

UNDERSTANDING THE IMPACT OF REMOTENESS ON STUDENT LEARNING

This is one of seven teacher guides in the series 'Teaching in Remote Australian Schools: Enhancing Pre-Service Teacher Education – A Resource Package'.

STANDARD

1.0 Know students and how they learn

FOCUS AREA

1.1 Physical, social and intellectual development and characteristics of students

GRADUATE DESCRIPTOR

Demonstrate knowledge and understanding of physical, social and intellectual development and characteristics of students and how these may affect learning

INTRODUCTION

The purpose of this teacher guide is to help prepare pre-service teachers to work and live in remote Australia. Specifically, this module focuses on the reality that geographical remoteness can amplify a range of factors that, in turn, can affect the physical, social and intellectual development and the characteristics of the students. It is well recognised, for example, that factors such as health, well-being and socio-economic status can impact on learning. It is also well recognised that there are significant health and socio-economic differentials between many rural and remote residents in Australia when compared to their urban counterparts (Liaw & Kilpatrick, 2008).

During the first 10 years of this new millennium the Telethon Institute for Child Health Research and the Kulunga Research and Training Network undertook a major research project titled the *Western Australian Aboriginal Child Health Survey*. The project resulted in the following publications (Silburn, et al. 2006; Zubrick, et al., 2004, 2005, 2006). Each volume of the findings is accompanied by a summary booklet both of which can be found at <http://www.ichr.uwa.edu.au/waachs/>.

These publications are highly recommended to all pre-service teachers and should be essential reading for any teacher considering taking up an appointment in remote Australia.

In addition to considering the impact of health and socio-economic factors on students living in remote locations, this teacher guide encourages pre-service teachers to consider the impact that geographic isolation and demographic factors have on learning.

Baxter, Gray & Hayes, (2011) provide an excellent overview of significant differences that exist in factors such as family structure, age distribution and household type, between urban and remote Australia. Baxter et al., also pose a question, "do children's lives differ according

to geographic remoteness?" (p.4) Data shows that there are significant differences in the way in which children who live in remote locations spend their free time, the amount of time spent "outside" compared to "inside" and engagement in extra curricula activities. Parents in remote locations also have different expectations about their children's educational attainment and views on the safety and desirability of their neighbourhood for their children than their urban counterparts. Many of the students taught in the remote Australian context will be Aboriginal.

There is a danger that this Teacher Guide could, at first glance, be seen to reinforce myths and stereotypes that some people have about rural and remote Australia. Pre-service students are, however, urged to take an evidence-based approach to understanding remote Australian and the educational environment to which they will be exposed as teachers. Pre-service students must be careful not to work from a deficit model when teaching in the remote context. While building a strong knowledge base and understanding that geographic remoteness can impact on the physical, social and intellectual development and characteristics of students, pre-service teachers interested in working in these locations need to begin the task of designing teaching sequences using strategies and resources that suit the developmental stages and characteristics of student groups within their remote classrooms.

In many ways teachers, in remote locations have to develop a skill set and knowledge base additional to that required by their metropolitan counterparts, in much the same way as rural doctors and nurses do, to ensure effective teaching and learning takes place. Likewise, in the same way that pre-service and graduate health professionals rely on those with exceptional knowledge and understanding about remote health issues to prepare them for working in these location, pre-service teachers and

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graduates need to be able to identify how others with deep knowledge about teaching in remote schools structure learning to suit the stages of development and characteristics of learners. The role of effective mentors in geographically isolated schools is extremely important.

It is also important for teachers in remote locations to realise that while geographical remoteness may impact in some way on physical, social and intellectual development and characteristics of students, students from these locations bring many strengths to the classroom. Many of these strengths stem from the unique experiences of living in isolated locations such as considerable knowledge of their local environment and a great sense of place. Tapping into these strengths and using them to enhance the teaching and learning process is an extremely important skill for teachers working in remote locations to develop.

OUTCOMES

- Graduates know and comprehend the meaning of remoteness in the Australian context and its potential to impact on the development and characteristics of students.
- Graduates know and understand that there are significant health differentials in rural and remote Australia and that the more geographically isolated the community, the more acute these health differentials are.
- Graduates can use their knowledge of health differentials in remote locations to design a teaching sequence using strategies and resources that take into account one or more health factor that may impact on learning.
- Graduates recognise and analyse the range of socio-economic differentials that exist in remote communities.
- Graduates know and understand that socio-economic differentials in remote locations can impact on the physical, social and intellectual development and characteristics of students.
- Graduates can draw conclusions from research materials about how geographic isolation can impact on the physical, social and intellectual development and characteristics of students.
- Graduates design teaching sequences using strategies and resources that suit the developmental stages and characteristics of student groups within the class.
- Graduates identify how others structure learning to suit the stages of development and characteristics of learners.

TOPICS

1. Health urban/remote differentials:

- Infant mortality rates in remote areas are almost double those in urban areas. This figure is skewed by much higher infant mortality rates among Indigenous people.
- For non-Indigenous Australians, death rates in regional areas are on average 1.1 times those of major cities. In remote areas, this rate increases to 1.5.
- The main causes of death include cardiovascular disease, chronic obstructive airways disease, injury related to motor vehicle accidents and suicide.
- There is a strong pattern of increasing mortality from injury with increasing remoteness, particularly for males.
- Death rates for Indigenous people are higher than those of non-Indigenous people, regardless of location, and death rates increase with increasing remoteness.
- Indigenous Australians more often live in remote areas with poor public health infrastructure and substandard living conditions. As a result, indigenous Australians suffer higher rates of diabetes, cardiovascular disease, respiratory disease, end-stage renal disease, cancer, sexually transmitted disease and other communicable diseases than non-Indigenous Australians.

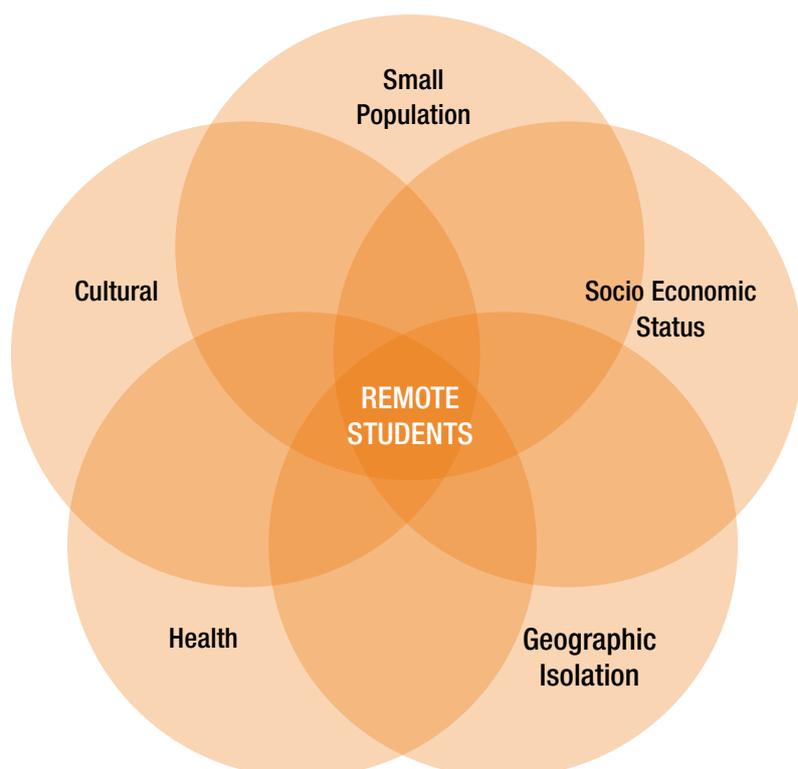
- High rates of suicide, smoking, abuse of alcohol and other substances, together with injury as a result of domestic and other violence contribute further to increased morbidity and mortality in remote communities.

Reference: Liaw, S., & Kilpatrick, S. (2008) A textbook of Australian rural health. Australian Rural Health Network, Canberra.

2. Socio-economic differentials:

- Poor housing.
- Limited experience and exposure to education (in some Indigenous cases only first or second generation involvement in education).
- Limited exposure to reading, writing and other education/learning building blocks prior to 'formal' education (i.e. in the 0-3-4years).
- Lower education expectations and aspirations.
- Limited funds to spend on education items that might support teaching and learning (e.g. books, 'educational' toys) along with the lack of understanding of the role of parents in the learning process.

NB: A demographic shift is taking place in some rural communities as some people relocate from urban to rural seeking cheaper accommodation.





3. Geographic isolation:

- Limited access to a range of education support services (e.g. speech pathologists, education psychologists).
- Limited access to a range of health services (as above).
- Limited access to a range of community services that support teaching and learning (e.g. public / community libraries, youth groups and activities, a range of sporting facilities and opportunities).
- Limited access to ICT infrastructure at school, in the community and at home.
- Limited access to career advice.
- Limited access and exposure to 'education' role models.
- Limited exposure to the world beyond the remote community.

4. Small populations:

- Limited role models.
- Small size classes.
- Limited exposure to the link between education and work / employment.
- Small or no economic base for the community.

5. Cultural:

Refer to Aboriginal Education Units available at your university.

TASKS

Select one or two factors that impact on the physical, social and intellectual development and characteristics of students (e.g. health, low socio-economics etc.). Refine the factors

into specific issues (for example otitis media). What strategies could/would you employ in the classroom to overcome these learning impediments?

You have been posted to a remote school. What processes/strategies would you put in place before and on arrival at the school to build your knowledge and understanding of the physical, social and intellectual development and characteristics of students in that school/community?

Design a two week teaching and learning program in either literacy or numeracy that incorporates a range of strategies to improve student engagement and learning outcomes. Consider the different developmental stages and characteristics of the students within the class.

What resources are available to aid teachers with students from different developmental stages and/or characteristics in a remote context?

Based on your research about remote locations and especially students living and learning in those locations:

- List a range of strengths these students might bring to the classroom.
- How might you capitalise on these strengths in your teaching and learning program for these students?

Acting on the advice provided by the What Works site <http://www.whatworks.edu.au/dbAction.do?cmd=displaySitePage1&subcmd=select&id=516>, develop a physical activity program with cross curriculum links to reinforce the health and well-being of students.

RESOURCES

Teaching in the remote context:

Austin, J. (2010). *Remote Ready*. Retrieved from: <http://www.cdu.edu.au/careers/remote-ready.pdf>

Australian Government. (2012). *Closing the Gap Publications*. Retrieved from: <http://www.aihw.gov.au/closingthegap/publications/>

Council of Remote Area Nurses of Australia Incorporated. (2000). *Avoiding Burn-out in Remote Areas. Surviving the day-to-day hassles: a guide for remote health practitioners*. Retrieved from: http://bss.crana.org.au/cms/file_library/Other/Other_7.pdf

Department of Education and Training. (2012). *Remote Teaching Service*. Retrieved from: <http://www.det.wa.edu.au/teachingwa/detcms/teachingwa/teaching-wa/shared-content/remote-teaching-service/remote-teaching-service.en?page=3&tab=Main#Housing>

Northern Territory Government. (2011). *Northern Territory Remote Teaching Service*. Retrieved from: <http://www.teaching.nt.gov.au/index.cfm?attributes.fuseaction=teacherStories>

Sharplin, E. (2002). Rural retreat or outback hell: Expectations of rural and remote teaching. *Issues In Educational Research*, 12, 49-63. Retrieved from: <http://education.curtin.edu.au/tier/tier12/sharplin.html>

Health urban/remote differentials:

Australian Indigenous HealthInfoNet. (2012). *Australian Indigenous HealthInfoNet*. Retrieved from: <http://www.healthinfonet.ecu.edu.au/>

Brennan, M. (2005). Putting rurality on the educational agenda: Work towards a theoretical framework. *Education in Rural Australia*, 15, 11-20.

Liaw, S., & Kilpatrick, S. (2008) *A textbook of Australian rural health*. Australian Rural Health Network, Canberra.

Silburn, S. R., Zubrick, S.R., De Maio, J. A., Shepherd, C., Griffin, J. A., Mitrou, F. G., Dalby, R. B., Hayward, C., & Pearson, G. (2006). *The Western Australian Aboriginal Child Health Survey: Strengthening the Capacity of Aboriginal Children, Families and Communities*. Perth: Curtin University of Technology and Telethon Institute for Child Health Research. Retrieved from: <http://www.ichr.uwa.edu.au/waachs/>

Zubrick, S. R., Lawrence, D. M., Silburn, S. R., Blair, E., Milro, H., Wilkes, T., Eades, S., D'Antoine, H., Read, A., Ishiguchi, P., & Doyle, S. (2004). *The Western Australian Aboriginal Child Health Survey: The Health of Aboriginal Children and Young People*. Perth: Telethon Institute for Child Health Research. Retrieved from: <http://www.ichr.uwa.edu.au/waachs/>

Zubrick, S. R., Silburn, S. R., Lawrence, D. M., Mitrou, F. G., Dalby, R. B., Blair, E. M., Griffin, J., Milroy, H., De Maio, J.A., Cox, A., & Li, J. (2005). *The Western Australian Aboriginal Child Health Survey: The Social and Emotional Wellbeing of Aboriginal Children and Young People*. Perth: Curtin University of Technology and Telethon Institute for Child Health Research. Retrieved from: <http://www.ichr.uwa.edu.au/waachs/>

Zubrick, S. R., Silburn, S. R., De Maio, J. A., Shepherd, C., Griffin, J. A., Dalby, R. B., Mitrou, F. G., Lawrence, D.M., Hayward, C., Pearson, G., Milroy, H., Milroy, J., & Cox, A. (2006). *The Western Australian Aboriginal Child Health Survey: Improving the Educational Experiences of Aboriginal Children and Young People*. Perth: Curtin University of Technology and Telethon Institute for Child Health Research. Retrieved from:

<http://www.ichr.uwa.edu.au/waachs/>

Otitis Media:

Department of Employment, Education and Training. (1994). *Otitis Media and Aboriginal Children – A handbook for teachers and communities*. Retrieved from

http://abed.boardofstudies.nsw.edu.au/files/otitis_media_aboriginal_children.pdf

Department of Health and Ageing. (2012). *Care for Kids' Ears*. Retrieved from:

<http://careforkidsears.health.gov.au/>

Queensland Government. (2012). *Hearing Impairment. Otitis Media - For Classroom Teachers*. Retrieved from:

<http://learningplace.com.au/deliver/content.asp?pid=37976>

Queensland Government. (2012). *Hearing Impairment. Teaching - Teaching for Otitis Media*. Retrieved from:

<http://learningplace.com.au/deliver/content.asp?pid=37980>

Nutrition:

ABC News. (2011). *Foetal Alcohol Syndrome*. Retrieved from:

<http://www.abc.net.au/news/2011-10-14/foetal-alcohol-syndrome/3571668>

Australian Government. (2012). *Healthy lifestyle programs for physical activity and nutrition*. Retrieved from:

http://www.aihw.gov.au/closingthegap/documents/resource_sheets/ctgc-rs09.pdf

Australian Politics TV. (2011). *Bess Price on education in remote communities* [Streaming video]. Retrieved from:

<http://australianpoliticstv.org/2011/04/15/bess-price-on-education-in-remote-communities/>

Browne, J., Laurence, S., & Thorpe, S. (2009). *Acting on food insecurity in urban Aboriginal and Torres Strait Islander communities*. Retrieved from:

http://www.healthinonet.ecu.edu.au/uploads/docs/food_insecurity.pdf

Department of Health, State of Western Australia. (2010). *Fetal Alcohol Spectrum Disorder Model of Care*. Retrieved from:

http://www.healthnetworks.health.wa.gov.au/modelsofcare/docs/FASD_Model_of_Care.pdf

Jukes, M., McGuire, J., Method, F., & Sternberg, R. (2002). *Nutrition and Education*. Retrieved from:

http://www.unscn.org/layout/modules/resources/files/Brief2_EN.pdf

National Health and Medical Research Council. (2000). *Nutrition in Aboriginal and Torres Strait Islander Peoples. Chapter 9: Childhood Growth*. Retrieved from:

http://www.nhmrc.gov.au/_files_nhmrc/publications/attachments/n26.pdf

O'Leary, C.M. (2004). Fetal alcohol syndrome: Diagnosis, epidemiology, and developmental outcomes. *Journal of Paediatrics and Child Health*, 40, 2-7. Retrieved from:

<http://onlinelibrary.wiley.com/doi/10.1111/j.1440-1754.2004.00280.x/pdf>

Rosier, K. (2011). *Food insecurity in Australia: What is it, who experiences it and how can child and family services support families experiencing it?* Retrieved from:

<http://www.aifs.gov.au/cafca/pubs/sheets/ps/ps9.pdf>

World Health Organisation. (2012). *Early Childhood Development*. Retrieved from:

<http://www.who.int/mediacentre/factsheets/fs332/en/index.html>

Socio-economic differentials:

News on ABC. (2011). *Remote communities subject to poverty* [Video file].

<http://www.news-australia.com/news/remote-communities-subject-to-poverty-201110212339.html>

News on ABC. (2012). *Remote communities in housing crisis* [Video file]. Retrieved from:

<http://www.youtube.com/watch?v=-iT2AvWusbo>

Geographic isolation:

Baxter, J., Gray, M., & Hayes, A. (2011). *Families in rural and remote areas: Fact Sheet 2011*. Retrieved from:

<http://www.aifs.gov.au/institute/pubs/factsheets/2011/fs201103.pdf>

Remote Area Health Corps. (2012). *Living in Remote Aboriginal Communities*. Retrieved from:

<http://www.rahc.com.au/professionals/living-in-remote-aboriginal-communities/>

Ministerial Review of Schooling in Rural Western Australia (1994). *Schooling in Rural Western Australia*. Perth, Australia: Western Australian Education Department.

Small populations:

Austin, J. (2010). *Remote Ready*. Retrieved from:

<http://www.cdu.edu.au/careers/remote-ready.pdf>

Stokes, H., Stafford, J., & Holdsworth, R. (1999). *Youth Rural and Remote School Education: A Survey for the Human Rights and Equal Opportunity Commission*. Retrieved from:

http://www.hreoc.gov.au/pdf/human_rights/rural_remote/scoping_survey.pdf

Cultural:

Australian Institute of Aboriginal and Torres Strait Islander Studies. (2010). *The Little Red Yellow Black Book*. Aboriginal Studies Press, Canberra. Retrieved from:

<http://lryb.aiatsis.gov.au/>

Australian Institute of Family Studies. (2005). *Early Learnings: Indigenous Community Development Projects. Telstra Foundation Research Report*. Retrieved from:

<http://www.aifs.gov.au/nch/pubs/reports/telstra2/telstra2.html>

Groome, H. (1995). *Working purposefully with Aboriginal students*. New South Wales, Australia: Social Science Press, 1995

Harrison, N. (2011). *Teaching and Learning in Aboriginal Education*. Victoria, Australia: Oxford University Press.

Education:

Engelmann, S. (2011). Critique and Erasure: Responding to Eppley's "Reading Mastery as Pedagogy of Erasure". *Journal of Research in Rural Education*, 26(15), 1 - 4. Retrieved from:

<http://jrre.psu.edu/articles/26-15.pdf>

Eppley, K. (2011). Reading Mastery as Pedagogy of Erasure. *Journal of Research in Rural Education*, 26(13), 1 - 5. Retrieved from:

<http://jrre.psu.edu/articles/26-13.pdf>

Eppley, K., & Corbett, M. (2012). I'll see that when I believe it: A dialogue on epistemo-logical difference and rural literacies. *Journal of Research in Rural Education*, 27, 2 - 9. Retrieved from:

<http://www.jrre.psu.edu/articles/27-1.pdf>

Stockard, J. (2011). Enhancing Achievement in Rural Schools: A Reply to Eppley. *Journal of Research in Rural Education*, 26(14), 1 - 6. Retrieved from:

<http://jrre.psu.edu/articles/26-14.pdf>

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