Challenges and Opportunities in the Introduction of a Tertiary Education Program in Regional South Australia: A Case Study

Hannah Harvey
University Of South Australia, hannah.harvey@unisa.edu.au

Sandra Walsh
University of South Australia, sandra.walsh@unisa.edu.au

Challenges And Opportunities In The Introduction Of A Tertiary Education Program In Regional South Australia: A Case Study

Hannah Harvey
Sandra Walsh
University of South Australia

Abstract: This paper explores the implementation of a Bachelor of Education program in regional South Australia. Using a case study approach, this paper describes the site of implementation, with attention paid to the challenges regional locations experience in attracting and retaining suitably qualified staff. It will explore the program model and consider the challenges and opportunities associated with the implementation and sustainability. At the individual level, it has provided students with an additional study option that negates the costs and stresses of relocation. At an organisational and community level, there is benefit for local schools as the provision of students and future professionals, who already have demonstrated commitment to the region, may assist in reducing staff turnover. The model presented could be adapted to similar locations, and while it is not a panacea to address regional teaching staff shortages, it offers another educational model that can help alleviate the issue.

Introduction

Like many regional areas around the globe, the Upper Spencer Gulf region of South Australia has experienced a number of challenges in attracting and retaining suitably qualified teaching professionals. To address this issue, two education programs (Bachelor of Education - Early Childhood and Primary) were introduced to a university campus in the region. Without the critical mass of population to draw the students from, there was a need to develop a hybrid model to allow cost-effective delivery. This paper describes the context and implementation of the education programs in a regional setting. Using a case study approach, the location is described paying particular attention to the need for the programs. Regional communities have a well-documented difficulty in attracting and retaining suitably qualified teachers (Beutel, Adie & Hudson, 2011; Kline, White & Lock, 2013); in regional South Australia this situation is a particularly poignant issue due to geographic and professional isolation. While many other models have been presented in the literature as a university response to address teacher shortages in regional areas, to the best of our knowledge, this is the first paper to present a case study of a hybrid model delivered at a regional campus.. There have been a number of benefits associated with the introduction of the programs extending beyond recruitment and retention. This paper considers social and cultural isolation, and the advantages for community to studying locally rather than at a metropolitan centre. The implementation of the programs and how they have been sustained is presented, offering a viable model for similar locations both in Australia and globally. The successes and benefits of the programs for the community and adjacent areas are discussed. The model

presented is not considered the answer to addressing teacher shortages in regional areas, however it does offer an alternative option that could be implemented with similar success.

Background

Whyalla is a regional community in South Australia located 382 kilometres from North Adelaide in the Upper Spencer Gulf region of South Australia with a population of approximately 22,000 people. In the township itself, there are four high schools (three public and one private), nine primary schools (seven public and two private), six kindergartens, nine childcare centres, and one special needs school. With a relatively large number of educational sites, Whyalla is not immune to the well-documented issues associated with staff attraction and retention in regional areas. However for students who wished to study education through tertiary education providers, there were no opportunities for face to face study. For many years the community has asked for a Bachelor of Education degree to be available to students as those desiring to be teachers had to either relocate to Adelaide to complete their degree or study externally. Many rural schools have complex challenges that require an understanding of the issues that shape the community (Allen, 2015). By offering an education degree in the region, future employees will have a firm understanding of these issues and possible solutions.

For regional areas, such as Whyalla, development of university programs that address local needs and are embedded in community are important for retention of young people in these areas. It helps build cultural capital and progresses towards a more equitable distribution of higher education resources. Drummond, Halsey and Van Breda (2011) acknowledge that people living in rural and regional areas identify the need for a university presence in their region, especially to retain young people in the community. Additionally, they offer that an increased university presence in these areas, combined with retention of young people, builds community capital and provides greater equity between rural and urban spaces (Drummond, et al., 2011). For students in regional South Australia to study a Bachelor of Education they would have to relocate, particularly to a metropolitan area such as Adelaide, or complete their study externally. For many years this has been the case in the North West region of South Australia, and there have been a number of petitions, over a period of years, for a Bachelor of Education to be made available at the university campus in Whyalla. The fight to gain a Bachelor of Education in regional areas goes back to 1987, and in 2013 the University of South Australia answered the call for the program to be available by implementing it in Whyalla. Lennox, Davis and Heirdsfield (2006) state that despite universities offering flexible learning, adequate attention has not been given to hearing students' voices and learning from their perceptions of their experiences. There were many viewpoints about this matter that impacted the decision not to offer the program, most of them centred around cost at the time of implementing, staffing a new program, and if there would be an uptake to justify it. The university could not justify offering the program and it remained this way for years.

As the campus at Whyalla was well established, there was anecdotal evidence to suggest that there were many local people who desired to become teachers, however not being able to study the degree locally and not being able to relocate (primarily due to costs or family commitments), many chose a different career path. When external study for education was available, there were a number of students who chose to study other programs or not at all, as their preference was to have face to face contact. Factors that could impact decision making in this regard include a high proportion of mature age students (approximately eighty per cent of the student body in Whyalla are mature age), many are first in family to

university, and a large proportion of Whyalla population are considered low socio-economic (potentially due to the housing structure of Whyalla, with a high proportion of government housing). According to the South Australian Centre for Economic Studies ((SACES), n.d.), Whyalla is the most disadvantaged Local Government Area in South Australia. In 2006, Whyalla had a Socio-Economic Index for Areas (SEIFA index) score of 887, indicating it experienced significant socio-economic disadvantage (SACES, n.d.).

For the Whyalla campus, the student cohort consists of students from a variety of backgrounds including school leavers to mature age students. Students are drawn primarily from Whyalla and its surrounding areas, such as Port Augusta, Port Germein, Crystal Brook, Cleve, Port Pirie, and Port Lincoln. Many students need to gain employment to sustain them while they study, particularly those from low socio economic backgrounds. There are many who decide to complete their university degree part time so they are able to gain employment and be available for a certain amount of time. By delivering a Bachelor of Education in Whyalla, many costs such as relocation, were eliminated or reduced and students are able to remain full time in the course. Students have the support from home and do not have the added pressure of relocating. There is still the option to complete studies part time and some have chosen this option. The campus provides students, particularly single parents and those from low socio-economic backgrounds, the opportunity to access the Bachelor of Education, while maintaining their lifestyle and providing for their families.

In addition with the new regulations that each childcare centre must have at least one staff member with a Bachelor of Education, the need for the Bachelor of Education Early Childhood in regional areas has increased significantly. However, many of the staff at regional childcare centres work full time and cannot afford to leave work for study purposes. By offering the Early Childhood program at the Whyalla campus, there was increased participation and preference given to the University of South Australia by students, compared with other universities that only offered the program externally.

By enabling local students to undertake higher education in Whyalla and after completing practicums at the local schools, more local teachers will be available for positions in schools in the future. There are some teachers who have relocated to Whyalla half way through a year to fill positions, but these are a rare few and not all remain. Continuity of staff and staffing can be magnified in rural areas where there are major teacher shortages to begin with; this in turn can affect successful daily running of schools (Plunkett & Dyson, 2011). For those who do relocate, they may be faced with the loss of their support systems and this impacts their efficiency and commitment to the school and local community. They can become reluctant workers who constantly travel back and forth from their work place to where their family and friends still reside. This impacts them financially and later contributes to the decision to relocate back to the city. By providing a Bachelor of Education in a regional setting, some of these issues may be eradicated as local students remain local and obtain work at the schools. These students and future workforce are able to maintain their support systems and also understand the context of the schools they will be working in. The students who understand the local community have the support systems and do not have the relocation costs. They have access to a local university and are more enticed to remain in that environment. By providing these programs in regional areas, it overcomes many of the difficulties associated with regional education and retention of future staff.

Literature Review

Australia's rural schools are characterized by high teacher turnover (Beutel, Adie & Hudson, 2011; Kline, et al., 2013). Regional schools face many difficulties in regard to

staffing; one of these is the costs associated with high turnover. In Australia, studies suggest that beginning teachers are not committing to remaining in the profession; teacher retention is compounded in rural areas *(*Beutel, Adie & Hudson, 2011; Plunkett & Dyson, 2011) as there is a lack of knowledge of life beyond the metropolitan area (Trinidad, Sharplin, Ledger & Broadley, 2014). As a result, teachers do not remaining in regional areas and return to the city and schools are left with the difficult process of finding enough teachers to ensure that schools operate efficiently. Herrington and Herrington (2001) state that within the first five years of rural and regional practice, geographical isolation and lack of professional development is likely to result in many professionals leaving their country locations and even the profession. Schools in regional areas and small towns have greater difficulty filling vacancies than those in cities due to lack of available and suitably qualified people (Goodpaster, Adedokun & Weaver, 2012). This can result in schools in regional areas often being staffed with relatively new and inexperienced teachers, in turn this can have a negative impact on school efficiency (Goodpaster, et al., 2012). If there is an illness or professional development, this can further complicate matters as there are not enough Temporary Relief Teachers (TRTs) to fill in the gaps. Some schools in Whyalla have had to survive a term or more relying on TRTs to fill vacancies so that schools can function until the position is filled. In 2014, one school experienced a turnover of six teachers, leaving the school with six positions to fill which is not always easy to achieve.

External education has broadened access to the degrees available online and has provided opportunities of university education for those who might otherwise not be able to obtain a degree. Flexibility and convenience relate mostly to life circumstances such as work and family commitments, external study can offer students the freedom to be able to choose when and where they study (Kramarae, 2001). Unfortunately students are not always satisfied with the amount of interaction with the instructor and with other students (Lennox, et al., 2006). The benefits of face-to-face contact with university staff are referred to repeatedly in many studies, as are the benefits of teacher education courses that incorporate content specific to rural and regional areas, such as information about teaching in multi-age/multi-stage classrooms and coping with geographic isolation (Kline, et al., 2013).

Everyone has different learning styles and there are still many who prefer to have access to a campus and its experience. To relocate is not always easy as there are numerous changes and costs associated with moving to the city. In Whyalla, many families could not afford to relocate their family and there are many single parents studying who cannot relocate due to family and work commitments, so external education was their only option to study a Bachelor of Education. For some single parents the issue remains that they cannot gain better employment without education, but they are not in a position where they could obtain an education and support their children (Haleman, 2004). The combined costs of housing, food, and childcare leave few remaining financial resources for single parents to relocate for study (Haleman, 2004).

Alternative models to encourage students to take up regional, rural and remote teaching positions have been developed by a number of tertiary education providers. These models have included providing the opportunity to gain insight into rural practice through placements and ad hoc experiences (see Beutel, et al. 2011; Young, Grainger & James, 2018). The model under case study for this paper provides an alternative that tertiary education providers could adopt in similar settings. It is a model that affords itself to locations where a university footprint exists or could be established. The discussion of alternative models is crucial if workforce maldistribution in regional areas, particularly in education, is ever to be addressed.

Method

To explore the introduction of the Education programs in Whyalla, a case study approach was adopted. Crowe, et al. (2011) state that using a case study approach provides opportunity for authors to generate an in-depth, multi-faceted understanding of a complex issue in its real-life context. In order to provide an in-situ account, one of the authors (HH) documented the introduction of the programs through reflective journaling. As part of this process, her previous involvement in the delivery of primary school education was drawn into the journaling process, providing insight into how the introduction could address staffing issues at the local level. Rather than seeking sources of student comment through specific data collection, such as interview or survey, these were gathered through media releases and reports to ensure alignment with a naturalistic approach to the case study.

Case study: University Context

In 2013, a new document was released by the University of South Australia, it highlighted how the university would develop and change by 2018 in a variety of ways. The Vice Chancellor and President, Professor David Lloyd (2013) stated that 'Crossing the Horizon is an action plan, as opposed to an aspirational plan. It details a number of concrete initiatives beneath seven over-arching themes that will help to further establish and differentiate UniSA as a true university of enterprise.' The first action set offered a commitment to enhance educational offerings and an outstanding student experience (University of South Australia, 2013). Action set five proposed a commitment to engagement with society beyond the classroom and campus (University of South Australia, 2013). This included providing more education outside the city of Adelaide by delivering three new regional learning hubs in South Australia (University of South Australia, 2013). Both these action sets are in motion with the further development of the Whyalla and Mount Gambier campuses by delivering the Bachelor of Education Primary and the Bachelor of Education Early Childhood. For the first time the Bachelor of Education program was and still is available face to face in the regional areas of South Australia.

The Model

In 2013, Bachelor of Education Primary became available for the first time in Whyalla. Students enrolled knowing they would be a part of a new model. This model would include technology-enabled participation via course websites and two hour tutorials per course at the Whyalla campus. For all modalities, content was provided from an Adelaide campus through already established courses. Students committed to two days of tutorials each week on campus with the expectation that they would interact and access the weekly material and lectures provided via the online site. Students could access information, activities and lectures available online for external students but attended campus for face to face tutorials with sessional staff. This proved to be successful and the students were appreciative of the face to face contact available in Whyalla. Word of mouth became a primary marketing tool with intake numbers doubling in the first few years. There was a general acknowledgement in the community with many expressing their appreciation that the program was now available in regional areas. It also provided the opportunity to experience campus life as a local student.

Initially, the program was delivered face to face by casual staff, however it became evident that a permanent position was needed to sustain the daily activity of the programs, and all that it entailed, to run the programs successfully on campus. In 2014, a full-time position was created at the Whyalla campus and filled by a person who held a Bachelor of Education, had previous experience teaching in the local region, international experience in Primary schools, and was in the process of completing a Master in Education. The position entailed running tutorials, engaging with the local community, promoting the program to the local communities, administrative duties for maintaining the program on campus, and overseeing any student and staff concerns or queries. This enabled a local staff member to be a point of contact at the campus for the community and provided the programs with a person who had local community knowledge. The position could engage with the community at different events making it easier for potential students to gain knowledge of the programs. For enrolled students, they could seek help and support with course content on campus and face to face.

The programs now consist of one full-time staff member and five casual staff. Lectures and readings are accessed online for each course which students are expected to complete before attending a tutorial on campus. This has reduced the cost of running the programs in the region as repeat lectures do not have to occur on campus and students were not required to attend campus for tutorials and lectures. The technology required to access materials were cost effective and available to all students no matter their circumstances. The Whyalla campus also offers computer and internet access to help cater for those students who do not have access at home.

Due to the smaller class sizes at Whyalla, students are provided a unique experience with the academic staff. Courses promoting critical thinking and advanced problem solving are best taught in a smaller classroom environment (Dillon, Kokkelenberg, & Christy, 2002). Activities and discussions could be more in depth and also provided opportunities for further development and elaboration on activities and discussions. The smaller class size provided multiple engagement opportunities with a nearby school without the school becoming overwhelmed with university engagement. These unique experiences provided the students with a more hands on approach to establishing their own pedagogy and with the opportunity to try out new ideas and strategies for engagement. As students' progress to the next year they stay with the same cohort of students and academic staff; this allows for staff to know their students personally and understand their strengths and weaknesses. Student and staff motivation and attitude towards learning tends to be more negatively affected by larger classes (Dillon, et al., 2002). Further studies show that the larger the class, the greater the instructor effort devoted to class wide activities at the expense of individual attention (Monks, Schmidt & Cornell Higher Education Research Institute, 2010). Each campus provides a unique learning experience for students and smaller class sizes is just one of the highlights for enrolling at a regional campus.

Courses in Whyalla are offered in a variety of methods through a variety of modalities. Video conferencing allows students to communicate with staff in Adelaide and Mount Gambier campuses. This is particularly distinctive from fully online courses with pre-recorded lectures and videos. Students are able to attend lectures through this technology and interact with lecturers and fellow students from other locations. The online environment creates opportunity for students to interact through forums and contact their lecturers with questions or concerns they have about the course; it also provides details of other staff members and support available for students. The programs have been implemented in a way that can be adopted for other programs allowing for further higher education opportunities in regional areas and around the world. Utilising a hybrid model of online and face to face allows students to have access to technology based learning and materials, while providing

opportunities for staff to interact with students and students to interact with each other. It affords students greater control and options for their study, and is a viable alternative for many that may not feel confident to pursue fully external/online courses. Further, it provides the potential for a variety of programs to be offered in regional areas using the same structure of implementation.

Discussion

This development at the regional campus has benefitted the region in a variety of ways and extends beyond the Whyalla community, encompassing many of the communities in the north and west of South Australia. It disrupts some of the trend of youth moving away for higher education and not returning to the regional locations. It provides a stepping stone approach for the surrounding areas such as Cleve, Port Pirie and Port Augusta. As one student noted, "I definitely prefer travelling to Whyalla than doing the course external so I can have that teacher one on one support" (Davis, 2014). Retaining regional youth results in sustaining communities and social capital (Drummond, et al., 2011). Sustainability of regional communities underpins the environmental, economic and social sustainability of all Australia (Halsey, 2009). The University of South Australia has contributed greatly to the sustainability and economy of regional communities by offering and staffing higher education programs such as education.

> *I had the intention of doing education, I was going to do primary schooling before they decided to offer the early childhood course, which I found much more suitable for me. It is what I have always wanted to do, I am glad it is now being offered here (Davis, 2014).*

Studying in Whyalla is perceived as less daunting, financially possible, and closer to supports, so students are more likely to start and complete their studies. The future of regional teaching will also benefit as training teachers locally will encourage and support the future workforce to remain local, allowing regional areas improved retention with less turn over each year. As of June 2017, there were currently 52 students enrolled in the Bachelor of Education at the Whyalla campus. The investment into the community is substantial as it provides opportunity for students to volunteer, participate and gain employment readily in their field of study. It provides students with the opportunity to gain contract employment that could lead to permanency quicker than those in the city. From 2014 to 2017, Whyalla students have had the opportunity to volunteer at the local public library to run school vacation activities, tutor primary and high school students through a mentoring program, and have gained casual employment at child care centres after completing their placements in first year. The 2016 and 2017 Whyalla graduate cohort all graduated with employment.

Drummond, Halsey and Van Breda (2011) have noted that many regional students do not apply to university due to relocation and allow their university offer to lapse rather than move. The introduction of the education programs in Whyalla has allowed students to take up university offers without the necessity of moving.

> *"When it was announced that Whyalla was getting a teaching program, it was like a dream come true. It meant that I didn't have to move or study externally and that I would be able to access on campus support" ('Student follows her dream', 2013).*

An increased number of qualified professionals is of benefit for the community, financially and socially. It has a number of additional benefits. Students have noted the reciprocity they have with their communities as current community members and future

professionals, 'It is so nice to give back to the community especially when I am so familiar with the locals' (Southern Cross News, 2017).

A number of practical challenges were experienced in the process of establishing the programs, and continue to challenge the sustainability of the programs. Sourcing qualified staff that have capacity to deliver tutorials proved a significant challenge. To address this, partnerships were created with local primary schools. Quality teachers were approached to teach into the programs and the school released the teacher for a period of time each week. The university compensated the school with the cost of employing a TRT. For sites where it was not feasible to release the teacher during the day, tutorials were scheduled for late afternoon commencing once the school day had completed. Taking this approach has enabled teaching staff to gain additional skills at teaching at a university level, essentially developing a local pool of talented casual staff. Building strong relationships with industry is vital, especially when it comes to sourcing placement sites for students. By maintaining and contributing to local sites, placements are easily located each year supporting the delivery of the placement courses in the region. Due to the geographic distribution of students, these relationships were also formed with neighbouring communities. Maintaining these working relationships ensures the continuation of placements in the region. The geographic distribution of students' necessitated further consideration in administrative areas such as timetabling. Students would need to travel up to two hours to attend a class, making a sporadic timetable costly both financially and in terms of time. The timetable was coordinated in a way that required students to only be on campus two days a week, tutors were consulted about availability before the timetable was implemented.

Smaller class sizes can be beneficial for students as it allows significant engagement with each student; however it has created a number of challenges. If a class is too small it becomes financially unviable for the university. To address this, video conferencing with another regional campus has allowed two classes to be taught simultaneously, creating a feasible class size. Smaller class sizes have highlighted the importance of maintaining professional relationships with students. Teaching staff and students get to know each other well over the four years and it is important to maintain a professional relationship. Casual staff are informed not to provide their mobile number to students. On one occasion, this has occurred and some students would call or text at 10:30pm at night and expect a response. This caused complications and students were encouraged to email only. Staff were provided with training around communicating with students after hours as in regional community students would see staff in other settings (supermarket, cinema or café) and approach them to discuss assignments or tutorial work. It was essential that staff understood how to respectfully withdraw from such conversations.

Academic satisfaction is a necessary part of the program's success, particularly as staff location could generate feelings of isolation, impacting wellbeing. Through the use of technology, such as videoconferencing and virtual classrooms, staff at the regional campus were able to be included in meetings and presentations. Email correspondence is vital and staff were included on relevant distribution lists, however they were also provided opportunities to travel to the metropolitan campuses and build on their professional relationships with their colleagues. Monthly meetings with leadership afforded discussions regarding the delivery of the program and staff wellbeing. This has all enabled the smooth running of courses across campuses and ensured communication was more inviting and welcoming due to familiarity with the relevant staff.

Limitations

The authors acknowledge that adopting a case study approach has only explored one geographic location in Australia. Other locations may have experiences not considered in this paper. The authors have considered their own reflexivity in relation to this work. As regionally based academics they believe that it is crucial to develop models that suit the needs of the community and the organisation. This case study is based on reflective journaling and media reports, further research could adopt different approaches and explore some of the factors that contribute to student challenges and successes in this model.

Implications

Programs can be introduced by tertiary education providers and rarely get reported. By examining this case study of the education programs at a regional campus, this paper contributes to the body of knowledge aimed at redressing workforce maldistribution and the approaches taken by universities to achieve this. While it may not be suitable for every regional location, it offers an alternative model that could be implemented in Australia and globally to help improve educational outcomes for particularly disadvantaged areas.

Conclusion

Improving regional education can have significant positive impacts on students, their families, and the community. There are times when success is achieved by expanding the education system to improve the community; the introduction of the Bachelor of Education Primary and the Bachelor of Education Early Childhood at the Whyalla campus of the University of South Australia highlights this. At the start of 2014, both programs were offered in Whyalla using a hybrid model that provided online and face to face contact. These programs have allowed students to remain local in a known environment with their support systems in place. This also benefits communities, providing future employees who have an understanding of what teaching regionally is truly like, as students have an in-depth understanding of what life is like in those areas and this will contribute to staff retention at regional schools. By implementing programs using a hybrid model, students are able to obtain affordable higher education and with delivery that engages a variety of modalities, it can meet the needs of regional students. Studying locally allows a familiar setting and maintenance of social supports. It also provides the opportunity to give back to local communities throughout the program and well after graduation. This process has been successful with the Bachelor of Education and it demonstrates great applicability to other programs while remaining cost effective for universities. This would allow opportunities for a variety of students who desire a higher education, but may have limitations in regards to relocation, finance or online capability.

References

Allen, D. (2015). Book review "Why rural schools matter." *Journal of Research in Rural Education, 30*(3), 1-3.

Beutel, D., Adie, L., & Hudson, S. (2011). Promoting rural and remote teacher education in Australia through the Over the Hill project. *International Journal of Learning*, *18*(2), 377-388. https://doi.org/10.18848/1447-9494/CGP/v18i02/47484

Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A., & Sheikh, A. (2011). The case study approach. *BMC Medical Research Methodology*, *11*(1), 100-100https://doi.org/10.1186/1471-2288-11-100

Drummond, A., Halsey, R. J., & Van Breda, M. (2011). The perceived importance of university presence in rural Australia. *Education in Rural Australia*, *21*(2), 1-18.

Dillon, M., Kokkelenberg, E., & Christy, S. (2002). The effects of class size on student achievement in higher education: Applying an earnings function. Retrieved July 9, 2015, from http://files.eric.ed.gov/fulltext/ED482389.pdf

Davis, K. (2014, March 20). New era for UniSA. *Whyalla News*, p.3.

Goodpaster, P. S. K., Adedokun, A. O., & Weaver, C. G. (2012). Teachers' perceptions of rural STEM teaching: Implications for rural teacher retention. *Rural Educator*, *33*(3), 9-22.

Haleman, L. D. (2004). Great expectations: Single mothers in higher education. *International Journal of Qualitative Studies in Education*, *17*(6). https://doi.org/10.1080/0951839042000256448

Halsey, J. (2009). Australia's sustainability: anew policy front for rural education? *Education in Rural Australia*, *19*(2), 13-24.

Kline, J., White, S., & Lock, G. (2013). The rural practicum: Preparing a quality teacher workforce for rural and regional Australia. *Journal of Research in Rural Education*, *28*(3). Retrieved from http://jrre.psu.edu/articles/28-3.pdf

Lennox, S., Davis, J., & Heirdsfield, A. (2006). Getting connected: Learning from external early childhood education students perceptions of their study experiences. *Journal of Early Childhood Teacher Education*, *27*, 275–289. https://doi.org/10.1080/10901020600843632

Monks, J., Schmidt, R., & Cornell Higher Education Research Institute. (2010). The impact of class size and number of students on outcomes in higher education. *Cornell Higher Education Research Institute*. Retrieved from http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1145&context=workingpapers.

Plunkett, M., *&* Dyson, M. (2011). Becoming a teacher and staying one: Examining the complex ecologies associated with educating and retaining new teachers in rural Australia. *Australian Journal of Teacher Education*, *36*(1). https://doi.org/10.14221/ajte.2011v36n1.3

South Australian Centre for Economic Studies (n.d.). *Regional Development Australia: Whyalla and Eyre Peninsula*. Adelaide: Adelaide and Flinders Universities.

Southern Cross News. (2017). Southern Cross SA- Monday May 8. Retrieved from https://www.youtube.com/watch?v=U3y5nWOAvs8&t=476s

Trinidad, S., Sharplin, E., Ledger, S., & Broadley, T. (2014). Connecting for innovation: Four universities collaboratively preparing pre-service teachers to teach in rural and remote Western Australia. *Journal of Research in Rural Education, 29*(2), 1-13.

University of South Australia. (2013). *Crossing the Horizon*. Retrieved from http://www.unisa.edu.au/About-UniSA/Strategic-action-plan-2013-2018/.

Young, K.D., Grainger, P., & James, D. (2018). Attracting preservice teachers to remote locations. *Australian Journal of Teacher Education*, *43*(2), 157-171. https://doi.org/10.14221/ajte.2018v43n2.9