



Rural and Regional Education Project: Final Report

Prepared for the NSW Department of Education

July 2023











Acknowledgement of Country

We acknowledge the Traditional Custodians of the lands where we work and live. We celebrate the diversity of Aboriginal peoples and their ongoing cultures and connections to the lands and waters of NSW.

We pay our respects to Elders past, present and emerging and acknowledge the Aboriginal and Torres Strait Islander people that contributed to the development of this Rural and Regional Education Project: Final Report.

We advise this resource may contain images, or names of deceased persons in photographs or historical content.

Rural and Regional Education Project: Final Report

Published by Department of Education

First published: July 2023

Authors

Kim Beswick, Philip Roberts, Scott Eacott, Richard Holden, Dennis Alonzo, Natalie Downes, Liliana Mularcyzk OAM, Tony Loughland, Suzanne Cridge, Erin Corbyn, Megan Bedford

Acknowledgements

The research team acknowledges the contributions made to the project by the research assistants: Jennifer Barr, Andrew Kingsford-Smith, Eveline Mussi, and Sijing Zhou, and the important contribution to conceptualising the project made by Adrian Piccoli.

Research Team

Kim Beswick, Philip Roberts, Scott Eacott, Richard Holden, Dennis Alonzo, Liliana Mularcyzk OAM, Tony Loughland, Suzanne Cridge, Erin Corbyn

Research Assistants

Jennifer Barr, Natalie Downes, Andrew Kingsford-Smith, Eveline Mussi, and Sijing Zhou

Project Manager

Megan Bedford

For further information, please contact:

Professor Kim Beswick +61 2 9065 7467

Gonski Institute for Education

UNSW Sydney NSW 2052 Australia

Email: gonski@unsw.edu.au Website: gie.unsw.edu.au

© UNSW Sydney 2022

The Gonski Institute for Education is based in the Faculty of Arts, Design and Architecture at UNSW Sydney. This report is an output of the Rural and Regional Education Research Project, funded by the NSW Department of Education.

Suggested citation:

Beswick, K., Roberts, P., Eacott, S., Holden, R., Alonzo, D., Downes, N., Mularcyzk, L., Loughland, T., Cridge, S., Corbyn, E., & Bedford, M. (2022). *Rural and Regional Research Education Project: Final report.* Sydney: UNSW Gonski Institute for Education and School of Education.

Contents

Exe	cutive	Sumn	nary	1
	Exe	cutive \$	Summary	2
	Ove	rview		3
	Key	finding	gs	4
	Orga	anisatio	on of the Report	7
Opp	ortun	ity List	t	8
	Орр	ortunit	ty List	9
1	Key Framing			17
	1	Key Framing		
	1.1	Inside and outside the school gate		
	1.2 Research approach		arch approach	22
		1.2.1	Research sites	22
	1.3	Litera	ature review	22
		1.3.1	Search results	23
		1.3.2	Evidence-based approaches	24
		1.3.3	Limitations of the evidence base of the studies	32
		1.3.4	Conclusion	34
2	Intersections			36
	2	Intersections		
	2.1	Local	l economies	37
		2.1.1	Access to health and social services	38
		2.1.2	Technology	39
	2.2	Valuing rurality		40
	2.3	Appreciating context		
	2.4	Centrality of staffing		43
	2.5	Autonomy support		
	2.6	Bullying		
3	Methodology			45
	3	Methodology		
	3.1	Research objectives		46
	3.2	Research questions		47
	3.3	Participants		47
	3.4	Clust	48	
		3.4.1	Cluster 1	49
		3.4.2	Cluster 2	50
		3.4.3	Cluster 3	50

		3.4.4 A	ggregate cluster descriptions	50
	3.5	Sample.		54
	3.6	Data col	lection	55
		3.6.1 A	nalysis of existing DoE datasets	55
		3.6.2 St	urveys	58
		3.6.3 In	terviews	59
		3.6.4 Fo	ocus groups	59
		3.6.5 Ci	ritical friends	59
		3.6.6 Fo	orums	60
	3.7	Limitatio	ons	60
4	Stud	Students and Families		
	4	Students and Families		62
	4.1	Linking	schools and their communities	62
	4.2	.2 Supporting student learning		73
	4.3	Looking	beyond the local	78
5	Tea	achers and Schools		
	5	Teachers	s and Schools	82
	5.1	1 Teacher-student relationships		82
	5.2	2 Teacher quality and development		84
	5.3	3 Teachers' work in regional and rural schools		87
	5.4	School c	culture and infrastructure	88
6	Com	Community and Place		
	6	Community and Place		
	6.1	Spatial r	elations	93
		6.1.1 CI	hange	94
		6.1.2 H	eart of the community	95
	6.2	Curricul	um	96
		6.2.1 Lo	ocal relevance	96
		6.2.2 Pe	edagogies of connection	97
		6.2.3 St	ubject access	98
		6.2.4 TA	AFE	100
	6.3	Staffing implications		100
		6.3.1 Co	ommunity dynamics & competition	101
7	Syst	ems Refo	orms and Initiatives	103
	7	Systems Reforms and Initiatives1		
	7.1	Developi	ing and sustaining a high-impact workforce in rural and regional schools	104
		7.1.1 U	nderstanding context	104
		7.1.2 Sy	ystem as guarantor of high-impact staff	108

		7.1.3	Rural career pathway	109
	7.2	Resou	urcing and supporting teachers and principals and schools	110
			Funding	
		7.2.2	Whole-of-government approach	111
		7.2.3	Technology	112
	7.3	Stream	mlining systemic structures to support schools and education	113
			Administrivia	
		7.3.2	Role of the Director, Educational Leadership	114
		7.3.3	Reducing duplication to optimise efficiencies	115
	7.4	Summ	nary	115
Refe	rence	S		116
	Refe	rences	<u> </u>	117
8	Appendices			123
	Appe	endix 1:	Promising Practices	124
	Appe	endix 2	: Literature review search parameters	139

List of Tables

Table 1: NSW Population by ASGS 2016	18
Table 2: Overview of the results of the screening process by themes identified in the literature search	23
Table 3: Multiple surveys: Comparison of responses about bullying at school	44
Table 4: Clusters and schools	47
Table 5: Participant groups	48
Table 6: Level of ABS data used for each of the locations and their related catchment area	49
Table 7: ICSEA score for cluster, outer regional government, all government, and non-government outer regional, 2008–2021	
Table 8: Full-time equivalent teaching staff by cluster, 2008–2021	52
Table 9: Full-time equivalent student enrolment by cluster, 2008–2021	53
Table 10: Percentage of Aboriginal or Torres Strait Islander enrolment, for cluster, outer regional government schools, and non-government outer regional schools, 2008 2021	3-
Table 11: Data collections by participant group	54
Table 12: Participant numbers	55
Table 13: Results from community member and parent survey	66
Table 14: Average professional capital across geographical categories, 2018-2019	85
Table 15: Principal responses to survey questions concerning DELs	90
Table 16: Themes identified in the grey literature	124
List of Figures	10
Figure 1: Rural social space model (Green & Reid, 2021)	
Figure 2: Bronfenbrenner's (1995) ecologic systems theory model	
Figure 3: NSW population 0–25 in education population by ASGS 2016	
Figure 4: NSW population 0–25 in education by Indigenous status by ASGS 2016	
Figure 5: Overview of the search and screening results for the literature review	
Figure 6: Changes in ICESA (clusters, govt OR schools, all government schools, and outer region non-government schools) over time, 2008–2021	52
Figure 7: Percentage of Aboriginal or Torres Strait Islander enrolment, 2008–2021	
Figure 8: Five student profiles regarding post-school intentions (statistically centred)	
Figure 9: NAPLAN scores in years 5 and 9	
Figure 10: Difference in mean NAPLAN (Reading and Mathematics) score by ASGS, Year 3 and 5 (2016–2019)	
Figure 11: Difference in mean NAPLAN (Reading and Mathematics) score by ASGS, Year 7 and 9 (2016–2019)	

Acronyms

ABS Australian Bureau of Statistics

ACARA Australian Curriculum Assessment and Reporting Authority

AECG NSW Aboriginal Education Consultative Group
ASGS Australian Statistical Geography Standards

ATAR Australian Tertiary Admission Rank

CESE Centre for Education Statistics and Evaluation

DoE NSW Department of Education
DEL Director, Educational Leadership

FIFO Fly in, fly out

HOD Head of DepartmentKLA Key Learning Area

LSLD Local Schools, Local Decisions

NSP Non-school-based DoE personnel

NSW New South Wales

ICT Information and Communication Technology

PD Professional Development
PL Professional Learning

PSL Principal, School Leadership

RR Rural and Regional

SED School Education Director
SES Socio-Economic Status

UNSW University of New South Wales
WWCC Working with Children Check

Executive Summary



Executive Summary

The local public school is an important community institution central to the identity of many rural and regional communities. The communities engaged in this research were extremely proud of their local schools and placed great value in them. Principals and teachers were also highly committed to their students and the future of the communities they serve.

This research aimed to address how the NSW Department of Education (the department) can assist in lifting educational outcomes in rural and regional schools. It looked specifically at the use and scope of tailored, context-specific approaches to support learning outcomes. It also examined the impact of current departmental policy and programs on rural and regional schools, and how this varies across schools, regions and socio-economic groups. Finally, it looked at how systems might be optimised to improve learning and wellbeing outcomes in rural and regional schools.

The findings in this report are based on data collected from principals, teachers, students, parents and community members. Non-school-based departmental personnel and representatives of stakeholder groups with an interest in rural and regional education were also included in the consultation. Data was gathered using a combination of surveys, individual and focus group interviews, field notes and forums, conducted throughout 2020 and 2021.

The research participants represented 17 schools selected by the department across three clusters in rural and regional NSW. The communities in which the schools were located represent much of the diversity of rural and regional schools in NSW, though are not representative of all communities. Nevertheless, consistent patterns in the findings across the range of schools involved provide clear direction for enhancing outcomes for students in rural and regional NSW.



Overview

Throughout this report we acknowledge examples of the many well-designed and targeted programs that the department has in place to address the needs of rural and regional schools. It is clear the department is aware of many of the issues raised by the research participants and is committed to addressing them.

Yet in some instances where opportunities are being addressed through existing programs, data indicates they have not achieved their intended outcomes. There is evidence of a disconnect between the central administration of the department and rural and regional schools, seen through the application of targets, procedures, policies and programs that take little account of local circumstances.

The research participants, both staff and leadership of schools and communities more broadly, expressed a consistent view that they were not understood by those in metropolitan centres and considered service provision, educational design and measurement to be metrocentric. While rural locations have often been associated with limited access to services, the experience of these communities was that the situation is getting worse.

Many of the opportunities identified in this report suggest deeper cultural issues that are expressed through program design and the ways in which they have effect in rural and regional schools. In addition, blurred lines between the accountability and support functions of non-school-based staff have meant school leaders can be reticent to discuss their difficulties with the departmental staff whose role it is to support them.

The report also notes the additional demands placed on sometimes inexperienced school leaders and teachers in rural and regional schools compared with their counterparts in metropolitan contexts. As a result, initiatives designed to support staff can at times be seen as additional demands on top of other more pressing issues.

To counter these issues and enhance the sense of being heard and valued, a rural lens in policy and service delivery is required. This would ensure all policies and procedures are viewed from the perspective of their applicability and appropriateness to rural places.



Key findings

The research adopted an approach centred on students and their families, moving outwards to teachers and schools, then to the communities in which schools are situated, and finally the departmental and government systems that frame the work of schools.

Key findings are listed in relation to each of these levels.



Students and families

- Schools are highly important to rural and regional communities. The school can be the last government institution left when a community is in decline. This exacerbates difficulties attracting staff.
- Parents and community members are acutely aware of, and concerned about, the reputation of local schools.
- Principals and teachers are expected to integrate into the community, which is seen as evidence of respect. Teachers without experience in rural and regional communities may struggle with this.
- There is a need for extensive and ongoing induction for teachers and principals that includes becoming familiar with the local community, its history, industry and key stakeholders.
- Parents and community members were generally positive about teachers but some expressed concern about the ability of some teachers to control their class or who mightn't have sufficiently high academic expectations of students.
- There is considerable scope to better harness community resources for curriculum delivery.



Teachers and Schools

- Having teachers with expertise relevant to the subjects they teach was seen as an unrealistic aspiration for rural and regional schools.
- Vocational rather than academic pathways are more likely to be seen as achievable for students in rural and regional schools compared with students in metropolitan schools.
- Teachers and school leaders need deep local knowledge, firm belief in the capacity
 of their students, and the confidence and skill to adapt curriculum without lowering
 its intellectual demand to support higher achievement.
- The work of teachers and principals in rural and regional schools is more complex and constant than elsewhere. Failure to account for this likely contributes to attrition.
- Principals have a crucial role to play in developing and maintaining teachers' sense of collective efficacy.
- The use of supportive and constructive practices are needed in the way the department interacts with schools, principals interact with staff and staff interact with students. Such practices are likely to support staff retention.



Community and place

- The three clusters of schools involved in the Rural and Regional Education project had an average Index of Community Socio-educational Advantage (ICSEA) of 873, and had experienced a period of negative enrolment growth and a widening of socio-educational disadvantage compared with other outer regional schools across sectors.
- Teaching in rural and regional schools requires specific classroom practice and community engagement skills e.g., to build community connections, connect the curriculum to the local context, composite classes, blended teaching.
- Competition occurs between schools within a town and in neighbouring towns both across sectors and within the government sector.



System reform and initiatives

- A rural lens needs to be applied to all government policy initiatives.
- Many of the issues that affect rural and regional communities and their viability impinge on schools and will require whole-of-government approaches to their solution.
- There is a blurring of the lines between support and accountability for principals in rural and regional schools.
- Principals appreciated autonomy with respect to staffing but also felt left to their own devices when local staffing solutions were not available.
- Some policies developed in metropolitan offices do not make sense in rural and regional contexts.



Key opportunities

The following summarises the areas and intent of the opportunities listed in the report.

- Adopt a rural lens approach to all NSW government and departmental policy to ensure that initiatives are tested for their applicability in a diversity of rural contexts before they are implemented.
- Apply a coordinated approach across the NSW and Federal Government to improve
 the economic conditions and access to social and health services for rural and
 regional communities. These are necessary pre-conditions for improving educational
 outcomes.
- Take departmental responsibility for the provision of appropriate staffing for rural and regional schools, without impinging on local autonomy. The provision of staff with expertise relevant to the subjects they teach should not be regarded as an unrealistic aspiration for rural and regional schools.
- Provide professional support for school leaders in rural and regional schools that is independent of department management and accountability structures and processes. This may require the establishment of new roles.
- Recognise the specific and additional classroom practice and community engagement skills required by teachers and school leaders in rural and regional schools in, for example,

- induction programs for teachers and school leaders new to a community
- professional learning that develops teachers' understanding of their local communities,
- embedded educational partnerships with Aboriginal organisations,
- revised professional standards that recognise the context specific ways in which rural and regional schools operate, and
- workloads that account for the additional work that teachers and principals in rural and regional schools must undertake.
- Provide induction programs for teachers and school leaders that are ongoing and include learning about the local community, its history and industries, the services available, and what it means to be a prominent and important member of a small community.
- Provide support for school leaders to develop and cultivate positive relationships with their local communities that recognises the central importance of the school to the community, and enables working with the community to meet the needs of local students and develop and publicise the unique strengths of their schools.
- Ensure professional learning for teachers in rural and regional schools is tailored to local needs and includes developing teachers' confidence to adapt curriculum to the local context while maintaining intellectual demand.



Organisation of the Report

The chapters of the report are arranged as follows:



Chapter 1: Key framing

Outlines the framing of the Rural and Regional Education Research Project, provides descriptions of the research sites and gives an overview of findings from the literature review.



Chapter 2: Intersections

Discusses the broad issues that emerged as common threads across participant groups and data collection methods. It includes things like local economies and the availability of health and other services, ways in which rurality is or is not valued, the role of context, and the centrality of staffing issues to achieving departmental objectives concerning student outcomes in rural and regional schools.



Chapter 3: Methodology

Details the research methods employed.



Chapter 4: Students and Families

Presents the data relating to students and their families, and the factors that most directly influence students. These coalesced around three themes:

- Linking schools and their communities
- Supporting student learning
- Looking beyond the local



Chapter 5: Teachers and Schools

Focuses on teachers and schools with findings organised according to the following four themes:

- Teacher-student relationships
- Teacher quality and development
- Teachers' work in rural and regional schools
- School structures and infrastructure



Chapter 6: Community and Place

Describes the findings concerned with communities and place, encompassing the notion of school as the heart of community. Also looks at curriculum, particularly its local relevance and accessibility compared with the very broad and diverse subject choices available in metropolitan schools.



Chapter 7: Systems Reforms and Initiatives

Concerns systems reforms and initiatives focusing on the provision of school staff equipped to make a difference in students' learning. The data highlight the importance of whole-of-government approaches and technology, especially fast Internet, to potential solutions related to these issues.

Appendices

Opportunity List



Opportunity List

The complete list of opportunities with accompanying sub-opportunities is provided below.



Chapter 1: Key framing

Opportunity 1-1:

The DoE commission quality, large-scale longitudinal research on approaches to lift student outcomes in rural and regional schools.

Sub-opportunities

- Ensure that a specific focus of any large-scale research is place-based learning.
- Instigate and employ a high-quality research design focusing on a range of observable and verifiable outcomes that meet scholarly review.
- Rigorously test and trial promising practices.



Chapter 2: Intersections

Opportunity 2-1:

A coordinated approach across NSW and the Federal Government is required to improve the economic conditions and access to social and health services. These are necessary pre-conditions for improving educational outcomes.

Sub-opportunities

- Work with NSW and Federal agencies to implement a whole-of-government approach to developing the social and economic conditions of rural communities.
- Work with NSW and Federal agencies to implement an integrated model of 'wrap-around' support in rural schools, including access to early childhood learning, social services, and health, with a dedicated and funded coordinator role to avoid adding to the burden of rural and regional school leaders.
- Work with other NSW Government departments to develop a coordinated state regional development strategy across departments that incorporates rural and regional industry, environment, and population characteristics.
- Develop a coordinated state rural and regional development strategy across departments with annual reports on progress.

Opportunity 2-2:

Develop a technology resource bank, including access plans, to ensure that the technology available in schools through the Rural Access Program is available in all homes in these communities.

Opportunity 2-3:

Change the narrative about rural places to be positive and reflective of unique and increasing opportunity.

Chapter 2: Intersections continued

Sub-opportunities

- Identify sites of positive practice and impact, investigate their characteristics, and share these through a coordinated strategy.
- Audit DoE documents and plans for direct and implicit deficit constructions of rural schools, and remove all such references.
- Ensure all new and revised DoE documents and plans avoid direct and implicit deficit constructions of rural schools.

Opportunity 2-4:

Ensure that policy and compliance approaches provide greater room for local flexibility to develop implementation strategies and targets in recognition of the distinct nature of rural and regional communities.

Sub-opportunities

- Give greater weight to locally developed targets in school planning and resource schools to develop these.
- Base growth targets and benchmarks only on factors under schools' direct control.
- Establish a rural executive role in all rural and regional schools to support the leadership workload. The principal's role is diverse and carries the additional burden of community development in these communities.
- Design principal preparation programs to prepare aspiring rural and regional principals for the complexity of their distinct specialist role.
- Revise the role of Director, Educational Leadership, or institute a new role to focus on support rather than compliance and provide specific professional learning to lead in rural and regional contexts.
- Provide targeted, bespoke professional development that is accessible to staff and based on embedded processes to support their self-determined needs.

Opportunity 2-5:

The NSW Government and the DoE adopt a 'rural lens' approach to policy. Policy needs to be tested for its applicability in a diversity of rural contexts before being implemented.

Sub-opportunities

- Develop a policy evaluation framework that requires a 'rural test' before being ratified.
- Funding cycles need to realistically recognise the time needed to develop, implement, refine, and assess new initiatives.

Opportunity 2-6:

Staffing should become the responsibility of the DoE, not individual schools.

Sub-opportunities

- Establish a dedicated staffing officer for each school cluster to understand the needs of each school. This would provide bespoke approaches to staffing where appropriate and ensure that broadly applicable policies adopted a rural lens.
- Enhance career pathways for rural and regional school staff through a focus on professional practice rather than external incentives. Develop local human capital including 'growing your own' staff for workforce and leadership sustainability.



Chapter 3: Methodology

Opportunity 3-1:

The NSW DoE should establish a single data portal to consolidate data custodianship and facilitate linkages across data sets.

Sub-opportunities

- Undertake a review of data policies and procedures in order to determine appropriate delegations for data ownership and access.
- Audit existing data sets to remove duplication, and update meta-data to reflect the actual level
 of data collected, and its form.
- Implement a unique student, staff, and school identifier across data collection and storage.
- Begin a systematic program of data linking.



Chapter 4: Students and Families

Opportunity 4-1:

Support schools to develop close relationships with their local communities.

Sub-opportunities

- Develop principals' understanding of the use of positive communication and messaging strategies in conveying the unique strengths of their schools.
- Provide professional learning aimed at building principals' ability to develop pride in their school among teachers, students, parents, and community members.
- Support schools serving particular communities to work together, and with parents and community members, to meet the needs of local students.
- Support principals to involve parents and community members in the school decision-making and curriculum delivery as appropriate.
- Recognise the centrality of local schools to their communities in decisions about schooling provision.

Opportunity 4-2:

Ensure that induction programs support teachers to become appropriately involved in the local community.

Sub-opportunities

- Ensure that principal and teacher induction is long-term and includes learning about the local community its history, industries (including their skill and knowledge).
- Provide new school staff with wrap-around support prior to arrival and ongoing thereafter that includes information about such things as housing, utilities, and health services, along with mentoring support.
- Ensure that prospective teachers and principals new to rural communities are aware of the challenges and opportunities inherent in being a 'prominent person' in a small community.
- Support principals and teachers to have nuanced understandings of local industry and employment issues and tensions around these.
- Use local expertise in curriculum delivery as part of building relationships with the community and enriching and contextualising the curriculum.
- Ensure local history is included in the curriculum as a means of enhancing student engagement and contributing to building community.
- Engage students in community projects to better contextualise curriculum and enhance student engagement.

Chapter 4: Students and Families continued

Opportunity 4-3:

Ensure that DoE structures support rather than impose collaboration among schools serving the same community.

Sub-opportunities

- Review relevant DoE policies to ensure that they support collaboration among schools serving the same community.
- Set student outcome goals at the community level.
- Provide DoE support to track student outcomes beyond school.

Opportunity 4-4:

Australian and NSW governments ensure rural communities and schools have excellent access to high-speed Internet.

Sub-opportunities

• The DoE fund the additional costs associated with obtaining access to high-speed Internet access in rural and regional schools.

Opportunity 4-5:

Support increased use of autonomy-supportive teaching practices.

Sub-opportunities

• Provide professional learning on pedagogies that support student motivation and engagement.

Opportunity 4-6:

Ensure principals and teachers have high academic expectations of all students.

Sub-opportunities

- Support schools to engage with their alumni to enhance student, teacher, parental, and community understandings of the post-school possibilities for students.
- Provide professional learning on strategies for developing and maintaining high academic expectations across their school communities.

Opportunity 4-7:

Tailor school completion initiatives to student post-school intention profiles.

Opportunity 4-8:

Implement and rigorously evaluate interventions aimed at boosting attendance.

Opportunity 4-9:

Support the development of 'home-grown' teachers.

Opportunity 4-10:

Encourage increased focus on rural education in initial teacher education programs.

Chapter 4: Students and Families continued

Opportunity 4-11:

Build on the successes of programs that can broaden curriculum access in rural schools.

Opportunity 4-12:

Facilitate opportunities for students to experience cities and interact with metropolitan peers.

Opportunity 4-13:

Enhance career advice available to rural students.

Sub-opportunities

- Provide free-of-charge access to online and/or phone career advisors throughout the year and to all secondary school students.
- Provide mobile career events that include rural and regional schools.
- Ensure career advice includes a focus on local industry needs and locally available post-school options.



Chapter 5: Teachers and Schools

Opportunity 5-1:

Support teachers to develop positive academic relationships with students.

Sub-opportunities

• Provide professional learning aimed at assisting principals and teachers to understand how such relationships look in practice and to equip them with strategies to develop them.

Opportunity 5-2:

Invest in forums and other informational strategies to ensure that parents in rural and regional areas are aware of the benefits of educating their children locally.

Opportunity 5-3:

Make available to teachers in rural and regional schools professional learning tailored to local needs

Sub-opportunities

- Ensure local input from principals and directors, education leadership into the design and delivery of professional learning programs.
- Support teachers to develop the confidence and skill to adapt the curriculum to local contexts by building their knowledge of the local community and provision of models of curriculum adaptation that maintain intellectual demand.

Opportunity 5-4:

Facilitate teachers' access to subject-specific teacher networks and mentors.

Opportunity 5-5:

Provide supports (e.g., reduced class time) that recognise the additional workload that teachers and principals are required to undertake in rural and regional schools.

Chapter 5: Teachers and Schools continued

Opportunity 5-6:

Support school leaders to use autonomy-supportive practices in leading staff.

Sub-opportunities

Provide additional opportunities for teachers to participate in school-level decision-making.

Opportunity 5-7:

Support school leaders to develop the confidence of staff that they can work together effectively to enhance student outcomes (i.e., build collective self-efficacy of staff).

Opportunity 5-8:

Ensure school leaders have access to professional support that is independent from DoE management and accountability structures.

Opportunity 5-9:

Ensure that the physical and technological infrastructure of rural and regional schools is maintained to a high standard.

Chapter 6: Community and Place

Opportunity 6-1:

Recognise that rural and regional teaching requires specific skills in classroom practice and community engagement.

Sub-opportunities

- Ensure that induction programs for new teachers include ongoing development of community awareness, and a dedicated community liaison role and system support in order to assist teachers to understand the community and build community connections.
- Provide ongoing professional learning for existing teachers to understand their communities, and link this to their curriculum implementation.
- Enhance current policies and practices for Aboriginal education to systematically support and embed partnerships with Aboriginal education initiatives led by Aboriginal organisations.
- Revise professional standards to recognise the context dependence of practice.
- Revise professional standards to recognise the reality of the ways in which rural schools operate (e.g., composite classes, blended teaching).

Opportunity 6-2:

Revise curricula so students are able to see themselves in the curriculum and teachers can more easily link the curriculum to students' lives.

Chapter 6: Community and Place continued

Sub-opportunities

- Redevelop a curriculum equity support program such as the former Country Areas Program to support teachers in developing contextually relevant curriculum resources for the diversity of rural communities.
- Establish a curriculum leadership role in rural schools at an executive level to lead local resource and programming development.
- Reduce the reliance on external high-stakes assessment, as this does not account for different contexts, and develop professional moderation of standards.
- Reduce the prescriptive content in the curriculum to enable teachers to use local knowledge and examples and design programs better aligned with student and community need.
- Include scope for school-developed units of study aligned with mandated curriculum outcomes in lieu of standardised content.
- Improve the balance between monitoring and accountability, and teacher professionalism.

Opportunity 6-3:

Enhance school staffing to recognise the complexity of rural schools

Sub-opportunities

- Implement the recommendations of the Review of Rural and Remote Incentives in NSW Public Schools (2021).
- Provide career pathways for teachers and principals in rural and regional areas that are planned and specific to these areas.
- Develop pathways into teaching for community members, including in-school training.
- Trial enhanced roles for appropriately qualified teaching assistants while they are teachers in training.
- Revise the requirements to teach to ensure vocational teachers in related fields can teach in schools.
- Enhance the staffing system to be based on need rather than ratio based.
- Review human resourcing processes and requirements to remove barriers to timely employment and temporary contracting arrangements.

Opportunity 6-4:

Develop new models of curriculum access.

Sub-opportunities

- Instigate a new classification of beginning teacher in impacted key learning areas (KLAs) to support online learning, and link these teachers to a network school where they are guaranteed a continuing role and work under the guidance of an experienced teacher (primary) or subject expert (secondary).
- Develop a networking model in which central schools are networked with schools in their larger centre.
- Reduce the reliance on 'online' curriculum access, and ensure teaching is always supported by a subject-qualified teacher.



Chapter 7: Systems Reforms and Initiatives

Opportunity 7-1:

Initiate, and recognise as legitimate, alternate school-level data demonstrating context-specific outcomes and impact.

Opportunity 7-2:

Assign responsibility for ensuring quality staff (permanent, temporary, and casual) in schools to the system.

Opportunity 7-3:

Expand and require preparation programs for all school leaders (principals, deputy/assistant principals, Head of Department's (HODs) and teachers appointed to RRR schools).

Opportunity 7-4:

Establish regional, rural, and remote education as a specialism for initial teacher education programs (for both secondary and primary).

Opportunity 7-5:

All re-organisation of school funding needs to be treated as major business cases that deliver demonstrable improved outcomes for schools and communities.

Opportunity 7-6:

Ensure regional and rural reform initiatives constitute a whole-of-government suite of activities accountable for outcomes in schools and communities.

Opportunity 7-7:

All new technological solutions need to include explicit infrastructure and educational outcomes in proposals, and be accountable for increasing equity of outcomes.

Opportunity 7-8:

Audit and remove systemic administrative requirements on schools which do not directly improve their capacity to deliver high-quality outcomes.

Opportunity 7-9:

Establish a class of systemic officers, or redefine the role of DEL or Principal, School Leadership (PSL), focused on support and capacity building of school leaders, not compliance.



1 Key Framing



In this first chapter, we outline the key framings of the research project, the research sites, and the literature review. We take the perspective of a 'rural lens' to contemporary education to provide the groundwork for the discussions, findings, and opportunities outlined in subsequent chapters.

We also illustrate how rurality is often a category of difference that is taken for granted and introduce a new model for understanding rurality as a distinct way of being. The community profiles of the research sites reinforce the diversity of rural communities and their unique characteristics compared with large cities and each other. Finally, the literature review establishes the scarcity of research that appreciates the rural as distinct. Instead, the vast majority of education research does not adequately account for rural diversity and may well contribute to rural disadvantage. From this, it is evident that there is a significant need for additional research.

The notion of 'rural' is deceptively difficult to define. In Australian popular culture, 'rural' is typically used as a collective noun for non-metropolitan spaces, with 'remote' then used as a further dimension relating to increased isolation (Roberts & Guenther, 2021). Such popular usage reflects the social nature of the use of the term 'rural' when referring to the national character and the role of the social 'rural' in national mythology (Brett, 2011). To understand how everyday meanings of the rural influence peoples' understandings of where they live, the research asked participants to describe their 'place' and the characteristics that make it unique and valuable to them. This was important as many people deliberately choose a rural lifestyle as their preferred experience and define their identity in relation to their rurality.

The Australian Statistical Geography Standards (ASGS) Remoteness structure (2016) was developed to represent five gradations, from major cities through to very remote. In this classification, the proximity to services and the population density of major cities is positioned as the benchmark, with gradations of lower population density and lesser proximity to services defined in relations to that. This approach positions the rural as deficit, with the major city as the desired standard. While important for comparability, it ignores the social aspects that influence people to live and work in rural places. Adding to the complexity of defining the rural is the history and perspectives of Aboriginal Peoples, who have been living in these spaces for thousands of years, and for whom the notion of 'remoteness' is alien given the centrality of land in Aboriginal ontologies. Table 1 shows the numbers and proportions of the NSW population living in each of the ASGS remoteness categories.

Table 1: NSW Population by ASGS 2016

ASGS	Total Population	%
Major Cities (e.g., Sydney, Newcastle)	5 577 543	75
Inner Regional (e.g., Bathurst, Kiama)	1 420 993	19
Outer Regional (e.g., Broken Hill, Jindabyne)	434 034	6
Remote and very remote (e.g., Brewarrina, Wilcannia)	34 961	0.4

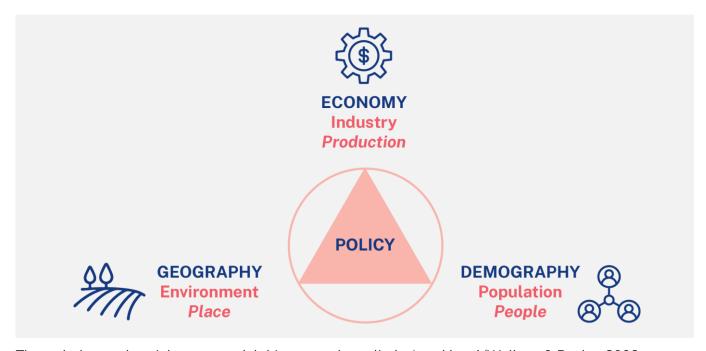
^{*}Percentages have been rounded.

The sites for the Rural and Regional Education project were selected by the DoE and were in the 'Outer Regional' classification, except for one in the 'Remote' classification. The 'Outer-Regional' classification is the mid-range between major cities and very remote and, thus, it can be understood to have moderately reduced accessibility to services.

Official definitions of rural are statistical, based on population density (persons per km), geographical definitions of distance (sealed-road distance) from these centres, and European notions of place. They ignore more complex understandings of rurality from the rural social sciences that engage broader notions of geography, and the social and cultural dimensions of 'rurality' as a lived experience. Such definitions also ignore that for Aboriginal Peoples, the notion of 'rural' is non-existent. Indeed, rural people do not tend to refer to themselves as such; it is a label given from the outside.

The limitation, therefore, of existing uses of 'rural' and 'regional' in public policy is that it is defined in comparison with the city, by statistical measures rather than social and cultural understandings, and attributed from outside communities. To move away from comparing and contrasting the rural and the city, we operationalised the rural social space model (Green & Reid, 2021; shown in Figure 1) as a tool for understanding rural places. This model represents the rural as a combination of economy, demography, and geography in each rural location and posits that this uniqueness creates the particular social conditions influencing each community, which in turn inform policy enactment. Therefore, it gives structure and direction to often vague references to 'context' and positions context as produced by and producing experiences, rather than a mere backdrop against which education takes place.

Figure 1: Rural social space model (Green & Reid, 2021)



Through the rural social space model this research applied a 'rural lens' (Wallace & Boylan 2009; Newfoundland and Labrador 2019) to school education in rural and regional NSW. The notion of a 'rural lens' has operated in Canada, particularly Newfoundland and Labrador, since the 1990s and is directed towards ensuring there are no unintended policy outcomes for rural places and that rural concerns and priorities are fully considered (Newfoundland and Labrador 2019). In Australia, Wallace and Boylan (2009) proposed a rural lens as a reversal of thinking — to begin in rural places, looking outwards, rather than being reactionary, to policy developed in other places and times. A rural lens, as understood in this research, is directed towards sustaining the social, cultural, and economic attributes of rural communities as well as strengthening their community capacity building options through the provision of contextually relevant services. This is a deliberate and significant reorientation of research to explicitly put rural perspectives at the forefront. It reverses what has been characterised historically as the "spatial blindness" (Green & Letts, 2007) of NSW school education, whereby country schools were,

from the earliest days, managed from the city and modelled on city schools. Similarly, much education research is directed at overcoming the "rural school problem" (Roberts & Green, 2013) from a metropolitan perspective. By examining rural education using a rural lens, rather than from a 'problem perspective' or 'deficit discourse' lens, this project considered the needs of rural schools and communities on their terms and from a 'strengths orientation'.

1.1 Inside and outside the school gate

Using a rural lens, the research is reported in terms of influences inside and outside the school gate. We were influenced by the ecologic systems theory model (Bronfenbrenner, 1995). This model, shown in Figure 2 (Guy-Evans, 2020), is centred on the child, surrounded by influences upon the child that are increasingly indirect. They range from the child and their immediate environment and connections to indirect influences of their environment, through to social and cultural values and change over time. The model remains a useful representation of the ecology of a child while also aligning with major and emerging theories of development.

Chronosystem Environmental changes that occur over the life course Macrosystem Attitudes and ideologies of the culture Exosystem Extended family and neighbours Mesosystem Parents' School economic board Microsystem situation Family School Health CHILD services Religious Neighbourhood Mass Government organization playground media agencies Davcare Social services and health care

Figure 2: Bronfenbrenner's (1995) ecologic systems theory model

Bronfenbrenner's ecological systems model (Guy-Evans, 2020)

Consistent with this, the chapters are organised according to the 'inside the school gate' factors of students and families, and teachers and school, followed by the 'outside the school gate' factors of rural communities and place, and broader systemic factors. Importantly, each is considered through a rural lens. Together, these perspectives bring a unique framing to the research and the opportunities it identifies for policy and practice reform.

This research has implications for present and future youth in rural and regional NSW and their communities. Although the population of non-metropolitan NSW comprises 25.5% of the state's population (see Table 1), it is the location of proportionally more government schools. The proportion of the population that identify as Aboriginal and Torres Strait Islander in non-metropolitan NSW is increasing, as is the proportion of school enrolments who identify as Aboriginal and Torres Strait Islander. Figures 3 and 4 show the respective proportions of the NSW population aged 0–25 years in education according to the ASGS categories in 2016: overall (Figure 3) and Indigenous (Figure 4).

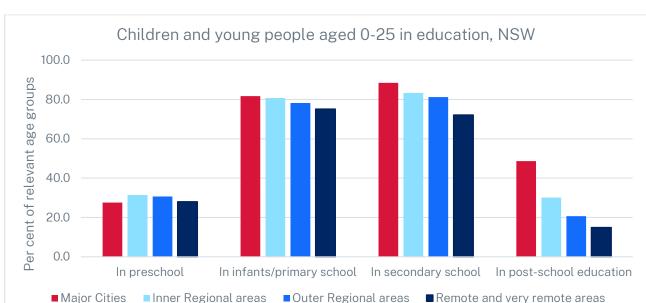
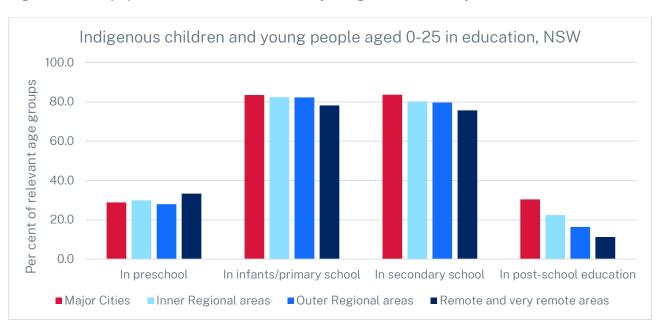


Figure 3: NSW population 0–25 in education population by ASGS 2016





¹ Aboriginal and Torres Strait Islander is the category reported in the ABS statistics and is used here when statistical data is referenced. 'Aboriginal Peoples' is used when referring collectively to the members of multiple Aboriginal nations in NSW.

1.2 Research approach

The research team used a range of research methods, with the data produced interpreted through the rural social space and ecological systems theory models. Specifically, the approach included:

- a review of the research literature;
- surveys of principals, teachers, parents, and community members, and students;
- interviews with principals, teachers, non-school-based DoE personnel, stakeholders, and community members;
- focus groups with students in Years 5–12; and
- secondary analysis of DoE data.

Further details of the methodology are provided in Chapter 3.

1.2.1 Research sites

With one exception, the research sites for this study fell within the 'Outer Regional' ASGS classification of NSW. One was in the 'remote' classification. Each site was located in a unique social space, produced by very distinct histories, economic bases, population profiles, and all influenced by their geographies.

Chapter 3 includes brief demographic descriptions of the communities in which the research took place. The profiles focus on population, education, and employment trends with reference to towns and their catchment region. They highlight the distinct social spaces produced in each community and the challenges of policy, targets, and practices that do not account for this diversity. Indeed, concerns about 'one-size-fits-all' approaches were a dominant theme across the research.

1.3 Literature review

A systematic review of the academic literature and related 'grey literature' pertaining to evidence-based practices and initiatives that support the improvement of education outcomes in rural and regional communities was conducted. It has been separated into the literature review included here and an appendix titled 'Promising Practices' (see Appendix 1).

The literature review was informed by the research question: "What strategies and approaches have a demonstrated positive impact on rural student outcomes?" To be included in the final analysis, articles had to be evidence-based and related to rural schools.

A literature search in the main Australian and international academic databases was undertaken. In this search, 'rural' and its various synonyms were used, as well as various words to denote student and outcomes. The results were checked by the research team and missing research of which the team was aware of was added. The abstracts were then manually checked to determine their relevance to the research question and, hence, their suitability for inclusion. Consistent with the rural-lens perspective, only research that referred to rural schools, involved a rural sample, and discussed the findings in relation to rural schools were considered suitable for inclusion. We did not include reports of interventions purported to improve rural student outcomes when these conditions are not met.

The review revealed that there is very limited research on effective practices that are based on a rural sample and provide high-quality evidence. Much research used to justify initiatives in rural schools is either not based on rural schools or does not include high-quality evidence. This is indicative of a major gap in the currently available literature and highlights a potential limitation of some current reform initiatives. The approach to the literature review is outlined below, with the specific search terms included in Appendix 2.

1.3.1 Search results

The initial database search identified 1,628 articles that met the search criteria. After duplicate results were removed, a total of 1,224 articles were included. The abstracts of the 1,224 articles were read by at least two members of the research team to determine their eligibility for inclusion in the literature review and to identify gaps and additional articles that we expected would be included. This process reduced the number of eligible articles to 215. Articles were removed for the following reasons:

- They were not focused on school education (e.g., they were focused on medical education or adult education).
- The study was in a small school that was not in a rural location.
- The research sample included rural schools but did not identify any specific outcomes for rural schools.
- The study focused on identifying a problem without identifying any evidence-based solutions.
- There were no links to improved outcomes for students or staff in rural schools.

Each of the 215 articles were categorised by the main theme of the article and further screened by members of the research team with expertise in relation to each theme. The articles were each read by members of the research team in a final round of screening to determine if they met the criteria for inclusion in the review. A further 139 articles were removed at this stage, leaving 76 articles in the literature review. Articles at this stage were removed for the following reasons:

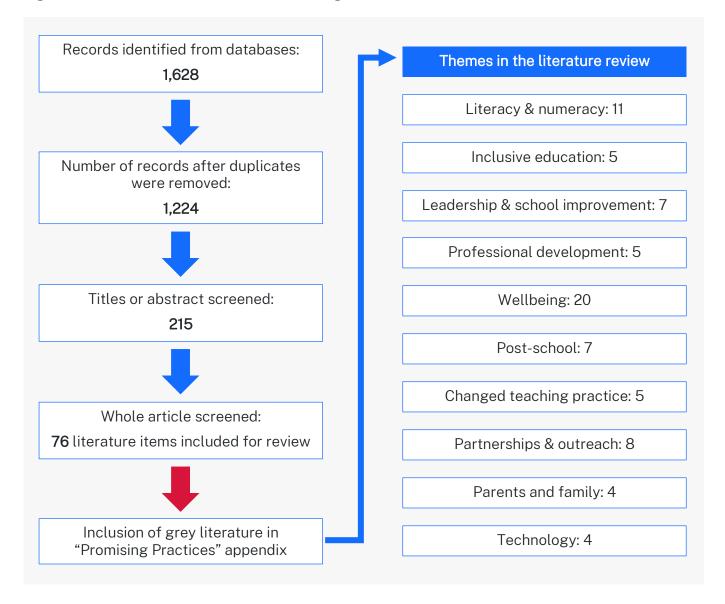
- They were descriptive only and lacked empirical evidence for their claims.
- There were no references to outcomes measures in the analysis of the initiative.
- They were not specific to rural schools.

Table 2 presents the search results by theme, while Figure 5 outlines the search results at each step of the screening process and literature review.

Table 2: Overview of the results of the screening process by themes identified in the literature search

Theme	Initial Results (No. of articles)	After Screening (No. of articles)
Literacy and numeracy	39	11
Inclusive education	6	5
Leadership and school improvement	21	7
Professional development	24	5
Wellbeing	41	20
Post-school	15	7
Changed teaching practice/instruction	20	5
Partnerships and outreach	32	8
Parent and family	6	4
Technology	11	4

Figure 5: Overview of the search and screening results for the literature review



1.3.2 Evidence-based approaches

The results of the literature review for each of the 10 themes are outlined in the following sections.

Literacy and numeracy

Technology-based interventions

Three studies identified the importance of technology-based interventions to increase students' literacy or numeracy skills:

- One study involved university academics working with teachers to support students to produce stories using digital literacy methods (Yamac & Ulusoy, 2016).
- The second study identified the success of a program where students received access to a technology-based literacy program that supported the development of early literacy skills such as phonics (Wolgemuth et al., 2011).
- The final study involved the use of a computer-assisted learning (CAL) program that provided students with instruction, opportunities to practice their skills, and feedback about their attempts (Mo et al., 2015).

Targeted teaching interventions

Three studies involved targeted teaching interventions that improved students' literacy scores:

- One study focused on professional development for teachers to implement a direct instruction program (Stockard, 2011).
- The second involved a cooperative learning program that was aimed at teaching English language skills to non-native English language speakers (Nievecela & Ortega-Auquilla, 2019).
- The final study involved storytelling strategies aimed at developing students' literacy skills (Cilliers & Blich, 2018).

Incorporating literacy across the curriculum

Three studies focused on literacy development through, and in relation to, other curriculum areas. These studies focused on drama education to develop literacy (Wright, 2006) using native languages in science lessons (Probyn, 2015) and project-based inquiry learning across the curriculum (Weeks, 2009).

- The drama intervention program (Wright, 2006) focused on developing students' skills in role-taking, self-concept and vocabulary knowledge.
- In the project-based inquiry program, students were engaged in units of work where literacy learning was incorporated into cross-curricular units of work (Weeks, 2009). These units focused on issues in wider society that were relevant to the students.
- In the science lessons, teachers incorporated their students' home language into science lessons when they felt it was appropriate (Probyn, 2015).

Access to, and progression through, school

Two studies focused on access to early childhood education prior to formal schooling, and student progression through formal schooling:

- Home-learning centres for parents who had completed only primary or high school education to provide care for children and students' literacy and numeracy development later in school were effective (Ezati et al., 2018).
- In the second study, students progressed through each level of schooling on time, regardless of whether they had reached the minimum learning outcomes expected at that level (Okurut, 2015). Previously, students would have been expected to repeat the level until they met the minimum requirements (Okurut, 2015).

Inclusive education

These studies focused on students with additional needs, with most studies based in support classes rather than in mainstream classes.

Equipment to support student learning

Three studies focused on using equipment or aids to support students with additional needs in the classroom:

- One approach involved using a device that prompted students to remain on task and focused during mathematics lessons (Boswell et al., 2013). The device allowed students to self-monitor their behaviour and focus on the task at hand.
- The second approach used assistive technology and a constructivist approach to learning to support students who were deaf (Abiatal & Howard, 2020).
- The third study focused on improving phonological skills using an app to learn phonemes while also observing the other students as they used the app.

Changing teaching practice

Two studies identified the importance of innovative teaching practice to supporting students with additional needs:

- One reported on a peer-support program that aimed to support students to develop positive post-school outcomes (Scheef et al., 2019). Peers were trained to scaffold and model specific skills – these included social skills, self-care skills, and independent-living skills as work and community engagement (Scheef et al., 2019).
- The second study focused on supporting students with dyslexia by targeting learning programs to their preferred learning styles (Exley, 2004).

Leadership and school improvement

The role of informal and formal leadership in supporting rural schools to improve outcomes was the subject of several studies encompassing school improvement, collaborative leadership, and school staffing and resourcing.

School improvement and initiatives that address underperformance in rural schools

Two studies focused on school improvement and initiatives to address underperformance of schools:

- One study identified that school leaders had an important role in increasing the performance of students on assessments by implementing change (Klar & Brewer, 2014). This involved approaches such as setting goals for a schoolwide direction, building the capacity of staff, focusing the school on improving outcomes, and building connections with communities (Klar & Brewer, 2014).
- In the other study, the importance of valuing Indigenous culture and perspectives was found to be crucial to supporting students to improve outcomes. This included collaborating and developing trust with Indigenous community members, valuing student wellbeing in all school activities, developing a holistic approach to leadership, and focusing on building social capital (Davies & Halsey, 2019).

Collaborative leadership

Three studies identified that approaches to leadership involving collaboration among staff and with community were important to improving outcomes in rural schools:

- One school identified an approach they called 'democratic accountability' (Mullen & Graves, 2000), which involved creating a collective sense of accountability and action focused on improving the school. The school used participatory approaches to overcome challenges and focused on improving communication, encouraging student responsibility for outcomes, identifying high expectations from the leadership team, and modelling appropriate approaches to support the development of a positive school culture (Mullen & Graves, 2000).
- In the second study, community support encouraged teachers to develop innovative practice to improve student outcomes. This included having good role models in the community and school, community involvement in decision-making, and an approach that aimed to improve community social capital (Ngalawa et al., 2015).
- The third study identified that instructional leaders who made time to collaborate with their teachers and focus on student-centred planning and outcomes supported increased student outcomes (Chance & Segura, 2009).

School staffing and resourcing

Three studies identified innovative and creative use of resources in improved outcomes:

• One study highlighted that schools need resources to target their efforts on high-impact strategies (Du & Hu, 2008).

- The second study identified that the creativity of principals was crucial to be able to attract and retain staff and sustain change in schools. This was because they were able to use resources creatively and collaborate with the community to develop social capital in the community, thereby making the school an attractive place to work (Anderson & White, 2011).
- The final study reinforced this notion and identified that school improvement relied on an understanding of the school and community context, as well as consideration for the networks and resources that are available to small schools (Chance & Segura, 2009).

Professional development

The articles in the "professional development" theme concerned programs that supported teachers to develop their professional knowledge and capabilities with a view to improving their teaching practice in rural schools.

Integration of Information and Communication Technology (ICT) into teaching practice

Two studies focused on sustained professional development to enhance teachers' use of ICTs to improve student outcomes:

- The first study involved a professional development program informed by design principles to guide 20 teachers through the adoption of ICT. This involved stages labelled 'replacement', 'amplification', and 'transformation' (Blanchard et al., 2016). The authors identified that teacher professional development is more effective if it is implemented schoolwide and is sustained over a two- to three-year period (Blanchard et al., 2016).
- The second study involved enhancing ICT integration through the creation of a professional learning community of teachers and their administrators (Cifuentes et al., 2011).

The development of professional knowledge in key learning areas

Two studies focused on the provision of professional development programs to improve teaching practice in specific key learning areas (KLAs):

- One focused on a professional development program designed to improve teachers' self-efficacy in teaching science to K-2 students (Sandholtz & Ringstaff, 2014).
- The second study supported teachers' professional learning in early years' mathematics using online distance education (Warren et al., 2012). The program was based on iterative cycles of reflection, collaboration, ongoing support, and feedback (Warren et al., 2012).



Early adolescents' schooling adjustment

One study reported on professional development to address early adolescent school adjustment, rather than professional development to improve teaching practice. Teachers were taught to relate to early adolescents with the aim of avoiding the disconnection from schooling that typically occurs in the middle years of schooling (Hamm et al., 2010).

Wellbeing

Programs to increase wellbeing and academic performance

Several studies involved programs to improve wellbeing and academic performance:

- Positive behaviour interventions (Leedy et al., 2004) and pedagogy-based interventions such as the use of the learning and behaviour management strategy (Fawley et al., 2020) and small group activities (Baessa et al., 2002) were important.
- Peer support indirectly influenced intrinsic and extrinsic motivation among students (Lai et al., 2019) and increased academic achievement (Hoffman et al., 2017).
- Students' perceptions of the safety of the school environment influenced their engagement and achievement at school (Van Ryzin, 2011).
- Applied learning pedagogies led to higher learning engagement and satisfaction among students (Campbell et al., 2010), and focusing on students' self-efficacy supported their learning (Bardhoshi et al., 2017).
- Non-cognitive strategies such as the use of a stress ball to decrease distraction-related incidents during both direct instruction and independent practice were also successful (Stalvey & Brasell, 2006).

Health and safety behaviours

Several studies focused on strategies to improve the health and safety behaviours of students in and out of school:

- Peer relationships were identified as significantly improving students' health and safety in rural schools. One study identified that the use of cooperative learning significantly reduced bullying, victimisation, and perceived stress for marginalised students; and reduced emotional problems and enhanced relatedness for all students (Van Ryzin, 2011).
- Another study found that a psychosocial whole-school program promoted a sense of self-belonging and relational connections amongst students (Cumming & Nash, 2015).
- One study identified the importance of the use of technology to help promote safety amongst students (Murry et al., 2019)
- Another identified that teacher support and positive personal characteristics were the strongest predictors of school belonging for students (Allen et al., 2018).

Physical health of rural students

Several studies explored programs to improve students' physical health and health behaviours:

- Three studies focused on interventions to improve the physical health of students. Of these studies, one found an increase in students' engagement in physical activities (Oh & Rana, 2017).
- The other two studies involved health promotion interventions (Jones et al., 2020; Murimi et al., 2015).
- Four studies involved interventions to improve students' understandings of health behaviours and mental health. A conceptually-based intervention embedded in physical education classes promoted primary students' understandings of healthy behaviours (Lorenz et al., 2020), and a teen mentoring program positively impacted the lifestyle patterns and health outcomes of

children (Smith & Holloman, 2013). Cognitive behavioural interventions were used in a study that improved mental health issues among high school students (Puskar et al., 2003). Another study highlighted that the increased presence of nurses in schools improved health services provided to students, thus increasing their positive health behaviours (Guttu et al., 2004).

Teachers' wellbeing

One study explored the wellbeing of teachers and an intervention program aimed at reducing depression and post-traumatic stress symptoms in teachers who had witnessed an earthquake. The study found that the teachers felt the intervention improved their classroom behaviours (Seyle et al., 2013).

Post-school

The focus of studies in this theme was on approaches implemented while students were in high school that aimed to improve post-school outcomes for rural students, specifically supporting students to achieve access to post-school education.

Programs that prepare students for university

Two articles focused on programs to support students to prepare for university². These programs provided rural students with access to targeted programs that supported them with entrance exams and writing requirements:

- In the first program, students had access to support to prepare for university entrance exams. This included instruction and tutoring in relevant content, as well as access to practice exams and preparation booklets (Whitaker et al., 2018).
- The second study involved a training course for teachers to implement a writing program with senior school students. The program focused on complex writing skills that are required to prepare entry essays and complete tests (Gallagher et al., 2017).

School policy or structural changes

Two studies identified the impact of school-level changes on post-school outcomes and opportunities for rural students:

- In one study, the school used data to examine what it could change in its policies, structures, and practice to support students to gain entry to university (Baharav & Newman, 2019). Many structural and policy limitations were identified leading to the school changed their graduation requirements to align with university entry requirements, changing their course offerings and timing, changing their protocols for make-up courses, and providing support to students if they had one low grade that was preventing them from meeting entry requirements. The success of the program relied on data-informed improvement approaches, the support of district level leadership, and an understanding of the local community and their needs.
- The second study focused on supporting students to meet the requirements for university access (Baharav & Newman, 2019). The program was provided to a consortium of schools by a local university across multiple years (Mokher et al., 2019). It focused on improving teachers' practices, providing opportunities for students to take courses online that would increase their access to university, promoting college as a good post-school option, and providing resources to students to support them in making decisions about university (Mokher et al., 2019).

² University has been used in place of 'college' for studies that are based in the USA.

Familiarity with university

The final theme identified in the literature about improving post-school outcomes for rural students was access to programs that enabled students to experience university. These programs familiarised students with university, careers, and university life:

• Two studies involved programs that supported students to attend university campuses, learn about university, explore possible careers, and explore the city in which the university was located (McIlveen et al., 2005; Penman & Oliver, 2011). The long-term success of one of these studies was evident 18 months after the conclusion of the program (McIlveen et al., 2012).

Changed teaching practice

Place-based or personalised learning

Three studies identified the role of place-based or personalised learning in improving student outcomes:

- Two studies identified that place-based learning enhanced rural students' understanding of science (Conkey & Green, 2018; Engels et al., 2019). The first involved connecting science topics in Years 10-12 to local contexts (Engels et al., 2019). The second used place-based art education to engage students in learning about food webs (Conkey & Green, 2018).
- Personalised learning was used in one study to enhance student learning in a cluster of high schools (Prain et al., 2012).

Preparing for tests and individual tutoring

Two studies identified the importance of providing students with test preparation strategies and individual tutoring:

- One study identified that metacognitive prompting during testing for high school students can increase student scores (Aurah, et al., 2014).
- In the second study, students able to participate in a peer tutoring program with students two years above them at school. The program involved support to develop academic skills as well as social and emotional skills (Capp et al., 2018).



Partnerships and outreach

University staff supporting curriculum development

Four studies highlighted the role that specialist university staff or students have in working with school students in curriculum-based programs. The subject area of science was the most common area of focus and included programs provided in and out of classrooms. These programs had positive impacts on students' attitudes to science, their intentions to remain in school, and their intentions to pursue post-secondary education (Boynton, 2010; Ihrig et al., 2018; Karp et al., 2010; Lynch et al., 2005). Programs that involved hands-on, practical activities were particularly important in schools (Boynton, 2010; Karp et al., 2010).

School activities and camps incorporating specialist knowledge

Two studies found that students benefitted from the opportunity to work with university staff on an individual basis. These studies involved mentoring (Clark et al., 2016) and personalised coaching (Zeller et al., 2013):

- In one study, students worked with coaches to develop a plan to improve outcomes and were provided with tutoring (Zeller et al., 2013). Students' goals were shared with stakeholders such as families and teachers so that they could support the students to achieve them.
- The second study described a program that included opportunities to learn about resilience, teamwork, communication, positive relationships, and college readiness, as well as provided mentoring and tutoring by peers (Clark et al., 2016).

Professional learning communities for school staff

Two studies identified the importance of collaboration between university staff and teachers:

- In one study, professional learning communities (PLCs) led by university staff were implemented, and participating teachers shared their learnings with other school staff. Teachers were able to develop their content knowledge as well as implement their learnings in a way that drew on their local environment (Weiser, 2012).
- The second study identified the importance of collaboration between teachers and university faculty members. Teachers and university staff supported each other to develop content knowledge and innovative pedagogical approaches to inquiry-based learning (Otieno, 2010).

Parents and family

The focus of studies in this theme was on programs in schools that involved parents and families.

Parental understanding of their role in schooling

Two studies focused on the importance of parents and teachers, as well as principals knowing about home and school circumstances and supporting students' learning at home and at school.

- In one study, teachers undertook home visits to get to know students and their families so that they were able to support their learning at school (Meyer & Mann, 2006; Meyer et al., 2011).
- The second study focused on parental involvement in homework to support students' mathematics skills (Simweleba & Serpell, 2013). Parents participated in a workshop that highlighted the benefits of their involvement in schooling and provided opportunities for them to learn strategies that would assist them to support their students with homework. One aspect of the program that was crucial to its success was the support that was provided to parents to identify resources and opportunities in their home and local surrounds to support their students with homework tasks (Simweleba & Serpell, 2013).

Parental involvement in schooling

One study identified the impact of a program that aimed to support parents to ensure their young children were school-ready. Parents participated in a program aimed at developing a positive home environment to enhance the children's preparation for school (Pegorraro-Schull & Anderson, 2008). They received home visits from a practitioner, who supported them with information about child safety, child health, and child development (Pegorraro-Schull & Anderson, 2008).

Technology

The role of technology, or programs that incorporate technology, in improving outcomes for rural students was the focus of four studies. Three of these involved providing students with ICT equipment with the aim of influencing student achievement. The approaches included a virtual lab based on the Second Life application (Franklin, 2008) and a one-laptop-per-child policy (OLPC), whereby every student was provided with a laptop to undertake their studies (Ale et al., 2017). The second area of focus in the literature was on the integration of ICT in classroom pedagogy:

- One study involved the use of interactive whiteboards to develop literacy and language skills using visual supports to improve literacy and language development (Harlow, 2010).
- The second study measured the impact of a computer game-design course on the systems thinking skills of students (Akcaoglu & Green, 2019).

Summary

A common theme across these studies was the value of context-specific interventions that include genuine relationships with participants. This includes building on teacher and student prior learning, working with parents and community in an inclusive manner, and bringing perspectives from outside the classroom in. Together, these insights reinforce the importance of relationships built on shared understandings that value diversity and the importance of better aligning out-of-school experiences with those in the classroom. Notably, these are themes that also emerged in the interviews and focus groups undertaken in this research.

1.3.3 Limitations of the evidence base of the studies

An important consideration throughout this literature review was the quality of evidence that was drawn on to make conclusions about improving outcomes for rural students. Limitations in the studies that were reviewed included the following:

- 1. the way that rurality was considered in the studies,
- 2. the limited research conducted in Australia, and
- 3. constraints related to methodological approaches.

Many of these limitations may be due to the strict criteria used to screen articles for the literature review. The limitations are discussed in turn in the following sections.

Considerations of rurality

There are many definitions and understandings of rurality, ranging from structural demographic definitions to those that consider social and cultural notions of rurality. Many studies in this literature review identified rurality only as a structural construct, located away from metropolitan locations. Rural schools were usually selected as sites of study (e.g., the authors completed studies in 10 rural high schools) for a topic that could have been researched anywhere (e.g., professional learning), with no consideration of the importance of rurality. In many instances, there was no explicit rationale for the choice of rural classrooms, so it can only be assumed the interventions were designed to address educational disadvantage based on rurality. In doing so, the studies failed to identify why underperformance in rural schools may have occurred, why there was a need for the intervention in rural schools, or how the conditions that led to underperformance could be overcome. It would not be valid to claim that a study identifies ways to improve outcomes in rural schools when

the real focus of the research was, for example, on the impact of ICT to enhance students' education. A wider search of the literature would be required to make such a claim that there are no evidence-based practices proven to improve rural student outcomes. Most studies, even those that identified the importance of place-based practice, could potentially be just as effective if they were undertaken in schools outside rural locations. As a result, the literature provides little guidance as to how exactly to address issues of performance in rural schools.

Limited research, particularly in Australia

There was only a small amount of literature that met the criterion of identifying successful strategies to improve performance in rural schools, which means findings of the review must be interpreted with caution. A notable limitation is that the focus of the research in this review was skewed in terms of its geographical location. Most studies were conducted in the USA, with few studies from Australia. Caution is thus required in deriving implications from the review because the context of rural and regional schools varies along with policies in different countries. Some studies are now also outdated (such as the use of particular technological innovations) or they occurred in developing contexts where education practice and needs were very different from those in Australia. The literature often appeared in peripheral academic journals rather than those published by leading publishing houses and/or professional associations. This may be due to the way that rural education as a field is perceived rather than the quality of the studies and articles themselves. Interestingly, in the case of outreach and partnerships, much of the research with 'quality' evidence was seemingly not conducted by education faculty members; rather, it was conducted through outreach programs run by scientists, engineering faculty or psychologists, often using quantitative data collected using validated psychometric surveys.

Methodological limitations

The studies that were reviewed highlight issues with the methodological approaches used to identify evidence-based approaches to improving rural school outcomes. These include reliance on self-reported outcomes, the preponderance of short-term program evaluations, articles providing descriptions rather than evaluations of programs, small sample sizes, and over-claiming of causal relationships.

Many articles were excluded because they had drawn on a weak evidence base of self-reported outcomes of the initiative's organiser or participants, or on the self-reported perceptions of the participants. Many of the included studies used pre-/post-surveys on perceptions of the usefulness of the initiatives or self-reported changes to perspectives, but these were not validated by external assessments of knowledge or skill and did not use psychometrically validated surveys. Similarly, most of the tools used to measure the outcomes of the interventions were self-developed and lacked rigour in terms of their reliability and validity.

Another limitation is the time frame involved in the assessment of program outcomes. Many studies were excluded because they provided only a description of the delivery of a program rather than an indication of results (professional development, for example). Others provided only narratives about the program and why it was needed or were based on single sites and small cohorts of participants. Of the studies that were included, a limitation was the timing of the post-program evaluations that took place. It is rarely possible for research to demonstrate immediate improvement in student achievement, or to identify long-term improvements because of the focus of programs. Narrow foci are more likely to result in success because targeted attention is given to a particular area.

Finally, 'promising practices' are included in Appendix 1. This refers to initiatives identified in a review of the 'grey literature'. These reports have not been peer reviewed and are often undertaken by advocacy groups and consultancy organisations. They do not meet the scholarly benchmark for evidence at this point in time, but they may well warrant investigation and evaluation in future trials.

1.3.4 Conclusion



It is clear from this review that there are few evidence-based practices and strategies that support the improvement of outcomes in rural schools. The lack of evidence-based practices and initiatives highlights the urgent need for rigorous research to identify what might be successful in improving education outcomes for rural schools.

The review highlighted a need to address the quality of evidence in current research to move forward. The high number of studies in the initial screening process demonstrates that there are many studies that were conducted in rural schools, but the impact they have on students and their outcomes is not clear. Many studies simply described an intervention or program in a rural school and did not identify how the intervention or program impacted outcomes for rural schools more generally. Other studies lacked evidence that they specifically improved outcomes for rural schools and could have occurred in a metropolitan school with the same results. Studies often relied on self-reported improvement, and initiatives were often evaluated over short time periods, providing no understanding of the longer-term impact on outcomes. Such studies reinforce the issues rural schools experience because there are no clear indications that they improve outcomes.

A further issue is the definition of improved outcomes for rural schools. In this review, we focused on outcomes that were measurable and related to readily measurable outcomes such as increasing student achievement in literacy and numeracy, school completion, attendance, and higher school certificate outcomes that are key components of reporting for schools and the DoE. However, in the literature, outcomes may be different from these. For example, a measure of improved outcomes for a student may be that they are more connected and engaged in their community, a factor that would not meet the criteria used for this review. Improved outcomes are not always able to be measured, nor measured routinely if measurement is possible. As a result, some improved outcomes may not be evident, using current definitions and measures of outcomes.

It is also important to note that many of the studies that met the criteria for inclusion in this literature review did not include anything that addressed the specific context of rural schools. Rather, it is possible that they could have been conducted in any school, in any location and shown similar results. These include studies that aim to improve student outcomes by working with parents to support their involvement in schooling, or a teaching intervention that involved the use of technology. Rural schools have unique social, cultural, geographical, and population-based needs (Green & Reid, 2021; Reid et al., 2010) that require specific attention to support student outcomes.

In summary, this review identifies an urgent need to address the lack of evidence-based practice that improves outcomes for rural schools with attention to the following key issues.

There is a need to build the evidence base for successful practices that improve rural school outcomes:

- It is necessary to identify how to define 'improved outcomes' in rural schools.
- More work is needed to identify what counts as 'evidence' of improved outcomes.
- Studies need to specifically identify and address issues that relate to rurality.

The literature review highlights the current limited evidence base and researchers' predilection to consider all schools and communities as the same regardless of location. Similarly, the research reported here is delimited by the time at which it was undertaken with a backward-looking frame of reference. It does, however, identify areas where multiple interventions may be undertaken and that, with rigorous research design and evaluation methodologies, could significantly grow the research base. In particular, research using a rural student sample is needed in relation to the areas that schools and the DoE publicly report on – literacy and numeracy achievement, attendance, post-secondary completion, and higher school certificate achievement, as well as measures of wellbeing. The drivers of improvements are often considered universal, and may well be, but this has not been

established using a meaningful sample of rural students or teachers. It is conceivable that given the distinctness of 'being rural', a notion explored later in this report, the particular approaches to these interventions may involve particularities for the rural context.

Opportunity 1-1: The DoE commission quality, large-scale longitudinal research on approaches to lift student outcomes in rural and regional schools.

Sub-opportunities:

- Ensure that a specific focus of any large-scale research is place-based learning.
- Instigate and employ a high-quality research design focusing on a range of observable and verifiable outcomes that meet scholarly review.
- Rigorously test and trial promising practices.



2 Intersections



Several consistent themes were evident throughout the research that are common threads across the chapters of this report. This chapter addresses them as 'intersections' between education and broader social issues. These include the importance of vibrant rural economies and the provision of social services – particularly health – as the pre-conditions of improving rural education. The fundamental issues that emerged were valuing local contexts in the setting of targets, providing greater flexibility in policy implementation, and supporting staff and students to develop greater autonomy.

A deep interdependence between the lived experience of rurality and satisfaction with the current experiences of education in rural communities is evident, with vibrant communities dependent on a symbiotic relationship between schools and community. However, harnessing the positive potential of rural education is constrained by the ongoing challenges of staffing, changing rural economies, and broader social service provision.

A consistent and dominant theme throughout the research was the critical importance of community health. A healthy community provides a positive social environment for the social and emotional development of children and youth, as well as the development of positive aspirations. This includes a well-functioning social system, a growing local economy with diverse pathways for young people, and access to the necessary social services. The presence or absence of these factors in the research clusters aligned with variations in outlook. This could be seen by community members reflecting on social and economic changes, school staff highlighting differences from other places, and children's perspectives on their communities and futures. A healthy community was also central to perspectives on overcoming the perennial challenge of school staffing.

The rural social space model framing this research references the local economy and community health as key elements of producing the conditions experienced in, and across, communities. Health and economy are themes that sit under many issues discussed in subsequent chapters. Together, they exert a strong influence on outcomes in non-metropolitan schools. 'In school' influences on student achievement are often cited as being the main area that systems can focus on to improve outcomes. However, Hattie (2008), upon whose germinal research this logic draws, identified that up to 60% of the influence on student achievement is related to students and their home environment. Improving the health issues and economic conditions that influence children's development and their home environments should be a major focus of efforts to improve outcomes for students in rural and regional locations (Hattie, 2008).

2.1 Local economies

The local economy has an influence on the experiences children bring to school by creating the social conditions they experience. This in turn influences aspirations. Community members often referenced the changing local economy as a major issue. Unfortunately, this was often in reference to the decline of industries and the service sector. The reduction of many sectors in these communities is evident in the community profiles presented in Chapter 3. Teachers saw this as a major problem that undermined student optimism and limited the range of careers visible to them. It was also reflected in the student interviews. For many, a 'why bother' attitude prevailed, while for some it created motivation to leave. Both are negative outcomes for these communities as they reduce the human capital of the future population.

The situation was slightly more complex in two towns experiencing economic growth linked to resource extraction. The growth of these industries was seen positively as it provided employment

opportunities and flow-on growth in the service sector. These positive sentiments were, however, tempered with caution from many participants about the possible narrowing of employment to dominant industries, and concern about the sustainability of employment in these industries once established.

The intersection of distance from larger towns and local economies has also produced additional challenges in the more outlying communities involved in the research. Seemingly driven by affordable housing, it was reported that many people experiencing long-term economic disadvantage had been moving to these communities. It was suggested that eligibility rules for income support payments were also driving this phenomenon. Many newer arrivals experienced a degree of transience, addiction issues, mental health concerns, and were typically not employed. This trend was evident in the community profiles insofar as they captured declining levels of community education and the increasing age of populations, with many retirees among the new arrivals. Compounded by a lack of available transport, these trends are changing the dynamic of the communities and the schools that serve them. While many of these contextual challenges are beyond the remit of the DoE, they have profound implications for its work.

2.1.1 Access to health and social services

The provision of health and social services are beyond the responsibility of the DoE and are often Commonwealth rather than State responsibilities. They are, however, a pre-condition for successfully engaging in education, with epidemiology research and the Federal 'Gonski' reports reinforcing this well-established relationship. The complexity of understanding the responsibilities for providing these services was consistently raised by participants, both in terms of the lack of accessibility and the frustration at what was often seen as a lack of accountability. Community members and teachers often referenced problems with accessing medical services and other social support services. It was generally considered that the DoE provision in these areas (e.g., school counsellors) was based primarily on student numbers and was not sufficient given the range of challenges these schools and communities faced.

For many teachers and principals accessing school counsellors, community health services, social services, and specialist medical services to diagnose and treat acute issues was a major cause of distress. This was exacerbated by the DoE's reliance on a formal diagnosis for access to supports in contexts where such diagnoses are unavailable due to a lack of access to the relevant specialist/s – which is often due to cost and location and exacerbated by a lack of transport. Principals and teachers uniformly raised the challenges that this created in supporting learning and maintaining a safe school environment, while community members frequently described the consequences of the lack of this support as a major reputational risk. While comparatively less access to health services was accepted as a consequence of living in a non-metropolitan community, those who had lived in the community for a considerable period of time felt the situation had been getting progressively worse. Indeed, a crisis was commonly referred to:

"The lack of services and the lack of access will always remain one of the biggest issues, and then that flows down onto the kid and then into the school. And that's what I see: it's a perennial issue across every community." (Connie, Non-school-based DoE personnel).

Opportunities for a 'wrap-around' approach need also to be read in the context of a concern about the lack of childcare and early childhood education. In this case, the need for minimum numbers of children, and the costs involved, were described as significant impediments that led to students entering school behind their expected benchmarks and reducing potential employment.

Principals expressed frustration at being held accountable for targets set centrally when many of the services they needed to achieve them were outside of their control. Indeed, as one interviewee expressed, the school "tends to be one of the last government institutions being withdrawn from the community" (Jim, Non-school-based DoE personnel), and that brings great pressures. The largest influences on what happens in school exist outside schools (e.g., social circumstances, health, employment, and limited technology).

The fact that these concerns were raised in spite of the existence of the Specialist Allied Health and Behaviour Support Provider Scheme suggests that the scheme is somehow missing the mark. The scheme is intended to provide access to services in exercise physiology, occupational therapy, physiotherapy, speech pathology, and behaviour support – including in rural and regional areas – using in-person or telehealth provision. None of the participants in the research referred to the Scheme.

Opportunity 2-1: A coordinated approach across NSW and the Federal Government is required to improve the economic conditions and access to social and health services. These are necessary pre-conditions for improving educational outcomes.

Sub-opportunities:

- Work with NSW and Federal agencies to implement a whole-of-government approach to developing the social and economic conditions of rural communities.
- Work with NSW and Federal agencies to implement an integrated model of 'wrap-around' support in rural schools, including access to early childhood learning, social services, and health, with a dedicated and funded coordinator role to avoid adding to the burden of rural and regional school leaders.
- Work with other NSW Government departments to develop a coordinated state regional development strategy across departments that incorporates rural and regional industry, environment, and population characteristics.
- Develop a coordinated state rural and regional development strategy across departments with annual reports on progress.

2.1.2 Technology

The provision of affordable phone and Internet coverage was a major issue, particularly in the smaller communities and for students living outside of towns. This lack of coverage or affordable connection was seen as hindering students' ability to do schoolwork outside formal hours. While access and bandwidth on school sites has reportedly been steadily improving, there is an impression that access outside of school is declining. This was heightened during the recent pandemic, where many students did not have the equipment needed to properly engage in learning. Instead, many schools, particularly in smaller communities, reported preparing hard copies of lesson materials.

Concerns were raised about the Rural Access Gap initiative as an example of the 'one-size-does-not-fit-all' approach that many participants in this research perceived to be in operation. While valued as an initiative and for improving Internet bandwidth and connectivity, principals were concerned about the lack of involvement in decisions about their needs. It was felt there was not enough flexibility or site-specific needs assessment and, instead, was experienced as a rollout of a pre-determined suite that did not take into account the physical environment or consider a school's own past purchases. There was also concern that it may be a precursor to moving curriculum access online and reducing the specialist provision of teachers.

Opportunity 2-2:

Develop a technology resource bank, including access plans, to ensure that the technology available in schools through the Rural Access Program is available in all homes in these communities.

2.2 Valuing rurality

A healthy community is one that feels valued. This value comes through a community being understood on its own terms, having appropriate and equitable access to services, and being included in decisions that impact its future. Throughout this research, participants provided responses that indicated feeling undervalued and often misunderstood. To better value these communities, a deeper understanding of rurality as a context for social experience, and student prior experiences, is required. The rural social space model and applying the concept of a 'rural lens' to policy (presented in Chapter 1) provides a framework for achieving this.

For the participants in this research, rurality – the experience of being rural – is at once valued as an identity yet often denied or marginalised in modern society. Indeed, it was common for study participants who identified as rural to describe rurality as just "a different type of lifestyle" (Parent 2, Cluster 3) that afforded different experiences of the world and relationships that they valued. These were often seen as at odds with the values of modern schooling. Many principals, teachers, and community participants explained that the experience of being rural Is more about perspectives than the reality of non-metropolitan areas. Often, the perceptions of rural communities by those outside of these communities have been built on perspectives that are not true. However, often the images promoted of non-metropolitan communities and the schools, or the lack of their promotion, is problematic for conveying their attractiveness. There is an inaccurate emphasis on the more pessimistic aspects of rural and regional communities and education in these places. This is not only inaccurate, but the narrative, policies, and reports on rural and regional communities and education are often framed using a deficit discourse. There needs to be a greater acknowledgement and promotion of the benefits of living and working in these areas, the many success stories at local public schools, and how such change in narrative can benefit these communities. Such benefits that emerged in the research included the school-community connections, strong relationships between teachers and parents, and the ability to connect learning to students' experiences because of these relationships. Further, some teachers referred to positives such as the physical environment of the community being close to nature, open spaces, and the short commute. Additionally, community members referred to the positive impacts some leaders and teachers have had (now or in the past) of transforming the local school.

Three themes emerged when interview participants were asked to define their location. In order of frequency, these themes were equity, the relativity of rurality, and size and distance. These themes map directly to the rural social model, with the first (i.e., equity) related to issues of access as outlined in Section 2.1. In defining their communities, the size of the community and the geographical distance to larger centres were a common description:

"We're still sort of big enough to, what is the population? About eight thousand. So, that's still enough within the community. I wouldn't say we're too far removed; we're still around a few big towns. But any further I would start sort of thinking, start to get a little bit more remote because if you got a little bit further enough, you know... that's just an hour or so away and that's scarce." (Brent, Teacher, Cluster 2)

All participants described their location as rural or "largely as a farming community" (Natalie, Community member, Cluster 1), highlighting how their social space was primarily in identifying their location. This is an important consideration for connecting school and community.

However, experiencing rurality was complex, especially for the many school staff who have not grown up in these locations. The sense of connection and community in many non-metropolitan areas provided a sense of purpose for some staff, while for others it was experienced as claustrophobic. The change in the social composition of many communities was seen to be undermining the sense of community that they valued. Similarly, while some teachers found the environment and distance challenging, others spoke of these as positive environmental factors, along with not being in big busy centres, shorter commutes, and more pleasant aesthetics:

"The size of the place is probably the thing that has the biggest impact here, in that everybody knows everybody literally." (Sarah, Principal, Cluster 1)

The positive aspects of community and purpose, and environmental affordances, do however come with challenges, linked to changing demographics, location, and size. As one newly appointed principal expressed:

"It's extremely challenging. Had I realised – I don't know that I would have possibly applied for the position had I realised it was so complex." (Principal, Cluster 3)

Such challenges often intersected with how 'the system' and society at large understands and engages with rurality as a lived experience of value and meaning. This can be seen in concerns about targets that do not make sense in their context, the inclusion of rural perspectives in policy and the curriculum, a general lack of awareness of their lived experience, and a feeling that their places were not valued in modernity. While many of these perceptions were influenced by broad social trends, it was felt that education had a key role in changing such perspectives.

Opportunity 2-3: Change the narrative about rural places to be positive and reflective of unique and increasing opportunity.

Sub-opportunities:

- Identify sites of positive practice and impact, investigate their characteristics, and share these through a coordinated strategy.
- Audit DoE documents and plans for direct and implicit deficit constructions of rural schools, and remove all such references.
- Ensure all new and revised DoE documents and plans avoid direct and implicit deficit constructions of rural schools.

2.3 Appreciating context

'Context' is a term often used as a broad reference to the conditions unique to each school and community. We have defined it in terms of the rural social space model. Context is often used to explain why some approaches work, how initiatives are framed, or to represent the limitations on practices in individual schools. Although the DoE is a large system, there was a strong view that many policies, initiatives, and targets do not work in rural and regional schools. Further, on account of their context, initiatives in some rural and regional schools were seen as not applicable to all. A common view expressed by many principals, and echoed by staff and community members, was that what was perceived as success in some communities was not seen as success by the DoE, and that this hindered their ability to promote their successes, thereby entrenching dissatisfaction:

"I'm pursuing targets that are imposed on cohorts of [a small number] kids is just an absolute waste of everyone's time, and you got to give lip service to something [...] it just further exacerbates that feeling of what – what am I doing? Like copping it from all sides right now and it's not real pleasant. You're trying to – like, I really care about this place and I really care about the kids, like I do. But it's just, it's making it harder when people, they don't get it, they just have no understanding." (Shaun, Principal, Cluster 1)

Members of all participant groups talked about the culture, tradition, and the identity of their communities, key demographic shifts in their regions, and the dominant industries and opportunities. There were clear differences between the comments and descriptions from participants from and within the three clusters, indicating that these rural social spaces – or contexts – were distinct. Some communities were still largely farm-based, though this sector is decreasing in the employment it offers. Other clusters were experiencing greater growth and had plans for further expansion, especially in association with resource extraction industries and the services and

institutions that follow on from that. None of the clusters seemed immune to growth in the lower socio-economic demographic, nor to the associated complexities. There was also an increase in the proportion of the population identifying as Aboriginal and Torres Strait Islander. These cultural, demographic, and economic factors affected each school and community differently, as well as their ability to meet imposed targets and implement mandatory policies where these did not adequately account for local circumstances.

There was concern among principals and teachers about PL not being relevant to their needs and perceived by some as a waste of time. Much available professional development was seen as not applicable or relevant to non-metropolitan schools, with presenters typically having no understanding of rural and regional contexts. This was a generally held perception across a range of areas of professional development, from curriculum suggestions that do not recognise their location of class size and distribution, or the size of the school and proximity to others, through to wellbeing programs that do not understand the limitations of rural communities in accessing services. Many participants felt much mandated PL was imposed and designed to meet an administrative risk. The fact that much PL was online for them, while their peers in the city had face-to-face opportunities and its associated networking, or that it was offered in locations inaccessible to them, reinforced the perception that they were not valued.

Opportunity 2-4: Ensure that policy and compliance approaches provide greater room for local flexibility to develop implementation strategies and targets in recognition of the distinct nature of rural and regional communities.

Sub-opportunities:

- Give greater weight to locally developed targets in school planning and resource schools to develop these.
- Base growth targets and benchmarks only on factors under schools' direct control.
- Establish a rural executive role in all rural and regional schools to support the leadership workload. The principal's role is diverse and carries the additional burden of community development in these communities.
- Design principal preparation programs to prepare aspiring rural and regional principals for the complexity of their distinct specialist role.
- Revise the role of Director, Educational Leadership, or institute a new role to focus on support rather than compliance and provide specific professional learning to lead in rural and regional contexts.
- Provide targeted, bespoke professional development that is accessible to staff and based on embedded processes to support their self-determined needs.

Opportunity 2-5: The NSW Government and the DoE adopt a 'rural lens' approach to policy. Policy needs to be tested for its applicability in a diversity of rural contexts before being implemented.

Sub-opportunities:

- Develop a policy evaluation framework that requires a 'rural test' before being ratified.
- Funding cycles need to realistically recognise the time needed to develop, implement, refine, and assess new initiatives.

2.4 Centrality of staffing

The challenges of ensuring schools are consistently staffed with appropriately prepared and qualified teachers was a dominant theme in this research. As expressed in stakeholder feedback on draft opportunities, initiatives aimed at addressing concerns rely on schools (and associated services) having staff. The recent review of rural and remote incentives in NSW public schools (NSW DoE September 2021) overlapped with this research, and the perspectives put forward in that report were echoed by our participants. In this chapter, we provide comment on staffing with the aim of ensuring teaching in rural and regional locations is a rewarding professional experience. This is dependent on ensuring these communities are attractive places to live and work and that their uniqueness is recognised.

Principals reported that the devolution of responsibility to secure staff had in many instances become the biggest drain on their time, taking them away from their core work of leading the school. This was reflected by community members and students who reported that the constant churn and unfilled positions left them with a sense of not being valued. Staff reinforced these perspectives with reference to the disruption to learning programs and professional relationships.

Dominant incentive-based approaches to attracting staff to rural and regional schools reinforce that these locations are poor places to work and do not focus on supporting the rewarding professional work undertaken in them. Considered in conjunction with issues of autonomy support (described below), valuing rurality and better connecting teaching with students' experiences suggests that a reframing of the staffing approaches may be possible.

These views coalesced around the value of developing local staff and career pathways that valued the distinct ways schools operate in rural communities. Participants discussed how views of rural and regional areas vary depending on where an individual is from, their personal preferences, as well as their different experiences. Several teachers referred to perceptions of teachers in metropolitan areas about the value of rural and regional teaching. Perceived impediments to transferring included a view that, in the merit selection system, non-metropolitan teaching was often a negative in applying for a position (back) in the city or a larger school. As one respondent who expressed a deep connection with their lived rurality pointed out: "They wouldn't want to come here basically [...] so they'd probably describe it as the sticks or way-out bush" (David, Teacher, Cluster 1). This of course needs to be weighed against the potential benefit of the new ideas, perspectives, and skills that newcomers bring.

Opportunity 2-6: Staffing should become the responsibility of the DoE, not individual schools.

Sub-opportunities:

- Establish a dedicated staffing officer for each school cluster to understand the needs of each school. This would provide bespoke approaches to staffing where appropriate and ensure that broadly applicable policies adopted a rural lens.
- Enhance career pathways for rural and regional school staff through a focus on professional practice rather than external incentives. Develop local human capital including 'growing your own' staff for workforce and leadership sustainability.

2.5 Autonomy support

Survey data showed that autonomy-supportive teaching and leadership practices that foster intrinsic motivation and encourage independence were found to have a significant relationship to student and teacher satisfaction. Autonomy-supportive practices focus on nurturing people's internal motivation to help them find value in what they do through, for example, listening to their perspectives, encouraging questions, providing meaningful choices, and giving rationales for work. Both the student and teacher survey data revealed that perceptions of autonomy support are linked

with many important educational and work outcomes including students' self-efficacy and teachers' job satisfaction. These findings are presented in detail in Chapter 4.

2.6 Bullying

The issue of bullying arose persistently in a number of interviews and focus groups with teachers and students and was perceived to be an issue in some schools by some community members. Reinforcing this concern, bullying also emerged as a significant issue in surveys, with differing perceptions of its prevalence. There were almost certainly differing understandings of what bullying is that may have impacted responses.

The interview data showed that some of this difference aligned with the changing nature of some of the communities studied. Specifically, there were differing expectations of schooling between families who had been in the communities for generations and newer arrivals with a range of social and economic disadvantages. These circumstances appeared to create pressure on school leaders, which in turn impacted their relationship with staff, as perceived by staff. Taken together, there appears to be a major reputational risk.

The survey results from teachers, principals, students, parents, and community members revealed that stakeholders in rural schools have some conflicting perspectives on the occurrence of bullying in schools. Students, teachers, and principals were asked to what degree they agree with the statement, 'Students are not bullied at this school'. Similarly, parents and community members were asked to what degree they agreed with the statement "At the local school, bullying is not an issue". The results were aggregated across all schools in order to keep individual schools and communities anonymous.

Comparison of the overall percentages revealed that parents were the most concerned stakeholder group, with 60.7% of parents either disagreeing or strongly disagreeing that 'At the local school, bullying is not an issue'. The other stakeholder groups reported lower percentages in comparison: students (49.8%), teachers (33.0%), community members (31.8%), and principals (20.0%). These differing perspectives indicate that, overall, stakeholders appear to have varying views of whether bullying is a problem at schools. While there may be school-level differences in bullying occurrences, the overall higher percentage of principals who consider bullying to not be a problem indicates that some school leaders may have contrasting perceptions of bullying than other stakeholder groups.

Table 3: Multiple surveys: Comparison of responses about bullying at school

	Response	Students (%)	Teachers (%)	Principals (%)	Parents (%)	Community (%)
1	Strongly disagree	32.7	11.7	0.0	23.0	13.6
2	Disagree	17.1	21.3	20.0	37.7	18.2
3	Neither agree nor disagree	28.4	29.8	10.0	18.0	45.5
4	Agree	14.0	31.9	50.0	18.0	18.2
5	Strongly agree	7.7	5.3	20.0	3.3	4.5
	Missing data	15.9	6.0	16.7	14.1	12.0

Note. The percentages shown are the valid percentage of responses, which does not include missing data. Missing data for each stakeholder group is listed in a separate row. The statement for students, teachers, and principals was: "Students are not bullied at this school". The statement for parents and community members was "At the local school, bullying is not an issue".



3 Methodology



The aim of the Rural and Regional Education project was to conduct robust high-quality research in partnership with the DoE to better understand what the DoE can do to assist schools in remote and rural settings to lift educational outcomes through tailored and differentiated support.

The key project outcome was to build a stronger evidence base to inform tailored support to schools and support context-specific policy decision-making and/or policy adjustments aimed at more effectively, efficiently, and sustainably improving the outcomes for students in rural and regional public primary schools, high schools, and central schools in NSW.

This project used a mixed-methods approach:



A key aspect of the project was the analysis of existing datasets held by the DoE. Various analytical techniques were used to provide local insights as well as look at connections between a range of variables and students' academic and wellbeing outcomes, both within the participating school and more broadly.



In-depth case studies of 17 NSW Government schools³ were conducted across three cluster areas in NSW. The case studies were designed to access the perspectives of a broad range of participant groups within and outside of the participating schools using a variety of data collection methods.

The research was conducted by a team of researchers from the University of New South Wales (UNSW), the University of Canberra (UC), and Social Ventures Australia (SVA).

3.1 Research objectives

The objectives of the project were as follows:

- 1. Through deep engagement with school leaders in the specified clusters of schools, acting as a critical friend, and through this process understand, capture, and analyse contextual factors impacting rural and regional school improvement.
- 2. Undertake quality research to review the impact of current DoE policy and program implementation on rural and remote schools with a view to identify opportunities to support school improvement.
- 3. Develop and establish a creditable research/evidence base that can inform policy development, program implementation, decision-making and other research projects within the DoE. The research/evidence base should consider specialised policy settings and related strategic approaches that will address the disadvantage and relative underperformance of rural and regional schools.
- 4. Identify the evidence to inform the DoE how educational services and other departmental business units can provide context-specific, tailored, and differentiated support for schools in regional and rural settings.
- 5. Define the optimal scope of context-specific, tailored, and differentiated support solutions to maximise impact to improve P-12 student learning outcomes across rural and regional schools.

³ The schools were selected by the Department.

3.2 Research questions

The research team identified the following research questions to drive the research:

- How can the DoE assist identified schools in rural and regional settings to lift educational outcomes?
 - a. How can the DoE use context-specific, differentiated, and tailored approaches to further support rural and remote schools to succeed on their improvement journey?
 - b. What is the optimal scope of context-specific, differentiated, and tailored support solutions to maximise (value-added) impact on the improvement of P-12 learning outcomes in rural and regional schools?
 - c. What new opportunities are there to improve learning and wellbeing outcomes in rural and regional schools?
- 2. What is the impact on rural and regional schools of current DoE policy and program implementation?
 - a. What variations are there in patterns of impact and expectations across rural and regional schools, regions, and socio-economic quartiles?
- 3. How could the DoE's policies impact schools' capacity for improvement and how might systems resources and tools be optimised?

3.3 Participants

In total, 17 NSW Government schools across three clusters participated in the research. The schools were identified and invited by the DoE to participate in the research project.

The schools were a mix of primary schools (8), central schools (6), and high schools (3). The schools ranged in size from 41 students to 614 students. The numbers of each school type in each cluster are shown in Table 4.

Table 4: Clusters and schools

Cluster	School Type
Cluster 1	6 x Central schools
Cluster 2	3 x Primary schools
	2 x High schools
Cluster 3	5 x Primary schools
	1 x High schools

In total, eight participant groups were invited to participate in the research project. Table 5 presents descriptions of the participant groups.

Table 5: Participant groups

Participant Group	Description
Principals	Were currently leading a school included in the project
Teachers	Were currently teaching in a school included in the project
Students	Were currently enrolled in a school included in the project
Parents & carers	Were the parent/carer of a child/ren currently enrolled in a school included in the project
Community members	Were currently residing in an area nearby a primary, central, or high school included in the project
Stakeholders	Representatives from stakeholder groups that were involved in different areas of education, and more specifically, rural and regional education
Non-school-based DoE personnel	Had responsibility related to rural and regional education in NSW
Other ⁴	Other teachers and principals that were currently working, or had previously worked, in a rural and regional school in NSW

3.4 Cluster descriptions

In this section, we describe the three clusters in which the 17 schools were located. The descriptions are based on the Community Profile data from the Australian Bureau of Statistics (ABS), from the census years of 2006, 2011, and 2016. State Suburb (SSC) level was considered to inform the local demographic data. The Statistical Area Level 2 (SA2) was considered to inform the regional demographic data in 2011 and 2016, as well as the Statistical Local Area (SLA) in 2006.

The catchment region for Clusters 2 and 3 was the same for all locations. In these two catchment areas, data from the main urban centre, identified in the ABS as Statistical Local Area 2 (SLA2), was added to the Region SA2 as part of the whole catchment area, as these centres were included in the regional data in 2006.

The approach was different for Cluster 1, as most of the towns related to different catchment areas. Variations to the level of data for the locations and catchment area are specified in Table 6.

48

⁴ These participants were only involved in the forums.

Table 6: Level of ABS data used for each of the locations and their related catchment area

Cluster	Location	2006	2011	2016	Catchment area	2006	2011	2016
1	Town 1	SSC	SSC	SSC	Regional town 1	SLA SLA	SA2	SA2
	Town 2	SSC	SSC	SSC	Regional town 2	SLA	SA2	SA2
	Town 3	SSC	SSC	SSC	Regional town 2	SLA	SA2	SA2
_	Town 4	SSC	SSC	SSC	Regional town 3	SLA	SA2 R SA2	SA2 R SA2
	Town 5	SSC	SSC	SSC	Regional town 3	SLA	SA2 R SA2	SA2 R SA2
					Regional town 4	SLA	SA2	SA2
	Town 6	SSC	SSC	SSC	Regional town 5	SLA	SA2	SA2
2	Town 7	SSC	SSC	SSC	Town 10	SLA	SA2 R	SA2R
	Town 8	SSC	SSC	SSC			SA2	SA2
3	Town 9	SSC	SSC	SSC	Town 9	SLA	SA2R	SA2R
	Town 10	SSC	SSC	SSC			SA2	SA2
	Town 11	SSC	SSC	SSC				
	Town 12	SSC	SSC	SSC				
	Town 13	SSC	GL/TB SSC	SSC				

Table notes: SSC – State Suburb; GL – Gazette Locality; SLA – Statistical Local Area; SA2 – Statistical Local Area 2; and SA2 R – Region Statistical Area Level 2.

3.4.1 Cluster 1

Cluster 1 was the most diverse cluster in terms of population, education, and economic trends, and included six distinct catchment areas.

The six catchment areas differed in terms of population trends, with some having experienced a decline and others growth. There had been an increase in the proportion of the populations that identified as Aboriginal or Torres Strait Islander. However, the proportion of growth for this cluster was much smaller than in the other clusters, ranging from 1–5% of the population, with some locations showing a smaller proportion than in NSW (2.9%).

For this cluster, all but two of the catchment areas had experienced a decline in the number of people attending an educational institution. This might be linked to the ageing population in all the catchment areas in this cluster. This was consistent with declines in enrolments in primary and high schools. However, one catchment area showed an increase in enrolments despite a decline in population.

Regionally, there has been a decline in the number of people working in agriculture. However, agriculture was still an important industry of employment for all catchment areas in this cluster.

Some catchments relied solely on agriculture, while others placed similar importance on manufacturing, transport and, to some extent, public administration and safety.

3.4.2 Cluster 2

Cluster 2 included one catchment area and two locations. Both locations had experienced slight increases in population since 2016. Like Cluster 1, there had been an increase in the number of people identifying as Aboriginal or Torres Strait Islander. In 2016, Aboriginal and Torres Strait Islander peoples represented 12–16% of the population of this catchment area.

In general, the population was ageing in this catchment area, and like Cluster 1, this might be linked to the decline in the number of people attending an educational institution in this catchment area. However, this catchment area showed an increase in the number of people with higher degree qualifications, which might suggest a level of in-migration.

This cluster had experienced a decline in the number of people working in agriculture, and an increase in the number of people working in healthcare and social assistance, most likely linked to the aforementioned ageing population. There had also been a decline in the number of managers, which may be linked to the change in industries providing major employment opportunities, and the decline in agriculture.

3.4.3 Cluster 3

Cluster 3 included one catchment area and four locations. Only one of the locations had experienced patterns of population, education, and economic growth.

Three of the four locations had experienced varying degrees of population change. Like the other two clusters, the number of people identifying as Aboriginal or Torres Strait Islanders had increased, representing between 8 to 12% of the population in 2016. Like the two other clusters, the population of these catchments has been ageing, in some areas more so than others.

Three of the locations in Cluster 3 showed a decline in the number of people attending an educational institution, while one represented growth. In general, the number of people attending primary and secondary schools showed small growth.

Cluster 3 had experienced a boom in mining, greater than in the other clusters. However, the one location that still relied on agriculture as the main industry of employment was experiencing greater general decline, while the locations experiencing growth showed greater economic diversity, with mining and agriculture being less predominant than other industries (e.g., retail). Almost all locations had experienced an increase in employment in health care and social assistance, most likely linked to an ageing population.

Change in industry has been followed by changes in occupation, with most locations experiencing a growth in the number of machinery operators and drivers, especially in the growth location. In general, there has been a decline in the number of managers in the cluster, accompanied by the decline in agriculture, which was experienced differently across the different locations.

3.4.4 Aggregate cluster descriptions

The sites for the Rural and Regional Education project included 16 schools across three clusters, in outer regional NSW (a 17th school in the project was classified as 'remote' and has not been included in this descriptive overview). To provide context, without naming the schools, the descriptions below feature a series of tables and statistics for the clusters, and comparisons with other outer regional government schools, all NSW government schools, and outer regional nongovernment schools. The data is drawn from Australian Curriculum, Assessment and Reporting Authority (ACARA) data sets, which are publicly available at ACARA – Data Access Program.

Socio-educational advantage

As an initial measure of school context, we analysed the Index of Community Socio-Educational Advantage (ICSEA) drawn from ACARA datasets. The ICSEA was developed to enable fair and meaningful comparisons between schools. It is calculated to have a median of 1,000 and a standard deviation of 100. Typically, it ranges from approximately 500 (representing schools with extremely disadvantaged student backgrounds) through to approximately 1,300 (representing schools with extremely advantaged backgrounds).

The schools in the three clusters had an average ICESA of 873 in 2021 (Cluster 1 = 924; Cluster 2 = 861; Cluster 3 = 832), with each Cluster declining since ICSEA was first reported in 2008 (see Table 7). The average ICSEA for all government schools, and particularly those in outer regional locations, have been declining over the same period.

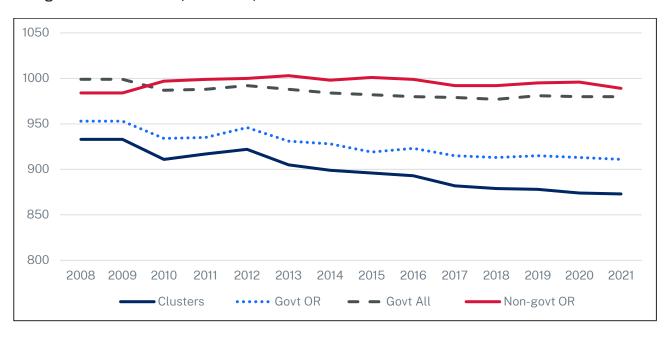
With an aggregated 6.43% decline across the clusters (Cluster 1 = -6.48%; Cluster 2 = -4.44%; Cluster 3 = -6.83%) over the period 2008–2021, there has been a sharper reduction in socioeducational advantage than other outer regional government schools (-4.41%) and all NSW Government schools (-1.90%). Significantly, over the same period, non-government outer regional schools have experienced a slight 0.51% increase in their ICSEA score.

Table 7: ICSEA score for cluster, outer regional government, all government, and non-government outer regional, 2008–2021

Schools	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cluster	933	933	911	917	922	905	899	896	893	882	879	878	874	873
Cluster 1	988	988	954	980	981	950	950	949	936	928	932	928	928	924
Cluster 2	901	901	894	883	891	893	891	876	879	874	864	868	861	861
Cluster 3	893	893	869	877	886	869	852	858	859	843	836	836	835	832
OR Govt	953	953	934	935	946	931	928	919	923	915	913	915	913	911
ALL Govt	999	999	987	988	992	988	984	982	980	979	977	981	980	980
NonGovt	984	984	997	999	1000	1003	998	1001	999	992	992	995	996	989

In addition to the decline, the gap between outer regional (particularly the clusters) government schools, and other government schools and outer regional non-government schools has grown (see Figure 6). This widening gap supports the priority focus of the DoE to support and resource outer regional (and other regional and rural) schools in ways that best facilitate improved outcomes for all.

Figure 6: Changes in ICESA (clusters, govt OR schools, all government schools, and outer regional non-government schools) over time, 2008–2021



Teachers

The functioning of a school is dependent on teaching staff. Table 8 displays the full-time equivalent teaching staff at the aggregate level for each of the clusters in the period 2008–2021. As a collective, the clusters have experienced a -2.9% change in the number of teachers (320.8 to 311.6). This contrasts with all government outer regional schools in NSW that grew an average of 4.0% (3,886.9 to 4040.4), and well below all government schools in NSW (+15.1%, 50,721.8 to 58,367.4) and non-government outer regional schools (+31.4%, 803.8 to 1,056.1). While the non-government schools in outer regional NSW are only 26% of government schools, they are the faster growing.

Table 8: Full-time equivalent teaching staff by cluster, 2008–2021

Cluster	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cluster 1	96	93	83	81	80	81	80	78	75	76	77	80	82	82
Cluster 2	127	123	120	122	125	122	124	124	123	123	123	126	128	127
Cluster 3	97	97	122	95	98	95	93	93	94	96	100	101	102	103

Note: Numbers rounded to the nearest whole number.

Enrolments

The vitality of regional and rural schools is dependent on student enrolments. Table 9 displays the full-time equivalent student enrolment at the aggregate level for each of the clusters in the period 2008–2021. As a collective, the clusters have experienced a -12.0% change in enrolments (3,661.2 to 3,223.4), slightly larger than all outer regional government schools at -11.0% (48,363.6 to 43,028.4), well below non-government outer regional that grew by 8.6% (11,684.9 to 12,689.5), and all NSW government schools, which grew by 9.7% (731,465 to 802,182.4) in the same period.

Table 9: Full-time equivalent student enrolment by cluster, 2008–2021

Cluster	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cluster 1	791	739	704	697	683	672	657	669	641	647	625	608	584	580
Cluster 2	1543	1499	1478	1529	1549	1595	1639	1618	1570	1564	1517	1500	1435	1390
Cluster 3	1328	1283	1253	1260	1263	1250	1238	1242	1235	1259	1288	1310	1307	1253

Indigenous enrolment

An under-addressed equity issue is Aboriginal and Torres Strait Islander access and participation in education. Table 10 displays the percentage of students identifying as either Aboriginal or Torres Strait Islander in the cluster schools (both aggregate and cluster-based) and comparators in all government outer regional schools, all government schools, and non-government outer regional schools.

Table 10: Percentage of Aboriginal or Torres Strait Islander enrolment, for cluster, outer regional government schools, all government schools, and non-government outer regional schools, 2008–2021

Schools	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cluster	17.1	17.9	18.3	19.4	21.4	21.1	22.4	22.7	24.6	26.7	27.3	28.7	31.3	34.1
Cluster 1	6.5	5.8	7.3	7.0	9.7	10.2	9.2	8.3	12.2	13.0	12.2	11.7	11.8	14.7
Cluster 2	24.0	24.0	25.4	26.8	26.8	26.8	28.8	29.6	30.2	31.6	34.8	34.4	37.6	40.8
Cluster 3	23.4	26.6	25.2	26.8	29.6	27.6	30.8	31.6	32.8	36.8	37.0	42.0	45.2	47.8
Govt OR	12.6	13.3	14.0	15.0	15.7	16.3	16.9	17.8	18.4	19.8	20.8	21.7	22.9	23.7
Govt All	7.5	7.9	8.3	8.7	9.1	9.5	10.0	10.5	10.9	11.3	11.7	12.2	12.6	13.1
Non Govt	6.9	7.4	7.3	8.3	10.8	9.9	10.0	11.7	12.5	10.6	11.9	12.3	13.3	13.9

The cluster schools have a faster growing enrolment of Aboriginal and Torres Strait Islander than other schools (see Figure 7). This brings a complexity to policy decisions focused on equity and inclusion.

2008 2009 •••• Govt OR — Govt All Non-Govt OR Clusters

Figure 7: Percentage of Aboriginal or Torres Strait Islander enrolment, 2008–2021

In summary, the cluster schools have experienced a period of negative growth (as measured by enrolments), increased Aboriginal and Torres Strait Islander enrolments, and a widening of socioeducational disadvantage compared with other outer regional schools across sectors.

3.5 Sample

The research involved six methods of data collection. Table 11 describes the participant groups involved in each of the data collection periods.

Table 11: Data collections by participant group

Data Collection	Participant Group
1. Analysis of existing DoE datasets	All NSW schools
2. Surveys	Principals, teachers, students, parents/carers, and community
3. Interviews	Principals, teachers, community, stakeholders, and non-schoolbased DoE personnel
4. Focus groups	Students in Years 5–12
5. Critical friends	Principals
6. Forums	All participant groups and others interested in rural and regional education

Table 12 provides a breakdown of the number of participants involved in the research by data collection method.

Table 12: Participant numbers

Data Collection	Participant Group	No.	Total
Data Collection 2 – Surveys	Principals	10	
	Teachers	101	
	Students	960	
	Parents/Carers & community	69	1,140
Data Collection 3 – Interviews	Principals	18	
	Teachers	17	
	Community & stakeholders	26	
	Non-school-based DoE personnel	15	76
Data Collection 4 – Focus Groups	Students	96	96
Data Collection 5 – Critical Friends	Principals	17	17
Data Collection 6 – Forums	Principals	8	
	Teachers	8	
	Students	30	
	Parents & community	5	
	Stakeholder representatives	12	
	Non-project teachers & principals	9	72

3.6 Data collection

The following section outlines the data collections and recruitment in more detail.

3.6.1 Analysis of existing DoE datasets

To complement the detailed in-depth case study work, we analysed existing datasets held by the DoE. The aim of this analysis was to provide additional local insights as well as establish connections between a range of variables and students' academic and wellbeing outcomes both within participating schools and more broadly.

The research team accessed data from the DoE, including:

- NAPLAN data;
- Tell Them From Me survey data;
- School enrolments, attendance, retention, and completion data;
- School and student characteristics data;
- Course and subject data;

- Principal and teacher data; and
- Funding and expenditure data.

The statistical analysis of these data sets used school and individual-level data from the DoE combined with demographic data at the SA2 level from the ABS. Together, these offered the possibility of uncovering causal relationships between educational outcomes and factors that can be influenced at the school level.

Data Approaches

Two approaches were used for the analysis of the data, outlined below.

Post-selection double lasso technique

This technique was used to estimate the effect of two candidate drivers of educational attainment. Educational attainment was measured by the average NAPLAN score (across students and the different NAPLAN tests) at a given school. The research team focused on Year 5 and Year 9 NAPLAN, although at various points in the analysis, Years 3 and 7 were considered. We note that NAPLAN scores are very far from a perfect measure of educational attainment; however, they are common across schools and provide a reasonable benchmark for our analysis. This does not preclude future work from considering alternative outcome variables using the methods utilised here.

By using all the variables available, plus squared and cubed transformations, and all two-way interaction effects, there was an extremely large number of potential control variables. The machine-learning algorithm mentioned above is well-suited to the use of a data-driven approach to selecting controls in this high-dimensional setting.

We encountered various limitations in our access to the DoE data, including speed of access, ability to perform logical operations (e.g., min, max), and linkages between different data sets (among others). This led us to focus on a single year (i.e., 2019) and on two main potential explanations for performance as measured by NAPLAN scores:

- **Professional development/capital:** The research team constructed a measure of professional capital based on the amount of professional development and training done by staff members at each school. The research team then constructed this variable from other elements of the DoE data set.
- School attendance: This is simply the average rate of attendance of students in each school. The research team particularly focused on "prior year" attendance when considering the impact on NAPLAN scores. Thus, for example, when considering Year 5 NAPLAN scores, the research team focused on Year 4 attendance from the previous year for that school.

There are natural reasons to think that both variables are potentially causal drivers of NAPLAN scores.

Inferential statistics

The research team compared the performance of students using various data sets. First, the research team used the three most recent years of *Best Start Kindy* data to compare the literacy and numeracy scores of Aboriginal and non-Aboriginal students.

An independent samples t-test was conducted by:

- 1. selecting students' Aboriginality status,
- 2. selecting school region,
- 3. selecting assessment domain,
- 4. splitting files into school years, and
- 5. testing students' literacy or numeracy scores by grouping their Aboriginality status.

Likewise, the literacy and numeracy abilities of Aboriginal and non-Aboriginal students in rural and regional schools were examined following the same steps described by filtering the school region to include only rural and regional schools.

Second, we used the three most recent years of NAPLAN data and analysed it using an independent samples t-test to explore differences in students' reading or numeracy scores at each stage – Years 3, 5, 7, and 9.

This was performed by:

- 1. grouping their Aboriginality status OR
- 2. splitting into rural and regional schools and metropolitan schools,
- 3. selecting the top two bands in each domain, and
- 4. using the school year as a grouping variable.

The bivariate correlations between reading and numeracy scores at each stage were also examined.

Third, we explored the school-level data of the *Tell Them From Me* (TTFM) survey. Schools were grouped by school type, region, and the combination of school type and region to examine the number and proportion of participating schools in each survey category. The results of this analysis can only be used to determine whether schools responded to the survey; they cannot measure their satisfaction with each survey item.

Fourth, we explored the employee data by grouping employees according to the region, the number of positions, age band, and gender to obtain descriptive statistic of the research participants. This analysis provides a general overview of metropolitan and rural and regional schools' employment patterns.

Advantages and limitations of analysis

Each data set contained millions of cases from NSW Government schools, including responses from hard-to-reach groups. The data provided reduced the time and costs associated with data gathering. Driven by large sample sizes, the results are more likely to be a relatively accurate representation of the population, with lower margins of error. In addition, the yearly collection of data provides an opportunity for longitudinal analyses, showing trends and patterns. However, due to multiple formats and multiple data warehouses used, access to and retrieval of data was quite challenging as it involved a high level of technical skill. This delayed the process, further compounded by fiddly procedures in data cleaning. In addition, access to some data was limited to school-level data, which limited the number of potential analyses that could have been done if student-level data had been provided. More importantly, the large amount of missing data also impacted the number of analyses conducted. Longitudinal analyses were impossible as list-wise deletion of missing cases gave an error output. Together, these limitations in data access and linkage have significant potential to limit the capacity of the Rural, Regional and Remote Education Policy Unit to seek the data required to undertake its work or engage in meaningful research to support the evidence base for policy reform. An improved data infrastructure would allow the Rural, Regional and Remote Education Policy Unit to meaningfully disaggregate data on rural students and examine the specific relationships to educational outcomes in rural, regional, and remote schools, and ultimately develop specific programs and practices to enhance educational provision.

Opportunity 3-1: The DoE should establish a single data portal to consolidate data custodianship and facilitate linkages across data sets.

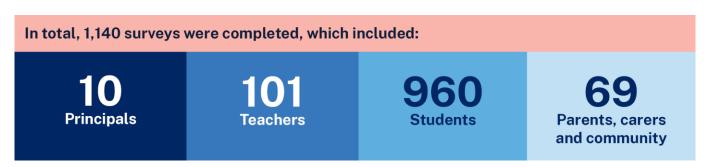
Sub-opportunities:

- Undertake a review of data policies and procedures in order to determine appropriate delegations for data ownership and access.
- Audit existing data sets to remove duplication, and update meta-data to reflect the actual level of data collected, and its form.
- Implement a unique student, staff, and school identifier across data collection and storage.
- Begin a systematic program of data linking.

3.6.2 Surveys

Data were collected through surveys with principals, teachers, and students from the schools that participated in the project, as well as from the parents and community members. In total, 1,140 surveys were completed, which included:

- Principals 10
- Teachers 101
- Students 960
- Parents, carers, and community 69



Participation was anonymous and voluntary. Participants could stop the survey at any time and, on average, surveys took approximately 20 minutes to complete. Consent was implied via completion of the survey.

The principal, teacher, and parent surveys were administered using Qualtrics⁵. An email invitation that included the Participant Information and Consent Form (PISCF) and an anonymous link to the survey was sent to each of the principals, inviting them to complete the principal survey. A similar email was provided to be shared with teachers and parents from their school.

The student survey was administered during class time in hardcopy as recommended by participating schools and the DoE. Each school was sent a package that included:

- hardcopies of the survey for students at their school in Years 5–12.
- participant information statements for students (PISs), and
- PISs for parents and carers with the option to 'opt out' on behalf of their child

The community member survey was administered via both Qualtrics and in hardcopy form. Recruitment was conducted via existing research team contacts, sharing the invitation and survey details with principals, using publicly available contact details and spending time in the

⁵ Online survey software program.

communities. Opportunities for local in-person data collection was limited by restrictions due to COVID-19.

3.6.3 Interviews

The research team conducted semi-structured individual interviews with principals, teachers, community members, stakeholders, and non-school-based DoE personnel. In total, 76 interviews were conducted, which included:

- Principals 18
- Teachers 17
- Community and stakeholders (including non-school-based DoE personnel) 26

Interviews were conducted online using Microsoft Teams or Zoom due to the COVID-19 public health orders at the time and consequent DoE guidelines. Interviews were recorded and transcribed with the permission of the participants and were 30–60 minutes in length.

The focus of the interviews was on participants' perspectives on their work or experience of school, the needs of their school, perceived opportunities afforded by their location, and ways that DoE programs and resources could support school improvement and capacity to meet their needs and targets.

3.6.4 Focus groups

Focus groups were conducted with students from Years 5–12 in 11 schools to ensure that the voices of students were represented in the data and informed the opportunities identified.

The number of students in each focus group varied from two to seven, with a total of 96 students participating in the 22 focus groups. The split in terms of primary and secondary school-age students was relatively even, as was the gender split.

Three locally retired principals were engaged to facilitate the student focus groups in each cluster. These facilitators were trained by the research team to ensure consistency in the approach and integrity of the data.

Parent/carer and student consent was sought; however, a student's right to withdraw was always respected, even if their parent or carer had consented to their participation. Parent and carers did not know if their child had participated unless their child had informed them.

The focus groups were up to 90 minutes in length and were audio-recorded and transcribed with the permission of the students.

3.6.5 Critical friends

Each cluster had a "critical friend", who was a member of the research team. Seventeen principals participated in this component of the data collection.

The role of the critical friend was to provide advice and support to each principal regarding their participation in the research. Detailed field notes were gathered that detailed what the critical friends had learned about the school context, culture, needs, and impressions formed. The field notes were only included in the project data with the permission of each principal. These data were important for capturing, analysing, and understanding contextual factors impacting rural and regional school improvement as well as to support the other qualitative and quantitative data gathered through the other data collection methods employed.

The frequency of contact with schools was negotiated between each critical friend and the principals. COVID-19 restrictions meant that most interactions were online.

3.6.6 Forums

Prior to finalising the opportunities from the project, we road-tested draft opportunities that came out of the data collections with each of the participant groups and with others with an interest in rural and regional education outside of the project (e.g., current and former principals and teachers from other rural and regional schools in NSW).

In total, 72 individuals participated in the forums:

- Principals 8
- Teachers 8
- Students 30
- Parents and community 5
- Stakeholder representatives 12
- Non-project teachers and principals 9

The aim of the forums was to discuss some of the key opportunities that came out of the research and to give participants the option to provide verbal or written feedback on these.

The forums varied in length from 60 to 90 minutes and in size from 1 to 10 participants. The forums were not recorded, only notes were taken.

The forums followed the same consent process as the interviews and focus groups. Written consent was sought for all participants and parent/carer consent for students.

3.7 Limitations

- Due to COVID-19 and the public health orders in place at the time of the research, we were not able to conduct the various data collections face-to-face as planned. This potentially impacted our ability to build rapport and engagement in the research, negatively impacting the numbers of participants in some data collection activities.
- It was particularly hard to engage the parents, carers, and community without being on the ground in the local areas surrounding the schools. The research team were not able to develop those contacts and networks.
- Timely access to DoE data and the quality of data (compatibility across data sets and degree of missing data) limited the analyses that could be undertaken.
- The single-year focus of the research, especially aligning with the pandemic, limited some of the claims that can be made. It is impossible to de-couple the impacts of the pandemic on the schools, students, staff, and community members.
- It is possible that the selection of the clusters may have influenced the findings of this research. Different clusters may have generated distinct insights. The role of context-specific dynamics is well-established, and while the research findings might be transportable to other contexts, they are not necessarily generalisable.



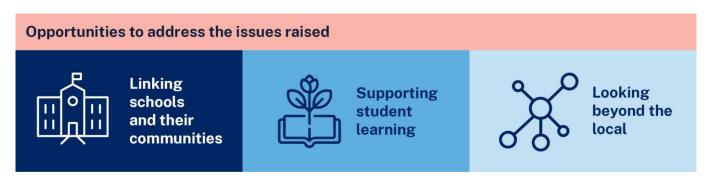
Students and Families

4 Students and Families



In this chapter, we report findings related to students and their families along with opportunities to address the issues raised. The chapter is structured around three major themes:

- Linking schools and their communities
- Supporting student learning
- Looking beyond the local



4.1 Linking schools and their communities

In the interviews, community members, teachers, and principals consistently pointed to differences between city and country people based on often longstanding connections of local people with place. The following is illustrative:

"[...] in the country, we seem to know our roots type thing. Like, you connect – you go somewhere, and, in the city, they might ask where you work. 'Where do you work?' You come to the country, and they'll want to know, you know, where are you from? Yeah. Which is totally different because people like to know – yeah, where you're from, how you're connected, why did you do this or why did you do that?" (Emily, Community member, Cluster 1)

Country people were characterised by all participants, including student focus groups, as hardworking, having a simpler outlook on life than their city counterparts, and being family and community focused. In all clusters, there was a strong emphasis on sports, and in towns where significant demographic shifts had occurred, there was concern about the decline of the community. Some students were concerned about the lack of prominence and status afforded to non-sporting interests, which they characterised as more academic.

Principals and teachers were more likely than other interview participants to refer to aspects of local history, including farming and Aboriginal history, but these mentions were nevertheless rare. More commonly, principals and teachers had difficulty explaining what constituted the local history or identity of the community in which they were located. For example, Chad (Teacher, Cluster 1) said:

"I don't know that we have anything distinctive in terms of what would define it elsewhere. I want to say something that's unique about this community. I think that would be quite difficult. It's got lots of very strong characteristics but nothing that I would say is fundamentally different."

Longstanding community members expressed strong connection to aspects of the built environment of their towns, including school buildings. Some teachers were aware of historical knowledge carried in the names of school sports houses and particular school buildings, and community members described experiencing the closure of buildings (e.g., hospitals, schools, pubs) as loss, disconnecting them from their history. For example, Kathy (Community member, Cluster 1) commented that, in her area:

"[...] everybody is just trying to hold everything together, keep what you've got and build rather than lose. So, yeah, everyone is very possessive of what they have and determined to maintain and trying to improve, trying to grow."

Community members were very interested in the reputation of their local schools and aware of the connection between reputation and student numbers. Reputation was cast as a function of the way the school was cared for, its facilities, and student behaviour, which was seen as related to the demographics of the schools' student population. Perceptions of the schools' teachers, and particularly the principal, were also significant contributors to school reputation in the view of community members. As one participant mentioned:

"I think it's a good school and the teachers really care. They seem to work very well as a team. From the outside there seems to be good morale. There doesn't seem to be – even as a parent, if the place is falling apart, generally you can sense it and I don't get that sense [...] I get the sense that they're very committed and they're very dedicated to their jobs and they all work well as a team, albeit it a very female-dominated team.

The private school has sucked away a lot of the kids who would have normally gone to [...] it was not performing super brilliantly a few years ago and then they got this new principal, and everyone thinks he's the bee's knees. I've met him and I was very impressed, and it's now got such a good reputation that I think a lot of people are choosing to send their children to <Catholic School> over the public schools, which has kind of altered the demographic." (Julie, Community member, Cluster 2)

The demographics of the student population were recognised by community members as influencing school reputations, with some towns and schools described as having "attracted the wrong people rather than the right people" (Danielle, Community member, Cluster 2). Older student focus group participants mentioned problems in their communities with violence and drugs. Principals talked about the attraction of the "wrong people" in terms of the challenges presented by student diversity and assumptions made about student behaviour that fed into the school's reputation even when behaviour was managed well:

"We manage behaviour really well and we support and diversify our approach to our kids in a way that meets individual needs really, really well, and there are kids that have had very complex lives and very complex behaviours and very complex needs here. And that's OK; they deserve an education. This is public education. Everybody gets the same access, the same opportunities and the same support and encouragement." (Marie, Principal, Cluster 2)

Schools from different education sectors, and government schools serving adjacent communities, were seen as in competition for enrolments. Community members described students taking buses from one town to the next to attend a different government school as well as community perceptions that non-government schools were inherently better.

Principals, teachers, and students were also acutely aware of the importance of their school's reputation in the community. While most believed that a school's reputation was difficult to shift, there were counterexamples. For example, one principal described turning the reputation of their school around in a few months based on strong community collaboration and recruiting students as advocates for their school. As the principal explained:

"My best advocates for that, I've got to say, were my [...] kids. [...] they were hysterical. They're going around town, meeting people and talking up the school. We've all suddenly got the community thinking about the fact that, what is it that I want for my kids?"

Many non-school-based DoE personnel and principals, and those who had worked in rural and regional schools, described being "adopted by the community very quickly" (Bouser, Non-school-based DoE personnel). They stressed that the school principal is part of the community and needs to understand this and engage with the local community. As Angus (Non-school-based DoE personnel) stated:

"You don't live within the four walls of the school; you live within the community. And, so, you know it's the people who you know – this is as simple as buying the fish and

chips at the local takeaway, it's going to the local IGA, it's getting your petrol at the local servo, it's having a schnitzel at the local pub on a Friday night. It's those sorts of things."

Others described taking on roles in the community such as "President of the Football Club or the Vice President of the Cricket Club" (Freddie, Non-school-based DoE personnel), while a current principal described how some staff were involved in harvesting crops on weekends and providing support with food and drinks during that time of year. It was apparent from the interviews with all participant groups that rural communities expect school staff to establish relationships in the community and demonstrate commitment and a desire to add value.

At least four principals described the need to be able to work with sometimes challenging personalities and community tensions. They mentioned the need to be sensitive and inclusive, and to recognise that you cannot be anonymous in a rural community. Teachers and community members made similar comments:

"You're there in the community and people know you. The parents will know you and they look at you. So, you're always being watched, always on guard in some ways, whereas in the metropolitan area, you can be anonymous if you want to. It's quite nice in some ways. It's quite a new unique challenge in many ways that we face." (Tony, Community member, Cluster 3)

Several explicitly mentioned that these issues should be a part of the induction for principals in rural communities.

Two non-school-based DoE participants expressed a view echoed by many principals, that the relationship between a school and its community could be mutually beneficial. As Henry (Non-school-based DoE personnel) said:

"The more I supported the families, the more the families brought the kids to school [...] so, whatever it took outside, whether it was, you know, helping people with issues on the weekend and stuff like that to get certain problems sorted or writing letters for them to address issues with real estate agents and those types of things."

According to Henry, this work-built trust and ensured that there was "a faithful and strong community behind the school" who would "do anything for the kids to get to school and do anything for the school if we needed" (Henry, Non-school-based DoE personnel). Other participants stressed the importance of the principal being able to "harness" the relationship with the community and attributed the ability of a particular effective principal in this regard to them having had a rural background.



There were several examples of community members contributing to aspects of the school that would usually be the province of teachers. For example, Bronwyn (Teacher, Cluster 1) talked about: "dads involved in making decisions about the agricultural department". Other interviewees recommended seeing the trades and skills of the community as a resource and drawing on the knowledge of the local NSW Aboriginal Education Consultative Group (AECG) for the "opportunity it gives to connecting to Country, acknowledgement of Country... you learn so much about our Aboriginal history that many people I don't believe have any understanding" (Freddie, Non-schoolbased DoE personnel). Community members tended to talk in terms of integration rather than support, describing activities such as "adult classes and community, like computers and family history" or "craft group" with the elders (Danielle, Community member, Cluster 1).

Interviewed community members and principals were united in their commitment to doing what is best for children, although what this means in terms of education was less clear, as only 7 of 12 surveyed principals agreed that their local community thought education was important. In interview, Kathy (Community member, Cluster 1) stated the following:

"They want the best for their children, so try and understand where the parents are coming from. It mightn't always be well-guided or expressed in a positive way, maybe aggressive, but bottom line, they want the best for their children. So, try and understand and work with them."

Julie (Community member, Cluster 2) expressed her personal commitment to the local school in terms of it allowing her greater engagement with her children's school experience:

"I couldn't be on the P&C and have the relationship I have with both my schools if my kids went to school an hour away ... I want to be a part of their life. I want to know who their friends are. I want to know where they are and what they're doing. I went through this school. Plenty of us did. I think if you want to succeed, you will. It may be a bit more challenging, but it also builds a bit of resilience."

Some community members also saw the local school as key to the ongoing survival and prosperity of the community, and this motivated their desire to be involved. For example, Chris (Community member, Cluster 3) stated:

"If you want a successful community, you've got to grow your future leaders, and your future leaders are your youth. If you don't retain a large percentage of your youth, you will lose those potential leaders. It's probably hard for me to explain, but unless you actually love your town and you want to care for it and you want to nurture it and make it grow and be there for the next generation, I believe you've got to be heavily involved with it. I don't want to say you've got to nearly be born and bred. That's not the case because there's plenty of people that have moved to communities and fell in love with that community and got behind it."

When relationships between schools and their communities were not working well, interview participants identified issues with both the school and the community. In terms of the school, poor relationships were attributed to staff members, particularly principals not sufficiently caring about or engaging with the community, as well as high staff turnover, in relation to which some staff were characterised as "job-jumpers". Two principals talked about the challenges of coming to a school in which their predecessor had lost the confidence of the community, necessitating the re-building of the relationship.

Another principal, Shaun (Principal, Cluster 1), described the difficulty of establishing constructive relationships in terms of differing values between the school and community, and among the school's staff, compounding the complexity of the principal's role:

"There's this incongruence between the institution's values and the community's values [...] And I think that we have teachers here who genuinely care about every kid and they will express how they care in different ways. Some I agree with some I don't [...] I would probably suggest to an incoming principal to be mindful about what battles they're gonna pick to fight. Because they may not be supported fighting the good fight, and the good fight may have no positive outcome other than fracturing your relationships with staff."

Parent and community survey respondents gave mostly positive feedback about their local schools, although there appeared to be room for improvement from the perspective of both community members and parents in relation to informing the community about school matters and facilitating community involvement with the school. The items with which participants either "Somewhat agreed" or "Strongly agreed" are shown in Table 13 (below).

Table 13: Results from community member and parent survey

Survey question	Community members (%)	Parents (%)
Teachers at the local school do a good job	75.0	70.6
Teachers at the local school believe their students can learn	79.2	70.6
Students in my community like their teachers	70.9	70.1
Teachers and students at the local school get on well	72.8	72.1
The community is well-informed about local school matters	60.0	59.1
It is easy for community members to be involved in the local school	60.0	52.5

Opportunity 4-1: Support schools to develop close relationships with their local communities.

Sub-opportunities:

- Develop principals' understanding of the use of positive communication and messaging strategies in conveying the unique strengths of their schools.
- Provide professional learning aimed at building principals' ability to develop pride in their school among teachers, students, parents, and community members.
- Support schools serving particular communities to work together, and with parents and community members, to meet the needs of local students.
- Support principals to involve parents and community members in the school decision-making and curriculum delivery as appropriate.
- Recognise the centrality of local schools to their communities in decisions about schooling provision.

Teachers also spoke positively about the sense of belonging that could be found in rural communities, but recognised that it was much more difficult for non-locals who did not have a long history with the community. Teachers and principals explained that the community feel a sense of ownership of the school, have strong opinions about what happens in the school, and a desire to contribute to decision-making. Several teachers and principals explained that when parents and community members contribute to the work of the school, it allows teachers to "see parents in a different light. You see kids in a different light. You can bring those connections then back to issues at school" (Billie, Principal, Cluster 1). Sport was cited as an effective means of entry into rural communities by teachers and principals. Principals explained how principals and teachers could, for example, play for local teams, contribute to sports club committees, or as trainers, all of which builds relationships and "buys you a little bit more trust" (Ruth, Principal, Cluster 1).

Principals, non-school-based personnel, and community members all recognised the 24/7 nature of being a teacher in a small community, with the inherent difficult of establishing boundaries between work and other parts of life. Illustrative principal comments included the following:

"They want your involvement at a very personal level. They want to stop you down the street and talk to you about their son or daughter and, you know, they were naughty today or they forgot their uniform or whatever. That's what – it's like you're just part of the family and they just want to be talking to you all the time. And then the other side of that is you need to get away from that." (Sara, Principal, Cluster 2)

"You live the job out here because you're never away from colleagues [...] and the staff tend to spend a lot of their own personal time doing school things. Moving from <suburb> to here, there was no way on God's earth that anybody would organise a school-based function on a Friday night, where it's just a given out here." (Helen, Principal, Cluster 1)

Principals acknowledged that new, young teachers from metropolitan areas struggle with the fact that "they can't come to school, go home, go to the pub for a couple of beers and a Friday night and cut loose without everybody knowing exactly what they did" (Sarah, Principal, Cluster 2), and that maintaining boundaries between work and out-of-school activities was something that "some of the staff who don't come from country towns also grapple with" (Steve, Principal, Cluster 2). The lack of privacy contributed to some staff wanting to live outside of the community in which they taught, but this was viewed negatively by the community who wanted teachers to live locally. Some principals explained that they had chosen to live outside of the immediate community for their own wellbeing while recognising the need to show commitment to the school community. Sarah (Principal, Cluster 2) described her decision to live in a large centre away from her school community as follows:

"It would be totally unbearable from my own wellbeing point of view to live here, absolutely without question and the deputy as well. You know when you're dealing with discipline, the unique circumstances. Some of these families, the confidential things that you know about them. You don't wanna be here in the middle of that main street; you just can't do it because you could not get away from it. There'd be no down time. The people that you're shopping with, the people that are at the doctor's surgery, the people at the hospital, behind the checkout, it doesn't matter where you go. Every single person in this town would know exactly everything about your life, wholly and solely. So, from that point of view, for your own wellbeing, absolutely no way will I live here. So, yeah, and I understand what they're saying about showing your commitment to the community, but you can do that in other ways. You make sure that you go to every event you are seen. You come to the show."

For some principals and teachers in rural and regional areas, there is no nearby alternative place to live and, thus, this choice is not available to them.

Opportunity 4-2:

Ensure that induction programs support teachers to become appropriately involved in the local community.

Kate (Non-school-based DoE personnel) highlighted the important role of induction programs for new teachers in establishing and maintaining cultures of high academic expectations in rural and regional schools, while other non-school-based DoE personnel and teachers pointed to the need for induction into the community beyond the school. This was seen as especially important in relation to connecting to Country and building cultural awareness in contexts with significant Aboriginal populations. Opportunities to work with community stakeholders on long-term induction programs were recognised, including existing good practice. Illustrative comments included the following:

"You've got to have really strong induction programs and I think that's another thing that a lot of our country schools do really well. You're not only inducting people into the school, you've got to have a strong induction that inducts people into a community. If you've got a significant Aboriginal population, that's why the connecting to Country and cultural awareness is so important." (Freddie, Non-school-based DoE personnel)

"The range of stakeholder groups that we interact with and they are sometimes saying that they'd like to be more involved in that process of, you know, welcoming people into the community." (Sonny, Non-school-based DoE personnel)

Some interviewees, principals, and teachers cast induction as beginning when prospective teachers come to a rural school for practicum, which ideally included additional time to get to know the community. They noted the need for support in the form of accommodation and that it had become increasingly rare for prospective teachers to undertake practicums in their schools.

Principal induction was also mentioned. Although improvements in online training were recognised, there remains a need for on-the-ground, in-person induction. As Paul (Principal, Cluster 3) said:

"There's only so much you can do online and, look, the quality of those programs has improved dramatically. I believe the principal induction program is a very good one when they do become a principal: you talk with experienced principals like myself. And go through – these are the realities of the day. But to prepare for school like this, I think you need to have someone hands-on with someone who has walked it before."

Sub-opportunity:

- Ensure that principal and teacher induction is long-term and includes learning about the local community its history, industries (including their skill and knowledge).
- Provide new school staff with wrap-around support prior to arrival and ongoing thereafter that includes information about such things as housing, utilities, and health services, along with mentoring support.

Principals and teachers have no option but to be important and prominent local figures in small communities. They are expected to be visible at local events: "they want you there and they want to see you there" (Sarah, Principal, Cluster 2). Balancing the lack of privacy that this entails and the opportunities it can afford to understand students and connect their teaching and curriculum to their everyday lives can be difficult. Students expressed enormous respect for teachers who involved themselves in the local community and showed an interest in learning about the local context. Preparation for these realities was considered an essential part of induction. For example, Jenny (Principal, Cluster 2) said:

"Induction about living in a rural community – what's that going to look like? [How are you going to] handle it when someone's down at the supermarket and they're looking in your trolley and they're having that conversation? Or the parent who you see playing sport out there when you're playing touch footy or ...? That's the induction side that I think comes with a rural school, that you've got to build their capacity that you're not anonymous here. You actually stand out quite significantly, and people will know who you are and they will be interested and they will be trying to catch you 24/7, wherever you are."

Sub-opportunity:

• Ensure that prospective teachers and principals new to rural communities are aware of the challenges and opportunities inherent in being a 'prominent person' in a small community.

Many communities had experienced changes in the nature of industries that supported local economies. Trends identified by community members and teachers included the mechanisation of farming with accompanying declines in the numbers of family farms, the ageing of farming communities, and consequent declining school enrolments. Farming remained the mainstay of some communities, however, even though the recent drought had accelerated changes. According to Hayley (Teacher, Cluster 2):

"[It's] not just that <Cotton Company> left, but it's the drought and probably mechanisation – you know, less people are needed at certain harvest times because, you know, I know cotton balers now do more of the work than cotton pickers used to [...] But, yeah, less people are needed so we've had a huge decline in population."

In some communities, mining had replaced farming as the major employer and was perceived as bringing wealth, younger families, and skilled workers. These changes were welcomed by interviewees across all participant groups, but there were reservations about jobs that were seen as

increasingly transient. As David (Teacher, Cluster 1) explained: "There are few job opportunities here year-round. Over harvests is a fair few jobs, but people tend to just follow the seasonal work and move on after harvest". Emily (Community member, Cluster 1) commented in relation to larger farms and corporations:

"So, the big companies that are coming in, they're bringing contract staff, you know, for the stripping and sewing and stuff. They might have a manager, but there's no guarantee that they have and there's no guarantees that they've got children, so you've only got to look at the bus runs to see how many kids – they're not coming in on buses. There's just no kids."

Shift work and fly-in, fly-out (FIFO) workers had also impacted communities, with the former making engagement with community activities more difficult, and the latter putting stress on the availability and affordability of housing. A principal, Chris (Principal, Cluster 3), described the situation as follows:

"It's a town that has, when you look at it, there's no accommodation in the town, but there's no people here, because the miners that fly in fly out. So, a lot of the miners all rent houses or groups of them rent houses, but they – their families aren't here, so when you do have people that are wanting to move to the town for whatever reason, there's no accommodation for them. And, so, that's the biggest one, is trying to increase accommodation."

Some teachers and principals commented on how, although fly in, fly out workers brought money to towns, their lives were elsewhere, and they did not contribute to the sustained growth or vibrancy of towns and community institutions, remaining strangers, or visitors. In towns that were experiencing significant economic growth as a result of growing mining industries and associated infrastructure development, appropriately skilled local people had been able to find long-term highly paid jobs but not all locals were appropriately skilled. One community member, Julie (Cluster 2), commented on the value of school-based traineeships and apprenticeships and the need for greater collaboration between industry and schools, including through greater involvement of career advisors. Other community members spoke of the difficulty of getting TAFE qualifications (e.g., Certificate III) run in schools and pointed to examples of high schools that had connected well with local industry to their mutual benefit. According to Danielle (Community member, Cluster 2): "They do try and connect with industry more than they used to 20 or 30 years ago. I know you can do a TAFE diploma or TAFE Cert IV as part of your schooling". Geoff (Community member, Cluster 2), on the other hand, described school-industry partnerships in transactional terms:



"Absolutely open to discussions about partnerships, financial partnerships... I've always said that if you're not partnering and in touch with your end purchasers [...] and that's what schools are. They're supplying a product. They need to supply a quality product to some purchasers, and those purchasers are employers. That's the deal. So, high schools are dealing with [...] they get a raw material in and they value add."

Students in focus groups were aware of the economic vulnerability of their communities and the need to diversify. Some had personal experience of parents losing jobs and needing to move away to find work. These issues were felt most keenly by older students.

Teachers and principals new to an area need to know about the local industries and associated issues and tensions that surround them, not only in terms of the local employment opportunities they present for students, but because they are key parts of the local community in which students live and present opportunities for connections with curricula.

Sub-opportunity:

• Support principals and teachers to have nuanced understandings of local industry and employment issues and tensions around these.

There were occasional examples provided by principals of collaborative links between schools and communities whereby the skills of community members were used in the local school. Kim (Principal, Cluster 3) provided two examples:

"We've got one family, a father who's a chef and he's our P&C president and he's just fantastic. So, he comes in [...] Can you help us with our veggie gardens? And he's an agronomist, so now our kids are learning about it. And it is up to the kids to invite community members; they go over and they invite one community member. It doesn't have to be their parents. It can be the shopkeeper down the road, it can be the policeman, and it brings interest for students, skills into the community, and that engagement and sense of community in general."

Linking with community expertise was recognised as especially helpful in schools with high proportions of Indigenous enrolments but is arguably imperative in all schools.

Sub-opportunity:

• Use local expertise in curriculum delivery as part of building relationships with the community, and enriching and contextualising the curriculum.

Many teachers who provided interviews seemed to lack knowledge of local history, including that related to agriculture or Indigenous history. Greater awareness of, and appreciation for, local history has the potential to assist school staff to better understand and forge links with their local communities as well as add to the relevance of the curriculum for students. As one community member explained:

"And particularly for our Aboriginal and Torres Strait Islander [...] it's so important to see themselves in the curriculum and I'm so proud to work with my other English teacher here that I teach with, that in every year group, we do Aboriginal literature essentially and have students with really great engagement from that. In fact, one of our schools got up there with the highest attendance rates for our Indigenous students, so my principals often ask some questions about that, what things we do, and we've got personalised learning plans. So, I'm passionate about that in the English classroom." (Tony, Teacher, Cluster 3)

Sub-opportunity:

• Ensure local history is included in the curriculum as a means of enhancing student engagement and contributing to building community.

There were occasional mentions by teachers of engaging students in community projects such as beautifying local waterfalls or painting murals. Stronger links between schools and communities would likely increase awareness of the possibilities for these types of initiatives.

Sub-opportunity:

• Engage students in community projects to better contextualise curriculum and enhance student engagement.

All interviewees mentioned collaboration positively in some sense – within schools, between schools and the community, and between schools. David (Principal, Cluster 3) mentioned the importance of the support he received from his Director, Educational Leadership (DEL) to implement Local Schools, Local Decisions in a collaborative way as part of a cluster of schools. Another principal, Leah (Principal, Cluster 1), explained that principals like her are too busy to think, organise, and manage collaborative initiatives if they are not in place already. Another principal, Shaun (Cluster 1), contrasted collaboration among schools with competitiveness between them. A community member participating in a focus group urged collaboration not just between government schools but among all educational institutions serving the community. As he stated:

"I'd like to see change in rural communities is a more collaborative approach amongst the education providers, that the funding model for students be looked at in relation to that collaboration. So, one student should be able to go from one school to another school to tap into their particular elective."

One advantage of collaboration among schools identified by several interviewees was broader curriculum provision through students attending classes at other schools or by teachers working across schools.

Opportunity 4-3:

Ensure that DoE structures support rather than impose collaboration among schools serving the same community.

Individualised school success measures, the dependence of staffing on enrolments at individual schools, and seemingly arbitrary geographic lines across which teacher incentives differed were all identified as positioning schools as in competition with one another rather than working together. In relation to incentives, Bouser (Non-school-based DoE personnel), explained the situation in one rural and regional location:

"<Large town>, which has always been a one-point school in the transfer scheme that still operates there a little bit. Whereas <small town>, which is 40 or 50 kilometres away, is, I think, a 4-point school, so there's an incentive to actually keep people out of <large town>."

Sub-opportunity:

• Review relevant DoE policies to ensure that they support collaboration among schools serving the same community.

A suggestion aimed at ensuring collaboration among schools serving the same community was that goals be set at the community level to be achieved by a group of schools, rather than only at the individual school level to be achieved by individual schools. Non-school-based DoE personnel talked about this in relation to academic goals: "We've got some pretty ambitious targets around student attainment and growth, and I don't think we can do that. I don't think we can achieve that without our parents on board" (Sonny, Non-school-based DoE personnel).

Robert (Non-school-based DoE personnel) suggested that it is also important to involve and collaborate with the community in the process of defining professional development and learning goals: "I think you always have high chances of success when there are good processes to negotiate with the community, opportunities to be involved in learning programs". He stressed that "tokenistic involvement" should be avoided and that great opportunities can emerge with the community's "meaningful involvement at the different stages".

Sub-opportunity:

• Set student outcome goals at the community level.

Student success was recognised as being more than the kinds of things that the DoE routinely collects data on. In particular, students' post-school destinations were considered important. As one non-school-based DoE employee stated:

"There are schools in rural and regional that punch above weight [...] we have to discover those gems and say [...] here they get strong student outcomes, and I don't think that should be limited to HSC results, it should be capturing pathways as well. And say, these schools we've got to dive in and find out why they are beating other rural and regional [...] and in some cases, in similar context, their outstripping their metro counterpart." (Adam, Non-school-based DoE personnel)

Sub-opportunity:

Provide DoE support to track student outcomes beyond school.

Technology was frequently mentioned as part of the answer to extending collaboration between schools and teachers, enhancing curriculum access, providing better access to professional development opportunities, and providing access to services. However, none of the participants saw technology as the sole answer. It was widely acknowledged that access to technology was inequitable, and that reliance on it for education could deepen rather than address inequities. It was additionally acknowledged that access was not a substitute for in-person connection. As one non-school-based DoE employee explained:

"There were multiple examples where we've tried to do the types of interventions for curriculum and wellbeing, and we've come up against a bit of a blocker in terms of bandwidth available into the community. Full stop, whether it was for police or for health or domestic, but certainly impacted education." (Jim, Non-school-based DoE personnel)

Community members also highlighted the unreliability of broadband connections and the onerous responsibility that reliance on technology for education placed on parents. Interviewees identified a need to "massively increase the bandwidth" (Jim, Non-school-based DoE personnel) in rural areas, and others noted the importance of excellent connectivity to retaining both students and teachers in rural communities. Community members pointed to the potential of technology to de-centralise work, directly benefiting rural communities. It was noted that the technology actually available in some communities did not match that imagined by policymakers devising initiatives for rural communities.

The DoE's Rural Access Gap program, commenced in 2020, has the potential to address these issues with its aim to provide access to strong, reliable Internet connection to all students, especially those in rural and remote schools. Students also complained about the poor Wi-Fi connections at school, the poor condition or outdated nature of devices, and the lack of access to software. An illustrative comment is as follows:

"Obviously, connection to the Internet is not very good. We pay three or four times the price for Internet that isn't as fast or as good and our mobile reception, mine is pretty jagged. That sort of hinders our ability [...] it was a real struggle to get Zooms and videos loading." (Student focus group, group 3, years 10-12, male)

Opportunity 4-4: Australian and NSW governments ensure rural communities and schools have excellent access to high-speed Internet.

Sub-opportunity:

• The DoE fund the additional costs associated with obtaining access to high-speed Internet access in rural and regional schools.

4.2 Supporting student learning

Survey data from both students and teachers highlighted the importance to motivation and engagement of perceived autonomy support. When confronted with disengaged students, teachers can rely on strategies to control student behaviours such as using a demanding tone or threatening punishment. Alternatively, they can use autonomy-supportive strategies that align with students' internal motivations. These include, for example, explaining the rationale for classwork, providing meaningful choices within the classroom, and listening to students' perspectives.

Structural equation modelling of student data showed that perceived autonomy support was a strong predictor of adaptive student attributes such as *adaptability* (i.e., the ability to adapt to changes; β = 0.515, p < .001), *academic buoyancy* (i.e., the ability to deal with challenges and setbacks; β = 0.502, p < .001) and *academic self-efficacy* (i.e., feeling competent in academic activities; β = 0.515, p < .001), as well as positive approaches to learning including having *mastery goals* (i.e., a learning focus on skill and knowledge development; β = 0.646, p < .001) and *efficacy for self-regulated learning* (i.e., feeling effective at managing one's own study behaviours; β = 0.482, p < .001).

Perceived autonomy support also predicted many key school outcomes, including school enjoyment (β = 0.511, p < .001), achievement motivation (β = 0.440, p < .001), perceptions of school importance for the future (β = 0.478, p < .001), numeracy confidence (β = 0.465, p < .001), literacy confidence (β = 0.453, p < .001), and stress and boredom at school (β = -0.361, p < .001), as well as students' educational intentions, including the importance of continuing study to Stage 6 (β = 0.417, p < .001), intentions to go to university (β = 0.233, p = .001), intentions to do an apprenticeship (β = 0.153, p < .001), and intentions to go to TAFE (β = 0.105, p = .005).

In summary, student perceptions of autonomy support were shown to benefit their resilience in dealing with the daily changes and challenges that are part of school life and increase their sense of self-competence. It also supports students to be active and reflective learners who take responsibility for their education and who adopt behaviours likely to make them successful learners who enjoy school and want to continue their education. Internationally, intervention studies have shown that teachers can be trained to be more autonomy-supportive, resulting in greater student motivation and achievement (Cheon et al., 2012, 2020).

Opportunity 4-5: Support increased use of autonomy-supportive teaching practices.

Sub-opportunity:

Provide professional learning on pedagogies that support student motivation and engagement

The academic expectations that teachers have for students are influenced by their own perspectives about the post-school pathways that are available to, and appropriate for, students. In interviews, community members pointed to the lack of tertiary-educated role models in rural communities associated with changing community demographics, reduced employment opportunities and increased reliance on government support. Steven (Community member, Cluster 2), described the situation as follows:

"One of the features that you're looking at across, particularly your rural and remote communities, is often a lack of aspiration for their children in terms of either completing the HSC or going on for tertiary study. It's often – it's very much around it. It can be around, there's no jobs here at such a disadvantaged community, so what's the point of education?"

Several teachers cited parents and families as impediments to student aspiration for further education. In some cases, they mentioned specific times of the year such as harvest when students were involved for long hours. One principal, Bev (Cluster 2) explained that students often don't value the opportunities that schools provide, while Sonny (Non-school-based DoE personnel) observed that:

"We've got some pretty ambitious targets around student attainment and growth, and I don't think we can do that, I don't think we can achieve that without our parents on board".

Keith (Principal, Cluster 3) contrasted the aspirations of families in rural areas with those in coastal cities. As he stated:

"A lot of the high schools on the coastal fringe – Sydney, Newcastle, Wollongong area – they're much more content-results driven, and the families are looking for often academic paths or career paths and that drives a lot of how the teachers approach what they're doing. I think the country experience is much more about relational experiences and it is much more oriented around the whole student rather than just the education side."

Just as teachers in metropolitan areas are influenced by the educational priorities they perceive among the families they serve, it seems reasonable to assume that teachers in rural communities might be influenced to focus on relational rather than academic experiences by the priorities they perceive in the local community.

Surveys provided evidence that some parents and community members had reservations about the extent to which teachers encouraged students to aim for higher education. Nevertheless, more than half of the parent survey respondents and almost two thirds of the community survey respondents believed that teachers in their local school encouraged students to aim for higher education. When asked: "teachers at the school encourage their students to aim for higher education", 55.9% of parents agreed, as did 62.5% of community members and stakeholders.

• One teacher described how their school had made a particular effort to consult with the community about their expectations (among other things). She described this as follows:

"We wanted to know things about expectations and so we had focus groups of staff, students, parents, yeah, community to really look at what everyone thought about a whole range of different areas. And expectations was the one that came out really strong, about having high expectations for success in the classroom, high expectations around class behaviour, you know, a whole range of things, so it was really good. So, it was driven. So, we've always gone back to that whenever we amended anything with staff: we're like, this came from the data. This is what everyone said they wanted. You know, that's what we're looking at. So, that was a really good way of doing it."

Opportunity 4-6: Ensure principals and teachers have high academic expectations of all students.

Sub-opportunities:

- Support schools to engage with their alumni to enhance student, teacher, parental, and community understandings of the post-school possibilities for students.
- Provide professional learning on strategies for developing and maintaining high academic expectations across their school communities.

Mixture modelling was used to identify five student profiles based on their educational intentions. The five profiles shown in Figure 8 were characterised as follows, with the percentages of students in the sample falling into each, as shown:

- 1. Average (23.8%): This group reported average education intentions across the four measures.
- 2. **High university intentions (18.4%):** This group reported above average in university intentions and importance of Stage 6, and below average in TAFE and apprenticeship intentions. This profile appears to represent students who plan to go to university and who are not interested in other tertiary options.
- 3. **Higher-risk non-completers (11.5%):** This group reported below average in all measures. While TAFE and apprenticeship intentions were within .5 standard deviations of the mean, their university intentions and Stage 6 importance were more than 1.5 standard deviations below average. This profile appears to represent students who are at higher risk of dropping out of school and who do not have strong tertiary intentions.
- 4. **Medium-risk non-completers (23.3%):** This group reported average TAFE and apprenticeship intentions, and below average university intentions and Stage 6 importance. This profile appears to represent students who are at some risk of school dropout, but who may intend to continue onto tertiary education through TAFE or an apprenticeship.
- 5. **High global intentions (23.0%):** This group reported above average in all measures. This profile represents students who value Stage 6 and tertiary education, and who are keeping an open mind about the avenue they might take.

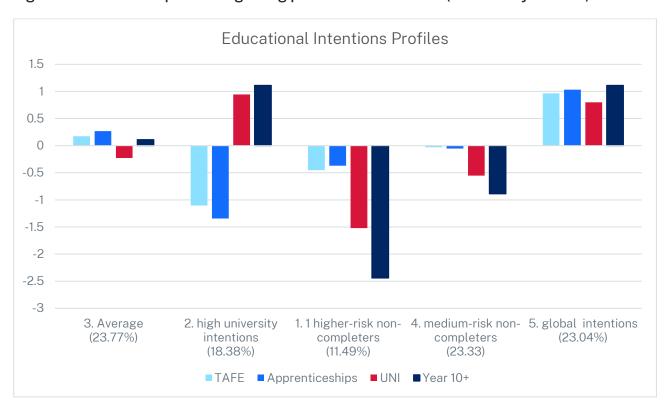


Figure 8: Five student profiles regarding post-school intentions (statistically centred)

Differences between the profiles based on auxiliary variables showed that the likelihood of students falling into the various categories varied with gender, year level, Aboriginality, socio-economic status (SES), home resources in the form of books, and reported experiences of school. Specifically:

• Younger students were more likely to either be in the high-risk non-completers profile or the high global intentions profile.

- Female students were more likely to be in the high university intentions profile or the high global intentions profile.
- Aboriginal students were less likely to be in the high university intentions profile.
- Students with higher SES backgrounds were more likely to be in the high university profile.
- Students with more books at home and who spent more time reading daily were more likely to be in the high university intentions or the high global intentions profile.
- Students in the higher-risk non-completers profile reported having the least positive school experiences, with the lowest adaptability, perceived autonomy support, academic self-efficacy, efficacy for self-regulated learning, academic buoyancy, mastery approach goals, enjoyment of school, achievement motivation, importance of school for future, numeracy confidence, and literacy confidence. They also experienced the highest stress and boredom at school.
- Both the high university intentions and high global intentions profiles reported above average positive experiences at schools and adaptive personal resources.
- Students in the high global intentions profile had significantly greater academic buoyancy and
 enjoyment at school than did students in the high university intentions profile. This may be
 because these students are open to a number of different education paths after school and,
 thus, do not feel stressed about needing to achieve higher grades to gain entrance to university.
- Students in the high global intentions profile also perceived their communities to value education more than students in the high university intentions group. This may explain why they are open about their education trajectories.
- Students in the high university intentions group saw fewer barriers that other groups to continuing their education. However, there were inconsistent patterns with the perceived barriers to continuing their education. This may be because these barriers focus on specific circumstances (i.e., not being able to continue education because of the need to find somewhere to live) rather than on the motivation to continue one's education.

Opportunity 4-7:

Tailor school completion initiatives to student post-school intention profiles.

Many participants referred to limited access to health services for students and families, including the "ever-growing needs of our kids, like mental health among the young is growing exponentially, yet the services aren't there to support it" (Group A, Community stakeholders). Mental health and wellbeing issues among young people were recognised as having a significant impact on educational outcomes.

Marie (Principal, Cluster 2) described the implications of limited health and mental health services for her school. As she described:

"No real access to paediatricians, we have minimal health care services, our FCJ network here – Family Community Justice – are stretched beyond capacity and are unable to really meaningfully service large parts of the community which need them. [...] affects their ability to learn, which then impacts our teachers and their ability to teach".

Hayley (Teacher, Cluster 2) pointed out that many students in her school get to the end of their primary education without a proper specialist assessment, which affects their secondary education and overall school performance. Without diagnoses, the school is unable to get the necessary resources to support the students: "just because I can't get diagnoses, you know, I find that really challenging" (Hayley, Teacher, Cluster 2).

A focus group participant (Group A, Community stakeholders) stated that: "We're supposed to have 7.6 counsellors and we've got 4.5 – so, no allied health people, and the most vulnerable people struggle to get to the nearest big towns". Another participant in the same group said: "There's only

one child and adolescent mental health worker to cover three shires". Others described a hospital and medical centre that was not operating due to a lack of staff (Brad, Principal, Cluster 3) and waiting lists of one to two years (Chris, Principal, Cluster 3).

Keith (Principal, Cluster 1) described the NSW Government's response to increasing needs for mental health services as ad hoc. Hayley (Teacher, Cluster 2) suggested that "some kind of travelling program, that brings speech therapists, paediatricians, maybe OTs around to rural areas and goes to [...] all the little towns as well". Jenny (Principal, Cluster 2) described the positive impact that wellbeing consultants had had in her school. She said that they had: "absolutely tremendous for us setting up a lot of things that have been led to our children being quite successful in some of those big steps forward in that self-regulation and working with families".

Sarah (Principal, Cluster 2) suggested schools become focal points for delivery of health services, adding the caveat that staffing such services could be problematic.

The DoE provides several well-evidenced programs to support students' mental health. These include SAFE Minds, which is available to parents to enhance understanding early intervention in mental health support for children and young people. Telepsychology is also available to schools unable to access local counselling services. None of these services were mentioned by participants in any of the 17 schools or their communities, suggesting either that they were unaware of the services or did not perceive them to be meeting the needs they described.

As part of the statistical analyses using school-level data from the DoE, as well as demographic data at the SA2 level from the ABS, the research team examined the effect of prior-year average attendance at a school on average NAPLAN scores in years 5 and 9. This analysis was conducted for all government schools in NSW, then for only inner regional and beyond, then for only outer regional and beyond. The analysis was conducted for 2019. Prior year attendance was found to impact NAPLAN scores for years 5 and 9 overall but much more so for Year 5 in inner regional and beyond schools, and for both outer regional and beyond and inner regional and beyond schools for Year 9. The size of effects can be seen in Figure 9.

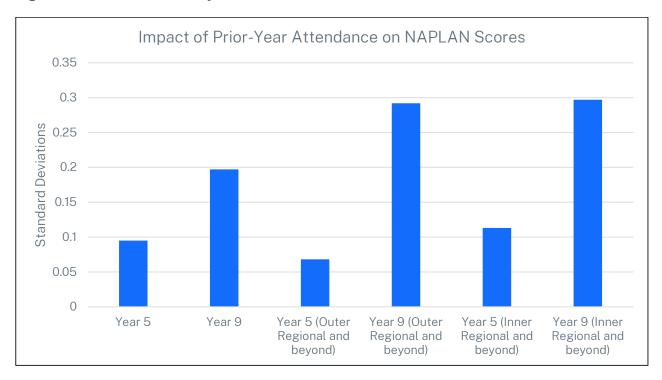


Figure 9: NAPLAN scores in years 5 and 9

Interventions that boost attendance in years 4 and 8 are thus likely to positively impact NAPLAN outcomes. Such interventions might sensibly be applied to all year levels and their impacts should be rigorously evaluated.

Interview data suggested that some schools have success with improving attendance for individual or small groups of students by tailoring the curriculum to students' interests and providing personalised learning plans. Illustrative comments included:

"He was a boy with chronic non-attendance, didn't like coming to school, didn't like the traditional model of 'this is how school's taught'. Once he heard about this program, he said 'Ah, that could be for me'. He started coming to school a little bit and he was having a conversation with the science and physics teacher at school about measuring the velocity of a football by how it is kicked, this teacher that he'd never had before, and the teacher didn't even know that he knew all this stuff." (Bob, Non-school-based DoE personnel)

"In fact, one of our schools got up there with the highest attendance rates for our Indigenous students, so my principals often ask some questions about that, what things we do, and we've got personalised learning plans. So, I'm passionate about that in the English classroom." (Tony, Community member, Cluster 3)

Opportunity 4-8:

Implement and rigorously evaluate interventions aimed at boosting attendance.

4.3 Looking beyond the local

Several community members, non-school-based DoE personnel, and teachers identified supporting locals to become teachers as part of the answer to chronic staffing problems in rural schools. This could begin with identifying school students who would make great teachers and encouraging them to pursue that path. We note that this idea has been taken up in the DoE's 'Teacher Supply Strategy' (2022), which includes a focus on recruiting high-potential prospective teachers from rural and regional areas and encouraging them to become teachers. One participant said:

"A solution to this, I believe, is we've got to identify potential teachers earlier. We've got to be able to say to some of our students who are in our rural and remote and regional schools already, 'Look, we think you'd be great as a teacher. We're going to support you to go into university and you're going to be placed with a school throughout your teaching degree'." (Bob, Non-school-based DoE personnel)



Several interviewees also noted dangers in over-reliance on locals for the teaching workforce, citing the need for "new blood as well and new ideas and new things" (Helen, Teacher, Cluster 2). Jane (Non-school-based DoE personnel) cautioned against limiting the diversity of the teaching workforce, while Sarah (Community stakeholder) pointed to the possibility of teachers having experience that was too limited, leading to stagnation in their practice.

Opportunity 4-9:

Support the development of 'home-grown' teachers.

Initial teacher education providers were urged to provide more and early practicum experiences in rural and regional schools. Universities were seen as being able to do more by identifying rural students in their prospective teacher cohorts early on and providing support and encouragement. Connie said:

"We should be identifying them because, you know, they've got an 80% chance of, if they go to a regional town, those kids are staying there because they are from regional New South Wales. We don't even know whether they are enrolled, and the universities don't either." (Connie, Non-school-based DoE personnel)

Other interviewees believed that universities have a responsibility to encourage their students to contribute to areas of needs, and in preparing teachers for the realities of the job. In particular, partnerships between local communities and universities whereby prospective teachers open to teaching in rural contexts could be contracted early, are able to build a relationship with a school, and arrive in a community already knowing the context and with mentoring structures in place.

Opportunity 4-10:

Encourage increased focus on rural education in initial teacher education programs.

Online provision of professional learning that eliminates the need for travel and accommodation was seen as a welcome change that had its origins prior to the COVID-19 pandemic. The Access program was singled out for praise by teachers and non-school-based DoE personnel for having enabled excellent professional development opportunities for teachers. Sandra (Teacher, Cluster 1) expressed this view as follows:

"Because of the Access program, we've always had lots of opportunities for professional learning. Whenever I've asked to go and do courses or whatever, it's always been, you know, approved within reason, of course."

Harry (Non-school-based DoE personnel) mentioned the Aurora College program as both a way of broadening curriculum access for students and as another means of making professional development available online for teachers.

Opportunity 4-11:

Build on the successes of programs that can broaden curriculum access in rural schools.

Several interviewed teachers and some community members noted that a downside of the close-knit nature of rural communities was that students in rural communities "tended to have this very narrow idea of the world and a lot of them seem very happy to stay in <Town> – or that's just like the little box that they know about" (Mitchell, Teacher, Cluster 2), and they seem relative ignorant of the world beyond their local context. Relatedly, they pointed to the lack of cultural diversity in these towns contributing to socially conservative attitudes, although girls seemed to be more "progressive" than boys.

Student focus group discussions revealed a degree of fear about large cities like Sydney, which were associated in their minds with crowds, danger, anonymity, and crime. They regarded students in cities as different from them, taking on fewer responsibilities at home, and lacking their toughness and practicality. Opportunities to travel to large metropolitan centres and to interact with students in those places would help to ensure that rural students were not making decisions about their future pathways based on unfounded fears of the unknown.

Opportunity 4-12:

Facilitate opportunities for students to experience cities and interact with metropolitan peers.

Several interviewees pointed to inadequate career advice available to students, and in central schools, small numbers of secondary students meant that dedicated careers advisers were not available. Schools were regarded as responsible for "giving kids the best opportunity to find what they want to do and to assist them to do what they want to do, but also opening up opportunities for what else is available out there" (Kathy, Community member, Cluster 1). This should begin at an early age. One community focus group discussed in positive terms programs such as the Clontarf and Girls Academy program that were encouraging Indigenous students to stay at school longer. While community members believed schools should open a world of opportunities to students, there was also a need to value choices to pursue local employment that did not involve university education. As Shaun (Community member, Cluster 1) said:

"There's a lot of kids that need that 'hands on' stuff [...] not all kids are going to uni and we need our tradesmen, we need our farmers, we need our shearers".

Chris (Community member, Cluster 3) noted a tension between building students' expectations that they could do anything with the reality of meeting those expectations. He said:

"The emphasis on the idea that 'the world is an oyster, you can do whatever you want, doesn't matter where you are, gives students that expectation'. The problem is, then, how to fulfil them?"

Opportunity 4-13: Enhance career advice available to rural students.

Sub-opportunities:

- Provide free-of-charge access to online and/or phone career advisors throughout the year and to all secondary school students.
- Provide mobile career events that include rural and regional schools.
- Ensure career advice includes a focus on local industry needs and locally available post-school options.



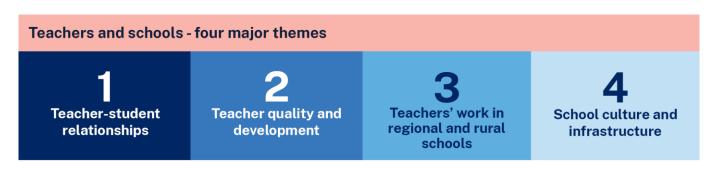
Teachers and Schools

5 Teachers and Schools



In this chapter, the findings related to teachers and schools along with opportunities to address issues raised. The chapter is structured around four major themes:

- 1. Teacher-student relationships
- 2. Teacher quality and development
- 3. Teachers' work in regional and rural schools
- 4. School culture and infrastructure



5.1 Teacher-student relationships

Students in focus groups expressed appreciation for the benefits of attending their local school. These included small class sizes and the care and individual attention that teachers who knew all their students could provide. They valued teachers who involved themselves in the community through such things as participating in sports outside of school. Taking the time to get to know students, their families, and the local community was seen as an indication of respect that warranted respect in turn. Illustrative comments included:

"I find that in rural communities it's probably better because you have that connection with your teachers, and you're not turning up and they're just your teacher, they're like actually your friend." (Student focus group 2G2, Year 11, female)

"Kind of out here we think that if you don't respect us, then why should we respect you?" (Student focus group 2, Year 7, male)

Sometimes teachers were perceived as disrespecting students by assuming they knew nothing about the world beyond their local community. For example, as one student pointed out:

"<Teacher> was treating Year 11s like they're at kindergarten and saying, 'Do you know where Sydney is?' and things like that. I think having an understanding that we are not too isolated in the sense, you know, we don't know what the broader world is like." (Student focus group 2, years 8/9, female)

Students were concerned about teachers whom they perceived as not demanding enough of students academically. They believed that teachers should push students to work hard and achieve as a result, rather than lowering the expectations of students who struggled. Students believed that the academic success in rural schools depended much more on them being self-motivated and working harder than students in city schools needed to. Comments from focus groups included:

"I feel like teachers don't believe in some students that are struggling and they don't do anything to modify their teaching to help them." (Student focus group 3, years 10-12, male)

"They don't push you in a way that you should be pushed by your teachers [...] They don't actually go, 'Yeah, you can do that – if you work hard, you can do it'. They just go, 'Maybe you should aim lower?'" (Student focus group 2, year 10, female)

"You just have to put more effort in [...] It's not like as if you are in a city, like you can just be a random person in school doing, like, nothing, just following the standard thing and you'll get an opportunity. Whereas here you have to be that person striving to do extra [...] to move away." (Student focus group 2, Year 11, female)

Overall, students were positive about their teachers, believing that they worked hard and did their best. Students were concerned, however, about teachers who were unable to control their classes. This was raised as an issue of particular concern in two of the three clusters where school discipline was located in the context of law-and-order problems in the local communities. Students in these clusters perceived a decline in school discipline accompanied by higher rates of truancy and violence at school. Students were concerned about the amount of time teachers spent trying to control the class and expressed a desire for "teachers actually controlling the nuisance, annoying kids in every class instead of them running the class rather than the teachers" (Student focus group 2, Year 9, female). Students recognised the need for consistency in the application of discipline policies, and while some favoured punishments, most saw the issues in more nuanced terms, recognising the need to find ways to engage misbehaving students in learning, and ensuring that troubled students have positive relations with police that allow them to seek help.

Teachers' responses in interviews resonated with those of students. They communicated genuine care for their students and stressed the importance of positive relationships with them, the importance of knowing the students and adapting teaching accordingly, of pushing students to be their best, and being consistent and patient. Illustrative comments included:

"You need a lot of patience. Need to be consistent. You need to get to know the kids and how they learn and how they react and all the little quirks so that you can help them, especially the autistic kids, and take your time." (Melanie, Teacher, Cluster 1)

"Quality teaching is being able to understand the kids and understand that if they're having a bad day, then of course they're not going to go into class and, like, how do you even approach that? I don't think that a lot of the teaching standards can really measure that." (Mitchell, Teacher, Cluster 2)

There may have been indications in Mitchell's (Teacher, Cluster 2) responses of lowering expectations of students identified as low ability or experiencing difficulty, or he may simply have been being realistic. For example, he stated: "I have a low-ability class this year. If I come in and they're in class, it's great", and "each student is different and some of them come from a very difficult background, so the expectations need to be set differently, respecting their limits while still pushing them to their best".

The importance of positive relationships between principals and students was emphasised by several principals and community members. According to Chris (Community member, Cluster 3), being the leader of a school is not about "being stuck in the office, typing up another report", while Kim (Principal, Cluster 3) provided examples of how she prioritised time with people – including students – over administrative tasks. Principals and non-school-based DoE personnel emphasised the need for empathy and compassion in dealing with both staff and students as a way of demonstrating care.

Positive teacher-student relationships are based on genuine care and a degree of respect that insists that students give their best and become their best. Students wanted their teachers to care enough to get to know them and also to push them to achieve.

Opportunity 5-1: Support teachers to develop positive academic relationships with students.

Sub-opportunity:

• Provide professional learning aimed at assisting principals and teachers to understand how such relationships look in practice and to equip them with strategies to develop them.

This opportunity links to Opportunity 4-6 in Chapter 4 concerning the importance of high academic expectations.

It was noted by critical friends that in schools with high staff turnover, developing and sustaining relationships and high academic expectations is impossible. One participating school, for example, had five changes of principals in the short period over which the project ran.

5.2 Teacher quality and development

Teacher quality was framed by community members and teachers in terms of being knowledgeable and inspirational. Having teachers with deep expertise in subjects that they teach was considered an ideal not attainable at least in rural and regional schools. It was something that some participants recalled having existed in the past but not now. Consequently, participants' commentary focused on aspects that contribute to a teacher being "inspirational".

According to Bev (Community member, Cluster 1), the best teachers have a vocation, while other community members and teachers used words like 'enthusiasm' and 'passion' to describe the best teachers. The ability to manage and move beyond poor behaviour was also seen as important. For example, Poppy (Community member, Cluster 3) described a quality teacher as a "[...] strong disciplinarian, one who knows how to handle the kids, one who loves teaching, one who can respond and work with kids and I think can see the possibilities".

Interviewees from all participant groups acknowledged that teacher quality defined in these terms was inconsistent across their schools. They linked this with the difficulty of finding staff. For example, Sonny (Non-school-based DoE personnel) stated that: "even those schools that can find staff might struggle in terms of finding quality staff", and Helen (Principal, Cluster 1) agreed that "quality [...], that's another issue that we have [...] Sometimes you've just got to take a teacher because they're upright and breathing".

Some students saw the enhanced student-teacher relationships that characterised their schools as a trade-off with academic quality. For example, a Year 7 participant in a focus group said the following:

"I'd say if you went down to <large reginal town>, I wouldn't say there would be better schools, but I'd say there would be educated schools, academically good, but this school is just friendship and all." (Student focus group 2, Year 7, male)

Although there is no evidence to support such beliefs about the incompatibility of academic quality and strong teacher-student relationships – in fact, the opposite is true (Lee, 2012) – perceptions about the academic quality of education provided at rural schools was one factor, which in conjunction with family traditions and socio-economic status, contributed to decisions about whether students remained in their local community for secondary school or moved to another school, possibly a boarding school, in a larger regional centre or city. As one Year 11 student observed:

"A lot of them leave at the end of Year 6 [...] a lot of farmers send their kids to boarding school [...] they thought that as other of their farmer friends are sending their kids away, that as the school is diminishing, that their learning could be hindered, so they send them somewhere else." (Student focus group 1, Year 9/10, female).

Opportunity 5-2:

Invest in forums and other informational strategies to ensure that parents in rural and regional areas are aware of the benefits of educating their children locally.

Participants also talked extensively about professional learning, the challenges in accessing programs located in Sydney, the opportunities with online professional learning, and the role of teams and role models in supporting professional growth, especially in isolated schools where professional networking is not easily accessible. Principals linked the lack of access to professional learning with high rates of staff turnover and stressed its importance for the many staff in these schools who are early in their careers. As Belinda (Community stakeholder) said:

"If there's not a good and effective support and professional network for them to tap into, then it can sometimes lead to them feeling quite disillusioned about the whole thing and moving out of the – either out of the region or out of teaching altogether."

Principals noted that having staff attend professional learning in major centres was costly in terms of time and money. Chris (Principal, Cluster 3) explained that a day of professional development required three days of cover for a teacher as well as travel and accommodation costs. School professional learning budgets did not go far in those circumstances. In addition, finding relief teachers was sometimes an impossible challenge. Despite the difficulty of accessing formal professional learning, some teachers and non-school-based DoE personnel noted that working in a small school afforded opportunities to try a greater range of roles, including leadership roles at an earlier career stage than would be possible elsewhere. They saw this as a positive aspect of working in rural and regional schools.

Supporting these responses about professional development from interview and focus group participants, an experimental measure of professional capital was developed to examine the impact of teacher professional development on students NAPLAN grades. Professional capital encompasses human (the capacities of teachers and school leaders), social (the collective capacity of teachers and other school staff working together) and decisional (the capacity of teachers individually and collectively to make daily judgments about teaching and learning in response to classroom events) capitals. While the analysis did not find a significant impact on students' NAPLAN results, it did yield an outcome regarding the different professional capital of teachers in 2018 and 2019 by geographic category. It is important to note that data limitations are significant, and so these different capitals should be considered indicative only.

To develop this experimental indicator of professional capital for each school year, the professional development hours undertaken by staff with reference to the school, and the individuals and their role were calculated. These were then averaged across geographic categories. Table 14 is the outcome of the experimental indicator.

Table 14: Average professional capital across geographical categories, 2018-2019

Remoteness Category	2018	2019	
Major Cities	147,886	1,183,622	
Inner Regional	155,395	839,842	
Outer Regional	108,842	509,848	
Remote	101,595	556,184	
Very remote	112,633	452,060	

This suggests that, in 2018, inner regional staff had slightly more development of their professional capital than teachers in the major cities. However, this was not the case in 2019, and in all periods, teachers in outer regional, remote, and very remote had less professional capital development, supporting the consistent findings from the interviews about perceptions of limited access to professional development for teachers in the research. Some principals, community stakeholders, and non-school-based DoE personnel stressed the need for professional learning to be contextualised, taking account of the particular needs, including students' social and emotional

wellbeing, and helping teachers to tailor programs for their students in order to get traction with them. Some of the participants talked about the importance of building networks of experts and peers as an effective strategy for professional support, especially in rural and regional areas given the isolation they experience.

Participants talked about the need for professional learning and mentoring for principals as well. Universities and technology were identified as having a role in improving professional learning provision for staff in rural and regional schools, and although the DoE provides extensive online PL for all teachers, including those in rural and regional areas, the need goes beyond access to the provision of PL that recognises the career stages and community contexts of teachers in rural and regional schools. A key way to ensure that PL meets local needs is to involve principals and DELs in the design of PL. Although this is already a feature of some DoE PL initiatives, it appears insufficient to meet the need in this regard.

Opportunity 5-3: Make available to teachers in rural and regional schools professional learning tailored to local needs.

Sub-opportunity:

• Ensure local input from principals and directors, education leadership into the design and delivery of professional learning programs.

The failure of the curriculum to meet the needs of many students in rural and remote communities was mentioned by several community members. Some urged a greater focus on vocational education, whereas others emphasised the importance of exposing students to a range of possible career paths. Small numbers of students in many schools were recognised as limiting the range of options that could be offered. Several teachers and principals expressed concern about the relevance of the curriculum for students in rural and regional communities. They considered it appropriate for students in metropolitan areas but not for their students. Melanie (Teacher, Cluster 1) described the curriculum as relevant to more academic students but not for the majority. David (Teacher, Cluster 1) described how teachers try to make the curriculum "as real-world as possible", especially for students not considering an Australian Tertiary Admission Rank (ATAR) pathway.



Implicit in these comments is an association of academic pathways with students in metropolitan schools, and vocational pathways with student in rural and regional schools. While this reflects the relative popularity of academic and vocational pathways with geography, it embodies a belief that there is something inherently different about the interests and/or abilities of rural and regional students compared with their metropolitan peers. Such beliefs are not conducive to establishing and maintaining high academic expectations for students in rural and regional areas (see Chapter 4 and Opportunity 4-6); rather, they serve to entrench differing student outcomes according to geographic location.

It is possible to adapt curriculum to local needs, thereby enhancing its relevance without compromising its academic standard. Most teachers, however, agreed that the curriculum is rigidly tailored to metropolitan areas and inflexible to adapt, although there was not consensus. Ellen (Teacher, Cluster 1), for example, believed the curriculum could be adapted to students' needs, and Chad (Teacher, Cluster 1) illustrated how this could be done by describing how the school tries to equip students with vocational agricultural knowledge that goes beyond what their families know:

"They have a look at some of the science about what's happening in the broader context beyond what's being discussed in the family and looking at some of the science behind what's happening. Some of the techniques and strategies for better managing the land, those kinds of things."

Non-school-based DoE personnel located the problem, not with the curriculum but with the ability of the teachers to deliver it to the diversity of students in their classes. Robert (Non-school-based DoE personnel) suggested that, while there needs to be an alternative curriculum in place more relatable to students: "teachers are provided with a particular skill set that doesn't cater for that contextualisation". Bouser (Non-school-based DoE personnel) believed that the level of curriculum delivery in arts, sports, science, and other subjects is not as good in rural and regional schools at least in part because of the lower standard of facilities in rural and regional compared with metropolitan contexts.

In Chapter 4, the lack of knowledge of local industry and history among many teachers, especially those new to an area, was described. Deep local knowledge, firm beliefs in the capacity of rural and regional students to learn as well as their metropolitan peers, and the confidence and skill to adapt curriculum without lowering its intellectual demand underpin adaptation that supports high expectations and achievement. Teachers in rural and regional areas need support to develop these skills and beliefs.

Sub-opportunity:

• Support teachers to develop the confidence and skill to adapt the curriculum to local contexts by building their knowledge of the local community and provision of models of curriculum adaptation that maintain intellectual demand.

5.3 Teachers' work in regional and rural schools

Participants from all groups talked about the diversity of skills that teachers need to have working in rural and regional schools, as well as the requirement for appropriate training. These included dealing with students with special needs, which was made more difficult when there was a lack of specialised health services in the community. Some felt they needed to be across too many subject areas due to the limited number of staff in the schools. Many teachers talked about the variety of responsibilities they have to take as teachers in a small rural or regional school. As Mitchell (Teacher, Cluster 2) explained:

"I was given four different subjects, so had visual arts, maths, geography, and I was doing a oncea-fortnight science for one student, who was, like, doing distance learning. So, three out of the faculty subjects. I spent a lot of my afternoons and weekends learning the content and preparing lessons, and particularly with geography. New syllabus. So, I was making all the resources 'cause they didn't have anything." Steven (Non-school-based DoE personnel) noted that the frequent requirement to teach out-of-field in rural schools is "really a strong incentive for me [the teacher] to go somewhere else, where I can have either access to the subject that I'm passionate about and trained in delivering".

Sandra (Teacher, Cluster 1) explained that her work as a classroom teacher is filled with:

"[...] classes, preparation for classes. Ancillary things like playground duty, roll call, staff meetings, training, professional development – all of that stuff, yeah. And then probably the next one would be, like, uh, staff. The interaction between staff, you know, going to have a chat, whatever it is that you do with staff. And then probably, like, talking to kids – you know, they'll stop you and say something, yeah, respond, you know, like, yeah. One kid will say, 'Oh, this happened to me' and we've got a kid who is really into history anyway, you know, talk about Hitler and you have to stop and have a chat and yeah."

Opportunity 5-4:

Facilitate teachers' access to subject-specific teacher networks and mentors.

While the DoE's Rural Learning Exchange goes some way towards addressing this need, there remains a need beyond the HSC and that allows for informal, flexible connections.

Based on their conversations with principals, critical friends reported that difficulties in filling non-teaching roles, such as for counsellors and psychologists added a significant burden to principals' workloads in rural and regional schools. Some principals and teachers described feeling that they were "left to their own devices" (Shaun, Principal, Cluster 1), and while some appreciated the autonomy afforded by reforms such as the Local Schools, Local Decisions (LSLD), others perceived them as creating an even greater gap between schools and the system, rather than giving them authority as originally intended. Problems with this initiative were located in its implementation, which was perceived as creating a constraining suite of processes and increased workload.

The 24/7 nature of the role of principal or teacher in rural towns was discussed in Chapter 4, Section 4.1. This adds significantly to the workload of staff in these areas and should be recognised. Overall, teachers and principals in rural and regional schools face more complex and constant work-related demands then their colleagues in metropolitan areas. Failure to adequately acknowledge this fact may contribute to high staff turnover in these contexts.

Opportunity 5-5:

Provide supports (e.g., reduced class time) that recognise the additional workload that teachers and principals are required to undertake in rural and regional schools.

5.4 School culture and infrastructure

A path analysis of teacher survey data was used to test the statistical relationships between the mean scores of the perceived autonomy support, collective teacher efficacy, adaptability, and job satisfaction. After testing several models, the best statistical fit and theoretical interpretation resulted from a model where perceived autonomy support predicted both collective teacher efficacy (β = .407, p < .001) and job satisfaction (β = .195, p = .021), collective teacher efficacy predicted adaptability (β = .403, p < .001), and adaptability predicted job satisfaction (β = .552, p < .001). Interestingly, when both perceived autonomy support and collective teacher efficacy were modelled to predict adaptability, the path between perceived autonomy support and adaptability was not significant. This suggests that collective teacher efficacy is an important mediator between the contextual resource of principal support and the personal resource of teacher adaptability.

The results indicate that principals' interactions with teachers can have significant influence on teachers' perceptions of the efficacy of the whole school. When principals are seen to be supportive, staff feel that they are part of an effective teaching cohort. Further, these perceptions of collective teacher efficacy support teachers' individual sense of adaptability, signifying that teachers who believe they are part of an effective team also feel more capable of dealing with change. In addition, job satisfaction was predicted by both adaptability and perceived autonomy support, although the path from adaptability was significantly stronger. This suggests that although supportive principals can make their staff feel more satisfied in their roles, personal adaptability is also required for greater job satisfaction.

Adaptability is critical for enabling teachers in rural and regional schools to feel more satisfied in their roles. Teachers require a strong sense of resilience to deal with ongoing change and uncertainty in their work. Further, since job satisfaction has been shown to increase important retention factors in teacher samples (Conley & You, 2009, 2021; Skaalvik & Skaalvik, 2011, 2017), it may be that adaptability plays a significant role in the retention of teachers in rural and regional schools.

The results also illustrate ways in which teachers' sense of adaptability can be supported. When principals provide support for the motivational needs of their staff, this not only leads teachers to feeling more satisfied but also that they are part of an effective organisation, which has a positive effect on adaptability. Thus, if schools hope to increase teachers' job satisfaction and staff retention, then focus may be best placed on supporting teachers' motivational needs and sense of autonomy. Intervention studies have shown that managers across different domains and disciplines can be taught to be more autonomy-supportive (Su & Reeve, 2011). Hence, professional development that focuses on autonomy-supportive practices for school leaders may be effective in increasing teacher retention. Autonomy-supportive practices focus on nurturing people's internal motivation to help them find value in what they do through, for example, listening to their perspectives, encouraging questions, providing meaningful choices, and providing rationales for decisions and directions.

The importance of perceived autonomy support is consistent across the project's analysis of the student (See Chapter 4) and teacher survey datasets. When teachers' psychological needs are supported, this can boost their autonomous motivation to teach and increase the autonomy support they provide their students (Liu et al., 2020; Taylor et al., 2008), as recommended in Chapter 4. Hence, autonomy support may provide a way to understand the trickle-down relationships between motivation at different school levels, where principals' management styles towards their staff influence teachers' management styles towards their students. Hence, focusing on autonomy support at all school levels may be beneficial for key school outcomes in regional, rural, and remote schools.

Opportunity 5-6:

Support school leaders to use autonomy-supportive practices in leading staff.

Among practices that support teacher autonomy are practices providing them with opportunities to contribute to school decision-making (Ryan & Deci, 2017). While it is acknowledged that this is usual practice – for example, through school improvement plans – it is worth looking for further opportunities in this space. The perceived autonomy of principals and teachers is likely to be undermined by processes that mandate targets and involve system monitoring, particularly when these relate to targets that are not directly within the control of school staff and that are symptoms of complex underlying issues. In contexts of relatively inexperienced school leadership (9 of the 12 principals who completed surveys had been working as principals for less than five years) and the additional workload demands inherent in rural and regional contexts, principals may need support to do this effectively. Indeed, principals commented on feeling that autonomy sometimes amounted to them being responsible and accountable for outcomes but with insufficient flexibility to decide how they would meet them.

Sub-opportunity:

• Provide additional opportunities for teachers to participate in school-level decision-making.

In addition to the teacher survey data reported above, interviewed teachers expressed positive views about working in a small school where there is a strong community feel and there is greater opportunity to know everyone in the school. Many commented on their preference to work in a smaller school for those reasons. For instance, Naomi (Teacher, Cluster 1) said she prefers to work in a small school because of the unique "family-orientated feel". As she explained:

"We have 64 students all up across K to 12. So, the older students always look out for the little ones and even vice versa. The little ones look out for the older ones as well. As far as staff wise, there are probably a few staff that look out for each other's wellbeing."

Ellen (Teacher, Cluster 1) also described how in her school there is a sense of camaraderie among staff, where they "help each other out and give each other ideas, which is really nice. Yeah, we get along really well". Similarly, Breanna (Teacher, Cluster 3) explained that, despite the "downside" of small schools, where "we all have to have multiple jobs because there's not that many of us", there is the positive side where "you're getting to know everyone's a good thing too [...] you can take the time to get to know them".

Strong, collaborative relationships among staff can contribute to building confidence that they can work together effectively to achieve positive outcomes for students – that is, they can contribute to enhanced collective efficacy.

Opportunity 5-7:

Support school leaders to develop the confidence of staff that they can work together effectively to enhance student outcomes (i.e., build collective self-efficacy of staff).

Although interview participants frequently mentioned the need for mentoring for principals, they were clear that this was not the role of DELs, whose major concern was seen as accountability. Responses to the relevant survey items from 11 principals are shown in Table 15.

Table 15: Principal responses to survey questions concerning DELs

Item*	Min	Max	Mean	Std. Dev.
My DEL listens to how I would like to do things	3	7	5.09	1.578
I feel that my DEL provides me with choices and options	3	7	4.82	1.471
I feel understood by my DEL	1	7	4.82	1.779
My DEL conveys confidence in my ability to do well at my job	1	7	5.45	1.809
My DEL encourages me to ask questions	3	7	5.45	1.293
My DEL tries to understand how I see things before suggesting a new way of doing things	1	7	5.00	1.732

^{*}Responses provided on a scale from 1= Strongly disagree; 2 = Disagree; 3 = Somewhat disagree; 4 = Neither agree nor disagree; 5 = Somewhat agree; 6 = Agree; 7 = Strongly agree

Although these principals were, on average, positive about their DELs, it was clear that some principals did not feel supported by their DEL. Paul (Principal, Cluster 3) described the relationship with DELs as having "gone from shoulder-to-shoulder to looking over your shoulder". While some

described positive relationships with their DEL, most described the DEL's presence in schools as limited, and some perceived them as focused on implementing a specific DoE agenda rather than on providing support or advice. The possibly unrealistic scope of the DEL's role was also recognised. Illustrative quotes included:

"An agenda is being sent from the top, but the DELs have to pitch whether they like it or not. And it's not decisions being made from the top aren't always, I think, decisions that probably fit well in running schools and certainly country schools." (Brad, Principal, Cluster 3)

"And the principal has the support of the DEL but, I mean, the DELs are also working in specific clusters and, you know, they've got so many other accountabilities – as I said, there are business rules that govern our organisation that we've got to have. You need the other support layer to be able to really get those things happening." (Robert, Non-school-based DoE personnel)

"There's significant call on their times and I'm seeing that many of the DELs are a little bit overwhelmed there, you know, with the expectations, and an example, it would also be one director I know is overseeing and is the conduit between schools, infrastructure and the school in terms of building programs and things like that. So, when that comes up, those meetings come on top of that, plus the perennial dealing with complaints, which come more and more." (Harry P, Non-school-based DoE personnel)

The result is that principals do not necessarily disclose problems that they are experiencing for fear of showing weakness:

"[S]o they [principals] don't do it, they don't tell them [DELs]. I don't care what anyone says, they don't tell them. It needs to be someone who is not their supervisor almost because – and, so, they are not going to do that. That model doesn't work." (Connie, Non-school-based Doe personnel)

Opportunity 5-8:

Ensure school leaders have access to professional support that is independent from DoE management and accountability structures.

The poor quality of the town's infrastructure, and that of the school, was a concern for students who participated in focus groups across the three clusters. They mentioned "disgusting toilet blocks", broken footpaths, rotting bridges, pool closures due to vandalism, and poor-quality playing fields. As mentioned in Chapter 3, students in particular expressed dissatisfaction with the quality of technology in their schools in terms of the poor condition of often outdated devices, a lack of access to software and, above all, poor Wi-Fi connection in their schools.

Opportunity 5-9:

Ensure that the physical and technological infrastructure of rural and regional schools is maintained to a high standard.



Community and Place

6 Community and Place



The adage of rural schools being at the heart of their communities certainly rings true. In many instances, they are the only government service in their community. Each community is distinct (see chapters 1 and 2), suggesting that policies or practices to achieve benchmarks, and the benchmarks themselves, need enough flexibility to be effective in shaping education.

Community in this research was understood as a dynamic concept influenced by the elements outlined in the rural social space model: the economy, the population, and the geography of a particular space. Together, these create the social environment in which young people develop and influence the available human resources and services. As noted in Chapter 2, most of the participants described the communities in terms of agriculture and the overall sense of connection between residents. Even if these communities may be changing, the heart of the community is in "the memory of the farms, the legacy of the farms" (Gazzola, Principal, Cluster 1). These two factors would appear to be at the centre of community identity and instrumental in understanding many perspectives on education in these communities. Indeed, this identity often seems at odds with contemporary education and dominant values.

It also needs to be recognised that while this identity can bind people together, it can also divide and exclude. The community participants chose to participate because they felt that doing so was important for their community. Similarly, a few new community members participated for similar reasons, having found themselves at peace with their new environment. The limited responses to the community survey may indicate a lack of value with the recruitment of participants privileging those already involved in the community. We are also cognisant of who we were unable to arrange formal interviews with. We also noted a subtle speaking of 'the other', being new people to the community who did not share their identity, and a general absence of significant discussion including Aboriginal and Torres Strait Islander communities.

A key issue needing to be untangled is the conflation of various measures and identities. It is common to read in research and DoE policy documents that lower community SES is related to reduced educational outcomes. There is a need to challenge blanket categories and particularly to untangle the conflation of SES, rurality, and Aboriginality. Rural identity was distinct, and something germane to most participants, that intersected with SES when measures of SES are defined by forms of education and occupation not necessarily valued in these communities. The same can clearly be said for Aboriginal identities and valued forms of capitals not recognised in traditional SES measures.

6.1 Spatial relations

The settlement patterns and town-centre dynamics discussed in earlier chapters exerted a unique influence in each community and research cluster that were important in understanding those communities.

The geographic extent and spatial inclusions of the communities varied across the research sites and clusters. Clusters 2 and 3 were each dominated by a large service town. Their spatial reference was large, often up to 100km in radius. However, the smaller towns or villages in each cluster had more constrained geographic references and were often positioned in relation to their larger 'centre'. The main towns in each were undergoing economic growth on account of the growth of resource extraction industries and transport infrastructure development. Cluster 1, however, was much more dispersed, comprising six smaller towns with multiple service towns. It included five kindergarten to Year 12 schools, ranging from nearly 300km apart, to three being approximately 35km apart. Each was a historic farming town far enough away from a large local centre to justify a kindergarten to Year 12 school.

Across these communities, there were four larger service centres, with each having a sphere of influence over one or more of these communities, but no one centre being dominant. This created a unique town-centre dynamic when considered against the other two clusters.

Historically, settlement patterns in Clusters 2 and 3 have reflected more dispersed population patterns and larger farms. Ostensibly, these farms are becoming larger with the growth of corporate ownership and technological advances. Cluster 1 is characterised by a more densely spread population and more settlements of varying size. As such, distance is operationalised by participants as a more relative concept – what is far in Cluster 1 is not in Clusters 2 and 3. Cluster 1 also had more fertile lands, affording a different population distribution, though it is still experiencing decline. Communities in Cluster 1 had a strong local identity, which in some instances was perceived as under siege from a declining population and changing social composition.

6.1.1 Change

All of the research communities were susceptible to outside-of-school influences, particularly changes in the local economy and natural disasters. Structural changes in the economy over previous generations were often cited as causing and exacerbating the decline of communities. Technology, in particular, in terms of increased mechanisation and the advent of agriculture technology industries, has reduced the number of manual jobs and requires a more skilled workforce. Coinciding with these advances has been the centralisation of service provision, which it was argued may have enhanced economic measures but diminished communities' wellbeing, creating new costs and impacts on the psychology of the place. A typical comment was: "...[it] is really quite depressing, particularly when you go down the street and you think, 'Oh that shop's closed'" (Hannah, Community Stakeholder, Cluster 3).

Of note was the reduction in the numbers of families on the land as a result of both consolidation and corporatisation, and the reduced demand that this creates in towns for services. In particular, corporatisation involves companies running large farming enterprises and consequently sourcing goods on a national tender and shipping basis rather than in ways that support local suppliers. Similarly, their different land management practices created tension in the community.

The consequences of these changes to the local economy and community compositions were a significant issue across the various categories of participants. For example, the decline of local sporting teams – a key focus of community identity – was reported as an impact of declining population and increased insurance costs. Local service clubs and committees were also said to be declining as they drew upon the same small group in the community who were typically ageing. Community interviews in Cluster 1 revealed that some sites were surrounded by corporate farms, while a couple of sites had maintained more family farms. In the latter cases, there was a more vibrant school and positive community than in the former.

Perhaps the most significant recent factor had been drought, which had accelerated many of the economic, and hence population, challenges. Significant psychological factors of drought were hinted at by various respondents. DoE support to maintain school staffing levels through this downturn was appreciated by principals, teachers, and the community as it both supported learning in psychologically challenging times and supported the community.

Long-term shifts also appeared to be underway across non-metropolitan NSW in terms of an increasing proportion of the community identifying as Aboriginal and Torres Strait Islander, including a growing proportion of the youth population. This was more pronounced in clusters 2 and 3, possibly due to historical factors related to land use. Across all clusters, the schools were, according to publicly available data (ABS and ACARA data), each experiencing increased proportions of students who identified as Aboriginal and Torres Strait Islander. Analysis of these data showed that while in some schools the proportion of Aboriginal and Torres Strait Islander students was increasing, in others it was steady or declining. That this trend has coincided with declines in outcomes comparatively may point to deeper issues about the nature of education and schooling.

6.1.2 Heart of the community

"[I]f you think about the welfare of the community, their pinnacle, schools are the heart. Regional and very remote schools, in particular, they are the heart of the community. If you think about the sustainability and economic sustainability of the community, they are important for that, if not the most important thing for the sustainability of the local community there [...] So, on every level, the functioning nature of a school [...] is the most important thing for a regional or a remote town." (Connie, Non-school-based DoE personnel)

The sentiment that the school is the heart of the community was expressed in various forms by all participants. There was a deep positive feeling expressed about the role of the local school, even though there were specific points of tension and concern. For the community participants in the smaller schools, this sentiment was quickly followed by an existential fear for the future of the community, linked to a perceived perennial uncertainty around the potential closure of the school due to population decline or staffing challenges. Many saw it critical to be involved with the school to ensure it had well-developed community links to avoid the feared death of community that many saw as the inevitable outcome of the local school closing.

These issues were linked to the challenges caused by limited access to health and social services described in Chapter 2. Appreciating the role of the principal in connecting community services and negotiating community dynamics was strong in the principal and stakeholder interviews. Principals and non-school-based DoE personnel also talked extensively about the pressures, time, and complexity of this work. Ultimately, being a principal in a rural or regional school is more than leading a school; it is also leading a community and working to ensure its sustainability. A persistent concern was the need for adequate time and specific skills to manage services, as well as access to them for community members at risk. This included managing the intersections of health access and post-school pathways such as apprenticeships, traineeships, and employment opportunities that are also dependent on health provision. There were also pressures in being a senior government employee located in the community, with many unofficial roles falling on them, and the need to be involved in community organisations. All in all, a sense of responsibility for producing the future economy of the community was experienced by many principals and teachers.

Students and community valued teachers and leaders that were part of the town. This was central to notions of trust and a sense of recognition and value. Indeed, particularly for students, teachers who did not connect with the local community were seen as not caring about them or their community. Problematically, several policies were seen to undermine this relationship, particularly DoE targets, bus subsidies, and government economic policies that appear to be undermine what constitutes a town. Principals talked consistently about targets that were unattainable due to their scope, where their community sits on the state-wide social gradient, and the lack of health and social services. It was seen that pursuing some targets, particularly in primary with literacy and numeracy progressions and attendance, often put them at odds with community's desire for more local connection and recognition of out-of-school connections, such as harvesting time. The linking of schools in very different communities often separated by large distances to create a statistical entity is also problematic. The availability of a free school bus beyond the local public school was also consistently raised by principals and community members (linked to the local government school) as a source of frustration. The anecdotal observation here was students leaving the local small town for a larger one, and often attending a non-government school, thus undermining the local school.

Trust, however, cannot be assumed by virtue of position. There were examples in the principal and community member interviews where they talked about school leaders and their lack of awareness about the importance of 'building trust' between school and the community, and therefore, limited efforts to nurture that connection. This, however, creates a tension around what is valued in schooling and the future of school relationships to the community. The second view here was a perspective that the community often felt that the school needed to understand how the community saw the school's role – that is, as forming their future leaders for that place and an important resource for the community. It was important, then, for commitment to the community to be visible to create 'trust', which can then be a resource to both the school and community. Building these relationships of trust, based on a deep understanding of the community, will help teachers develop

their curriculum with reference to students' experiences of the world and ensure their pedagogies build on these understandings.

The following sections of this chapter focus on the implications of understanding rural communities as distinct.

6.2 Curriculum

The distinct characteristics of rural and regional communities, their changes, and challenges, create a unique context for education. More experienced teachers and leaders described increasing standardisation, centralisation, and a lack of professional autonomy compared with earlier in their career. It appeared that a tension exists between seeing the curriculum as neutral – and achievement in it being a marker of value – and curriculum being central to community wellbeing. While a middle path of greater flexibility of curriculum enactment using contextually relevant resources and assessment may exist, participants perceived their professionalism to do so has been undermined by irrelevant accountability mechanisms and external examinations that did not have room for more nuanced meanings.

6.2.1 Local relevance

The ways in which the curriculum mediates relationships with rural, regional, and remote communities is central in communities' sense of being valued in the broader society. The curriculum needs to be sufficiently broad enough to enable all communities to see themselves in it and flexible enough to allow teachers autonomy and agency in their curriculum enactment in diverse contexts. To enact curriculum in place requires teachers who have a deep understanding of their community in order to draw on local examples, connect to local opportunities, and build from students' social contexts. While these are key components of quality teaching, teachers rely on community knowledge and a curriculum form that allows this professional autonomy. Reinforcing the importance of this consideration, one student said in their focus group feedback that "if they don't care about me or my community, why would I care about them?" This focus group then discussed the perceived silliness of studying a phenomenon in a book when they have the same issue playing out locally in a nearby waterway as an example of lack of knowledge of the community. Versions of this were repeated in other focus groups and interviews and implicitly linked to issues of respect for teachers (and schools) and related behaviour issues.



Teachers and principals spoke of the lack of relevance of the school curriculum, the lack of space in it to link local content, and the constraints of monitoring and reporting on their ability to do so. There was both a lack of a professional language to discuss curriculum as a form of knowledge, and perceptions of workload and accountability that sometimes-conflated curriculum with accountability. Examples included what was seen as extreme levels of time needing to be devoted to data entry and monitoring of curriculum in the primary schools, and the demands of external assessments in secondary schools. Links between the perceived lack of curriculum relevance and student achievement is an important area for future research and supported by the findings of the recent research on contextually relevant NAPLAN scores undertaken by members of the research team (Holden et al., 2021) that showed achievement in standardised tests is linked to the cultural context of the questions. Using a randomised control trial (RCT), this research reinforced long-held perspectives from educational sociology that a student's socio-cultural context shapes the way they engage with school knowledge, and ultimately their outcomes in (particularly) standardised tests.

The technological changes in the broader rural industries and value chains of the last generation provided opportunities for schools that it was suggested were not well-harnessed. Particular references here refer to technological changes such as satellite imaging, driverless tractors and drone use to manage crops and livestock, as well as new forms of sustainable land management. These are all based on cutting-edge science and technology, and not represented in the typical school curriculum. Many community members – and students – referenced these changes and the need to prepare students for them in the interests of future employment while also developing the local economy.

The issue of local relevance of curriculum connects to perspectives on the purposes of education. Here, there is need for a balance between an education that facilitates social and geographic mobility, and education that supports the sustainability of rural communities. To this point, the interview protocols used were intentionally developed to surface perspectives rather than to privilege particular views. It is interesting that 'getting a good education' was a natural concept, although just what this was or included may not always have been what is assumed by education systems. This is where the challenge lies for the system – no participant would argue that improving educational outcomes was not a key goal, but how this relates to communities and their aspirations is a structural question related to balancing the system's needs for consistency with flexibility.

6.2.2 Pedagogies of connection

Supporting students to find relevance in their studies requires teachers to have a deep understanding of the students in their social space in order to connect the curriculum to students' experiences. This also requires staff to understand students' lives in rural communities to be able to show that they value their pre-existing knowledges and lived experiences. Policy tends to focus on distance and community SES as having well-established influences on educational outcomes and access to service – often overlooked is how the social space represents experiences. Children in rural and regional communities may not have been to large cities and their cultural institutions, and recreation appeared to be more nature-based. The jobs they see most around them are not the ones people in the city see, and the physical environment is distinct. These differences are part of the challenge for staff, as many find this an absence. As outlined in Chapter 2, however, for locals, this is a strength as they do not assume 'urban' life to be better.

Theories of learning espouse starting with what children know, but this can be limited to 'curriculum' definitions of prior learning and competencies. That teachers generally described relevance as connection indicates that meaning was mainly focused on pedagogical strategies of content selection and linking, and not on knowledge generation. The student focus groups, and many community interviews, indicated a natural affinity with theories of learning that seem to have been sidelined – that is, students tend to learn from connection and relations before the academic content. There may be a skill gap that can be addressed and may be accounted for by the way the professional standards are positioned as context-free. Again, these perspectives ask fundamental questions of the preparation of teachers, their induction into the community, and the increasingly centralised tendencies of curriculum. Teacher preparation, given it is governed by national

standards, and curriculum structures both require ongoing work with national implications. In the first instance though, ensuring teachers have the necessary community understanding and support to develop the local knowledge required to make learning meaningful in each community is essential.

Opportunity 6-1: Recognise that rural and regional teaching requires specific skills in classroom practice and community engagement.

Sub-opportunities:

- Ensure that induction programs for new teachers include ongoing development of community awareness, and a dedicated community liaison role and system support in order to assist teachers to understand the community and build community connections.
- Provide ongoing professional learning for existing teachers to understand their communities, and link this to their curriculum implementation.
- Enhance current policies and practices for Aboriginal education to systematically support and embed partnerships with Aboriginal education initiatives led by Aboriginal organisations.
- Revise professional standards to recognise the context dependence of practice.
- Revise professional standards to recognise the reality of the ways in which rural schools operate (e.g., composite classes, blended teaching).

6.2.3 Subject access

There is a view that inequities in secondary education exist because many students in rural and regional schools do not have access to the full range of school subjects. As one community stakeholder put it: "The ranges of subjects and the availability for specialist teachers in the smaller areas is not so great and children sometimes have to go to bigger areas, or bigger centres for late education" (Hannah, Community stakeholder, Cluster 3).

Access to specialist teachers was a concern that was consistently noted and well-canvassed in relation to staffing issues. Notwithstanding the difficulties of finding staff, the influence of staffing formulas linked to student numbers was a major concern of principals. This was not seen as being overcome by supplementary funding as these positions could not be permanently appointed. Of particular concern for some community members was the lack of music and language teaching and teacher librarians in primary schools, with the lack of technology teachers being a further concern in secondary schools. Breaking the nexus between student numbers and specialist roles needs to be a priority if curriculum breadth is to be maintained.

There was a perception by community members that larger schools had broader curriculum offerings. However, this was not necessarily the case as access via distance education was available, or by the Access network in one cluster where schools share teachers and co-timetable senior classes that are delivered in blended online mode. Instead, perceptions of a lack of access appear to be a way of expressing that access mediated by technology was not desirable, and a view that such provision is less preferable than having a qualified subject specialist in each school. To this end, a community member spoke of looking to move their child for secondary school as they did not want them doing their senior studies through online learning. Again, staffing formulas need to be reconsidered in the interests of curriculum breadth. This is both in small schools and in schools where the student profile means fewer may choose higher level subjects, thus putting demands on school decision-making about the allocation of teachers in secondary school.

Consideration of models of senior secondary access is warranted. In Cluster 1, in particular, there was an existing – and successful – long-term solution to senior secondary curriculum access using shared teachers and technology. Here, the state Access program provides access to a broad curriculum in the senior secondary through shared curriculum offerings in a blended online mode on a common timetable. However, community members also spoke of the online solution not being desirable and of the social pull of a larger centre. As Chad (Community member, Cluster 1) described:

"Your child's close friend goes off to the nearby larger town for Year 11 on the free bus and then your child is left without their close friend, and while there are other children they are not 'like' your child. As a consequence, you send your child to the larger town, and they start making friends there, going to their houses on weekends, playing sport there, and getting a weekend job. Suddenly, their social network is in that larger town, and you are making friends with their new friends' parents and shopping more in that town."

The perceptions of online delivery are an intractable problem, with it presently being a better option and certainly better than that available before the Internet. The issue may well be perception management, possibly made more difficult in the recent COVID-19 pandemic and concerns for 'learning at home'. Bringing many threads of the community interviews together, we suggest a stronger integration between schools in smaller and larger towns may be the best way to manage the negative perception. However, at present, competition for numbers of students and subsequent resources, and the status of the positions in the school, exert a negative influence.

The social and economic gravity of the larger towns in Cluster 1 was evident in a range of interviews and in the community profile analysis. Existing access arrangements are based on the needs of similar central schools dispersed over large distances and that share no other real connection. Exploring a new model that better reflects the social and economic relationships in the region may be timely and may disrupt some of the drivers of students choosing to leave their local schools. Some online learning would likely be necessary but could be used to help develop new teachers. The current Rural Learning Exchange Pilot goes some way towards trialling a new model to support broader subject access, and to provide broader peer interaction, and subsequently learning in the Higher School Certificate. However, its scale may make implementing the key findings of this research regarding connecting to local understandings difficult without a skilled teacher in each school facilitating lesson enactment. It does, however, support the professional learning of newly appointed teachers and address concerns about support for these teachers. It appears the key decision point to leave the community is at the end of primary school and, as such, we would suggest the pilot be expanded to the high school years. We also note the perception of the undesirable nature of online learning was a key driver out in smaller schools and, thus, reinforce the importance of building networks of schools from the early years. Building on the structure of the Rural Learning Exchange Pilot, one approach may be a structured relationship with the larger high school nearby, whereby new teachers in the smaller school co-teach with a more experienced teacher. The new teacher role would be to make the curriculum meaningful to their local students and may precede a move to the larger town in a few years to replace their current mentor. Such a model could also form part of a structured induction and mentoring program. In the context of the main findings, this would not entail downgrading of existing arrangements and could be focused on years 11-12 and specific specialist subjects.

Opportunity 6-2: Revise curricula so students are able to see themselves in the curriculum and teachers can more easily link the curriculum to students' lives.

Sub-opportunities:

- Redevelop a curriculum equity support program such as the former Country Areas Program to support teachers in developing contextually relevant curriculum resources for the diversity of rural communities.
- Establish a curriculum leadership role in rural schools at an executive level to lead local resource and programming development.
- Reduce the reliance on external high-stakes assessment, as this does not account for different contexts, and develop professional moderation of standards.
- Reduce the prescriptive content in the curriculum to enable teachers to use local knowledge and examples and design programs better aligned with student and community need.
- Include scope for school-developed units of study aligned with mandated curriculum outcomes in lieu of standardised content.
- Improve the balance between monitoring and accountability, and teacher professionalism.

6.2.4 TAFE

There was a general perception that TAFE is becoming less available in these communities. At the same time, representatives of growing resource extraction industries were concerned about the lack of local skills and how this limited their ability to employ locals. There were downsized TAFE sites in many communities and unused industry centres in many schools. Instead, students had to attend a larger centre, which impacted attendance at other classes or was often unavailable due to a lack of community transport, the cost of transport, the lack of a qualified driver, and safety concerns about travelling at dusk or early evening. Further, for the industry representatives interviewed, the lack of a strong school-industry link was lamented as a lost opportunity. This was particularly in relation to students – and future apprentices – not having an OH&S card or a 'hand skills' certificate, meaning that new apprentices or workers were unable even to enter a workshop or site, causing a disincentive to employment and a further impost on the employer in terms of training and staff time to supervise a new employee. In Cluster 2, industry representatives spoke of how the Chamber of Commerce had been forced to sponsor private industry to fill the gap in basic training and the perceived withdrawal of TAFE. On this issue, a number of the community representatives were industry representatives, or had strong local industry links. They held strong concerns about the reduction in TAFE access and viewed the move to online learning for industry skills in these communities as inappropriate. This was often described as a major impediment to employing locals.

6.3 Staffing implications

Staffing was a critical concern of participants and is a pre-condition of achieving many of the changes suggested in this report. For many prospective teachers not from these regions, local economic conditions and their related social implications act as a disincentive. As communities change, the sense of not 'fitting in' is heightened as fewer people are like them.

While social isolation from family and friends 'back home' is not easily overcome, the challenges of accessing services to support students was a major disincentive discussed in the interviews. This disincentive is often manifested in a perception of not being able to do the job to the standard they want and, as a result, experiencing a decrease in their sense of professional self-efficacy. This was further exacerbated by a perception of increased compliance or lack of freedom to link to the local community in their work. This was reinforced by survey findings pertaining to perceived autonomy support and related human development theory described in Section 4.2. Teacher autonomy is a key factor in teacher self-efficacy and perceived effectiveness, which is supported by school-wide collective teacher efficacy. Collective teacher efficacy was found to be boosted by autonomy support in the teacher survey data, and significantly predicted greater adaptability, which in turn predicted increased job satisfaction, which links to retention.

Communities valued the important role many staff played in the social fabric of the community. This was discussed by community members and students as a key form of evidence that teachers valued them and their community. Although it is unlikely that engagement in the community can be mandated, these characteristics need to be fostered in recruitment and initial teacher education, and through the development of local community members as future teachers. In the short-term, a strong induction program is needed. Induction was often spoken about as either missing or as a one-off, and often not situated in the community. There was overwhelming support for ongoing structured induction programs over the years a teacher is in the community and involving families and a range of community organisations. Such programs would assist teachers to better understand the community and its values, and the lives of students. It would enable them to better connect their curriculum enactment to the local community. Such an approach may contribute to breaking down the perceived separation of school and community. The DoE is aware of this need and work is underway to improve induction. It will be important to bear in mind the policy/program

implementation gap that appears to have significantly curtailed the effectiveness of many well-designed and well-intended programs.

There is also a need for enhancing existing retraining programs. Local staff employed as teaching assistants would better understand the local community, as would other qualified locals. In two clusters, we heard consistent accounts of skilled individuals who had been unable to work in the school. In one cluster, downsizing of the local TAFE such that it had discontinued running its agriculture program was described, at the same time as the local high school had been unable to fill the role of agriculture teacher for nearly two years. However, the TAFE teacher was not allowed to teach at the high school due to different qualification requirements. A similar situation was discussed in another cluster regarding a metal and woodwork teacher and an unused industry hub adjacent to the school. Given the shortage of teachers in some of these areas a program of retraining seems sensible.

6.3.1 Community dynamics & competition

While there are strong connections in these communities, there are also strong exclusions. Further, the dynamics between towns are not necessarily governed by proximity. The changing nature of many of these communities is significant as many long-term residents struggle with the changes in their communities, and divides emerge between those who have the ability to be mobile and those who do not. The community and competition dynamics described operate from pre-primary school. Many community members talked about families making decisions based on perceptions of senior secondary options.

A major contributor often spoken about passionately by community members was free bus travel. This essentially creates a market among local government schools, and between government schools and the non-government sector. Craig (Community member, Cluster 1) spoke about the impact of a student attending school in a larger town, facilitated by a free bus; and in Cluster 2, students from an outlying town moved to the larger centre, while some students in that larger centre moved to the main town of Cluster 3 (which, in turn, experienced competition from a further larger centre). In some instances, these dynamics were exacerbated by the presence of a non-government school and perceptions about student behaviour in and resourcing of different schools. Free bus travel associated with rhetoric of choice and competition comes at the expense of smaller rural schools. As these community's change, and access to health and social services becomes more difficult, perceptions of negative behaviour grow amongst the mobile classes accelerating their exodus. Views about the relative quality of the facilities and grounds further contribute to perceptions of quality. In one of the communities in Cluster 1, a rotating roster by residents to maintain the grounds was described as necessary to ensure a quality visual appearance. It was described by the principal that the allocation for a general assistant was not based on the land area that the school occupied, so their allocation was not full time and not enough to maintain the grounds.

Opportunity 6-3: Enhance school staffing to recognise the complexity of rural schools.

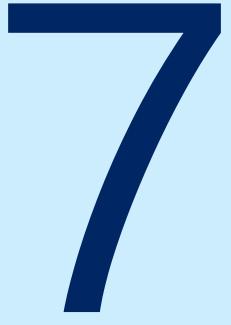
Sub-opportunities:

- Implement the recommendations of the Review of Rural and Remote Incentives in NSW Public Schools (2021).
- Provide career pathways for teachers and principals in rural and regional areas that are planned and specific to these areas.
- Develop pathways into teaching for community members, including in-school training.
- Trial enhanced roles for appropriately qualified teaching assistants while they are teachers in training.
- Revise the requirements to teach to ensure vocational teachers in related fields can teach in schools.
- Enhance the staffing system to be based on need rather than ratio based.
- Review human resourcing processes and requirements to remove barriers to timely employment and temporary contracting arrangements.

Opportunity 6-4: Develop new models of curriculum access.

Sub-opportunities:

- Instigate a new classification of beginning teacher in impacted key learning areas (KLAs) to support
 online learning, and link these teachers to a network school where they are guaranteed a continuing
 role and work under the guidance of an experienced teacher (primary) or subject expert (secondary).
- Develop a networking model in which central schools are networked with schools in their larger centre.
- Reduce the reliance on 'online' curriculum access, and ensure teaching is always supported by a subject-qualified teacher.



Systems Reforms and Initiatives

7 Systems Reforms and Initiatives



How best to organise education at scale to deliver on the equity, inclusivity, and excellence agenda of national (Alice Springs Mparntwe Declaration)⁶, international (e.g., SDG4⁷ and Incheon Declarations), and the DoE strategic priorities is an enduring question.

We know that the further a school is located from a major city, the lower level of performance in standard educational measures. To this point, attempts to redress this situation have not achieved at-scale success. In this chapter, the focus is on systemic activities aimed at optimising the performance of regional and rural schools.

This chapter is organised around three key themes for understanding systemic reforms and initiatives:



1. Developing and sustaining a high-impact workforce in regional and rural schools.



2. Resourcing and supporting teachers and principals, schools, and communities.



3. Streamlining systemic structures to optimise efficiencies for teachers, principals, schools, and communities.

7.1 Developing and sustaining a high-impact workforce in rural and regional schools

Delivering equitable and inclusive education at scale is dependent on a high impact⁸ workforce. Staffing has been an enduring issue for regional and rural schools. Addressing this issue requires an understanding of contexts, re-casting the role of the system in the provision of staff in all schools, and providing rural career pathways for teachers and principals.

7.1.1 Understanding context

There was unanimous agreement across all respondents (via all data collection methods) that there is minimal understanding among the senior personnel (e.g., those DEL and above, and especially staff located in offices in Sydney making decisions on regional and rural schools) of the DoE of the realities and contexts of regional and rural schools and communities. Representative responses included:

- "Absolutely no understanding" (Shaun, Principal, Cluster 1).
- "Limited or very poor" (Sarah, Community stakeholder).
- "A lot of the time no" (Brad, Principal, Cluster 3).
- "Not even close" (Kim, Principal, Cluster 3).
- "Lack of awareness and genuine understanding" (Angus, Non-school-based DoE personnel).

⁶ The Alice Springs (Mparntwe) Education Declaration – Department of Education, Skills and Employment, Australian Government (dese.gov.au)

⁷ Goal 4 – United Nations Department of Economic and Social Affairs (un.org)

⁸ In this chapter, the term 'high-impact' is used to signify staff able to make significant positive differences to students' learning outcomes.

This situation impacts teachers, principals, schools, and communities through standardised target setting, metrocentric decision-making, and conflation of difference with deficit.

Centralised and standardised target setting for NAPLAN and HSC outcomes do not consider the contextual diversity of schools and particularly those with small student cohorts (e.g., Chad, Teacher, Cluster 1; Corinne, Teacher, Cluster 2; Henry, Non-school-based DoE personnel; Jenny, Principal, Cluster 2; Leah, Principal, Cluster 1; Sarah, Principal, Cluster 2). As a simple example, attendance data targets do not reflect the realities of rural schools such as children and youth needing to work at harvest time (Shaun, Principal, Cluster 1). What is required to address this issue is "greater flexibility in how schools are assessed" (Kim, Principal, Cluster 3). This is not about removing standardised measures; rather, it is about allowing schools the opportunity to provide additional data as legitimate evidence for the impact of their work.

Building a stronger evidence base tailored to supporting all schools is dependent on initiating. developing, implementing, and monitoring policies and reforms relevant to the diversity of schools within the system, not just those of metropolitan centres. Metrocentric policymaking often makes assumptions regarding access to resources that cannot be guaranteed in rural communities (Barry, Community stakeholder; Henry, Non-school-based DoE personnel). The result is an 'us and them' mentality between metropolitan and non-metropolitan schools. The loss of regional educational offices (Belinda, Community stakeholder; Hannah, Community stakeholder; Steven, Community stakeholder), minimal visibility of senior personnel in schools (Bruce, Community member, Cluster 3; Connie, Non-school-based DoE personnel; Geoff, Community member, Cluster 2; Keith, Non-schoolbased DoE personnel; Sonny, Non-school-based DoE personnel; Tony, Community member, Cluster 3), and a perceived lack of engagement with those working in schools (Barry, Non-school-based DoE personnel; Gazzola, Principal, Cluster 1; Connie, Non-school-based DoE personnel; David, Teacher, Cluster 1; Freddie, Non-school-based DoE personnel; Paul, Community stakeholder, Cluster 3; Ruth, Principal, Cluster 1; Sonny, Non-school-based DoE personnel), creates a division that perpetuates disadvantage in regional and rural schools (Group A, Community stakeholders). The further a school is located from a major city, the more student outcomes decline. NAPLAN data for 2015–2019 explicitly show a higher proportion of the top two performance bands in metropolitan schools. Figures 10 and 11 show the difference in mean NAPLAN score, with the percentage meeting the minimum achievement standard in parentheses, in NSW by geographic region (using the Australian Statistical Geographic Standard [ASGS]) for the period 2016–2019 in Reading and Mathematics. It is clear from the data that distance from the major city centres is correlated with lower levels of performance in NAPLAN testing, Year 3 through to Year 9.

Figure 10: Difference in mean NAPLAN (Reading and Mathematics) score by ASGS, Year 3 and 5 (2016–2019)

YEAR 3 Reading	2016	2017	2018	2019	Difference v Major Cities by ASGS, 2016-2019
Major Cities	436.4 (96.4)	443.2 (96.0)	443.8 (96.7)	442.7 (97.1)	0
Inner Regional	411.0 (94.8)	416.9 (94.6)	419.3 (95.6)	416.8 (95.5)	-20 ■IR -40 OR
Outer Regional	395.7 (93.0)	402.8 (93.0)	404.2 (93.8)	398.8 (94.0)	-60 ■ R
Remote	379.7 (86.7)	380.3 (89.1)	382.6 (87.7)	398.2 (93.5)	-80 ————————————————————————————————————
Very Remote	365.4 (83.9)	368.5 (86.8)	368.8 (85.7)	352.9 (82.2)	

YEAR 3 Numeracy	2016	2017	2018	2019	Difference v Major Cities by ASGS, 2016-2019
Major Cities	411.8 (96.4)	422.0 (96.3)	418.4 (96.6)	419.9 (96.5)	010
Inner Regional	388.9 (94.9)	397.3 (95.3)	398.0 (95.8)	397.8 (95.2)	-30 -30 -0 O
Outer Regional	379.7 (94.2)	387.2 (94.2)	384.8 (94.1)	383.1 (93.7)	-40 -50
Remote	371.4 (90.7)	369.8 (91.2)	373.9 (88.5)	379.6 (90.8)	-60 ————————————————————————————————————
Very Remote	360.7 (89.0)	355.1 (86.1)	362.4 (88.3)	348.8 (85.5)	-00

YEAR 5 Reading	2016	2017	2018	2019	Difference v Major Cities by ASGS, 2016-2019
Major Cities	509.3 (94.5)	514.7 (94.9)	517.5 (95.9)	514.5 (95.9)	0
Inner Regional	488.5 (91.9)	492.9 (93.2)	494.5 (94.3)	492.6 (93.7)	-20 — I
Outer Regional	472.5 (88.1)	478.8 (91.3)	481.9 (92.5)	479.1 (91.4)	-60
Remote	449.3 (79.2)	462.0 (86.1)	458.4 (82.1)	465.5 (85.7)	-80
Very Remote	434.7 (71.4)	439.5 (78.7)	430.1 (73.7)	428.1 (72.7)	-100

YEAR 5 Numeracy	2016	2017	2018	2019	Difference v Major Cities by ASGS, 2016-2019
Major Cities	505.8 (95.5)	505.8 (96.3)	506.2 (96.5)	508.2 (96.5)	0
Inner Regional	478.5 (93.3)	480.6 (94.8)	480.3 (95.0)	480.1 (94.5)	-20 IR
Outer Regional	467.1 (90.4)	468.7 (93.4)	472.5 (94.1)	468.2 (92.8)	-40
Remote	452.7 (84.4)	454.6 (88.6)	454.3 (87.8)	460.2 (88.1)	-80 ————————————————————————————————————
Very Remote	440.9 (81.4)	436.7 (80.8)	436.7 (81.8)	421.9 (71.3)	-100

Figure 11: Difference in mean NAPLAN (Reading and Mathematics) score by ASGS, Year 7 and 9 (2016–2019)

YEAR 7 Reading	2016	2017	2018	2019	Difference v Major Cities by ASGS, 2016-2019
Major Cities	547.4 (95.8)	553.6 (95.3)	550.0 (95.4)	555.2 (95.5)	0
Inner Regional	529.7 (94.1)	533.4 (93.1)	527.5 (92.7)	532.2 (92.9)	-20 - IR -40 - OR
Outer Regional	512.7 (90.7)	515.1 (90.1)	512.2 (89.0)	516.6 (90.8)	-60 - R
Remote	492.1 (81.0)	488.1 (76.3)	493.7 (76.4)	488.8 (81.2)	-80 -100 -100 -100 -100 -100 -100 -100 -
Very Remote	485.1 (81.0)	463.5 (64.6)	471.9 (72.5)	496.4 (77.1)	-100

YEAR 7 Numeracy	2016	2017	2018	2019	Difference v Major Cities by ASGS, 2016-2019
Major Cities	559.8 (96.5)	566.7 (96.4)	560.1 (96.5)	568.5 (95.4)	0
Inner Regional	532.2 (94.5)	536.6 (94.5)	530.7 (94.6)	535.9 (92.5)	-20 — ■ II
Outer Regional	514.9 (91.7)	520.6 (92.9)	518.7 (92.6)	519.2 (89.9)	-60 -60 -60 -60 -60 -60 -60 -60 -60 -60
Remote	497.0 (83.5)	494.1 (82.3)	487.8 (84.8)	486.8 (80.7)	-80 -100 -100 -100 -100 -100 -100 -100 -
Very Remote	482.4 (80.5)	471.1 (75.1)	475.7 (76.1)	487.9 (71.6)	-120

YEAR 9 Reading	2016	2017	2018	2019	Difference v Major Cities by ASGS, 2016-2019
Major Cities	586.5 (93.9)	592.7 (94.0)	592.5 (95.1)	590.3 (93.6)	0
Inner Regional	570.9 (91.6)	575.5 (91.8)	570.8 (92.1)	569.5 (90.0)	-20 - IR -40 - OR
Outer Regional	555.5 (88.6)	558.6 (88.0)	556.3 (88.8)	553.3 (86.5)	-60
Remote	525.3 (72.2)	533.7 (76.6)	528.8 (81.5)	526.3 (74.4)	-80 -100
Very Remote	521.4 (71.7)	501.8 (60.5)	519.0 (69.7)	529.9 (75.0)	

YEAR 9 Numeracy	2016	2017	2018	2019	Difference v Major Cities by ASGS, 2016-2019
Major Cities	599.9 (96.2)	607.8 (96.9)	607.9 (96.6)	604.0 (96.9)	0
Inner Regional	570.9 (93.4)	579.9 (95.3)	578.8 (94.4)	577.1 (95.0)	-20 -40
Outer Regional	558.9 (92.1)	567.0 (94.3)	565.7 (93.5)	561.9 (93.9)	-60
Remote	534.8 (81.3)	542.8 (86.1)	549.4 (89.8)	534.6 (84.5)	-80 ————————————————————————————————————
Very Remote	525.0 (78.7)	510.6 (70.7)	534.2 (84.7)	535.9 (79.2)	-120

Addressing this geographic disparity gap has been an enduring priority of the DoE. However, well-intentioned initiatives targeting improved outcomes often mistake difference for deficit. In doing so, the complexity, history, and trajectories of communities are side-stepped in preferences for replicating success elsewhere. Assuming all schools are the same creates a policy tension. As Kim (Principal, Cluster 3) notes: "I do not think that running my school is any harder than running a school in Mount Druitt or anywhere else, but it is different and they [the DoE] do not know that difference".

Conflating performance data with deficit thinking does not improve outcomes. What is required is greater systemic understanding of the diverse ways in which schools deliver student outcomes. This is about working with schools, within systemic parameters, to support them in delivering for their communities and the system, while simultaneously generating a bank of data on the impact of schools on student outcomes. It is not about replacing existing measures, but for those where it is appropriate (e.g., regional and rural schools), it is about co-designing alternative indicators for school success.

Opportunity 7-1:

Initiate, and recognise as legitimate, alternate school-level data demonstrating context-specific outcomes and impact.

7.1.2 System as guarantor of high-impact staff

The quality of schooling is dependent on the quality of staff – teachers, leaders, and non-teaching staff. Currently too much is left to chance in the provision of high-impact staff in every classroom. This situation, while present across the state, is amplified in regional and rural schools. Many schools have unfilled vacancies, and finding replacements – whether they are permanent, temporary, or casual – is difficult (Barry, Community stakeholder; Group A, Community stakeholders; Jane, Non-school-based DoE personnel; Jenny, Principal, Cluster 2; Julie, Community stakeholder, Cluster 2). As a result, children and youth are missing out on academic and extra-curricular activities. The market has been unable to resolve these issues and there is a need for greater systemic oversight and management to guarantee high-impact staff in every classroom throughout the state.

Existing loopholes in staffing rules make it possible for offers of employment to be declined without consequence (Bob, Non-school-based DoE personnel; Connie, Non-school-based DoE personnel; Sarah, Principal, Cluster 2; Steven, Community stakeholder), or for extended leave to be taken whilst undertaking work elsewhere in the system. Natalie (Community member, Cluster 1) provided the example of an educator who had been on continuous leave for 4–5 years while working in Sydney, leaving the school unable to fill the position with a permanent staff member, and with the location making it difficult to recruit a temporary teacher. In short, existing rules and procedures make it

possible for individuals to exploit loopholes that compromise the work of schools to be both fully staffed and to deliver high-quality education.

The policy shift towards more localised staffing in the last decade has not worked for regional and rural schools. Put simply, the market has not been capable of resolving the staffing issue. Equality of opportunity for schools to attract high-impact staff (an input variable) does not align with equitable distribution of high-impact staff (an output variable). As a result, the system can no longer guarantee a quality teacher in every classroom. This compromises the social contract of all children and youth having access to a high-quality education. DoE staffing arrangements in their current form have reduced, if not removed, systemic responsibility for staffing schools.

Equitable outcomes cannot be achieved without equity of staffing. Children and youth in regional and rural schools are missing out on educational and extra-curricular activities as a direct result of inconsistent quality and lack of staff. Addressing this requires a recalibration of responsibility for staffing schools within the system, and amendments to staffing rules to prevent exploitation of leave or declining of offers free of consequences.

Opportunity 7-2:

Assign responsibility for ensuring quality staff (permanent, temporary, and casual) in schools to the system.

7.1.3 Rural career pathway

Regional and rural schools are frequently perceived as stepping stones in an educator's career. This creates a tension as many staff who move to these schools don't stay very long as they move to the next promotional position (Belinda, Community stakeholder; Jane, Teacher, Cluster 2; Kath, Non-school-based DoE personnel; Sarah, Community stakeholder). Apart from the potential turnover of staff, and particularly at promotional (e.g., assistant principal, head of department) levels, it also creates a churn of reforms and initiatives in schools. The schools are exploited for what they can add to an individual's CV to help them move on, rather than what is in the best long-term interests of the school and its community (Ruth [Principal, Cluster 1]). Improving outcomes requires a well-prepared and supported workforce aligned with the communities they are working with.

There has been a changing culture within the DoE "from being employed by the system to thinking more individually about getting a job where I want one" (Harry P., Non-school-based DoE personnel). This subtle shift is significant when it comes to a high-impact workforce in regional and rural schools. In the past, and not that long ago, there was a rite of passage for teachers and principals that included country service. Many participants called for the reinstatement of the idea of country service (e.g., Bev, Community member, Cluster 1; Bob, Non-school-based DoE personnel; Chris, Principal, Cluster 3; Julie, Community member, Cluster 2), with some going so far as to suggest it has become a prerequisite for securing permanency within the system. While acknowledging that such a move would not be popular, the current strategy is "not working and how else can you solve the staffing crisis in regional and rural schools" (Connie, Non-school-based DoE personnel). Any move along this path would require significant infrastructure spend to ensure quality teacher housing, reduced rents, and other services to make it a positive experience so as not to further compromise the attractiveness of teaching as a career path. This investment would be needed regardless of the introduction of a prerequisite for country service to secure permanency. Should country service become a requirement, or pathway to permanency, minimum stays (e.g., two years) would need to be established to maintain program integrity.

Additionally, regional and rural career paths can be enhanced through targeted and tailored preparation and development programs, such as those offered by the NSW School Leadership Institute, and Teach for Australia. Aimed at both pre-service and in-service teachers and principals, these programs would be focused on finding "the right person to work in communities, people who want to be there and want to embrace the life of the community" (Jenny, Principal, Cluster 2). These programs could be embedded in initial teacher education at universities and recognised in the DoE recruitment process. Similarly, for in-service teachers and principals they can be offered by

universities, the School Leadership Institute, or other appropriate professional associations (e.g., Primary Principals Association, Secondary Principals Council) and become a pre-requisite for, or condition of, appointment to regional and rural schools. If combined with comprehensive orientation and induction programs as described in earlier chapters, working in regional and rural schools can become an attractive career path for teachers and principals (Freddie, Non-school-based DoE personnel; Hayley, Teacher, Cluster 2; Sonny, Non-school-based DoE personnel).

Opportunity 7-3:

Expand and require preparation programs for all school leaders (principals, deputy/assistant principals, Head of Department's (HODs) and teachers appointed to RRR schools).

Opportunity 7-4:

Establish regional, rural, and remote education as a specialism for initial teacher education programs (for both secondary and primary).

7.2 Resourcing and supporting teachers and principals and schools

Developing and sustaining a high-impact workforce in regional and rural locations is dependent on strategic resourcing and supporting of teachers, principals, and schools. As Jim (Non-school-based DoE personnel) points out, there has been a 'trial-and-error' approach to policy for regional and rural education. Overcoming this requires a whole-of-government approach to thinking through funding, assets and inter-department projects, and technological infrastructure for community sustainability.

7.2.1 Funding

Increasing funding to schools or incentives to teachers and principals are frequently the first approaches raised to resource and support regional and rural schools (Angus, Non-school-based DoE personnel; Bouser, Non-school-based DoE personnel; Chris, Community member, Cluster 3; Geoff, Community member, Cluster 2). Whether financial incentives are the right driver to attract the best staff remains contested (Adam, Non-school-based DoE personnel), especially in the absence of targeted and tailored preparation and development programs. Similarly, greater funding does not necessarily solve issues of inequitable student outcomes. Steven (Community stakeholder) pointed out that his school had sufficient budget but had no access to local supply teachers (casual or temporary) or non-teaching staff who can support students in the ways they are needed. Group A (Community stakeholders) and Steven (Principal, Cluster 2) had similar stories of being unable to expend funds due to a lack of availability of staffing or resources. Even initiatives with the best of intentions often have embedded assumptions that are not consistent with the realities of schools (Keith, Principal, Cluster 1).

Participants provided multiple examples of successful funded programs that were discontinued. A specific example was the Country Area Program (CAP) (Leah, Principal, Cluster 1; Robert, Nonschool-based DoE personnel). The CAP program featured 12 to 15 consultants across the state supporting schools by working with them to develop ideas, and then plan, implement, and evaluate those initiatives. Other programs such as the Deputy Principal Instructional Leader – Aboriginal Students was discontinued after making progress in schools (David, Principal, Cluster 3). Programs that are continued, and those that aren't, do not appear to have a clear logic or evidence base underlying decisions.

Beyond increasing funding to schools or incentives to individual teachers and principals there is a need for greater infrastructure in making regional and rural communities more attractive places to live and work (Barry, Non-school-based DoE personnel). This includes having quality teacher

housing, reduced rents (similar to initiatives for defence personnel) and other community infrastructure (Jenny, Principal, Cluster 2). Resourcing and supporting teachers, principals, and schools need to be part of a suite of initiatives. It is not solely about money but changing systems and structures in communities (Barry, Community stakeholder). As an example, Jane (Non-school-based DoE personnel) and Geoff (Community member, Cluster 2) pointed out that decisions by Transport for NSW provided funding for students to attend the school of their choice, meaning that taxpayer funds were used to drive students past the local public school to well-resourced private schools further away. The intent was to support regional and rural families, but the effect is to divide communities primarily on economic lines.

Opportunity 7-5:

All re-organisation of school funding needs to be treated as major business cases that deliver demonstrable improved outcomes for schools and communities.

7.2.2 Whole-of-government approach

To improve outcomes for regional and rural students, it is easy to attribute sole responsibility for problems to schools. However, as Henry (Non-school-based DoE personnel) noted, it is easy to say that students "are not engaged at schools, programs are not good enough" and completely overlook the "major issues that these schools need to deal with prior to addressing the educational side of things". Improving outcomes requires synergies between education, infrastructure, and health among others to optimise conditions for learning.

The provision of education infrastructure is based on numerical data, favouring schools with enrolment growth and large scale (Barry, Community stakeholder). This creates considerable disparity in the quality of assets across the system (David, Principal, Cluster 3; Shaun, Principal, Cluster 1). The situation is made more glaring when Catholic and Independent schools in towns (or nearby areas) engage in large-scale infrastructure programs enabling explicit advertising and promotion based on new buildings and facilities that the public schools simply cannot match. This creates a 'double bind' in which schools are not invested in due to stable or declining enrolments, and then cannot attract further funds or enrolments as they are not growing in comparison to other, better resourced schools. Investment in public education is an investment in communities, and assets increase the attractiveness of locations.

When dealing with infrastructure assets within the DoE, participants discussed the difficulties of speaking to the right person or needing to speak to multiple people, all of whom did not communicate with one another (e.g., Bruce, Community member, Cluster 3; Jane, Non-school-based DoE personnel; Sarah, Principal, Cluster 2; Shaun, Principal, Cluster 1). This made the process time consuming and frustrating, removing teachers and principals from activities explicitly focused on improving outcomes. There was also some concern about the increased use of sub-contractors to undertake work in schools and the removal of the former Department of Works, while simultaneously empowering of the new school infrastructure section of the DoE, which appears to have less education background.

Beyond education and infrastructure, across all participant groups there was concern raised about the difficulties of accessing allied health professionals (e.g., Bob, Non-school-based DoE personnel; Group A, Community stakeholders; Lucy, Community stakeholder; Parent S, Community member, Cluster 3). The inability of schools and families to secure timely diagnostic information and associated delays in planning for interventions compromises the ability to cater effectively for all students (Hannah, Community stakeholder, Cluster 3). There are many reasons for the limited access. For some it is being located outside of regional centres or proximity creating a geographic gap (Connie, Teacher, Cluster 2), for others it is a lack of resources (Marie, Principal, Cluster 2), and another group reported having facilities but no staff (Brad, Principal, Cluster 3; Chris, Principal, Cluster 3). The result is wait times of up to two years or extensive (and expensive) travel expectations. While it may seem peripheral to educational outcomes, as Hayley (Teacher, Cluster 2) noted: "the more we know about a student the more we can help them". In regional and rural locations, schools could become focal points for the delivery of health services (Hannah, Community

stakeholder; Jenny, Principal, Cluster 2; Sarah, Principal, Cluster 2), even though travelling programs bring speech therapists, paediatricians, psychologists, occupational therapists, psychiatrist, among others to communities.

Opportunity 7-6:

Ensure regional and rural reform initiatives constitute a whole-of-government suite of activities accountable for outcomes in schools and communities.

It is, however, noted that there has recently been the establishment of a Department of Regional NSW to help coordinate activities across government departments working with regional NSW.

7.2.3 Technology

The role technology plays in solving issues of equity and access created by distance was commonly mentioned among stakeholders. As Sonny (Non-school-based DoE personnel) noted: "Technology is increasingly playing a significant role in society, and in terms of equity for our students we need to consider how we ensure access".

Technological innovations have enabled greater access to professional learning opportunities for regional and rural teachers and principals (Bev, Principal, Cluster 2; Ellen, Teacher, Cluster 1; Harry, Non-school-based DoE personnel; Melanie, Teacher, Cluster 1; Robert, Non-school-based DoE personnel; Sandra, Teacher, Cluster 1). It also saves schools money for staff travel and back-filling positions during their absence (Tony, Community member, Cluster 3). However, the quality and enduring impact of professional learning online is not consistent. This is especially the case when hybrid approaches – blending an on-site location and virtual participation – teachers and principals are consistently virtual participants they are excluded from incidental engagement with materials and other participants (Robert, Non-school-based DoE personnel; Paul, Non-school-based DoE personnel). It is often the connections with colleagues and sharing of expertise and experiences that enhances content at professional learning events.

The possibilities of technology for enhancing the experiences of students and staff are dependent on the quality of infrastructure in communities. For many regional and rural locations, this quality cannot be guaranteed. As Jim (Non-school-based DoE personnel) noted: "There were multiple examples where we have tried to do types of interventions for curriculum and wellbeing, and we have come up against a block in terms of bandwidth available into the community".

This is not limited to education, it is similar for law enforcement and health, among others. In particular, the inconsistent reliability of Internet access places greater responsibility on schools and families (Belinda, Community stakeholder; David, Principal, Cluster 3; Sarah, Community stakeholder). The outcome is heightened disadvantaged in communities already somewhat removed from the system.

Digital technologies do, however, offer potential means of increasing the sustainability of regional and rural communities. While there remains "lots of work to be done in the digital literacy space" (Lucy, Community stakeholder), opportunities through programs such as Access and Aurora College, among others, means it is possible for children and youth to remain in towns and not need to move away to boarding school to widen their study options. In addition, the modelling afforded by digital networks show children the possibilities of doing similar without the need to move to the city (Bouser, Non-school-based DoE personnel). With appropriate whole-of-government planning and infrastructure investment, technology offers a means to enhance the educational experience leading to better outcomes and support the sustainment of regional and rural communities (Jim, Non-school-based DoE personnel).

Opportunity 7-7:

All new technological solutions need to include explicit infrastructure and educational outcomes in proposals, and be accountable for increasing equity of outcomes.

7.3 Streamlining systemic structures to support schools and education

Securing a high-impact workforce that is supported and well-resourced is only effective if systemic structures allow for teachers and principals to spend the greatest amount of time on activities focused on improving outcomes. This requires streamlining administration, removing duplication, and re-casting the role of Director, Education Leadership (DEL), linking schools to the system.

7.3.1 Administrivia

There was unanimous agreement that the level of administrative paperwork that not directly impacting on instructional activities has increased in schools. This is combined with the perception of a disconnect in understanding between the DoE and the realities of schools. Put simply, "you cannot delegate administrative tasks when there is no one to delegate to" (Bev, Principal, Cluster 2; Sarah, Principal, Cluster 2). Increasing administrative tasks adds to the expansiveness of the contemporary principalship and creates a lot of the hidden work in the role (Bev, Principal, Cluster 2; David, Principal, Cluster 3; Kim, Principal, Cluster 3; Shaun, Principal, Cluster 1). This adds significant work in different ways for schools (Brad, Principal, Cluster 3) and the volume of work is amplified in small operations (Helen, Principal, Cluster 1).

Reducing administrative tasks is not about removing policies or line management. It is about displaying trust in principals (Bob, Non-school-based DoE personnel) and taking away redundancies, which in turn distracts school leaders from instructional leadership (Steve, Principal, Cluster 2). It is much more than simply prioritising tasks (David, Principal, Cluster 3; Marie, Principal, Cluster 2), as the DoE – the employer of teachers and principals – is asking for tasks to be completed irrespective of their impact on outcomes.

It is not completing paperwork that motivates teachers and principals (Gazzola, Principal, Cluster 1). Increasing paperwork, particularly financial management since the Local Schools Local Decisions (LSLD) reform, and the need to justify everything, has added substantial non-education-focused administration to schools (Chris, Community member, Cluster 3; David, Principal, Cluster 2; Helen, Principal, Cluster 1; Kate, Non-school-based DoE personnel). The volume of work was causing some principals, namely from smaller schools, to miss professional learning events (Angus, Non-school-based DoE personnel) and stifling potential collaborative endeavours across schools (Chad, Teacher, Cluster 1; Group A, Community stakeholders), or with local industries (Chris, Community member, Cluster 3). Administrative burdens such as risk assessments and ensuring all staff have active Working with Children Checks (WWCC) make it difficult to convince local businesses (especially small- to medium-sized) to engage since they cannot afford the time and resources (e.g., costs for WWCC) to complete paperwork.

The increase in administration is not limited to schools but is witnessed throughout the DoE (Harry P., Non-school-based DoE personnel). This was correlated, in participants' perceptions, with the rise of senior personnel within the DoE from outside of education. Connecting with claims of not understanding contexts, a common critique was that the DoE is "trying to introduce this business or corporate model which does not work in education". Rather than generating a 10- to 15-year vision for education or adopting innovative and bold thinking on how to address the disparity gap in regional and rural outcomes, school leaders and teachers are subjected to ever-expanding audit trails that shift focus with political rather than educational imperatives (Adam, Non-school-based DoE personnel; Jane, Non-school-based DoE personnel; Harry, Non-school-based DoE personnel).

Opportunity 7-8:

Audit and remove systemic administrative requirements on schools which do not directly improve their capacity to deliver high-quality outcomes.

7.3.2 Role of the Director, Educational Leadership

The Director, Educational Leadership (DEL) is a significant role that links schools and the system. Intended to provide principals with direct one-to-one support, the DEL is the person a school leader should turn to when things get difficult. However, based on the interviews with school leaders (e.g., principals), this intended role of DEL is rarely experienced by principals. Paul (Principal, Cluster 3) indicated that the DEL is now more oversight and line manager than the previous more collegial approach of "working with you for the betterment of all".

With the DEL as a crucial informant for promotion applications, there is the possibility that principals are not sharing details with DELs for fear of being assessed as weak, struggling, or unable to cope (e.g., Connie, Non-school-based DoE personnel; Paul, Principal, Cluster 3). This is amplified by the limited presence of DELs in schools, where often due to geography they are just not visiting schools often enough, or for long enough, to get a feel for them (Gazzola, Principal, Cluster 1; Shaun, Principal, Cluster 1). In summary, the role has evolved such that it entails being neither a mentor nor an educational leader for principals and schools.

Harry P. (Non-school-based DoE personnel) went further describing DELs as 'implementers', adding the following:

"They are the translators of the policy and the policy decisions and strategic directions that are set centrally. The translate that through the principal into school size chunks, bite size chunks. [...] They are the major interface between what is being prepared through different Directorates in the Department and what must be happening in schools. They are the interface and their job of encouraging, enhancing, and developing principals and leadership in schools is being diluted because of the other things that they are expected to do."

The complexity of primary and secondary – not to mention central schools – was perceived as a difficulty for DELs, whose background was from one or the other. This reduced the effectiveness or usefulness of DEL advice for schools. When there was a more positive experience working with a DEL, it was the result of a long-term relationship with the individual rather than necessarily the role (e.g., Billie, Principal, Cluster 1).

The position description for the role of Director, Educational Leadership states that they have 'a key strategic role in supporting the continuous improvement of principals in NSW public schools' and providing:

"[...] differentiated line management support to principals in their pivotal responsibility for leading and managing their school. The Director will work with the Principal to ensure evidence-based decision-making is focused on improving student progress and achievement by improving the quality of teachers and through effective school planning, self-assessment and change management processes."

Evolution of the DEL role, compared with the previous School Education Director (SED) role, has meant that principals are less likely to confide in their DEL when potential career limiting consequences (either real or perceived) are in play. In addition, rather than working with principals, DELs are now more concerned with compliance and ensuring fidelity of implementation of systemic imperatives. Absent in the system now are non-school-based roles that provide direct support and capacity building rather than line management. This creates an opportunity.

Opportunity 7-9:

Establish a class of systemic officers, or redefine the role of DEL or Principal, School Leadership (PSL), focused on support and capacity building of school leaders, not compliance.

7.3.3 Reducing duplication to optimise efficiencies

Much of the administrative paperwork required of teachers and school leaders relates to demands from the DoE for record keeping and as evidence for policy management. This has created "a huge workload" at the school level (Steve, Principal, Cluster 2), compiling "compliance activities or collecting and organising data with limited purpose at our site level" (Chad, Teacher, Cluster 1). A substantial amount of time is spent on activities with no direct impact on student outcomes (Marie, Principal, Cluster 2). Schools, too, have proliferated administrative requirements as part of a cascading of systemic requirements (Ellen, Teacher, Cluster 1; Gabby, Teacher, Cluster 1; David, Teacher, Cluster 1; Jane, Teacher, Cluster 2; Melanie, Teacher, Cluster 1; Mitchell, Teacher, Cluster 2).

The impact of administrative tasks is amplified in small regional and rural schools where there are fewer staff (Naomi, Teacher, Cluster 1; Sandra, Teacher, Cluster 1). Often there is a single teacher in a faculty creating substantial non-teaching related tasks that reduce the amount of preparation time for delivering the education to students. For primary schools, multi-age classes necessitate new materials every year as classes can have the same children for 2–7 years (Naomi, Teacher, Cluster 1). Any tasks that do not directly improve the quality of instruction are distractions for teachers and principals, and schools cannot afford the inefficiencies. Rather than a focus on describing what is being done, schools need to curate the right data in the right amount to optimise teaching and learning activities through high-impact practices.

While addressing duplication and optimising efficiencies is a separate issue, it does not require a listing separately as it is covered by Opportunity 7.8.

7.4 Summary

Systemic responses to improving outcomes in regional and rural schools based on the research for this project centred on three themes:

- 1. Developing and sustaining a high-impact workforce in regional and rural schools.
- 2. Resourcing and supporting teachers and principals, schools, and communities.
- 3. Streamlining systemic structures to optimise efficiencies for teachers and principals, schools, and communities.

The nine opportunities provided in this chapter are designed to address these possibilities.

References

References

Abiatal, L. K., & Howard, G. R. (2020). Constructivism-led assistive technology: An experiment at a Namibian special primary school. *South African Journal of Childhood Education*, 10(1), 1–12. https://doi.org/10.4102/sajce.v10i1.794

Akcaoglu, M., & Green, L. S. (2019). Teaching systems thinking through game design. *Educational Technology Research and Development*, 67(1), 1–19. https://doi.org/10.1007/s11423-018-9596-8

Ale, K., Loh, Y.AC. & Chib, A. (2017). Contextualized-OLPC education project in rural India: Measuring learning impact and mediation of computer self-efficacy. *Educational Technology Research and Development*, 65(3), 769–794. https://doi.org/10.1007/s11423-017-9517-2

Allen, K., Kern, M. L., Vella-Brodrick, D., Hattie, J., & Waters, L. (2018). What schools need to know about fostering school belonging: A meta-analysis. *Educational Psychology Review*, 30(1), 1–34. https://doi.org/10.1007/s10648-016-9389-8

Anderson, M., & White, S. (2011). Resourcing change in small schools. *Australian Journal of Education*, 55(1), 50–61. https://doi.org/10.1177/000494411105500106

Aurah, C. M., Cassady, J. C., & McConnell, T. J. (2014). Genetics problem solving in high school testing in Kenya: effects of metacognitive prompting during testing. Electronic *Journal of Science Education*, 18(8), 1–26.

Baessa, Y. D., Chesterfield, R., & Ramos, T. (2002). Active learning and democratic behaviour in Guatemalan rural primary schools. *Compare: A Journal of Comparative and International Education*, 32(2), 205–218. https://doi.org/10.1080/03057920220143183

Baharav, H., & Newman, E. (2019). Contextual research for educational improvement: A collaborative process in Northern California. *Improving Schools*, 22(3), 237–250.

Bardhoshi, G., Duncan, K., & Erford, B. T. (2017). Effect of a specialized classroom counseling intervention on increasing self-efficacy among first-grade rural students. *Professional School Counseling*, 21(1), 12–25. https://doi.org/10.5330/1096-2409-21.1.12

Blanchard, M. R., LePrevost, C. E., Tolin, A. D., & Gutierrez, K. S. (2016). Investigating technology-enhanced teacher professional development in rural, high-poverty middle schools. *Educational Researcher*, 45(3), 207–220. https://doi.org/10.3102/0013189X16644602

Boswell, M. A., Knight, V., & Spriggs, A. D. (2013). Self-monitoring of on-task behaviors using the MotivAider® by a middle school student with a moderate intellectual disability. *Rural Special Education Quarterly*, 32(2), 23–30. https://doi.org/10.1177/875687051303200205

Boynton, M., & Hossain, F. (2010). Improving engineering education outreach in rural counties through engineering risk analysis. *Journal of Professional Issues in Engineering Education and Practice*, 136(4), 224–232. https://ascelibrary.org/doi/10.1061/%28ASCE%29EI.1943-5541.0000026

Brett, J. (2011). Fair Share: Country and City in Australia. Quarterly Essay, No. 42. Melbourne: Black Inc.

Bronfenbrenner, U. (1995). Developmental ecology through space and time: A future perspective. In P. Moen, G. H. Elder, Jr., & K. Lüscher (Eds.), Examining lives in context: Perspectives on the ecology of human development (pp. 619–647). *American Psychological Association*. https://doi.org/10.1037/10176-018

Campbell, C., Faulkner, M., & Pridham, B. (2010). Supporting adolescent learning and development using applied learning pedagogies in a regional secondary school: An evaluation of a pilot program. *The High School Journal*, 94(1), 15–27. https://doi.org/10.1353/hsj.2010.0006

Capp, G., Benbenishty, R., Astor, R. A., & Pineda, D. (2018). Learning together: Implementation of a peer-tutoring intervention targeting academic and social–emotional needs. *Children & Schools*, 40(3), 173–184. https://doi.org/10.1093/cs/cdy009

- Chai, Z. (2017). Improving early reading skills in young children through an iPad app: Small-group instruction and observational learning. *Rural Special Education Quarterly*, 36(2), 101–111. https://doi.org/10.1177/8756870517712491
- Chance, P. L., & Segura, S. N. (2009). A rural high school's collaborative approach to school improvement. *Journal of Research in Rural Education*, 24(5), 1–12. http://jrre.psu.edu/articles/24-5.pdf
- Cifuentes, L., Maxwell, G., & Bulu, S. (2011). Technology integration through professional learning community. *Journal of Educational Computing Research*, 44(1), 59–82. https://doi.org/10.2190/EC.44.1.d
- Cilliers, L., & Bloch, C. (2018). A reading project to improve literacy in the foundation phase: A case study in the Eastern Cape. *Reading & Writing*, 9(1), 1–7. https://doi.org/10.4102/rw.v9i1.167
- Clark, N. C., Heilmann, S. G., Johnson, A., & Taylor, R. (2016). Impact of formal mentoring on freshmen expectations, graduation rates, and GPAs. *Leadership and Research in Education*, *3*(1), 52–76. https://doi.org/10.1080/0969594X.2011.592972
- Conkey, A. A., & Green, M. (2018). Using place-based art education to engage students in learning about food webs. *Journal of Instructional Pedagogies*, 21, 1–17.
- Conley, S., & You, S. (2009). Teacher role stress, satisfaction, commitment, and intentions to leave: A structural model. *Psychological Reports*, 105(3), 771–786. https://doi.org/10.2466/PR0.105.3.771-786
- Conley, S., & You, S. (2021). School organizational factors relating to teachers' intentions to leave: A mediator model. *Current Psychology*, 40(1), 379–389. https://doi.org/10.1007/s12144-018-9953-0
- Cumming, F., & Nash, M. (2015). An Australian perspective of a forest school: Shaping a sense of place to support learning. *Journal of Adventure Education and Outdoor Learning*, 15(4), 296–309. https://doi.org/10.1080/14729679.2015.1010071
- Davies, J. & Halsey, J. (2019). Principals as protagonists: Practices beneficent for Indigenous education in rural schools. *Australian and International Journal of Rural Education*, 29(1), 101–118. https://doi.org/10.47381/aijre.v29i1.190
- Du, Y. & Hu, Y. (2008). Student academic performance and the allocation of school resources: Results from a survey of junior secondary schools. *Chinese Education & Society, 41*(5), 8–20, https://doi.org/10.2753/CED1061-1932410501
- Eacott, S., Niesche, R., Heffernan, A., Loughland, T., Gobby, B., & Durksen, T. (2021). *High impact leadership in regional, rural and remote schools*. Retrieved from https://www.unsworks.unsw.edu.au/permalink/f/a5fmj0/unsworks_modsunsworks_75297
- Engels, M., Miller, B., Squires, A., Jennewein, J. S., & Eitel, K. (2019). The confluence approach: Developing scientific literacy through project-based learning and place-based education in the context of NGSS. *Electronic Journal of Science Education*, 23(3), 33–58.
- Exley, S. (2003). The effectiveness of teaching strategies for students with dyslexia based on their preferred learning styles. *British Journal of Special Education*, 30(4), 213–220. https://doi.org/10.1111/j.0952-3383.2003.00313.x
- Ezati, B. A., Madanda, A., & Ahikire, J. (2018). Improving learning in rural lower primary school through provision of informal ECD: Lessons from an NGO model in Uganda. *Journal of Education and e-Learning Research*, 5(1), 51–59. https://doi.org/10.20448/journal.509.2018.51.51.59
- Fawley, K. D., Stokes, T. F., Rainear, C. A., Rossi, J. L., & Budd, K. S. (2020). Universal TCIT improves teacher–child interactions and management of child behaviour. *Journal of Behavioural Education*, 29(4), 635–656. https://doi.org/10.1007/s10864-019-09337-6
- Franklin, T. J. (2008). Teaching digital natives: 3-D virtual science lab in the middle school science classroom. *Journal of Educational Technology*, 4(4), 39–47. https://doi.org/10.26634/jet.4.4.577
- Gallagher, H. A., Arshan, N., & Woodworth K. (2017) Impact of the National Writing Project's College-Ready Writers Program in high-need rural districts. *Journal of Research on Educational Effectiveness*, 10(3), 570–595, https://doi.org/10.1080/19345747.2017.1300361

- Green, B., & Letts, W. (2007). Space, equity, and rural education: A "trialectical" account. In K. N. Gulson & C. Symes (Eds.), *Spatial theories of education: Policy and geography* matters (pp. 57-76). New York, NY: Routledge.
- Green, B., & Reid, J. (2021). Rural social space: A conceptual-analytical framework for rural (teacher) education and the rural human services. In P. Roberts & M Fuqua (Eds), *Ruraling Education Research* (pp. 29-46). Springer.
- Guttu, M., Engelke, M. K., & Swanson, M. (2004). Does the school nurse-to-student ratio make a difference? *Journal of School Health*, 74(1), 6–9. https://doi.org/10.1111/j.1746-1561.2004.tb06593.x
- Guy-Evans, O. (2020, Nov 09). Bronfenbrenner's ecological systems theory. *Simply Psychology*. www.simplypsychology.org/Bronfenbrenner.html
- Hamm, J. V., Farmer, T. W., Robertson, D., Dadisman, K. A., Murray, A., Meece, J. L., & Song, S. Y. (2010). Effects of a developmentally based intervention with teachers on Native American and white early adolescents' schooling adjustment in rural settings. *The Journal of Experimental Education*, 78(3), 343–377. https://doi.org/10.1080/00220970903548038
- Harlow, A. (2010). Beginning the day with the IWB in an early childhood classroom. *International Research in Early Childhood Education*, 1(2), 57–68.
- https://www.researchgate.net/publication/267423593_Beginning_the_day_with_the_IWB_in_an_ear_ly_childhood_classroom
- Hattie, J. (2008). Visible learning: A synthesis of over 800 meta-analyses relating to achievement. Routledge.
- Hoffman, J. A., Anderson-Butcher, D., Fuller, M., & Bates, S. (2017). The school experiences of rural youths: A study in Appalachian Ohio. *Children & Schools, 39*(3), 147–155. https://doi.org/147-155.10.1093/cs/cdx010
- Holden, R., Dobrescu, I., Motta, A., Piccoli, A., Roberts, P., & Walker, S. (2021). *Cultural Context in Standardised Tests*. UNSW Economics of Education Knowledge Hub. Retrieved from http://www.edhub.unsw.edu.au/projects/cultural-context-in-education
- Ihrig, L. M., Lane, E., Mahatmya, D., & Assouline, S. G. (2018). STEM excellence and leadership program: Increasing the level of STEM challenge and engagement for high-achieving students in economically disadvantaged rural communities. *Journal for the Education of the Gifted, 41*(1), 24–42. https://doi.org/10.1177/0162353217745158
- Jones, E., Zuest, L., Bulger, S., Elliott, E., Cho, K., & Lilly, C. (2020). Initial findings of a multicomponent school health intervention in rural Appalachia: The Greenbrier CHOICES Project. *Health Education & Behavior*, 47(2), 332–343. https://doi.org/10.1177/1090198119897612
- Karp, T., Gale, R., Lowe, L. A., Medina, V., & Beutlich, E. (2010). Generation NXT: Building young engineers with LEGOs. *IEEE Transactions on Education*, *53*(1), 80–87. https://doi.org/10.1109/TE.2009.2024410
- Klar, H. W. & Brewer, C. A. (2014). Successful leadership in a rural, high-poverty school: The case of County Line middle school. *Journal of Educational Administration*, 52(4), 422–445. https://doi.org/10.1108/JEA-04-2013-0056
- Knight, J. (2009). What can we do about teacher resistance? *Phi Delta Kappan, 90*(7), 508–513. https://doi.org/10.1177/003172170909000711
- Lai, A. H. Y., Chui, C. H.-K., Wong, K.-Y., & Chan, C. L. W. (2019). Academic motivations of Yi youths in China: Classmate support and ethnic identity. *The Journal of Educational Research*, 112(4), 550–563. https://doi.org/10.1080/00220671.2019.1602820
- Lee, J-S. (2012). The effects off teacher-student relationship and academic press on student achievement and academic performance. *International Journal of Educational Research*, 53, 330–340. https://doi.org/10.1016/j.ijer.2012.04.006

- Leedy, A., Bates, P., & Safran, S. P. (2004). Bridging the research-to-practice gap: Improving hallway behavior using positive behavior supports. *Behavioral Disorders*, 29(2), 130–139. https://doi.org/10.1177/019874290402900204
- Liu, W. C., Wang, C. K. J., Reeve, J., Kee, Y. H., & Chian, L. K. (2020). What determines teachers' use of motivational strategies in the classrooms? A self-determination theory perspective. *Journal of Education*, 200(3), 185–195. https://doi.org/10.1177/0022057419881171
- Lorenz, K. A., Stylianou, M., & Kulinna, P. H. (2020). Changes in healthy behaviour knowledge of rural pupils. *European Physical Education Review*, 26(2), 465–480. https://doi.org/10.1177/1356336x19867732
- Lynch, M., Zovinka, E. P., Zhang, L., Hruska, J. L., & Lee, A. (2005). Rural Outreach Chemistry for Kids (ROCK): The program and its evaluation. *Journal of Higher Education Outreach and Engagement*, 10(3), 125–141. https://files.eric.ed.gov/fulltext/EJ1096758.pdf
- McIlveen, P., Ford, T., & Everton, B. (2005). Facilitating transition from rural schools to university. *Australian Journal of Career Development*, *14*(1), 11–17. https://doi.org/10.1177/103841620501400104
- McIlveen, P., Morgan, T., & Bimrose, J. (2012). A longitudinal study of the experience of a career development program for rural school students. *Australian Journal of Career Development*, 21(1), 22–30. https://doi.org/10.1177/103841621202100104
- Meyer, J. A., & Mann, M. B. (2006). Teachers' perceptions of the benefits of home visits for early elementary children. *Early Childhood Education Journal*, 34(1), 93–97. https://doi.org/10.1007/s10643-006-0113-z
- Meyer, J. A., Mann, M. B., & Becker, J. (2011). A five-year follow-up: Teachers' perceptions of the benefits of home visits for early elementary children. *Early Childhood Education Journal*, 39(3), 191–196. https://doi.org/10.1007/s10643-011-0461-1
- Mo, D., Zhang, L., Wang, J., Huang, W., Shi, Y., Boswell, M., & Rozelle, S. (2015). Persistence of learning gains from computer assisted learning: Experimental evidence from China. *Journal of Computer Assisted Learning*, 31(6), 562–581. https://doi.org/10.1111/jcal.12106
- Mokher, C. G., Lee, S., & Sun, C. (2019). Evaluating innovations for improving college and career readiness in rural schools. *Research in the Schools*, 26(1), 48–63.
- Mullen, C. A. & Graves, T. H. (2000). A case study of democratic accountability and school improvement. *Journal of School Leadership*, 10(6), 478–504. https://doi.org/10.1177/105268460001000601
- Murimi, M. W., Chrisman, M. S., Hughes, K., Taylor, C., Kim, Y., & McAllister, T. L. (2015). Effects of school-based point-of-testing counselling on health status variables among rural adolescents. Health Education Journal, 74(5), 557–567. https://doi.org/10.1177/0017896914552000
- Murry, V. M., Berkel, C., Inniss-Thompson, M. N., & Debreaux, M. L. (2019). Pathways for African American success: Results of three-arm randomized trial to test the effects of technology-based delivery for rural African American families. *Journal of Pediatric Psychology, 44*(3), 375–387. https://doi.org/10.1093/jpepsy/jsz001
- Newfoundland and Labrador (2019). Rural Lens: Assessing Regional Policy Implications A guide for Public Bodies. Retrieved from https://www.gov.nl.ca/pep/files/Rural-Lens.pdf
- Ngalawa, A., Simmit, E., & Glanfield, F. (2015). Exploring the emergence of community support for school and encouragement of innovation for improving rural school performance: Lessons learned at Kitamburo in Tanzania. *Global Education Review, 2*(4), 101–125. https://files.eric.ed.gov/fulltext/EJ1080909.pdf
- Nievecela, L. C., & Ortega-Auquilla, D. (2019). Using cooperative learning strategies to develop rural primary students' English oral performance. *English Language Teaching, 12*(11), 74–84. https://doi.org/10.5539/elt.v12n11p74

Oh, H. J., & Rana, S. (2017). Using a 3-day physical activity recall as homework to increase physical activity in rural Appalachian school youth: A 3-week pilot intervention program. *The Physical Educator* 74(3), 497-517. https://doi.org/10.18666/tpe-2017-v74-i3-7343

Okurut, J. M. (2015). Examining the effect of automatic promotion on students' learning achievements in Uganda's primary education. *World Journal of Education*, *5*(5), 85–100. https://doi.org/10.5430/wje.v5n5p85

Otieno, T., & Wilder, M. (2010). Enhancing inquiry-based science and math in Appalachian middle schools: A model for community engagement. *Kentucky Journal of Excellence in College Teaching and Learning*, 8(1), 1, 57-68. https://encompass.eku.edu/kjectl/vol8/iss1/1

Pegorraro-Schull, C. P., & Anderson, E. A. (2008). The effect of home visiting and home safety on children's school readiness. *European Early Childhood Education Research Journal*, 16(3), 313–324. https://doi.org/10.1080/13502930802291983

Penman, J., & Oliver, M. (2011). Schools-University Partnership Program involving Year 10 students is changing aspirations of first-generation potential university students in South Australia. *International Journal of Learning, 18*(1), 487-498. https://doi.org/10.18848/1447-9494/CGP/v18i01/47464

Prain, V., Cox, P., Deed, C., Dorman, J., Edwards, D., Farrelly, C., Keefe, Lovejoy, V., Mow, L., Sellings, P., Waldrip, B., & Yager, Z (2013). Personalised learning: Lessons to be learnt. *British Educational Research Journal*, 39(4), 654–676. https://doi.org/10.1080/01411926.2012.669747

Probyn, M. (2015). Pedagogical translanguaging: Bridging discourses in South African science classrooms. *Language and Education*, 29(3), 218–234. https://doi.org/10.1080/09500782.2014.994525

Puskar, K., Sereika, S., & Tusaie-Mumford, K. (2003). Effect of the Teaching Kids to Cope (TKC) program on outcomes of depression and coping among rural adolescents. *Journal of Child and Adolescent Psychiatric Nursing*, 16(2), 71–80. https://doi.org/10.1111/j.1744-6171.2003.tb00350.x

Reid, J., Green, B., Cooper, M., Hasting, W., Lock, G., & White, S. (2010). Regenerating rural social space? Teacher education for rural-regional sustainability. *Australian Journal of Education*, 54(3), 262–267. https://doi.org/10.1177/000494411005400304

Roberts, P. & Green, B. (2013). Researching Rural Place(s): On Social Justice and Rural Education. *Qualitative Inquiry.* 19 (10) pp. 765 – 774.

Roberts, P., & Guenther, J. (2021). Framing rural and remote: Key issues, debates, definitions, and positions in constructing rural and remote disadvantage. In P. Roberts & M. Fuqua (Eds.), *Ruraling education research* (pp. 13–27). Springer.

Ryan, R. M., & Deci, E. L. (2017). Self-determination theory: Basic psychological needs in motivation, development, and wellness. Guilford Publications. https://doi.org/https://doi.org/10.1521/978.14625/28806

Sandholtz, J. H., & Ringstaff, C. (2014). Inspiring instructional change in elementary school science: The relationship between enhanced self-efficacy and teacher practices. *Journal of Science Teacher Education*, 25(6), 729–751. https://doi.org/10.1007/s10972-014-9393-0

Scheef, A. R., Hollingshead, A., & Voss, C. S. (2019). Peer support arrangements to promote positive postschool outcomes. *Intervention in School and Clinic, 54*(4), 219–224. https://doi.org/10.1177/1053451218782430

Seyle, D. C., Widyatmoko, C. S., & Silver, R. C. (2013). Coping with natural disasters in Yogyakarta, Indonesia: A study of elementary school teachers. *School Psychology International*, 34(4), 387–404. https://doi.org/10.1177/0143034312446889

Simweleba, N. H. & Serpell, R. (2020). Parental involvement and learners' performance in rural basic schools of Zambia. *South African Journal of Childhood Education, 10*(1), 1–13. https://doi.org/10.4102/sajce.v10i1.608

Skaalvik, E. M., & Skaalvik, S. (2011). Teacher job satisfaction and motivation to leave the teaching profession: Relations with school context, feeling of belonging, and emotional exhaustion. *Teaching and Teacher Education*, 27(6), 1029–1038. https://doi.org/10.1016/j.tate.2011.04.001

Skaalvik, E. M., & Skaalvik, S. (2017). Still motivated to teach? A study of school context variables, stress and job satisfaction among teachers in senior high school. *Social Psychology of Education*, 20(1), 15–37. https://doi.org/10.1007/s11218-016-9363-9

Smith, L. H., & Holloman, C. (2013). Comparing the effects of teen mentors to adult teachers on child lifestyle behaviors and health outcomes in Appalachia. *The Journal of School Nursing: The Official Publication of the National Association of School Nurses*, 29(5), 386–396. https://doi.org/10.1177/1059840512472708

Stalvey, S., & Brasell, H. (2006). Using stress balls to focus the attention of sixth-grade learners. *Journal of At-Risk Issues*, 12(2), 7–16. https://files.eric.ed.gov/fulltext/EJ853381.pdf

Stockard, J. (2011). Increasing reading skills in rural areas: An analysis of three school districts. *Journal of Research in Rural Education, 26*(8), 1–19. https://jrre.psu.edu/sites/default/files/2019-08/26-8.pdf

Su, Y.-L., & Reeve, J. (2011). A meta-analysis of the effectiveness of intervention programs designed to support autonomy. *Educational Psychology Review, 23*, 159–188. https://doi.org/10.1007/s10648-010-9142-7

Taylor, I. M., Ntoumanis, N., & Standage, M. (2008). A self-determination theory approach to understanding the antecedents of teachers' motivational strategies in physical education. *Journal of Sport and Exercise Psychology*, 30(1), 75–94. https://doi.org/10.1123/jsep.30.1.75

Van Ryzin, M. J. (2011). Protective factors at school: Reciprocal effects among adolescents' perceptions of the school environment, engagement in learning, and hope. *Journal of Youth and Adolescence*, 40(12), 1568–1580. https://doi.org/10.1007/s10964-011-9637-7

Wallace, A., & Boylan, C. (2009). Reviewing the 'rural lens' in education policy and practice. *Education in Rural Australia*, 19(2), 23-30.

Warren, E. A., Quine, J., & DeVries, E. (2012). Supporting teachers' professional learning at a distance: A model for change in at-risk contexts. *Australian Journal of Teacher Education*, 37(6), 1–18. https://doi.org/10.14221/ajte.2012v37n6.1

Weeks, P., Boxma, A., & Maxwell, N. (2009). Does a "flat world" level the playing field? *International Journal of Learning*, 16(11), 1–9.

Weiser, B. (2012). Collegiality and better science teaching. Science and Children, 49(5), 52–55.

Whitaker, B. T., Osborne, J. A., Anderson, K., Livingston, K., & Brierton, S. (2018). Assessment of the ASPIRE (ACT Supplemental Preparation in Rural Education) Program: A tool to increase ACT college entrance examination scores of rural high school students. *North American Colleges and Teachers of Agriculture (NACTA) Journal*, 62(4).

Wolgemuth, J., Savage, R., Helmer, J., Lea, T., Harper, H., Chalkiti, K., Bottrell, C., & Abrami, P. (2011). Using computer-based instruction to improve Indigenous early literacy in Northern Australia: A quasi-experimental study. *Australasian Journal of Educational Technology*, 27(4), 727–750. https://doi.org/10.14742/ajet.947

Wright, P. R. (2006). Drama education and development of self: Myth or reality? *Social Psychology of Education*, 9(1), 43–65. https://doi.org/10.1007/s11218-005-4791-y

Yamac, A., & Ulusoy, M. (2016). The effect of digital storytelling in improving the third graders' writing skills. *International Electronic Journal of Elementary Education*, 9(1), 59–86. https://files.eric.ed.gov/fulltext/EJ1126674.pdf

Zeller, P. J., Carpenter, S., Lacefield, W. E., & Applegate, E. B. (2013). Graduation coaching in a rural district school. *International Journal for Leadership in Learning*, 1(1), 1–39. https://files.eric.ed.gov/fulltext/EJ1033208.pdf



Appendix 1: Promising Practices

Evidence concerning innovative practices that improve outcomes for students, staff and communities in education can take many forms. In many cases, reporting on interventions appears in locations other than peer-reviewed literatures. Capturing this emerging evidence base is important for developing timely reforms to optimise decisions for schools and systems.

This section contains an overview of what we have loosely defined as "promising practices". Our working definition of this is "evidence of practice that has yet to be peer-reviewed but is demonstrating emerging evidence of positive impacts on student, staff and community outcomes". For the most part, the practices have been implemented at small scale, demonstrating new ways of thinking or doing schooling, but are yet to be scaled or validated through formal testing. By removing the requirement of peer review, this section (unlike other parts of the literature review) focuses on grey literature.

We take grey literature to be research that is undertaken and published outside of the traditional scholarly (e.g., university) and publishing/distribution channels. Such evidence can be generated by many sources including, but not exclusively, systems, schools, think tanks, consultants, and other public and private entities. Common forms of grey literature are annual reports, working papers, evaluations and technical reports from projects, white papers, and government documents.

This section is organised in five connected themes that are responses to the practical challenges and opportunities that have been identified. The themes have been synthesised and collated from a selection of the relevant literature. While some of this published literature is not peer-reviewed, it does provide both consistent and aligned messages across these themes. The themes are presented as 'sign-posts' to the suggested directions for priority consideration and merit across a range of credible organisations and experienced educational thinkers and researchers.

Table 16: Themes identified in the grey literature

Lead Theme	Goal/s	Source
Leadership support and capacity building, well\and shared leadership practice, leading from the middle	 Build capacity to support and cultivate strong leaders Builds notion of collective responsibility and efficacy, reduces isolation while providing professional support and increased capacity Contributes to wellbeing 	 Education Commission (2020). Transforming the education workforce: Learning teams for a learning generation. Education Commission. https://educationcommission.org/transformingthe educationworkforce/ Halsey, J. D. (2018). Independent Review into Rural Regional and Remote Education — Final Report. Department of Education, Skills and Employment, Commonwealth of Australia. https://www.dese.gov.au/quality-schools-package/resources/independent-review-regional-rural-and-remote-education-final-report House of Representatives, Standing Committee on Employment, Education and Training (2020). Education in remote and complex environments. Commonwealth of Australia. https://apo.org.au/sites/default/files/resource-files/2020-11/apo-nid309426.pdf Istance, D., & Paniangua, A. (2019). Learning to leapfrog: Innovative pedagogies to transform education policy brief. Center for Universal Education at Brookings.

Lead Theme	Goal/s	Source
		https://www.brookings.edu/wp- content/uploads/2019/09/Learning-to-Leapfrog- InnovativePedagogiestoTransformEducation- Web.pdf Organisation for Economic Co-operation and Development. (2020). What difference do networks make to teachers' knowledge? Literature review. OECD Education Working Paper No. 215. Organisation for Economic Co-operation and Development. https://www.oecd.org/officialdocuments/publicdis playdocumentpdf/?cote=EDU/WKP(2020)3&docLanguage=En Riley, P., See, SM., Marsh, H., & Dicke, T. (2021). The Australian Principal Occupational Health, Safety and Wellbeing Survey. Institute for Positive Psychology and education, Australian catholic University. https://www.healthandwellbeing.org/reports/AU/2020_AU_Final_Report_Embargoed.pdf Seashore L., K., Leithwood, K., Wahlstrom K. L., & Anderson, S. E. (2010). Learning from Leadership Project: Investigating the links to improved student learning. Wallace Foundation; Center of Applied Research and Education Improvement; Ontario Institute for Studies in Education. https://www.wallacefoundation.org/knowledge-center/Documents/Investigating-the-Links-to-Improved-Student-Learning.pdf
Bespoke and responsive, differentiated professional development	Contextually relevant professional support & development that is tailored	 Downes, N., Roberts, P., & Dean, J. (2021). Researching the schoolhouse: Rethinking research on the staffing of rural, remote and isolated schools in Australia (2000-2019). Centre for Sustainable Communities, monograph series no. 3. University of Canberra. https://researchsystem.canberra.edu.au/ws/portal files/portal/52676956/Researching_the_schoolhouse.pdf House of Representatives, Standing Committee on Employment, Education and Training (2020). Education in remote and complex environments. Commonwealth of Australia. https://apo.org.au/sites/default/files/resource-files/2020-11/apo-nid309426.pdf McGregor, C. (2019). Improving transitions for Indigenous learners through collaborative inquiry. AESN Transitions Research Report 2016–2018. https://noiie.ca/wp-content/uploads/2020/08/AESN-Transitions-report-February-2019.pdf Organisation for Economic Co-operation and Development (2019). Learning in rural schools: insights from PISA, TALIS and the literature. OECD Education Working Paper No. 196. Organisation

Lead Theme	Goal/s	Source
		for Economic Co-operation and Development. https://www.oecd.org/officialdocuments/publicdis playdocumentpdf/?cote=EDU/WKP(2019)4&docLa nguage=En Seashore L., K., Leithwood, K., Wahlstrom K. L., & Anderson, S. E. (2010). Learning from Leadership Project: Investigating the links to improved student learning. Wallace Foundation; Center of Applied Research and Education Improvement; Ontario Institute for Studies in Education. https://www.wallacefoundation.org/knowledge- center/Documents/Investigating-the-Links-to- Improved-Student-Learning.pdf Singhania, A., Hard, N., & Bentley, T. (2020). Unleashing the power of the collective in education: The impact evaluation of SVA Bright Spots Schools Connection. RMIT University. https://apo.org.au/sites/default/files/resource- files/2020-09/apo-nid308693_0.pdf
Networks supporting system design for collaboration, embedded professional support, learning and expertise sharing, mentoring	 Reduces isolation, builds professional support, wellbeing, and professional incentives to deepen expertise and knowledge. Generates notion of shared and collective responsibility 	 Education Commission. (2020). Transforming the education workforce: Learning teams for a learning generation. Education Commission. https://educationcommission.org/transformingthe educationworkforce/ Istance, D., & Paniangua, A. (2019). Learning to leapfrog: Innovative pedagogies to transform education policy brief. Center for Universal Education at Brookings. https://www.brookings.edu/wp-content/uploads/2019/09/Learning-to-Leapfrog-InnovativePedagogiestoTransformEducation-Web.pdf Centre for Education Statistics and Evaluation. (2020). Evaluation of the Rural and Remote Education Blueprint — Final Report. NSW Department of Education. https://education.nsw.gov.au/content/dam/maineducation/about-us/educational-data/cese/2020-rural-and-remote-blueprint-final-report.pdf Organisation for Economic Co-operation and Development. (2020). What difference do networks make to teachers' knowledge? Literature review. OECD Education Working Paper No. 215. Organisation for Economic Co-operation and Development. https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=EDU/WKP(2020)3&docLanguage= House of Representatives, Standing Committee on Employment, Education and Training. (2020). Education in remote and complex environments. Commonwealth of Australia. https://apo.org.au/sites/default/files/resource-files/2020-11/apo-nid309426.pdf

Lead Theme	Goal/s	Source
		 Downes, N., Roberts, P., & Dean, J. (2021). Researching the schoolhouse: Rethinking research on the staffing of rural, remote and isolated schools in Australia (2000–2019). Centre for Sustainable Communities, monograph series no. 3. University of Canberra. https://researchsystem.canberra.edu.au/ws/portal files/portal/52676956/Researching_the_schoolhouse.pdf Singhania, A., Hard, N., & Bentley, T. (2020). Unleashing the power of the collective in education: The impact evaluation of SVA Bright Spots Schools Connection. RMIT University. https://apo.org.au/sites/default/files/resource-files/2020-09/apo-nid308693_0.pdf Riley, P., See, SM., Marsh, H., & Dicke, T. (2021). The Australian Principal Occupational Health, Safety and Wellbeing Survey. Institute for Positive Psychology and Education, Australian Catholic University. https://www.healthandwellbeing.org/reports/AU/2020_AU_Final_Report_Embargoed.pdf McGregor, C. (2019). Improving transitions for Indigenous learners through collaborative inquiry. AESN Transitions Research Report 2016–2018. University British Colombia. https://noiie.ca/wpcontent/uploads/2020/08/AESN-Transitions-report-February-2019.pdf Forsyth, P. B., Adams, C. M., & Hoy, W. (2011). Collective trust: Why schools can't improve without it. Teachers College Press.
Staff recruitment and retention strategy	Reduce transitions, build stable workforce, and secure talent with aligned skill sets and expertise	 Education Commission. (2020). Transforming the education workforce: Learning teams for a learning generation. Education Commission. https://educationcommission.org/transformingthe educationworkforce/ House of Representatives, Standing Committee on Employment, Education and Training. (2020). Education in remote and complex environments. Commonwealth of Australia. https://apo.org.au/sites/default/files/resource-files/2020-11/apo-nid309426.pdf Victorian State Government, Department of Education & Training. (2019). Expert Advisory Panel for Rural and Regional Students. Melbourne: Victorian State Department of Education and Training Riley, P., See, SM., Marsh, H., & Dicke, T. (2021). The Australian Principal Occupational Health, Safety and Well Being Survey. Institute for Positive Psychology and education, Australian Catholic University. https://www.healthandwellbeing.org/reports/AU/2020_AU_Final_Report_Embargoed.pdf

Lead Theme	Goal/s	Source
Culture building, partnership, cultural competencies	Creates sense of belonging, shared understanding with community alignments and values	Downes, N., Roberts, P., & Dean, J. (2021). Researching the schoolhouse: Rethinking research on the staffing of rural, remote and isolated schools in Australia (2000-2019). Centre for Sustainable Communities, monograph series no. 3. University of Canberra. https://researchsystem.canberra.edu.au/ws/portalfiles/portal/52676956/Researching_the_schoolhouse.pdf
		 Forsyth, P. B., Adams, C. M., & Hoy, W. (2011). Collective trust: Why schools can't improve without it. Teachers College Press. https://www.researchgate.net/publication/262335 717_Collective_Trust_Why_Schools_Can't_Improved e_Without_It
		House of Representatives, Standing Committee on Employment, Education and Training. (2020). Education in remote and complex environments. Commonwealth of Australia. https://apo.org.au/sites/default/files/resource-files/2020-11/apo-nid309426.pdf
		Organisation for Economic Co-operation and Development. (2019). Learning in rural schools: Insights from PISA, TALIS and the literature. OECD Education Working Paper No. 196. Organisation for Economic Co-operation and Development. https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=EDU/WKP(2019)4&docLanguage=En
		Organisation for Economic Co-operation and Development. (2020). What difference do networks make to teachers' knowledge? Literature review. OECD Education Working Paper No. 215. Organisation for Economic Co-operation and Development. https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=EDU/WKP(2020)3&docLanguage=En

Leadership support and capacity building, wellbeing, distributed and shared leadership practice, and leading from the middle

Substantial studies identify that school leadership is becoming increasingly taxing (Riley et al., 2021) and there are difficulties attracting and retaining quality applicants in difficult-to-staff schools (Heffernan & Pierpoint, 2020). Improving outcomes both academically and in terms of wellbeing in regional, rural, and remote contexts is dependent on school leadership, and all available data demonstrates a significant gap in these outcomes between urban and regional locations (Centre for Education Statistics and Evaluation, 2015; Halsey, 2018).

While there is no absence of material telling school leaders how to go about their work, what remains an evidence void is data on the impact of school leadership on outcomes in regional, rural, and remote schools. There is plenty of advocacy pieces stressing the importance of a particular type of leadership (e.g., distributed, shared, participatory, context-sensitive, culturally responsive), but this is not necessarily grounded in context. Calls for attracting and retaining high-quality applicants into regional, rural, and remote locations suggest the need for targeted and tailored programs based on the unique contexts of such schools rather than generic solutions (Halsey, 2018).

A recent report for the Commonwealth Department of Education, Skills and Employment that is grounded in in regional, rural, and remote school contexts, proposes a model for high-impact leadership based on:

- an innovative imperative
- collective responsibility
- a focus on teaching and learning
- visibility in and commitment to the community (Eacott et al., 2021).

The work was based on interviews with, or case studies of, 24 regional, rural, and remote principals identified by their peers (through Principals' Associations) as generating 'high impact' in their contexts. 'High impact' was defined loosely with Principals' Associations encouraged to nominate peers achieving desirable outcomes and the kinds of schools and school leaders we should be learning from.

However, despite significant grey literature promoting the idea of the heroic leader that saves or 'turnarounds' an underperforming regional school, no single individual or role can be held responsible for delivering improved outcomes. Working with others, within and beyond the school (e.g., in networks), holds great promise for creating the necessary conditions for improving student outcomes (see sections below).

Bespoke and responsive, differentiated professional development

The role of tailored professional development that is high quality and contextually relevant for the diverse needs of rural, regional, and remote locations is consistently highlighted as an opportunity to strategically invest in building the capacity of the system (Organisation for Economic Cooperation and Development, 2019). Much of what is offered currently is designed from an urbancentric perspective without consideration of alternative perspectives to promote inclusion. Where professional learning is tailored to context, regional, rural, and remote teachers and principals report being considered a homogenous group and the nuanced challenges of specific contexts are rarely addressed (Australian Institute for Teaching and School Leadership Limited, 2018).

Another compounding factor in the access to high-quality professional learning for regional, rural, and remote teachers and principals is the difficulty of physical access and cover for teacher release. Although the growth in provision of professional opportunities provided via technology addresses some of these challenges, this smaller cohort of teachers and principals across the system are those at most risk of professional isolation (OECD, 2019). Therefore, any technology-based online

learning must be complimented with purpose-designed professional learning communities that emphasise holistic responsive support and collegiate collaboration (Australian House of Representatives, 2020). More professional learning that empowers participants, highlights expertise in practice, builds confidence, and creates efficiencies that are of value for rural, regional, and remote communities will improve provision. The improved skills, confidence, and increased professional capacity generated in participants will then be invested back into classrooms of learners and can influence fellow professionals.

The Education Commission, a research institute, refers to investment in targeted professional learning that not only prepares teachers and principals for rural, regional, and remote contexts, but goes on to support and enrich the professional practice in these locations. It cannot be assumed that teachers and principals become equipped and ready, culturally competent, or informed into roles in rural, regional, and remote communities without specific preparation. The opportunity to target gaps, build skills, and affirm growing expertise is an investment in the capacity of the rural, regional, and remote education workforce. Engagement in professional learning codesign builds confidence and respect for the specialisation of rural, regional, and remote education as a recognised practice that has kudos and value (Education Commission, 2020). Building opportunities to share expertise and provide collaborative problem solving is also of value.

The report Learning from Leadership Project: Investigating Links to Improved Student Learning, refers to five core premises to increase professional efficacy for all education leaders serving in challenged contexts, advocating that place is important and that relational trust is required and fundamental to success. As Seashore Louis et al., (2010) explain, they include:

- 1. Access to quality tailored PD to strengthen capacity.
- 2. Prioritising achievement and instruction.
- 3. Promoting shared instructional leadership.
- 4. Selecting the best people for the roles.
- 5. Growing teamwork and a sense of belonging in a culture of professional community.

This is supported by research conducted across ten rural and regional school communities in British Colombia, Canada, which highlights the value of inquiry-based professional learning that is not only aligned to local context but also cultural values. The terminology used is 'ally-focused inquiry teams' that are built around the challenge of transitions. The focus is about building collegiate and professional trust to refine pedagogical practice, which collaboratively creates aligned and consistent pedagogical practice that is responsive to contextual need (McGregor, 2019).

Networks supporting system design for collaboration for embedded professional support, learning and expertise sharing, and mentoring

A significant proportion of literature reviewed for this chapter highlighted the value of collective leadership as a priority support for leaders in rural, regional, and remote locations.

The Centre for Education Statistics and Evaluation (CESE), on behalf of the DoE itself, conducted a recent review of the NSW Blueprint strategy and identified networks that grow opportunities to create collective system leadership actions as contributing value. The review also calls out the need for increased evaluation of the associated impact of networks and operational implications (CESE, 2020). It is no surprise that leaders of schools in rural, regional, and remote locations see value in the opportunity to connect purposefully within networks that are designed to build collective expertise, support, efficacy, and increased impact. Working in isolated locations exacerbates the risks of introspective practice and problem-solving; it also increases risks around stress, mental health, and wellbeing of the schools' leaders and their teams in these situations (Downes et al., 2021).

The same insights were noted in reviews conducted by others. The OECD (2019) working paper, Learning in Rural Schools: Insights from PISA, TALIS and the Literature, identifies and describes both the professional isolation and the value of professional collaboration in systems design in terms of both being a challenge and an opportunity. In Chile, the establishment of 'micro-centres' of practice

is provided as an example of a successful response in this practice. The advantages of relational trust and social capital in many rural and regional locations can be leveraged through intentional collaboration strategy and mechanisms that build productive supports for isolated practitioners and leaders.

The Brookings Institute provides another signpost urging all system leaders to leverage and grow network structures. In the report Learning to *Leapfrog: Innovative Pedagogies to Transform Education Policy Brief*, the third of three core recommendations based on extensive global research of practice is to promote networks as a way to achieve system transformation (Istance & Paniangua, 2019).

The report describes networks as the "missing middle" or the "meso" level of implementation and mobilisation of professional practice in education. The "meso" systems level can be guided and influenced within education systems, while at the same time professionally empowering leaders, building motivation, efficacy, and confidence. There are specific references to rurality in the detailed documents that align with this focus of systems leadership work.

The Education Commission with another global perspective also champions the network design concept as a critical professional system support for school leaders. From the synthesis of research from across the global education ecosystem, which includes some of the most challenged rural education contexts in the world, the report *Transforming the Education Workforce: Learning Teams for a Learning Generation* recommends a core network response for action. The recommendation is summarised as follows:

"[...] developing school networks and harnessing system leaders. Learning systems are highly networked, enabling schools and districts to generate and exchange evidence and knowledge about effective instruction and management approaches. Policies need to foster the conditions for working across networks, allowing schools to work as networks and roles such as system leaders to work across schools." (Education Commission, 2020, p. 20)

The Education Commission report summary explains in detail the features of what a fully networked education system looks like. The report explains also how the specifics of the responsibilities and how they weave together creating a collective action. It also highlights the shared value of what the role alignments and compliments within the system could be. Fundamentally, the report proposes that network system design provides for cultural shift from the transactional functions of accountability to networked aligned action in practice to grow collective responsibility, and the shared leadership support for both accountability and aligned strategic actions at scale.

In 2020, the OECD also released a working paper to explore the impact of networks on teacher knowledge, What Difference do Networks Make to Teachers' Knowledge? Literature Review and Case Descriptions (OECD, 2020). The paper identifies networks as a way to connect evidence to practice that informs the evolution of new practice, referred to as "innovation" in the report. While there is more research to be conducted to understand the extent and detail of the impact on professional practice, the relationship in the case studies presented in the report is significantly apparent. It is therefore reasonable to suggest that where there are challenges to address in education practice such as those in rural, regional, and remote locations, sharing quality evidence through collaboration to inform new practice would be a valuable action. Therefore, networks designed to use evidence, share expertise, and support leadership through collaborative practices to improve practice could be a particularly valuable action.

In Australia, networks feature across the education landscape in various configurations, but few are purpose-designed or evaluated for impact. Social Ventures Australia codesigned *The Connection* (also known as *Bright Spots Schools Connection*) with education stakeholders in 2013. It is a network design that is a model of collaborative leadership in action. The for-purpose network spans across multiple Australian states to grow strategic actions in schools that build education practices to deliver increased equity and excellence. It has been independently evaluated by both ACER and the RMIT Policy & Impact team as having achieved strong and emerging impact on and for both educator capacity building and student learning (Singhania et al., 2020). Twenty-two schools from NSW were engaged in this national network from 2014–2021, nine of them are located within rural and regional locations.

Findings from the RMIT Policy and Impact team two-year evaluation conclude:

"Our findings paint a clear picture that 'The Connection' is an emerging, distinctive, and innovative model of collaboration for professional development and that participating schools have become sites of innovation and collaboration." (Singhania et al., 2020, p. ii).

Other insights from Singhania et al. (2020) include the following:

- "System-wide school improvement is a crucial and collaborative responsibility of teachers, school leaders, and system leaders" (p. v).
- "Collective Leadership Development Network approach is highly effective in generating meaningful short-term and long-term education outcomes" (p. vi).
- "The Connection" is living evidence: a working model for system-wide school improvement and collaborative leadership development" (p. ix).

The Connection collaboration leadership network design continues to grow and scale in Australia with support from multiple state governments and philanthropy.

Network design for collective leadership and impact is not new work, but fast evolving and expanding work. The Wallace Foundation in 2010 published a research report conducted over six years for the *Investigating the Links to Improved Student Learning from the Learning in Leadership* series. A key finding is summarised as follows: "Collective leadership has a stronger influence on student achievement than individual leadership" (Seashore Louis et al., 2010, p. 19).

The Wallace Foundation report refers to both rural and urban examples in the US context that define cases of the notion of 'collective and shared leadership' as also including collaborations with parents, carers, and community. The report suggests in the findings that in rural smaller contexts there is often greater levels of relational trust already present, making collective and shared leadership easier to establish, manage, and cultivate. The report pulls data and evidence from 9,000 teachers and principals, 180 schools located across nine states in the US and was conducted over a six-year period. Core summary recommendations to state departments include actions to grow collaboration opportunities and provide differentiated professional support and development to leaders in rural contexts to strengthen capacity (Seashore Louis et al., 2010).

The Wallace Foundation report further concludes the following:

- School leaders are more effective when they distribute and share leadership and collaborate with each other.
- Higher performing schools were found to be more open to input and feedback, creating a more transparent culture of shared responsibility.
- It was also noted that in schools that are doing well, teachers and school leaders pay attention to multiple measures of student success.
- Leadership distribution has the potential to mitigate against rapid staff turnover risks.
- Systems support for the creation of professional learning communities designed for collaboration was also acknowledged as being a catalyst for supporting instructional leadership practices across schools (Seashore Louis et al., 2010).

In the Australian context, there are two national review reports that also consolidate a view that high-quality bespoke professional support and development is important leverage in supporting growing and strengthening education practice. In both the *Independent Review into Rural Regional and Remote Education* (Halsey, 2018) and the *Education in Remote and Complex Environments* (House of Representatives, Standing Committee on Employment, Education and Training, 2020) review, both the need to strengthen and differentiate professional support provision to rural, regional, and remote education communities are referred to. This challenge requires refined thinking to embed structures that support, grow, and build capacity in these target communities while engaging and motivating target participants.

In the Victorian State context, recommendations from the *Expert Advisory Panel for Rural and Regional Students*, published by the Department of Education and Training, suggests that there are no "silver bullets". Again, however, support should be differentiated, and collaboration is instrumental to drive improvements. There is specific mention of the creation of "resource hubs", for example. High-quality and targeted professional support are identified as a leverage point to grow and sustain impact. This is consistent with the broader literature (Victorian State Government, Department of Education & Training, 2019).

The Canadian experiences and research conducted in British Colombia around the value of collaborative inquiry to build collective actions provides further examples of what this work might look like in practice, while also growing the necessary professional trust for shared work, responsibility, and accountability (McGregor, 2019).

The notion of 'collective trust' is discussed at length and detail in the publication *Collective Trust:* Why Schools Can't Improve Without It (Forsyth et al., 2011). It presents as an underpinning precondition for successful collaboration for growing positive impact. Of note are the conditions of what best grows trust; small team size and familiarity are presented as core premises for success. What we know is that rural, regional, and remote school communities often naturally present with these pre-conditions for success. These contextual features are an opportunity to leverage and to grow embedded improvement actions and strategies.

Cognitive and affective conditions for collective trust to grow include the following, as pointed out by Forsyth et al. (2011):

- 1. School structures perceived to enable co-operation and promote collective action, promote collective trust.
- 2. Collective teacher efficacy is positively associated with faculty trust in clients, faculty trust in colleagues, and student trust in teachers.
- 3. Perceived influence on instructional and school decisions facilitates collective trust within school groups.
- 4. A shared sense of belonging among group members supports collective trust among all school members.
- 5. Positive morale and attitudes among group members is positively related to collective trust.
- 6. A group's collective trust in one school group is positively related to collective trust in other school groups.
- 7. External context effects on the formation of collective trust are mediated by affective conditions.

The concept of the creation of collaboration networks that cultivate the collective wisdom, also built with the intention to generate collective trust, are a resource opportunity that is already within the system primed to create collective efficacy and presents a powerful opportunity. The collective actions and responsibility generated drive collective impact that is shared across the system of education provision. It is an opportunity to potentially embed capacity building within these challenging contexts, providing a safety net for practice, but then also growing, cultivating, and improving learning outcomes and impact sustainably in these challenging contexts.

Staff recruitment and retention strategy

As identified, quality staff recruitment and retention, most particularly in rural, regional, and remote locations, is one of the most significant issues challenging the education eco-system nationally. As this is an issue that has been consistently highlighted for decades, it requires bold redesign and new thinking that focuses on place and professional support to adequately address entrenched practice for sustained improvement.

There are references to 'holistic' support for new teachers, mentoring for both teachers and leaders to build embedded networks of collaboration, and mutual support in clusters. Establishing cluster managers is one suggestion, with roles that become less about accountability and more about support as convenors.

Retention is a significant issue, given isolation, workload, and 'poor' access to highly-valued professional support and learning that is seen to be relevant. The suggestion that isolation and workload are real challenges means it is complicated to benchmark against and learn from others, or access expertise that can be instrumental in addressing complexity of the day-to-day work. Programs and interventions often have short-lived longevity given high staff turnover. Improving coordination across state borders, including sharing, learning and collaboration via networking, was also suggested as a guiding recommendation for action. Cultural competence and differentiated support that focused on capacity building and values alignment, such as targeting individuals with direct personal experience in rural and remote contexts, were also suggested considerations and deemed advantages for consideration in the design of solid recruitment strategy (House of Representatives, Standing Committee on Employment, Education and Training, 2020).

The fundamental and emerging question is: "how can these identified elements be combined to create an infrastructure of responsible responsive support that is tailored to contextual need?" The suggestion is that tailored professional credentials and bespoke professional expertise would be bolstered via increasing the opportunity for deeper collaboration efforts and support.

The Education Commission in the Transforming the Education Workforce report (Riley et al., 2021) sharing from a global perspective and consideration, recommends redesigning for "local learning teams" that are responsive to local need and relevant to local context. These local teams take on collective responsibility for local impact. The local teams become collaborators in and across the learning system. The "learning team" approach naturally invites collaboration, shares responsibility, and naturally distributes leadership. The learning teams can also incorporate other professionals that have complimentary skills and expertise to add value (Education Commission, 2020).

According to the Education Commission (2020, pg. 15) report:

"The learning team approach is based on a concept of professionalism that leverages the collective capacity of a group of people as opposed to just focusing on developing the skills of individuals to do their work better. It is about investing in the 'social capital' as well as the 'human capital' of the workforce. A learning team approach is about investing in the 'social capital' as well as the 'human capital' of the workforce. A meta-analysis of factors influencing student achievement identified collective teacher efficacy as the single most powerful characteristic of highly effective schools and the leading factor influencing student achievement. A study in New Zealand found that teacher-peer collaboration doubled student achievements, but in a survey of 25 countries, only one-fifth of teachers reported participating in mentoring or collaborative work. Team-based approaches are integral in other sectors such as early childhood development (ECD) and health, where they have demonstrated improvements in service delivery, health outcomes, and cost-effectiveness."

The notion of 'local learning teams' could be applied more broadly across the geographies of rural, remote, and regional locations to reduce professional isolation and increase support while offering an opportunity to refine and grow context-specific expertise.

The OECD (2019) report, Learning in Rural Schools: Insights from PISA, TALIS, and the Literature, refers to research that supports the concept of supportive working environments that feature quality relationships and collaboration among staff, are supported by school leaders, and have shared expectations for students, have been shown to be key for keeping teachers in schools, helping teachers develop and be effective in classrooms. A supportive school environment has also been found to influence teacher retention in rural schools (OECD, 2019).

The Australian Principal Occupational Health, Safety and Wellbeing Survey 2021 report provides insights and recommendations based on current data from school leaders about wellbeing, a factor that impacts staff retention. Comparatively, workload demands as reported by school leaders themselves did not vary significantly by geolocation when looking at quantitative demand, work pace, cognitive demand, emotional demand, and demand on leaders when hiding emotions. These demands, however, were found to be at significantly higher levels in educational leadership roles than in the general population. In response, the report shares the same message about the importance and value of leadership support and collaboration.

As specified by Riley et al. (2021), the report's recommendations for Government include the following:

- "Stop looking for short-term quick fixes and concentrate on getting a better grip of the fundamentals (collaboration, creativity, trust-based responsibility, professionalism, and equity). These conditions underpin the whole of society, not simply schools".
- "Trust rather than rule teachers and principals. Leave the mechanisms for producing the best teachers and principals to the experienced teachers and principals themselves. This will also increase social capital. Long-term increases in social capital helped Finland become the world leader in education".

The report's recommendations for schools include the following:

"Increase internal social capital. Social capital can be achieved by looking to schools with school leaders that are reporting high levels of social capital and emulating these environments. Each school needs to do this as best they can in relation to their own resources and context. Greater school collaboration and rapid dissemination of successful strategies will contribute to significant improvement in schools." (Riley et al., 2021)

Another recommendation from the Education Commission also refers to the opportunity to create rigorous data-driven and informed deployment and planning systems. The suggestion is that data will serve to build fidelity around actual trends, while also providing insights around gaps, opportunities, and specific actions that can create efficiencies and insight to informed strategic responses for systems. Data can also be compared for benchmarking and used as an impetus for responsible policy redesign opportunities (Education Commission, 2020).

Culture building, partnerships, cultural competencies

The role of place in education that is based in rural, regional, and remote locations cannot be underestimated. As it has been stated so many times, there is no 'one-size-fits-all' approach in education practice that adequately responds to and respects context and community.

In the OECD (2019) report, Learning in Rural Schools: Insights from PISA, TALIS and the Literature, there are multiple references to the role of 'place' in building a supportive culture that is conducive to both the opportunities for engaged learners and high-quality teaching. Schools in rural, regional, and remote locations are hubs of their communities, and their contexts are often far removed from urban-dominated and influenced resources and curriculum design. The opportunity to integrate local resources and partnerships as additional sources of learning support are often bespoke and unique. The opportunities to provide engaging learning, based on the values and resources of local context can enrich and engage learners in both culturally and contextually appropriate ways (OECD, 2019).

These concepts of place and context are also reiterated by the work of Downes and Roberts in Australia. Connecting to community in meaningful ways that build social capital and relationships that are primed to flourish, creating a stronger sense of belonging (Downes & Roberts, 2018).

The Commonwealth report *Education in Remote and Complex Environments* refers to the importance of cultural competency support, two-way learning to embed cultural competencies, holistic support for educators, mentoring, and collaboration as key leverage points for responsive and responsible policy and action (House of Representatives, Standing Committee on Employment, Education and Training, 2020).

The challenge then becomes how educators are prepared to work in these often-unfamiliar contexts, given it is likely they may be new to or even transient in the community. While this is risky work, it can also be an opportunity for the right profile of educator for the community to consolidate a solid baseline to launch and grow a career. If an educator is already familiar with the nuances of context, place, and culture, this also serves as a bonus baseline from which to grow (Education Commission, 2020).

Improvements in student outcomes are linked to greater relevance or context-sensitive adaption of curriculum (Eacott et al., 2021). Limitations of existing curriculum, or the metro-centricity of curriculum materials, have been well-rehearsed.

Conclusion - Promising practices

The purpose of this chapter was to highlight and find themes within the grey literature of 'promising practice' that could signpost us to look forward to innovative solutions for complex issues. Five key themes were identified:

- There cannot be a one-size-fits-all approach to issues of staff recruitment, retention, or professional development, nor can rural, remote, or regional schools be treated as a homogenous group.
- 2. It will take a brave and innovative approach to attract and retain leaders in rural, remote, or regional settings, and neither funding nor incentives are the complete answer. This approach must include measures that support the wellbeing of leaders by encouraging the distribution of leadership across both the school and system, resulting in a reduction in emotional and cognitive demand. It must also create feelings of empowerment and belonging within the school community, and allow time for change to take effect.
- 3. There is a need for bespoke and tailored professional support and development that values the expertise already in existence within rural, remote, and regional contexts, both within and beyond NSW. Although some of the challenges associated with professional learning in RRR contexts can be addressed through increased provision online, a mixed-mode approach is needed to combat feelings of isolation and feelings of not being noticed or valued.
- 4. Greater investment is required to develop a connection to place within RRR communities for prospective and existing staff. Culture building is an essential part of the induction process, and ongoing support should be given to grow cultural competency and create successful and sustainable partnerships with the local community.
- 5. Non-competitive networks of similar schools with a clear shared vision and moral purpose are key to addressing the complexities of working in isolation. These networks should be outside of the accountabilities of the system in a collegiate, supportive, and empowering role.

References

Australian Institute for Teaching and School Leadership. (2018). Exploring the opportunities and challenges of teacher professional learning in the early childhood, casual/relief and rural/remote teaching contexts: Findings report. AITSL. https://www.aitsl.edu.au/docs/default-source/hqpl/hqpl-3-cohorts-findings-report---final.pdf

Centre for Education Statistics and Evaluation. (2020). Evaluation of the Rural and Remote Education Blueprint–Final Report. NSW Department of Education.

https://education.nsw.gov.au/content/dam/main-education/about-us/educational-data/cese/2020-rural-and-remote-blueprint-final-report.pdf

Downes, N., Roberts, P., & Dean, J. (2021). Researching the schoolhouse: Rethinking research on the staffing of rural, remote and isolated schools in Australia (2000-2019). Centre for Sustainable Communities, monograph series no. 3. University of Canberra.

 $\underline{\text{https://researchsystem.canberra.edu.au/ws/portalfiles/portal/52676956/Researching_the_schoolho}\\ \underline{\text{use.pdf}}$

Eacott, S., Niesche, R., Heffernan, A. Loughland, T., Gobby, B. & Durksen, T. (2021). *High-impact school leadership: Regional, rural and remote schools.* Commonwealth Department of Education, Skills and Employment, Australia.

Education Commission. (2020). Transforming the education workforce: Learning teams for a learning generation. Education Commission.

https://educationcommission.org/transformingtheeducationworkforce/

Forsyth, P. B., Adams, C. M., & Hoy, W. (2011). *Collective trust: Why schools can't improve without it.* Teachers College Press Colombia University.

 $\frac{https://www.researchgate.net/publication/262335717_Collective_Trust_Why_Schools_Can't_Improve_Without_It$

Halsey, J. D. (2018). *Independent review into rural regional and remote education–Final report.*Department of Education, Skills and Employment, Commonwealth of Australia.
https://www.dese.gov.au/quality-schools-package/resources/independent-review-regional-rural-and-remote-education-final-report

Heffernan, A. & Pierpoint, A. (2020). *Autonomy, accountability, and principals' work: An Australian study.* Australian Secondary Principals' Association.

House of Representatives, Standing Committee on Employment, Education and Training. (2020). *Education in remote and complex environments*. Commonwealth of Australia. https://apo.org.au/sites/default/files/resource-files/2020-11/apo-nid309426.pdf

Istance, D., & Paniangua, A. (2019). Learning to leapfrog: Innovative pedagogies to transform education policy brief. Center for Universal Education at Brookings. https://www.brookings.edu/wp-content/uploads/2019/09/Learning-to-Leapfrog-InnovativePedagogiestoTransformEducation-web.pdf

McGregor, C. (2019). Improving transitions for Indigenous learners through collaborative inquiry. AESN Transitions Research Report 2016–2018. University British Colombia. https://noiie.ca/wp-content/uploads/2020/08/AESN-Transitions-report-February-2019.pdf

Organisation for Economic Co-operation and Development. (2019). Learning in rural schools: Insights from PISA, TALIS and the literature. OECD Education Working Paper No. 196. Organisation for Economic Co-operation and Development.

 $\frac{https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=EDU/WKP (2019) 4\&docLanguage=Enumer (2019) 4\&docLanguage (201$

Organisation for Economic Co-operation and Development. (2020). What difference do networks make to teachers' knowledge? Literature review. OECD Education Working Paper No. 215. Organisation for Economic Co-operation and Development.

 $\frac{https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=EDU/WKP(2020)3\&docLanguage=En$

Riley, P., See, S.-M., Marsh, H., & Dicke, T. (2021). *The Australian Principal Occupational Health, Safety and Wellbeing Survey.* Institute for Positive Psychology and Education, Australian Catholic University. https://www.healthandwellbeing.org/reports/AU/2020_AU_Final_Report_Embargoed.pdf

Seashore Louis, K., Leithwood, K., Wahlstrom K. L., & Anderson, S. E. (2010). Learning from leadership project: Investigating the links to improved student learning. Wallace Foundation, Center of Applied Research and Education Improvement; Ontario Institute for Studies in Education. https://www.wallacefoundation.org/knowledge-center/Documents/Investigating-the-Links-to-Improved-Student-Learning.pdf

Singhania, A., Hard, N., & Bentley, T. (2020). *Unleashing the power of the collective in education: The impact evaluation of SVA Bright Spots Schools Connection*. RMIT University. https://apo.org.au/sites/default/files/resource-files/2020-09/apo-nid308693_0.pdf

Victorian State Government, Department of Education & Training. (2019). Expert Advisory Panel for Rural and Regional Students. Victorian State Department of Education and Training.

Appendix 2: Literature review search parameters

The following search parameters were used in the literature review search. This search included the major Australian and international academic databases. The approach followed a typical systemic review approach.

- Search terms: (rural OR regional OR remote OR small OR isolated) AND (school) AND (Improv* OR positive impact OR enhance*) AND (learning OR outcomes OR wellbeing OR academic OR expect* OR retention OR aspir* OR complet* OR achiev* OR attain*). (Note: * indicates truncated term this is used to ensure all potential tenses and plurals are included)
- The search terms 'country' and 'provincial' were not included due to the different ways the terms are used and understood across the world, leading to ambiguous and sometimes contradictory results
- Years: 2000 to 2021
- Scholarly limitations: Articles, books, and book chapters where the full text was available in the database
 - Other parameters: International literature in English
- Databases: Seven education databases were searched:
 - A+ Education
 - Education Research Complete
 - ERIC
 - Teacher Reference Centre
 - Proquest Central
 - Educational Administration
 - Web of Science

NSW Department of Education









