social inclusion. In Shah, M., Bennett, A., & Southgate, E. (Eds.), *Widening higher education* participation: A global perspective (pp. 1-13). Elsevier.
- Organisation for Economic Co-Operation and Development. (2019). TALIS 2018 results (Volume 1). Teachers and school leaders as lifelong learners. OECD
- Panizzon, D. (2011). Teaching secondary science in rural and remote schools: Exploring the critical role of a professional learning community. In Corrigan, C., Dillon., J., & Gunstone, R. (Eds.), *The professional knowledge base of science teaching* (pp. 173-187). Springer.
- Parliament of Victoria Committee. (2017). *Inquiry into career advice activities in Victorian schools*. Economic, Education, Jobs & Skills Committee. https://www.parliament.vic.gov.au/58th-parliament/eejsc/article/3878
- Plunkett, M., & Dyson, M. (2011). Becoming a teacher and staying one: Examining the complex ecologies associated with educating and retaining new teachers in rural Australia? *Australian Journal of Teacher Education, 36*(1), 32-47. http://www.dx.doi.org/10.14221/ajte.2011v36n1.3
- Productivity Commission. (2012, April). Schools workforce. Commonwealth of Australia. https://www.pc.gov.au/inquiries/completed/education-workforce-schools/report/schools-workforce.pdf
- Productivity Commission. (2018, February 1). Report on government services 2018. https://www.pc.gov.au/research/ongoing/report-on-government-services/2018/child-care-education-and-training
- Queensland Government Statistician's Office. (2019, January). *Accessibility/remoteness index of Australia*. The State of Queensland (Queensland Treasury). https://www.qgso.qld.gov.au/about-statistics/statistical-standards-classifications/accessibility-remoteness-index-australia
- Roberts, P. (2004). *Staffing an empty schoolhouse: Attracting and retaining teachers in rural, remote and isolated communities.* New South Wales Teachers Federation.

https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.631.5357&rep=rep1&type=pdf

Scottish Government. (2019, October 10). Strategic board for teacher education.

https://www.gov.scot/publications/strategic-board-for-teacher-education-papers-may-2019/

SeWoog, L. (2018). Pulling back the curtain: Revealing the cumulative importance of high performing, high quality teachers on student's educational outcomes. *Educational Evaluation & Policy Analysis, 40*(3), 359-381.

- Smith, J., Trinidad, S., & Larkin, S. (2015). Participation in higher education in Australia among under-represented groups: What can we learn from the Higher Education Participation Program to better support Indigenous learners? Indigenous pathways and transitions into higher education [Special Issue], *Learning Communities: International Journal of Learning in Social Contexts 17*, 12-29. http://doi.org/10.18793/LCJ2015.17.02
- Southgate, E. (2017, August). Fair connection to professional careers: Understanding social difference and disadvantage, institutional dynamics and technological opportunities. NCSEHE & The University of Newcastle. https://www.ncsehe.edu.au/wp-content/uploads/2017/09/Southgate_Fair-connection-toprofessional-careers.pdf
- Sullivan, K., McConney, A., & Perry, L. (2018). A comparison of rural educational disadvantage in Australia, Canada, and New Zealand using OECD's PISA. Sage Open, 8(4), 1-12. http://www.doi.org/10.1177/2158244018805791
- Teach for Australia. (n.d.). *Where we work*. Australian Government Department of Education, Skills and Employment. Retrieved August 25, 2019, from https://teachforaustralia.org/about-us/areas-we-work-in/
- Teach Queensland. (n.d.). *Beyond the range professional experience grant*. The State of Queensland (Department of Education). Retrieved July 15, 2019, from https://teach.qld.gov.au/scholarships-and-grants/beyond-the-range-professional-experience-grant
- Weldon, P. (2015, March). *The teacher workforce in Australia: Supply, demand & data issues*. Australian Council for Educational Research.

https://research.acer.edu.au/cgi/viewcontent.cgi?article=1001&context=policyinsights

- White, S., & Kline, J. (2012). *Renewing rural & regional teacher education curriculum: Final Report 2012*. Australian Learning and Teaching Council. https://eprints.qut.edu.au/109112/1/109112.pdf
- Wilson, B. (2014). A share in the future: Review of Indigenous education in the Northern Territory. The Education Business. http://hdl.voced.edu.au/10707/331230.
- Zanderigo, T., Dowd, E., & Turner, S. (2012). *Delivering school transparency in Australia: National reporting through My School*. OECDiLibrary. http://www.doi.org/10.1787/9789264175884-en