Education in the North

UNIVERSITY OF ABERDEEN

FEATURE

Defying distance, ameliorating access: school education for remote Australian students

Natalie Downes, natalie.downes@canberra.edu.au
University of Canberra, Australia

Philip Roberts, Philip.roberts@canberra.edu.au
University of Canberra, Australia

Michael Barbour, michael.barbour@tu.edu
Touro University, United States

DOI Number: https://doi.org/10.26203/jvkj-pb50

To cite this feature: Downes, N., Roberts, P. and Barbour, M. (2020). Defying distance, ameliorating access: school education for remote Australian students. *Education in the North*, **27**(2) pp. 248-255.

Defying distance, ameliorating access: school education for remote Australian students

Natalie Downes, natalie.downes@canberra.edu.au

University of Canberra, Australia

Philip Roberts, Philip.roberts@canberra.edu.au

University of Canberra, Australia

Michael Barbour, michael.barbour@tu.edu

Touro University, United States

Abstract

In Australia, rural and remote schools are known for their innovation in providing education throughout remote locations, with students accessing distance education since the early 1900's. Distance education in Australia involves students learning in a different location to their teacher, using a combination of 'asynchronous' and 'synchronous' learning using advanced ICT products that enable them to interact. This paper provides an overview of these schools in New South Wales, an education jurisdiction that has adapted distance education schools to meet the diverse needs of students. This includes the inclusion of a distance education school for gifted students, and "Access Networks" where students attend their local high school, and groups of schools share teachers using co-timetabled subjects and technology to communicate. These schools highlight that education for students in geographically remote locations is not only possible, but provides many benefits for students, when we accept that 'school' doesn't have to mean numbers of children attending one setting together.

Keywords: school distance education; rural and remote education; Access Networks; online learning; learner relationships

Introduction

All around the world there are concerns about how to adequately provide education to students in rural and remote locations. Over the past thirty years, the advent of the internet has seen a rise in the growth of distance learning, also known as distance education. Distance learning usually involves students participating in schooling from a different physical location to their teacher, using a combination of asynchronous and synchronous learning and ICT products that enable the teacher and students to interact (Lopes, O'Donoghue & O'Neill, 2011). While this growth of the use of the internet in distance learning is relatively recent, distance learning for school age children in Australia has a long history, having been used successfully for over a century by families in geographically remote areas.

In this paper we explore Australia's system of providing access to schooling for very remote students through distance education schools. Specifically, we focus on New South Wales (NSW), an education jurisdiction that has adapted distance education schooling to meet the diverse needs of students. Here we describe the evolution of distance education schooling from their original form over 100 years ago where they were known as correspondence schools, through to their evolution as distance education schools as they are today. It is through Australia's examples that we can see that education for students in geographically remote locations is not only possible, but a mode of education that provides many benefits for students.

The geography of Australia & access to compulsory schooling

With the exception of climate, Australia shares many geographic characteristics with the North making it a valuable site for international comparisons. Australia is a geographically vast continent as the world's largest island and smallest continent with approximately seven point seven million square kilometres of land mass (Australian Government Geoscience Australia n.d.). The population of Australia is approximately 23.4 Million (ABS 2018a), that equates to 3.1 people per square kilometre of land (ABS 2018b). While this sounds like a vast amount of land mass per person, it is important to consider that the majority of the population live in the south-eastern corner of the continent. Australia's landmass is statistically categorized as either major cities, inner regional, outer regional, remote, or very remote based on distance, population density and access to services (ABS 2011). These are on a scale of decreasing density, increasing distance, and availability of services, from major cities through to very remote locations. Major cities are considered to have a higher density population, more service availability, and less distance to major services and facilities, and very remote locations have low density of population, services and are larger distances to other locations (ABS 2011). Here we acknowledge that while the terms rural, regional and remote are contested, complex and encompass many factors such as the land, culture, population, economy and resident's relationships and interactions to these factors (Downes & Roberts 2015; Reid *et al*. 2010), we refer only to the geographical and population-based definition of these terms used to categorise school location in Australia. Regional and remote areas occupy vast areas of Australia, but are only home to approximately 28% of the population, and less than 10% of the population when excluding inner regional locations (ABS 2019). Much of the outer regional, remote and very areas are occupied by small

communities and large farming stations (Lee & Wilks 2007; Lopes *et al.* 2011), where the closest schools may be hundreds of kilometres away.

For students in these outer regional and remote locations it is not practical for school authorities to provide face-to-face schooling because of the geographical distance separating individual students. Today, the main educational options for these children are to attend a boarding school, move into the nearest town with family, or enrol in a distance education school (Alston & Kent 2008; Tynan & O'Neill 2007). Given the costs of boarding school and relocation, distance education is often the alternative chosen for children's education in rural and remote areas, especially in the early years of schooling (Alston & Kent 2008; Tynan & O'Neill 2007).

What is distance education schooling?

Definitions and descriptions of distance education vary around the world. In Australia Lopes *et al*. (2011) identified that distance education involved providing learning materials to students from a distance, with teachers rarely having face-to-face contact with students. This means that for the majority of the school year students work remotely and their teacher leads their class using a combination of 'synchronous' and 'asynchronous' learning technology. Synchronous learning is where children are learning in real time, often with other students who join in from their remote locations, and asynchronous learning is where learning is without real time interaction and the students work independently of the teacher (Murphy, Rodriguez-Manzanares & Barbour 2011). Different modes of information communication technology (ICT) are a key component of distance learning today, both as content management systems and means of communication (Murphy *et al*. 2011). ICT technology allows students to interact face-to-face with their teachers and with other students in their remote school and elsewhere. Students in these schools still have to meet the same outcomes of schooling that are expected of students in face-to-face classrooms and participate in the same national and international standardised tests. The only difference in these schools is the innovative method of delivery.

In full-time distance education schools' students cannot manage the requirements of distance education schooling alone, especially in the early years of schooling where students may only be four to five years of age. As such it is an enrolment guideline that children must have an adult other than their teacher act as supervisor of their learning on a day-to-day basis (NSW Department of Education 2019a; Tynan & O'Neill 2007). The role of the supervisor has been described to be similar to that of a teacher, where they are expected to support their students time management, motivate the students, and support them through the lesson expectations set by the school (Downes 2013; Tomlinson *et al*. 1985). In the early years of schooling teachers provide lessons that are scripted almost word for word for supervisors to implement with their students, with these usually given to the supervisors weeks in advance. In the upper years of schooling, students work more independently, with supervisors taking more of a guiding role in their students learning (Downes & Roberts 2015).

With their physical separation, students and teachers also aim to meet a few times a year when possible. Students attend 'mini-schools' or camps, where the students travel to the school for a few days to work with their teachers on specialist areas they may not be able to at home (Tynan & O'Neill

2007). This includes undertaking national assessments, participating in sports carnivals, and performing music and drama concerts. In addition to these mini-schools, teachers of students in younger years of schooling also try to visit the students at home to get to know their home environment and learn more about the student to assist them in their learning throughout the year (Lee & Wilks 2007).

History of distance education schooling in Australia

Distance education has a long history in Australian schooling. This mode of schooling was developed over a century ago in response to a recognition of the need to enable access to education for all students in all areas after the introduction of compulsory school education. It is important to note here that while Australian education is governed by national policies and guidelines about education, such as a National Curriculum and standardised testing, each state and territory in Australia is responsible for managing its own school system. In this paper we focus on New South Wales (NSW), an education jurisdiction with the largest population and one of the most expansive geographical distance, and therefore one of the highest populations of remote and very remote students, followed by Western Australia and Queensland.

Before the development of distance education schools, half-time schools were introduced to assist with providing students in remote locations access to school education in the late 1860's in NSW (NSW Department of Education 2019c). These schools required that a teacher worked with two different groups of students in two nearby remote locations, by travelling between both groups (Burkhardt 2017; Freeman 1993). In 1880, the Government introduced a The Public Instruction Act 1880, which was the early beginnings of compulsory schooling in the state, so a smaller version of half-time schools were introduced to cater for more remote students. These schools were known as house to house schools, which operated the same way as half-time schools, just with less students (Freeman 1993; NSW Department of Education 2019b). However, these schools were still unable to meet the needs of all remote students.

In the early 1900's, it was becoming increasingly obvious that it was difficult to provide access to schooling for students in geographically remote parts of Australia due to the wide spread of students. This led to the development of the Sydney Correspondence School, which began to support the education of geographically isolated students in 1916 (Ramsland 2015). This Correspondence school operated with teachers working in a physical school in Sydney while the students stayed in their own home and communicate by post (Freeman 1993). The teacher planned lessons and sent instructions and materials to the student to complete and then post them back to the teacher for assessment. In these schools the teachers and students rarely had face-to-face contact, and almost all the schooling was completed by posting materials back and forth, often with long periods between each package of school materials being received by teacher and student (NSW Department of Education 2020a; Ramsland 2015).

To improve interaction between pupil and teacher, or between pupils, in 1956 NSW opened it's first School of the Air, modelled on the Northern Territory's pioneering Alice Springs School of the Air developed a few years earlier (NSW Department of Education 2020a). These schools were similar to

correspondence schools, with the difference being that they also used two-way radio technology for communications, which allowed the teachers and students to communicate verbally over two-way radio (NSW Department of Education 2020a). Later, in the early 1990's, several distance education centres/schools were opened throughout NSW (NSW Department of Education and Training 2008; NSW Department of Education 2020a). Satellite communication technology was added to these schools, allowing students to see their teacher, improve communications and allow quicker feedback on lessons (Towers & Hutchinson 2008). Although some Schools of the Air have maintained their names, they all operate as distance education schools and centres, with advanced ICT usage, making these schools world leaders in technology based teaching.

Innovations in Distance Education Schooling

With these innovations in ICT there have also been variations of the use of distance education schools since their inception. In the early 1990's NSW also introduced Access Networks, which offers a shared curriculum for senior secondary students across clusters of isolated schools across the state (NSW Department of Education 2020b). Schools within a vicinity – that can include schools up to 300km apart - share a teacher in specialist subjects, with the specialist teacher physically situated at one of the network schools. In this way schools are able to provide a breadth of curriculum access in the senior secondary years that would otherwise not be possible due to student and staff numbers (Harriman, Daly, Dione-Rogers, Wong, & Knight 2016) Schools co-timetable to ensure students have half their lessons as live video conference lessons. The other half comprises of structured learning activities using a learning management system. Students in Access programs attend their local community school for these lessons, even though they may in practice have no 'traditional' lessons at their school. This means that students do not need to move away to access specialist subjects that cannot be provided to small numbers of students in individual remote schools (Harriman *et al*. 2016; NSW Department of Education 2020s).

More recently, NSW also introduced a selective distance education school for gifted students, where the students are based at their local school and take classes virtually. In 2015 the Aurora College was opened, allowing students to access selective schooling, where enrolment is based on academic merit, regardless of location (Robertson & Ford 2019). Here students from all across the state, who have passed an academic test that would allow them entry to selective schools for academically gifted students (Robertson & Ford 2019), learn in a virtual environment organized in a similar manner to the Access program. The students attend their local high school and access technology based instruction for the classes they are enrolled in at the virtual selective school. Some subjects may be taken at their local school, such as sports, while the majority are provided online through the selective school (Bannister, Cornish, Bannister-Tyrrell, & Gregory 2015). Students are able to stay in their home community and access an advanced curriculum suited to their academic needs (Robertson & Ford 2019). The continued success of Aurora College shows that online learning in Australia can extend academically gifted students as well as provide the usual curriculum.

The future of schooling for remote students

The example of Australia's long history of distance education schooling shows that the education of remote populations is not only possible, but that distance education schools are actually a world leader in the development and use of ICT in schools (Lopes *et al*., 2011). Distance education is a method of school learning that is continually evolving at a fast pace to meet the needs of students. These schools show us we can choose to now rethink how we see schooling and embrace the experiences around us. 'School' doesn't have to mean numbers of children attending one physical setting together, in a classroom with a teacher during set hours (Downes & Roberts 2015). By approaching schooling this way, the needs of more students may be met, including many vulnerable students, both in remote locations and more populated locations, who may not otherwise have access to face-to-face school education.

References

ALSTON, M & KENT, J. (2008), Education for isolated children: Challenging gendered and structural assumptions, *Australian Journal of Social Issues*, **43**(2), pp. 427-440.

AUSTRALIAN BUREAU OF STATISTICS (2019), 3218.0 - Regional Population Growth, Australia, 2017-18, Commonwealth of Australia, Australia, viewed July 23, 2020. https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3218.02017-18?OpenDocument

AUSTRALIAN BUREAU OF STATISTICS (2018a), 2071.0 - Census of Population and Housing: Reflecting Australia - Stories from the Census, 2016, Commonwealth of Australia, Australia, viewed July 23 2020. https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/2071.0~2016~Main%20Features~Snapshot%20of%20Australia,%202016~2#:~:text=The%202016%20Census%20counted%2023.4,which%20counted%2011.6%20million%20people

AUSTRALIAN BUREAU OF STATISTICS (2018b), Population Density. 3218.0 - Regional Population Growth, Australia, 2016, Commonwealth of Australia, Australia, viewed July 23 2020. https://www.abs.gov.au/ausstats/abs@.nsf/Previousproducts/3218.0Main%20Features752016

AUSTRALIAN BUREAU OF STATISTICS 2011, Australian Statistical Geography Standard (ASGS): Volume 1 - Main Structure and Greater Capital City Statistical Areas, July 2011 (1270.0.55.001). Commonwealth of Australia, Australia, viewed July 23 2020. https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/1270.0.55.001July%20.2011

AUSTRALIAN GOVERNMENT GEOSCIENCE AUSTRALIA (no date), Australia's Size Compared, Australian Government, Australia, viewed July 23 2020. https://www.ga.gov.au/scientific-topics/national-location-information/dimensions/australias-size-compared

BANNISTER, B, CORNISH, L, BANNISTER-TYRRELL, M, & GREGORY, S (2015), Creative us of digital technologies: Keeping the best and brightest in the bush, *Australian and International Journal of Rural Education*, **25**(1), pp. 52-65.

BURKHARDT, G (2017), *Half-time and travelling schools. Dictionary of Educational History in Australia and New Zealand* (DEHANZ), viewed August 3 2020. http://dehanz.net.au/entries/half-time-and-travelling-schools/

DOWNES, N. (2013), The challenges and opportunities experienced by parent supervisors in primary school distance education, *Australian and International Journal of Rural Education*, **23**(3), pp. 31–42.

DOWNES, N. AND ROBERTS, P. (2015), Valuing rural meanings: The work of parent supervisors challenging dominant educational discourses, *Australian and International Journal of Rural Education*, **25**(2), pp. 72–85.

FREEMAN, A. (1993), The travelling schools of New South Wales 1908-1949, *Education in Rural Australia*, **3**(1), pp.7-18.

HARRIMAN, S., DALY, A., Dione-Rogers, M., Wong, P. and Knight, K, (2016), Riverina Access Partnership Evaluation Report. CESE: NSWDET. Australia.

LEE, L. and WILKS, A. (2007), Documenting the early literacy and numeracy practices of home tutors in distance and isolated education in Australia, *Australian Journal of Early Childhood*, **32**(2), pp. 28-36.

LOPES, E. O'DONOGHUE, T. and O'NEILL, M. (2011), *The Education of Children in Geographically Remote Regions through Distance Education: Perspectives and Lessons from Australia*. Information Age Publishing, United States of America.

MURPHY, E., RODRÍGUEZ-MANZANARES, M., and BARBOUR, M. K. (2011). Asynchronous and synchronous teaching and learning in high-school distance education. *British Journal of Educational Technology,* **42**(2), pp 583-591.

NEW SOUTH WALES DEPARTMENT OF EDUCATION (2018), Aurora College Annual Report 2018, New South Wales Department of Education, Australia, viewed 8 June 2020. https://cpb-ap-se2.wpmucdn.com/www.aurora.nsw.edu.au/dist/c/1/files/2019/05/2018_Annual_Report.pdf

NEW SOUTH WALES DEPARTMENT OF EDUCATION, (2019a), *Distance Education Enrolment Procedures*, New South Wales Department of Education, Australia, viewed 7 June 2020. https://policies.education.nsw.gov.au/policy-library/associated-documents/de-enrolproc.pdf

NEW SOUTH WALES DEPARTMENT OF EDUCATION, (2019b), *Public Instruction Act 1880, History of NSW Public Schools*, New South Wales Department of Education, Australia, viewed 7 June 2020. https://education.nsw.gov.au/about-us/our-people-and-structure/history-of-government-schools/government-schools/public-instruction-act-1880

NEW SOUTH WALES DEPARTMENT OF EDUCATION, (2019c), *Public Schools Act 1866 History of NSW Public Schools*, New South Wales Department of Education, Australia, viewed 7 June 2020. https://education.nsw.gov.au/about-us/our-people-and-structure/history-of-government-schools/government-schools/public-schools-act-1866

NEW SOUTH WALES DEPARTMENT OF EDUCATION, (2020a), New South Wales Department of Education. '*History (School of the Air)*, New South Wales Department of Education, Australia, viewed 7 June 2020. https://schoolair-p.schools.nsw.gov.au/history.html#:~:text=The%20first%20'School%20of%20the,that%20area%20via%20HF%20Radio

NEW SOUTH WALES DEPARTMENT OF EDUCATION, (2020b), *Rural and Distance Education, Access Program*, New South Wales Department of Education, Australia, viewed 7 June 2020. https://education.nsw.gov.au/teaching-and-learning/curriculum/rural-and-distance-education/access-program

NEW SOUTH WALES DEPARTMENT OF EDUCATION, (2020c), *Rural and Distance Education, Distance Education Centres*, New South Wales Department of Education, Australia, viewed 7 June 2020. https://education.nsw.gov.au/teaching-and-learning/curriculum/rural-and-distance-education/distance-education/distance-education-centres

NEW SOUTH WALES DEPARTMENT OF EDUCATION AND TRAINING, (2008), Current Provision of Distance Education in NSW. Review Report. New South Wales Department of Education and Training, New South Wales.

OLIVER, R. and REEVES, T. (1994), *Telematics in rural education: An investigation of the use of telematics.*

REID, J. GREEN, B. COOPER, M. HASTING, W. LOCK, G. and WHITE, S. (2010), Regenerating rural social space? Teacher education for rural-regional sustainability, *Australian Journal of Education*, **54**(3), pp. 262-267.

RAMSLAND, J. (2015), *Blackfriars Correspondence School. Dictionary of Educational History in Australia and New Zealand* (DEHANZ), viewed 10 June 2020. http://dehanz.net.au/entries/correspondence-school-blackfriars/

ROBERTSON, C. and FORD, S. (2019), Aurora college: Igniting new ways of learning, *Australian Educational Leader*, **41**(2), pp. 48-52.

TOWERS, L. and HUTCHINSON, A. (2008), The sound and the vision: Developments in interactive distance education facilitated by satellite broadcast in NSW and the NT, *Education in Rural Australia*, **18**(2), pp. 27-38.

TYNAN, B. & O'NEILL, M. (2007), Individual perseverance: A theory of home tutors' management of schooling in isolated settings, *Distance Education*, **28**(1), pp. 95-110.