Australian Journal of Adult Learning Volume 45, Number 2, July 2005

'SERPS Up': support, engagement and retention of postgraduate students – a model of postgraduate support

Margaret Alston, Julaine Allan, Karen Bell, Andy Brown, Jane Dowling, Pat Hamilton, Jenny McKinnon, Noela McKinnon, Rol Mitchell, Kerri Whittenbury, Bruce Valentine, Alison Wicks, Rachael Williams Charles Sturt University

The federal government's 1999 White Paper Knowledge and Innovation: a policy statement on research and research training, notes concerns about retention and completion rates in doctoral studies programs in Australia. This paper outlines a model of higher education support developed at the Centre for Rural Social Research at Charles Sturt University. The postgraduate student body in the Centre represent the most vulnerable to attrition – mostly female and mature-aged, a majority studying at a distance and part-time, and most with family and work responsibilities. The program developed in the Centre – the SERPS model (Support, Engagement and Retention of Postgraduate Students) – has seen a significant

rise in the number of students studying through the Centre and significantly high retention and completion rates. This paper outlines the model as well as the results of an evaluation of the model conducted with students in the Centre. This paper indicates that retention (and ultimately completion) is linked to the vibrancy of the learning and social support networks established for the students and the creation of a collegial culture.

The attrition and completion rates of students from post-graduate education programs in Australian universities have created concern within Australian government circles. The federal government white paper, *Knowledge* and *Innovation*: a policy statement on research and research training (Kemp 1999) notes the need to improve completion rates and reduce the amount of time taken to complete higher degrees. Yet the focus of the White Paper on PhD completion rates as a critical indicator of success for research programs risks prioritising a rapid throughput of students rather than the quality of the education experience. Such a model might well be described as research training rather than one that provides 'a complexity of nurturing knowledges and practices that underpin and enable innovation' (Zeegers and Barron 2000: 180 quoting Smith 2000). Attention to completion rates and minimal time for completion overshadows the links between the quality of the educational experience and retention of students, arguably a more critical indicator of success. Nonetheless a focus on completions alerts those of us engaged in teaching at postgraduate level to consider effective strategies that may influence students to stay with a doctoral program.

This paper outlines a model to address doctoral student retention developed by the first author, who is also the Director of the Centre for Rural Social Research at Charles Sturt University, a centre that

provides a 'home' for a cohort of over thirty PhD students studying within the social sciences areas. The model, named Support, Engagement and Retention of Postgraduate Students (SERPS) by the students, represents a departure from more traditional learning practices. The paper draws on a survey conducted with eleven of these students in the Centre whose names also appear as authors. A majority of the Centre's students are studying at a distance from campus and in a part-time mode, most are female, most have families and several have paid work, factors likely to promote attrition (Leonard 1997). In addition a majority are from rural areas. What the model and students' reactions reveal are the links between retention (and thus ultimately completion), innovative learning and social support networks and collegiality.

Higher education completions in Australia

From 1990 to 1999 there occurred a two and a half fold increase in the number of doctoral students studying through Australia's universities (DETYA 2001). Yet a study by DETYA (2001) found that fewer than 30% of doctoral students had completed their studies within five years. Concern over these completion figures led to the publication of the White Paper.

There was general acceptance of the need to improve student completion rates and times to graduation ...

Institutions will be rewarded for performing research of an excellent quality, as well as being encouraged to increase their collaboration with industry. They will be rewarded for the quality of their research training environments and for ensuring that students complete their degrees. http://www.dest.gov.au/archive/highered/whitepaper/6.htm

We know that students most likely to complete *undergraduate* courses are females, studying full-time, who are younger, urban and from a high socio-economic background (Martin, Maclachlan

and Karmel 2001). By contrast, postgraduate students most likely to complete their program are students studying sciences, who are younger, studying full-time and on scholarship (Martin, Maclachlan and Karmel 2001). McCormack and Pamphilon (2000) note that males are far more likely to complete a doctoral program (85% compared to 15%), although Martin et al. (2001) suggest that there are no significant gender differences in post graduate completion rates. Nonetheless the difference in the gender profile of successful undergraduate and postgraduate students may be explained by other factors impinging on students. Women, for example, are more likely to experience 'fractured' doctoral careers because of the pressures of combining work and family (Leonard 1997) thus making it more likely that female doctoral students will be mature-aged.

Also of significance to successful completion is a student's sense of isolation, a factor exacerbated by off-campus study (Macauley 2000). Students studying at a distance from campus are more vulnerable as are those from rural areas. If universities were to concentrate only on successful completions in minimal time frames, they might be tempted to favour those applicants that fit the 'success' factors outlined above. Thus universities may resist enrolling older females from rural areas, studying part-time by distance with work and family responsibilities because they do not fit the profile of the most successful postgraduates. Such a move would be questionable not only on equity grounds but also risks missing the rich contributions to academic collegiality that these mature-aged part-time students can provide. Such a move would also completely annihilate the Centre's student body.

The cohort of social science students studying through the Centre is significantly different to the stereotypical successful doctoral graduate and is significantly vulnerable to attrition. It therefore would appear to provide something of a challenge for a regional university specialising in distance education to produce significant PhD

completions. Yet our focus on the provision of successful learning and social support networks provides a challenge to the established wisdom on completions.

The students' support network

Clearly it is important to focus on the support networks, both social and scholarly, if students are to be retained in a doctoral program. This is particularly important if students are studying at a distance from campus. Critical to a successful learning environment is, of course, the supervision arrangement and Gordon (2000) suggests that one of the main factors in student withdrawal is dissatisfaction with their supervision arrangements. There is little doubt that the quality of the supervision provided for students is essential to their satisfaction (DETYA 2001; Colebatch 2002) and that flexibility in supervision arrangements is essential (Pearson 2000). However defining quality supervision is much more difficult. It has been described as an advanced form of teaching, a critical conversation (Knowles 1999), a mentorship (Taylor 1995), a master / apprenticeship relationship (Macauley 2000) and as having an implicit pastoral responsibility (Colebatch 2002). All students at Charles Sturt University are assigned a principal and associate supervisor whose task it is to provide one-to-one teaching relationships.

The model developed over the last six years at the Centre for Rural Social Research, Charles Sturt University, a regional university, adds another layer to this relationship. It is important to note that the model is in addition to the formal courses and support networks operating through the University and the Centre for Research and Graduate Training more generally. The model is unique to the Centre, providing additional support to its students. Similar to the 'Collaborative Cohort Model' described by Burnett (1999), it brings the Centre's student body together four times a year in a supportive

learning environment where a strong sense of collegiality, trust and peer group support has developed. The seminar program provides a vehicle for an advanced form of learning, a critical conversation, mentorship not only between academics and students but also between students in the group, and also has an implicit pastoral element. In developing this model the focus of the Centre is on the provision of research education rather than research training. A significant attempt is made to develop a learning support network that is stimulating, nurturing and enabling of collegiality and student interaction.

There is no doubt that the attrition/completion debate encompasses a complex set of relationships and goals. However attending to the provision of a supportive learning network for students within the Centre is not about focusing on successful completions. It is more about investing in strategies that expand students' capacity to produce new knowledge and, in the process, allowing students to have an optimal support structure around them. That one of the spin-offs has been high retention rates and successful completions is a bonus. As with the Collaborative Cohort Model, the quality of dissertations and completion rates are enhanced (Burnett 1999).

The student cohort

The Centre for Rural Social Research was set up in 1989, in conjunction with the establishment of Charles Sturt University as a new regional university. The Centre provided an initial focus for the research of academics working in the new university and developed as a locus for postgraduate students in the early 1990s. The Centre's first PhD student, graduated in 1995 and the Centre's postgraduate student body has grown from four PhD students in 1994 to thirtythree in 2004. Approximately a third of the students are studying on campus full-time. Those studying at a distance are mature-aged and predominantly located in rural areas of NSW, Victoria, South

Australia and Western Australia. This significant growth in numbers has a number of explanations. The Centre has managed to secure its place as a focus for rural social research in a relatively short time. This, coupled with the strategic location of a number of leading rural sociologists, psychologists and social workers (a cohort that has changed over time but retains its leading edge focus on rural social issues research), has firmly established the Centre as one of national significance. Additionally students have been attracted to the Centre through the publicity generated by research and through various Australian Research Council (ARC) linkage projects with Australian Postgraduate Award (Industry) (APAI) scholarships attached. The rapid rise in numbers taxed the first author (as director of the Centre) to provide a satisfactory and engaging learning environment.

The model

Initial development

The Centre's higher education model developed from humble beginnings in the latter part of the 1990s. The first author became aware of the isolation of distance education students through the experience of supervising students at a distance. Initially a group of four mature-aged students, three of whom were studying part-time by distance, were invited to attend a seminar at the university where a wide range of issues relating to their own experiences and needs were discussed. The writer was principal supervisor for each of these students and had been conscious of their individual and collective struggles to stay engaged with their studies, the academic endeavour and with the university. Initially it was determined that a similar seminar of four hours in length would be held each semester. Very quickly two things became clear – one was that two seminars of less than a day in length was not enough, and, two, that there were other students studying through the Centre, not necessarily supervised by the first author, who were seeking access to the seminar program.

During the second year of operation the seminar program expanded to two half days, from midday the first day until midday on the second. This allowed the students to travel to the university on the morning of the first day and travel home on the afternoon of the second. It also allowed for students to make time to see their principal supervisor during their visit, spend time in the library, and to socialise over dinner. Further it allowed for more informal time for the students to discuss progress and issues with each other. The group soon negotiated for two seminars each semester – a total of four per year. It was clear that the seminar program had quickly taken on a significance far beyond its original conceptualisation.

Facilitating students' engagement

What was quickly evident was that the structured program provided the vehicle for students to engage at a number of levels. Previously students had been disengaged from the university itself, not necessarily seeing themselves as part of a larger student body and not feeling any strong sense of identity to the university because their rare visits had been solitary experiences for a one-on-one discussion with their supervisor. The seminar program quickly changed this perception, allowing students to gain strength from their collective identity as 'the Centre for Rural Social Research postgraduate students', and giving them the confidence to seek additional university infrastructure support such as their student funding entitlements, information on courses run through the graduate studies office, more detailed information on library facilities, and guidance on IT services and programs.

Campbell (2000) notes the importance of students' ability to participate in formal and informal student and faculty interactions. This has been evident in relation to the Centre's students. Because they were now regular visitors to the Faculty of Arts, staff came to recognise members of the group and students became more integrated into the life of the faculty and more attuned to academic

life and its structured patterns. One of the consequences was that several students were offered marking and tutoring opportunities.

However the engagement that has made the most significant impression on the students and has, more than anything, facilitated their retention in the program is the one the first author least expected. That is the engagement at a student to student level. Because students in the program encompass all stages of the PhD experience from the very first months to the final stages of drafting, students act as mentors to one another, advising, supporting, alerting others to good references, personal break throughs, research milestones, new computer programs, better ways of handling data, the best and cheapest voice recorders etc. It is at this level that the real strength of the group is revealed. From its earliest beginnings students asked for an email distribution list so they could keep in touch with one another between meetings to facilitate the ongoing discussion of their work. They now also have an on-line forum that acts as an ongoing tutorial discussion group. Their discussions can range from a comment on a book, to a tortured question on theory, to the best way to deal with managing work and study. The collegiality, support and trust evident in the group, despite its constantly changing membership over time, indicate that this group fills a need, particularly for students studying by distance.

Perhaps a real indication of the success of the group has been that the regular attendees have remained in the program despite significant life changes and each seminar is attended by about fifteen students. There are three other indicators that suggest to the writer the significance of the group. Firstly, is the joy with which the group celebrates the submission of a thesis, and /or the successful examination and graduation of a group member. Secondly, it is worth noting the efforts group members make to attend the regular seminars. An example is one member from rural Western Australia who, to get to the seminar, travelled a couple of hours by car, then

took a plane to Perth, flew to Sydney and then connected to Wagga Wagga. This is the most extreme example, but it indicates the lengths to which most will go to attend. Thirdly, the strength of the group is demonstrated in the difficulty graduates have in separating from the group. It is not unusual for those who have submitted, and even been successfully examined, to continue to come a couple more times. Their attendance is welcomed because of the new insights on the examination process they offer. Nonetheless it is difficult for group members to break away. It is clear then that the seminar format we have developed creates a strong sense of identity, collegiality and trust. Equally important is the content of the program.

The program

Initially the seminar program was held at Charles Sturt University's Wagga Wagga campus. A structured program included student presentations of their work and lectures from CSU academics and divisional support staff. Noting the developing enthusiasm of the group and the need for students to be exposed not only to new ideas and approaches, but also to the policy process dependent on research and to the employment possibilities that research opens, the first author determined that it might be useful to take the group out of Wagga Wagga. Group members were consulted and the idea was met with an enthusiastic response. A small amount of funding was obtained from the research office at the university which allowed for payment of speakers, the first author's travel and accommodation and that of Ian Gray, the Associate Director of the Centre, who has also attended many of the seminars. Because most students studied by distance, they travelled anyway to get to the seminar, so travel to a different site was not a problem. For some it was, in fact, easier to get to a capital city and cheaper. Accommodation has always been booked in university on-campus facilities in the capital city visited.

In the first year we experimented by going to Canberra for one of the seminars. Two leading Australian National University (ANU)

researchers were contracted to speak to the group on their work and theoretical position, as was a social researcher from the Bureau of Rural Sciences (BRS) who spoke on the employment prospects for researchers in the public service. The group also arranged a formal dinner and invited two politicians to attend. This exchange allowed the students to discuss their work, but also exposed the politicians to the scope of the research happening through the Centre.

During the second year of our expanded program the group decided to travel to Canberra for one of our seminars and to Sydney for another. On our first Sydney visit members stayed at Macquarie University and were privileged to hear from two leading academics and high profile policy people in state government. Our Canberra visit proved equally successful, this time being timed to coincide with the federal government budget week. The writer arranged for our group to be invited to the post-budget Labor Women's breakfast, a practice we have continued for several years.

We have continued our 'away' visits as they add a significant dimension to our learning. Over the years we have become known in Canberra as the rural PhD group, a group that politicians recognise has something significant to offer to the policy debate. We have been invited to lunch with the Minister for Family and Community Services, and have met on various occasions with several Members, Shadow Members and Senators. We have heard from leading policy people in the Department of Transport and Regional Services, Department of Agriculture, Forests and Fisheries and the Office of the Status of Women. A direct result of our familiarity in Canberra circles led to our students being taken on as summer scholars in the Department of Agriculture, Forests and Fisheries and in the BRS.

Our last two Sydney visits have taken place at the University of Sydney, joint ventures with students in the School of Social Work. This has allowed our students to be exposed to internationally prominent academics at the university. In this way students come to meet and hear from leading theorists and researchers, many of whom they have read and studied. The ability to listen and question these writers adds a significant dimension to our distance education students' learning. We are indebted to academics at ANU, Macquarie and Sydney Universities who give freely of their time to speak to our students.

Essentially the 'shape' of the away seminars remains very much the same. A maximum of three speakers over our 24 hour period allows plenty of time for discussion on the issues raised by the speakers and also allows time for students to address with the first author, with the Associate Director and with one another any issues or concerns that may have arisen for them since the last seminar.

The two seminars held in Wagga Wagga are structured around the students presenting their work to one another and to invited staff for comment and critique. These seminars are more informal and allow students to engage with each other at a deeper intellectual level. Each at-home seminar has a theme – for example methodology, theory, data collection, analysis etc. Thus students present on the theme, bring any issues they may have on this theme to the group and generally engage with the development of their work in this particular area.

Again the dinners at night provide additional time for the in-depth student to student discussions so essential to providing insights, developing collegiality, providing peer mentorship, and generally allowing a relaxed atmosphere where students can get to know one another better.

The evaluation

In 2003 the writer decided to evaluate the program to determine how it might be improved. A written survey was developed and distributed to approximately fifteen students who had attended regularly over

the previous two years. Eleven surveys were returned. Of these eleven respondents, eight are female, nine are over thirty-five (three are over fifty-five), seven study at a distance, three are part-time, six have dependent children and seven have paid work (three full-time).

When asked to comment on what helps them work consistently, ten students noted the CRSR seminars, nine noted the collegiality within the group especially helped and ten noted the support they receive at home. Asked to comment on what had held up progress, six noted other personal commitments, six family commitments, five work commitments, six the isolating nature of the PhD process, five a lack of time, six noted their need for paid work and one health issues. Significantly all students under forty-five and all on-campus students noted that family commitments had held up their PhD suggesting that 'fractured' PhD study is not limited to female students.

Students were asked to comment on the seminar series. All noted the format is relevant, nine that the guest speakers are of significance to their research, all noted the spacing of seminars is about right, ten that the collegiality of the group is good, ten the usefulness of the away seminars, ten that the Wagga Wagga seminars are helpful and all noted the organisation of the seminars as excellent.

Asked to provide ideas for improving the seminars, one noted the need for more dialogue in between the seminars, another noted the need for more discussion time, two noted the need to have more time at Wagga Wagga and another suggested a buddy system within the group for new students. Asked to comment on the two best things about the seminar, seven noted sharing with others and the exchange of ideas, one noted seeing others progress provides motivation, another noted the need to present ensures critical reflection, one noted that the seminars provide an opportunity to recommit to research and to the PhD, another that learning from others was particularly special, one noted the guest speakers are inspiring, another that the range of stages of the group members demystifies the

process and breaks down isolation, and another noted the seminars allow students to learn about the process of a PhD.

When asked to comment on the two worst things about the seminars one noted the need for more rigorous debate, two that they have to leave the group when the PhD is finished, a part-time student noted it was frustrating to move more slowly than the full-timers, two noted there was not enough time, another noted the frustration of sometimes not being able to attend because of work and family commitments, and another noted the lack of dialogue between seminars.

The following additional comments were written on survey forms and indicate the support provided by the seminar program. Referring to the way they seminars break down isolation, one student noted:

Always more motivated after attending a seminar, inspired by other students and relieved you are not alone.

Two students alluded to the learning and social support provided by the seminars.

Seminars greatly assist – they provide a safe environment to float ideas for the first time – where you know you will get honest, thoughtful, considered responses.

Huge learning from other students. This has been amazing for me. ... this aspect has certainly been most useful for me in terms of learning about specific topics, research process, personal management etc, but also in terms of support provided by other students. Would feel that I could probably call ten or more students right now for assistance and they would know who I was and what I was talking about and would be happy to help if they could. Have also made some friends which is a bonus!

One female student noted the way the seminars helped her overcome her lack of confidence in her ability to complete a PhD.

I still feel nervous every time, but the supportive and collegial environment have helped me to better explain my topic and methodology, and have aided me in developing the confidence to make a presentation at a national conference.

The collegiality of the group inspired another student to note:

Feel a sense of belonging to a group of people. Very important to me as it reduces isolation as a DE student.

The following comment also intimates that the collegiality and support provided by the group allows personal growth beyond the scholarly endeavour.

The seminars keep me on track – motivation is high – support at time is positive ... they give me the opportunity to grow – feedback is positive and useful in a supportive and non-threatening environment.

Noting the complexity of life for students studying part-time by distance, one student noted:

There are two things that helped with consistent work – family support and seminars – and the main thing that got in the way of progress was the need to work.

Yet the seminars also provide a legitimate reason to step outside the external pressures of work and family to concentrate on their PhD and to become part of the academy.

I enjoy the opportunity to get away from my job and, as a student, to enjoy the academic atmosphere.

Indicating something of the sense of inspiration the seminars provide, one student summed up as follows:

Must admit that when they started, I thought they might be a bit of a waste of valuable time (I was wrong) and that four a year was too many, I thought two would have been plenty (I was wrong again). I've loved them!

Conclusion

Attention to PhD completion and attrition rates overshadows the sector's need to focus on a sustaining and supportive environment for our postgraduate students, and, therefore, quality research outputs. The provision of mechanisms to ensure students enjoy their learning, grow with the PhD experience, form attachment to the academic endeavour and emerge with well-developed research skills and enhanced critical capacities is essential to the retention of students regardless of their profile. At the Centre for Rural Social Research the profile of the PhD student cohort is anything but ideal when compared with the 'success' factors for PhD completions. Predominantly female, rurally located, studying part-time at a distance, with work and family responsibilities, the Centre's students are those most vulnerable to attrition. Yet the development of a model of post-graduate learning has enabled these students not only to remain in the program but also to develop excellent skills in a supportive and trusting environment and to make significant contributions to research.

If we are to focus on post-graduate completion rates, we must first ensure that the learning and social support networks we create are stimulating, nurturing and exciting, that they enable the exchange of knowledge, the challenge of big ideas, the support of colleagues and a place to share the excitement of a 'big breakthrough' that only other researchers might understand.

This paper outlines one successful model developed in the Centre for Rural Social Research, a research centre at Charles Sturt University. Since the survey that informs this paper was distributed, five of the co-authors have passed with significant results. The remainder are into the final stages of their PhD years and only one has taken leave from her studies for family reasons. These group members retain their place as the elders of the group. They have been joined by several new members, all of whom have taken to the group with

enthusiasm and a thirst for learning, and who draw on the skills and knowledge of the now senior members. The group members at various stages of the PhD process watch the graduates' careers with interest, taking pride in their achievements. Maintaining a consistency in our profile, our current members are scattered across four states and are mostly located in rural areas.

Distance and isolation have been overcome by this model and we look forward to developing its strengths even further. In 2005, for example, the first author is taking a sub-group to the National Women's Studies Association Conference in Florida, USA, where the group will have a whole session to present on their research on Australia's rural women. The introduction of an international focus is a natural next stage development.

While the concern of the government over attrition and completion rates is acknowledged, we would counsel a greater focus on the provision of successful learning and social support structures. As one of the co-authors noted on a survey form:

I have developed a support network as a result of the seminars that I would not have had otherwise. This support has been crucial to my ongoing progress and my motivation to continue on the road towards completing my PhD.

References

Burnett, P. (1999). 'The Supervision of Doctoral Dissertations Using a Collaborative Cohort Model', *Counsellor Education and Supervision*, 39 (1), 46–51

Campbell, J. (2000). 'What are students in the UMPA survey saying about their pedagogical experiences?' In Kiley, M. and Mullins, G. (eds) *Quality in Postgraduate Research: Making Ends Meet*. Proceedings of the 2000 Quality in Postgraduate Research Conference. The Advisory Centre for University Education, Adelaide: The University of Adelaide. 39–42

- Colebatch, H.K. (2002). 'Through a Glass Darkly: policy development on higher degree completions in Australia', Journal of Higher Education and Management, 24(1), 27-36
- Department of Education, Training and Youth Affairs (DETYA) (2001). Factors Associated with Completion of Research Higher Degrees. Higher Education Series Report No. 37. DETYA. May. 1-8
- Gordon, J. (presenting for M. Gallagher) (2000). 'The challenges facing higher education research training'. In Kiley, M. and Mullins, G. (eds) Quality in Postgraduate Research: Making Ends Meet. Proceedings of the 2000 Quality in Postgraduate Research Conference. The Advisory Centre for University Education, Adelaide: The University of Adelaide.
- Kemp, Hon Dr D.A. (1999). Knowledge and Innovation: a policy statement on research and research training. Canberra: Commonwealth of Australia.
- Knowles, S. (1999). 'Feedback on writing in postgraduate supervision: echoes in response-context, continuity and resonance'. In Holbrook, A. and S.Johnson (eds) Suprevision of Postgraduate Research in Education No. 5. Coldstream: Australian Association of Research in Education.
- Leonard, D. (1997). 'Gender Issues in Doctoral Studies'. In Graves, N. and Varma, V. (eds) Working for a Doctorate: a Guide for the Humanities and Social Sciences. London: Routledge.152-183
- Macauley, P. (2000). 'Pedagogic continuity in doctoral supervision: Passing on, or passing by, of information skills'. In Kiley, Margaret and Gerry Mullins (eds) Quality in Postgraduate Research: Making Ends Meet. Proceedings of the 2000 Quality in Postgraduate Research Conference. The Advisory Centre for University Education, Adelaide: The University of Adelaide, Adelaide. 215-226
- Martin, L. M., Maclachlan, M, & Karmel, T. (2001). Undergraduate Completion Rates: An Update. Canberra: Department of Education, Science and Training.
- McCormack, C. and Pamphilon, B. (2000). 'Paths, phases, juggling and balancing acts: how women academics understand their personal experience of postgraduate study'. In Kiley, M. and Mullins, G. (eds) Quality in Postgraduate Research: Making Ends Meet. Proceedings of the 2000 Quality in Postgraduate Research Conference. The Advisory Centre for University Education, Adelaide: The University of Adelaide. 193-202
- Pearson, M. (2000). 'Flexible postgraduate research supervision in an open system'. In Kiley, M. and Mullins, G. (eds) Quality in Postgraduate

- Research: Making Ends Meet. Proceedings of the 2000 Quality in Postgraduate Research Conference. The Advisory Centre for University Education, Adelaide: The University of Adelaide. 103–118
- Smith, B. (2000). *Postgraduate Education: The Missing Link in the Innovation Equation*. Media Release, Melbourne: Council of Australian Postgraduate Associations, Friday, February 11.
- Taylor, P. (1995). 'Postgraduate Education and Open Learning: anticipating a new order'. *The Australian Universities Review*, Vol 38(2), 28–31
- Zeegers, M. and Barron, D. (2000). 'More than an apprentice model: legitimate peripheral participation (LLP) and the research conference for postgraduate students'. In Kiley, M. and Mullins, G. (eds) *Quality in Postgraduate Research: Making Ends Meet*. Proceedings of the 2000 Quality in Postgraduate Research Conference. The Advisory Centre for University Education, Adelaide: The University of Adelaide. 179–190

About the author

Margaret Alston is Professor of Social Work and Human Services, and Director of the Centre for Rural Social Research at Charles Sturt University. The co-authors are students in the PhD program at the university and took part in the evaluation of the program.

Contact details

Professor Margaret Alston, Centre for Rural Social Research, Charles Sturt University, Locked Bag 678, Wagga Wagga 2678 Australia

Tel: 0418242856 Fax: 0269332293

Email: malston@csu.edu.au