

Developing a virtual learning community of managers in rural and remote health services: reflections on opportunities and challenges

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The paper describes an **e-learning approach** to **service improvement** and **continuing professional development (CPD)** of **health service managers** in rural and remote areas. We briefly outline the Electronic Advanced Learning Set (EALS) pilot project, and reflect on our experience in terms of advantages, challenges and implications of the model for other CPD programs in rural and remote regions.

The **tyranny of distance and geographical isolation**, particularly in a state the size of Western Australia, can limit many rural practitioners' access to networks and other CPD opportunities provided through in-service and external education providers. However, some would argue that in health, as other rural service organisations, the need for CPD is greater, given that managers have more challenging roles; often they are solely responsible for ensuring viability of day to day services, and at the same time need to manage radical service change. The EALS project combined the power of **action learning/reflective practice** with the flexibility and efficiency of **electronic technology** to address these challenges and provide the means for **service improvement, networking and continuing professional development**.

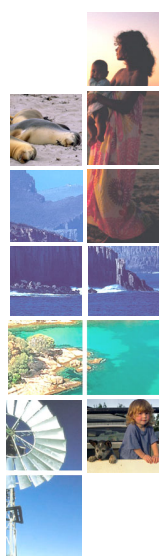
EALS used a range of electronic technology and face-to-face meetings to assist participants to **network** and **collaborate** in a change management process **within and across geographical regions**. Participants extended existing networks in pursuit of creative reconfiguration of health service provision. Using data from the **Project evaluation**, we share our learnings and identify **practical implications** of the EALS project for other CPD programs in rural health. The paper will be of particular value to those who are interested in using electronic media and action learning/reflective practice to **develop and support learning communities in rural health services**.

INTRODUCTION

The Electronic Advanced Learning Set (EALS) pilot project ran from June 2001 to September 2002. It was funded via RHSET grant funding and was a University-Health Department (DOH) partnership.

The project built on earlier work utilising action learning as a basis for continuing professional and service development (Roche, 1999; 2002a). Using **action learning** together with **electronic technology**, the EALS project assisted middle health service managers to **network**, and build skills to negotiate and lead change in their services through **work-based projects**.

The EALS project was an ambitious undertaking in two ways. Firstly, it was the first time that action learning and electronic media had been combined to meet the dual



aims of reducing isolation of health service managers in rural and remote health services. Secondly, it aimed to simultaneously focus on participants' professional development and health service development whilst earlier work had focused exclusively on CPD or service development, and/or relied totally on face-to-face interaction to provide a platform for learning (Whitener, Stevens, Cochran, Thompson and Williams 1999; Hartley 2000).

This paper reflects on the EALS project in terms of the **processes, outcomes, and learnings** that can be applied to any future projects of a similar nature. Data has been gathered from participants through internal and external evaluation via focus group discussions; telephone interviews, a questionnaire; project communications, and earlier Project reports (Roche, 2002b; Aoun, 2002).

BACKGROUND

The rural environment presents immense challenges to those who work in health services notably managers who have major responsibilities to re-create services in ways that apply principles outlined in key documents (WHO, 1986; Australian Health Ministers, 1999).

Despite the fact that mechanisms exist to increase their capacity to address the challenges, major obstacles in the rural health environment limit managers' access to opportunities for professional development, mentoring and support. Researchers such as Humphreys, Hegney, Lipscombe, Gordon and Chater, (2002) report obstacles including:

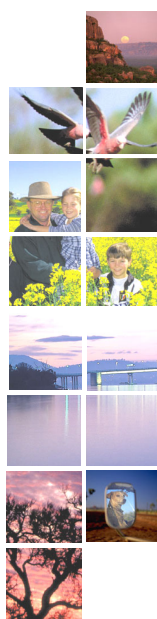
- isolation, work overload due to staff attraction and retention difficulties
- large distances between health services and managers
- budget constraints, high costs of travelling, and time.

Yet, the above barriers simultaneously provide a convincing opportunity to develop alternative mechanisms for delivery of cost effective professional development, networking, and support programs for rural health service managers (Whitener et al, 1999 ; Geissinger and Lloyd, 2001).

METHODOLOGY

For two significant reasons, the EALS project methodology offered a new and powerful medium for facilitating management development in rural health. First, action learning is a well-proven and established methodology for professional and organisational development through work-based project teams. However, action learning programs are traditionally facilitated through face-to-face contact between members of a "learning set" (Weinstein, 1995; Gattegno, 1996; Pedler, 1996; Roche, 1999).

Second, electronic media (videoconferencing, telephone conferencing, the Internet and email) are increasingly used to compliment, enhance or replace face-to-face contact for meetings and networking in many organisations, including health (Hamilton,



Rucinski and Schakelman, 2001; Rich, 2001) and higher education (Burstall, 2000; Sutton, 2001).

Project methods and activities

Methods to support participants' networking, learning and service change are shown in Figure 1 and major Project activities outlined in Table A1 in the Appendix.

As shown in Figure 1 support methods included:

- hard copy material distributed at face-to-face meetings
- videoconferencing (Monthly)
- TELEPHONE conference calls (Monthly)
- bulletin board (Weekly and as required)
- email networking (as required)
- feedback reports to sub-groups following each link-up
- face-to-face workshops: Start-up (half day), Call-Back (one day), and Final workshop (two days)
- face-to-face meetings of action learning project teams or regional groups (limited).

Participants were encouraged to seek suitable mentor and sponsor support for their work-based projects, and to self-manage their learning process utilising materials and support from the Co-ordinator. Feedback reports were circulated to the Project funder and participants following the workshops (Roche, 2002b).

Participants

Participants cited a number of reasons why they had joined EALS (Appendix Table A2) including networking and to co-operate on a new project.

There were initially twenty-four people (22 females, two males) from the following designations:

- health service managers
- directors of nursing
- clinical nurse managers
- program co-ordinators
- primary health care managers
- senior allied health.

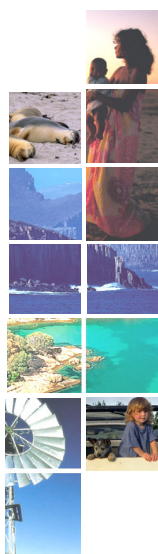
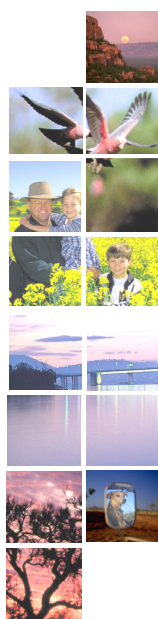
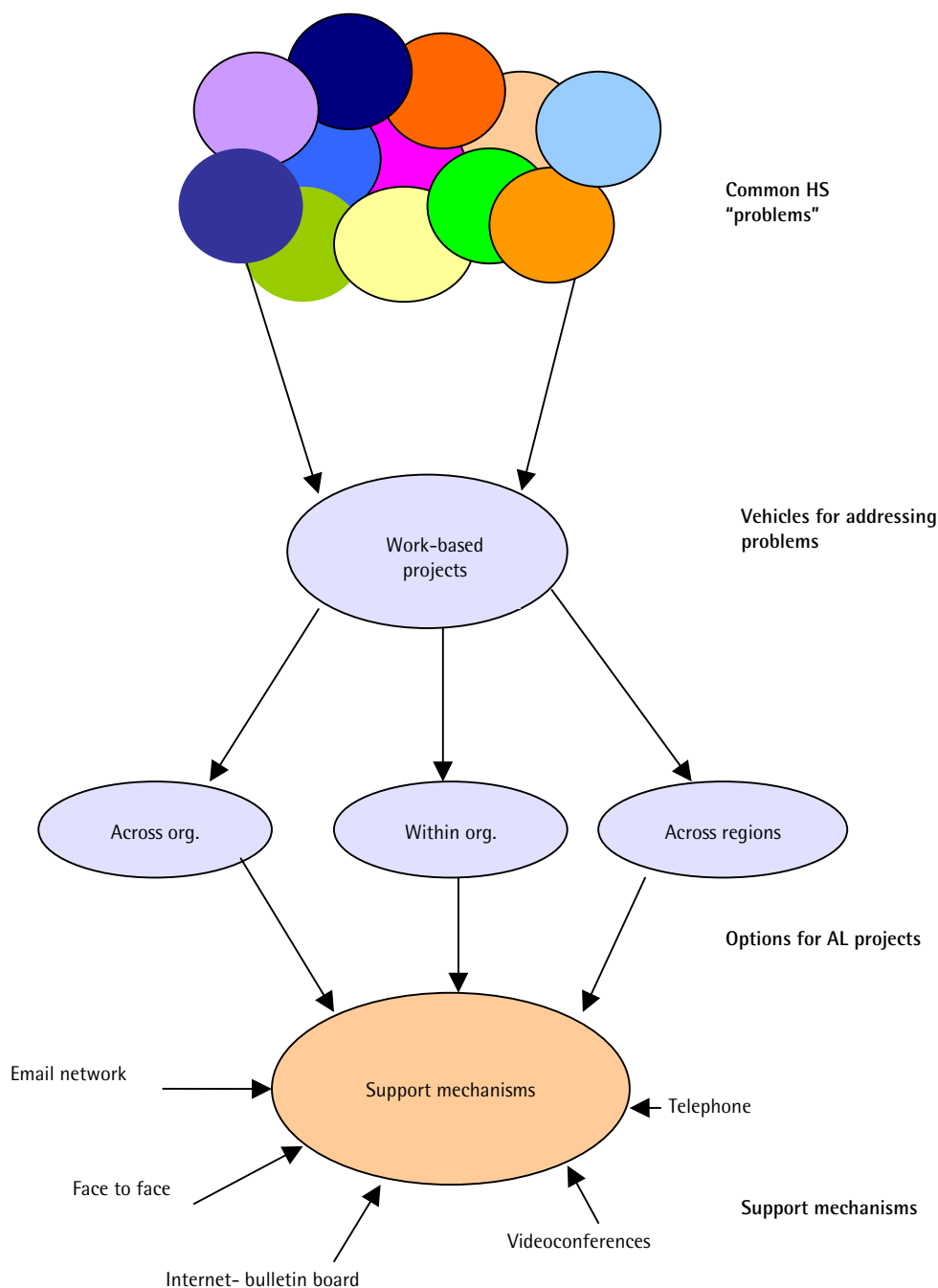


Figure 1 EALS Project support methods



By February 2002 participation had dropped to eighteen, and by July, to twelve people. Of the six participants who had disengaged from the Project after six months, two took on more demanding jobs and moved location; another person's employment conditions limited access to the group. One person withdrew because she was unable to obtain local support to implement her project brief. Four people withdrew from organised meetings and workshops (but not the Project) because of increased workload or changed work conditions.

All participants undertook collaborative work-based projects. In general, project teams consisted of 2 to 6+ people (Appendix Table A3). Fifty per cent had sponsors or mentors. Interestingly rather than health service personnel, the project co-ordinator was identified as the major source of mentoring support together with the funder in some cases.

Evaluation of outcomes and processes

Internal and external evaluation was undertaken to review the effectiveness of the program processes and outcomes. Data was obtained from interviews (telephone, face to face), focus groups and a questionnaire.

- EALS project outcomes
- scope and focus of the work-based projects
- project methodology
- factors facilitating progress
- factors inhibiting progress
- recommendations regarding next steps.

The following is a summary of participants' responses in the above areas. Additional information is contained in the Appendix (Tables A4, A5, A6 and A7).

Outcomes of the EALS project

Participants reported a range of outcomes and benefits gained from the learning set that included:

- increased networking and decreasing isolation
- service development
- management development
- improved use of technology.

These are reflected in their comments shown in Table 1 and (Appendix Tables A5, A6).

Scope and focus of the work-based projects

Work-based projects maintained the same general focus throughout the EALS life. However, there were substantial shifts in the scope of projects resulting from team membership changes, project withdrawal, change of employment and, or domestic situation, wider large-scale health service change. Table 2 indicates the range of projects at July 2002. On average participants spent between one day per month to a half-day per week on their respective projects.

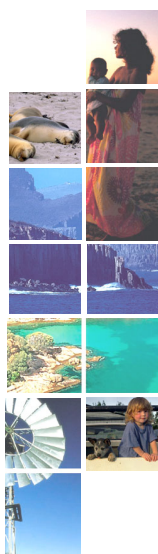


Table 1 Outcomes of the EALS project

Outcomes	Comments
Networking/decreased isolation	<p>"The contacts that I have made through this project will be very useful in the future."</p> <p>"I learned from other people's experiences, and if I need something, I know who to ring for advice on a particular issue."</p> <p>"The program provided networking, contact with people whose health services are undergoing similar changes. The workshops were the best link, and we felt supported that we were not the only ones undergoing change."</p> <p>"Improved networks in different areas ie. more exposure to primary health staff and ECU staff. DONs tend to be action focused rather than reflective, and it was interesting to see how other people engaged in reflective thinking and listening."</p>
Service development	<p>"The process and framework of collaboration has been beneficial with further development of a couple of major projects in the South West – Diabetes Integrated Care and Healthy Communities."</p> <p>"What I got out of it is team development, this also coincided with work in our health service which gave further support to the project."</p> <p>"I was able to develop a plan for change."</p> <p>"The program has broadened our service delivery options. It served as a benchmark, and enabled us to see where we were in the global scheme in this state."</p>
Management development	<p>"My involvement enabled considered strategies to be developed (time to plan) – with time out of the workplace to reflect and consider."</p> <p>"I got a better awareness of several technology methods used for communication to link us with other people."</p> <p>"I think now above the next step and need to justify to others why and what. It helps me clarify for myself so I'm therefore able to present to others with more clarity and belief."</p> <p>"I changed my approach to how I deal with a particular issue and I am prepared to look at it in a different way."</p>
Improved use of technology	<p>"I have increased networking from outside the group using electronic networking."</p> <p>"On a personal level, I felt comfortable with the computer while I was previously a technological Neanderthal, and I hated it. I even searched for articles for our group."</p> <p>"It increased our awareness that we need to use more IT in our work, and certainly existing infrastructure has been used more as a consequence of the program."</p> <p>"The program built my confidence in use of technology, such as videoconferencing."</p> <p>"It was great to use IT in different ways, has a flow-on benefit, this is the real strength of the program."</p>

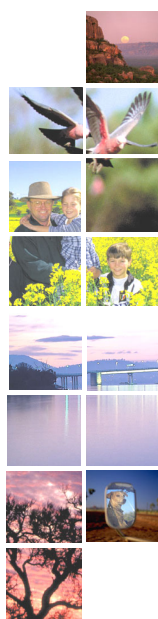


Table 2 Work-based projects

Work-based project focus	Work-based projects (July 2002)
Role development and reorientation of services	Assisting and valuing staff in respective health services to make the transition to a primary health care focus. (3 ongoing local projects, 2 status uncertain).
Discharge planning and continuity of care	Refining and implementing a holistic discharge planning framework, including community-based services, in elderly and mental health populations (2 ongoing local projects).
Partnerships – community participation	Involvement of consumers in planning and implementation of services (4 ongoing local projects).
Partnerships – inter-agency collaboration	Utilisation of a collaboration framework for practice nurses to work collaboratively (1 ongoing project). Testing a framework for inter-agency collaboration in diabetes programs in the Busselton area (1 ongoing project).

Methods of communicating and networking with other members of the EALS group

Participants networked using a variety of media including:

- email
- regional face-to-face meetings with co-ordinator
- whole group workshops in Perth
- face-to-face or telephone meetings independent of the co-ordinator
- project sub-set meetings initiated by the co-ordinator via telephone or videoconference.

Of the four participants who said that they self-initiated meetings with their groups, one person indicated that ...

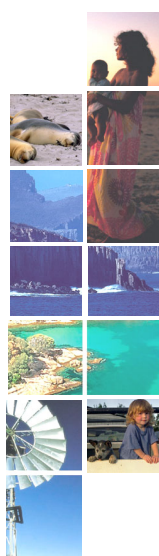
logistical issues dictated (choice of method) – face-to-face meetings, while very useful, (are) costly and problematic to arrange (travel, venue, time taken). Convenience of methods (access to appropriate equipment) is important. Confidence in using various methods for communication is essential to discussions on use of those.

Email was the most frequently used medium for communicating in the learning set. Everyone had access to email and it was a quick and effective way of keeping in touch. Participants noted that email was much easier to access and that there was some difficulty accessing the Internet, essential for Bulletin Board entry. Two people noted...

Email is important and very effective for short communication eg. organising meetings or just keeping in touch. Also quick, easy on our desks all the time.

Email – I can get to it when I have time. Bulletin Board – (I have) difficulty with Internet access. Face to face is always better.

The **bulletin board** was used most frequently between October 2001 and January 2002. It was used mainly to obtain information posted by the Co-ordinator, as opposed to networking with other project members. Nevertheless one sub-group utilised it for discussion during this time. By February usage had dropped to fifty per cent access.



By June it was the least used of all the media, and one of the least preferred methods for communicating in the learning set. The Project Co-ordinator made the last posting on the bulletin board in April 2002.

One person remarked ... "The Bulletin Board started really well but dropped off. However, I think it could be effective for resource sharing."

Attending face-to-face meetings with project team members and the co-ordinator, and or funder was the most preferred method for communicating for a number of reasons. In particular, it allowed time away from the workplace and the personal contact helped to develop relationships/rapport with others. One person noted the importance of face-to-face meetings for enhancing communication. She said ...

Doing face-to-face meetings helps me to accomplish more and develop relationships and gain better common understanding and ground rules. Communication is the basis to successful projects and outcomes involving collaboration and forming relationships is better achieved face to face than over the Internet or via telephone. Videoconferencing was difficult due to quality, availability of network and technical difficulties.

Although utilised throughout the Project by over half of the groups **videoconferencing** was less preferred to **telephone conferencing**. People reported that videoconferencing was difficult because of quality, access or technical difficulties.

One person pointed to a common experience of technological problems with videoconferencing. She said ... "I preferred the face-to-face meetings. However the tele-conference and videoconference worked well when the technology worked".

Factors limiting and facilitating progress in the EALS project

People indicated a variety of factors that either inhibited or facilitated their progress. These are summarised in Table 3 and Appendix Table A7.

Factors facilitating progress

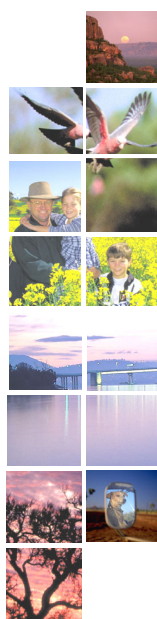
As shown in Table 3 five main factors facilitated progress. These included resources such as provision of references, hard copy materials; co-ordinator's facilitation, that kept participants focused and motivated; personal commitment; positive sub-group relationships; and support/networking from face-to-face workshops and meetings.

Table 3 Factors facilitating and, or inhibiting progress

Factors facilitating progress	Factors inhibiting progress
<ul style="list-style-type: none"> • Commitment • Resources (access) • Facilitation • Relationships • Support/networking 	<ul style="list-style-type: none"> • Time • Resources • Change • Group dynamics • Clarity about goals

Factors limiting progress

Time, other commitments and lack of a common IT infrastructure were identified as factors that inhibited progress in the Project (Table 3 above, Appendix Table A7). To a lesser extent other factors included gaining support in the health service region,



The EALS project design — combining action learning with face-to-face and electronic media as platforms for learning — demonstrated its potential as a valuable model for ongoing networking and support, and **continuing professional development (CPD)** in rural and remote regions.

Yet the EALS project presents several challenges relating to resources, roles, and limitations of a reliance on electronic media as adjuncts to health service change and networking across remote and rural regions. These issues once addressed and integrated into future project design are likely to strengthen and enhance the power of the model as a tool for CPD.

Challenges

Staff resources and support to co-ordinate the project

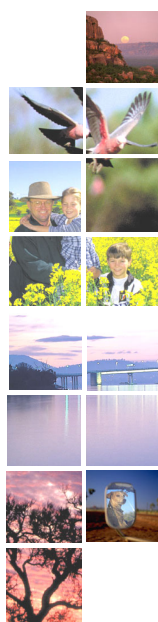
In hindsight, the \$23 000 funding was grossly inadequate to effectively support and co-ordinate the Project effectively. However, it is not surprising that this was the case given it is the first time a project of this kind has been undertaken. Original estimates for budgeting of staffing (0.4 co-ordination) were based on “guestimates” from experience of action learning set programs conducted in one organisation with active mentor and sponsor support. Future similar projects would require a minimum of 0.4 Co-ordination provision and 0.4 research assistant provision with consideration given to numbers, locations and specific needs of participants in the program, as well as formal regional mentoring and sponsorship of work-based projects.

Participants' time and resources for undertaking the project

Participants indicated overwhelmingly that time was a major limiting factor in their involvement in the EALS project both for meetings and undertaking service level change. It is likely also that this was a major factor in the high level of withdrawals from the Project that were unrelated to cases of employment changes, and or, reluctance of senior managers to authorise travel and time out to undertake related project activities.

Therefore, future e-learning set projects should take this factor into consideration and require that health service regions demonstrate commitment to continuous service improvement and CPD of their staff by contributing funding to participate in such a project. For example initiators of future projects could involve health services when developing CPD proposals and gain their commitment to allocate funds for participation which enables time out for work-based learning, support to attend set activities, including travel and subsistence allowances to attend workshops in central locations.

An overall budget of \$60–70 000 would be more appropriate to effectively support a similar project of 20 participants spread across a large region like Western Australia. This would include salary, travel and infrastructure costs for project staff, together with funding to support travel and time-out for participants to engage in project activities. Such an option has the potential to be a more cost-effective option than face-to-face workshops or fee-paying university programs and have longer-term benefits for the health service. For example, it is likely that any work-based projects undertaken as part of the program, and involving local peers, managers in sponsor, mentor and, or team member roles, would be more sustainable than applied



assignments conducted in conjunction with a centralised once-off university based course.

Role clarity

Respective Project roles appeared to be unclear so that participants had different expectations of their own roles as self-managing learners in the set, as well as those of the co-ordinator, sponsor and mentor. For example the Co-ordinator undertook a much more involved mentor role to the work-based groups than is usually the case in action learning sets where there is an onus on participants to be self-managing learners. This had an obvious impact on time to undertake the co-ordination role. Future projects should negotiate and clarify the major Project roles at the outset of the experience (in an initial workshop) based on the mutual needs and circumstances of the group. This includes clarifying, negotiating and preparing participants at the start for:

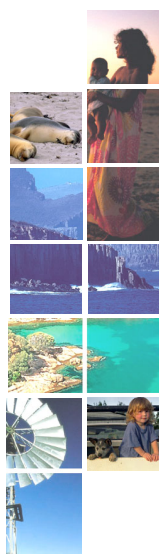
- the role of co-ordinator as process mentor
- project set members as self-managing individuals and groups
- mentors as content support specialists and guides
- sponsors as advocates and resources for the work-based projects.

Challenges of developing a virtual action learning set of self-managing members in rural and remote regions

There are several issues here in addition to that of access to videotechnology, and or the Internet. These include the need to develop a sense of community/identification with the group that may be impossible without adequate initial face-to-face interaction. Successful learning sets have open communication, trust and honesty that enhance reflection and learning (fundamental to effective development and change). The initial half-day workshop was insufficient to develop these attributes and sustain group processes via electronic technology. People did not know each other, had different experiences and were from regions that had contrasting health cultures and service delivery issues across the massive state of Western Australia. For example three people in one sub-group were 1700 kilometres apart.

Another challenge in this area relates to level of skills that participants and the Project co-ordinator had of videoconference meetings. Fortunately the Co-ordinator received training and ongoing support from the Telehealth staff. However, this was not always the case for people in the remote and regional areas so that differences in abilities and familiarity with equipment, as well as outdated machines, reduced the effectiveness of video link ups. Consequently a lot of time was wasted in the one hour video link up meetings, sorting out connection, transmission or other problems which meant that there was minimal time for reflection between group members. However in this respect it should be acknowledged that videoconferencing was new at this time and as a consequence participants in some areas received less support than they needed.

So too video and telephone conferencing (to a lesser extent) reduces spontaneous interaction so that greater structure was required particularly in video conferencing. This had the potential to reduce meaningful reflective interaction and consolidation of



self-managing groups, especially where members had had little time to get to know each other in a face-to-face situation.

On this point, however, it is important to point out that there are most certainly other important factors besides the limitations of technology, and clarity of roles that could confound the use of technology as a tool for learning. For example, personality, group mix, knowledge of change management, project planning and action learning are potential variables. Strikingly one group (focusing on inter-agency collaboration) took the initiative much more than other groups to become a self-managing team. Yet the people knew each other before joining the set; 3 of the 4 members had previously worked in a similar way with the Project co-ordinator whilst undertaking a Health Services Management Certificate course. Thus they were familiar with the concepts of action learning and project management processes compared to newly formed teams that were unfamiliar with action learning and project management processes.

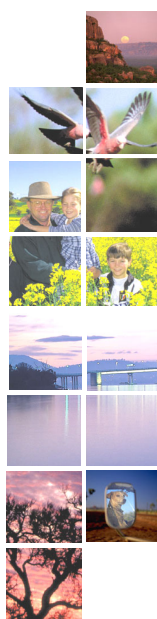
As well it may be that the scope and focus of the projects had an impact on the ability of participants to be self-managing. For instance 3 of the 4 people in the project group addressing the issues of service reconfiguration to primary health care models took on projects of much greater scope and values challenge than perhaps those that contained their projects to testing out a previously developed model of inter-agency collaboration.

To address these issues, maintain motivation and connection to the self-managing group process the initial workshop should be residential and extend over a minimum of two or three days. The program needs to focus on group building and role clarification. As well it should expose people to more discussion about action learning, and start the process of sub-group collaborative planning. So too if video conferencing is to be used for connecting across groups participants need to be more familiar with the methodology, and or undertake to practice its use before hand. It goes without saying that all should have equal access to reliable equipment and support. These suggestions will have implications the budget required to undertake future projects.

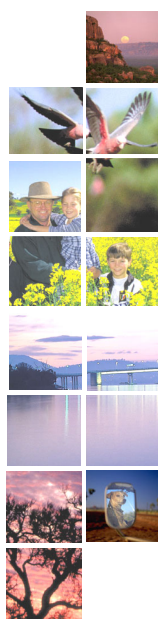
Organisation of project sub-groups

At the outset of the EALS project participants chose how they organised their work-based learning sub-groups. Sub-groups for work-based learning projects linked up either across regions, within regions and, or within services as teams of 2-5 people, and apart from workshops, the sub-groups did not meet face to face with the whole EALS group. Consequently three of the four sub groups of the learning set were across regions (discharge planning, service reconfiguration, and community participation groups). Only one group was located in the same geographical region – the inter-agency collaboration group.

Feedback from participants indicates that across-region linking via a mixture of face to face and telephone or video conferencing is beneficial for support, networking and reassurance. However, if the major aim is for service and professional development in change management there is a preference for within region (or within service) groupings, given the need for interaction to build the rapport essential for teamwork and service change and the limitations of technology outlined above. People are more likely to have opportunities for meeting face to face, understand their regions, culture, each other, all of which are fundamental to building work-based teams.



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APPENDICES

Table A1 EALS project activities, September 2001 to September 2002

Month	Activity	Use
September/Oct 2001	Organising and facilitation Start-up Workshop Provision of action learning and project planning materials Organise roster for video/tele-conferences – June 2002 Attend video-conference training Bulletin board activated and registration of participants Email distribution list set up Tele-conferences with all groups Feedback report on workshop	Learning resources and networking for professional development, project planning and implementation Networking Group discussion Posting of resources, literature, ideas General information on program activities feedback reports to each group after each link up with co-ordinator Assist group cohesion Summarise information, decisions made in workshop
November/Dec/Jan	4-weekly Video-conferencing commenced: 1 hour link up with project groups Teleconferencing (in addition to or in lieu of video) Face-to-face meeting x3 (Mandurah, Geraldton) coinciding with other business Project groups focus on scoping projects, stakeholder analysis, determine vision and missions Provision of feedback reports following link ups	Report and reflect on progress, clarify scope of project, and teams Learning sub set and project group consolidation Networking/support Project planning Aid reflection on the next step
Feb 2002	Poster presentation at National Teaching and Learning Forum (2002) Organise and facilitate 1-day call back workshop (Perth) Feedback report on workshop	Dissemination of information about the EALS project Report on progress, provide feedback; reflect on next steps for work-based and EALS project Summarise information, decisions made in workshop
February–end June	Project groups continue with projects Video link up and tele-conferences Continued provision of feedback reports following monthly link ups	Local work-based project implementation Reflection on sub-set projects across regions Aid reflection on the next step
April	Regional face-to-face meetings with co-ordinator Bulletin Board postings Poster presentation at WONCA world conference (2002)	Strengthening regional networks Useful references posted by co-ordinator Dissemination of information about the EALS project
May	Revision of questionnaire for final administration Literature searches on electronic learning, rural health undertaken	Provide feedback on EALS project in July Report and journal writing preparation
June/July	Poster presentation at HERDSA conference (2002) Organising and facilitation of 2 day final workshop in Perth 25–26 July Final questionnaire sent out to project participants	Networking, reflection on projects; review EALS project as a whole Internal evaluation
August	Data analysis for process evaluation External evaluation completed by evaluator	Provide data for co-ordinator's report As required by RHSET
September	EALS report completed	Provide feedback on the EALS project process, learnings and outcomes

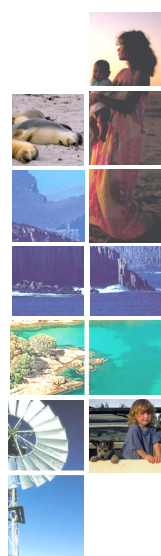


Table A2 Reasons given for joining the electronic learning set

Reason	%
To learn about rural service change	25%
To reduce isolation	25%
Manager suggested that I join	0%
To work on difficult issues that I have as a manager	25%
To network with other rural service managers and professionals	88%
To network on a new project	62%
To continue a project started in a university HSM course	25%

Other

. Interest in new concepts of learning

. As a challenge

Table A3 Work-based project team composition, size, sponsor, and mentorship

Collaborative team-based project	%
Yes	100%
Alone in my health service	–
Worked with personnel in my health service	50%
Worked with other agency personnel	38%
Worked with HS consumers	12%
Number of people in project team	
Two	12%
Four	50%
Six	–
Six+	25%
Other – Three	13%
Project sponsor	
Yes	38%
No	62%
Project mentor	
Yes	50%
No	50%

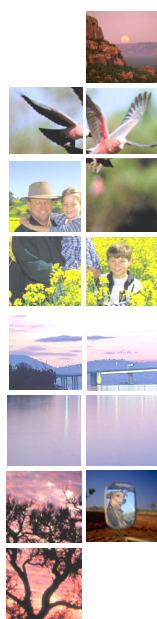


Table A4 Methods for connecting with other members of the EALS group

Method(s) used for communicating in the learning set with project team members and project co-ordinator						
Where 1 = most used to 6 = least used	1	2	3	4	5	6
Tele conference	25%	50%	-	12%	12%	-
Videoconference	25%	-	-	50%	-	12%
Using the MPS Website bulletin board	-	-	25%	-	25%	25%
Being part of an email networking list	12%	12%	50%	-	12%	25%
Face-to-face meetings with project team members	-	50%	-	25%	-	25%
Face-to-face meetings with project co-ordinator	12%	12%	38%	25%	-	-
Preferred method(s) for communicating in the learning set with project team members and project co-ordinator						
Where 1 = most preferred to 6 = least preferred	1	2	3	4	5	6
Tele conference	-	25%	12%	38%	-	-
Videoconference	-	12%	-	50%	38%	12%
Using the MPS Website bulletin board	-	12%	12%	-	12%	25%
Being part of an email networking list	25%	12%	-	12%	-	12%
Face-to-face meetings with project team members	62%	12%	25%	-	-	-
Face-to-face meetings with project co-ordinator	50%	12%	12%	-	-	-

Table A5 Gains, benefits from involvement in the advanced learning set

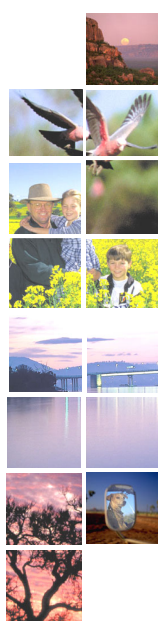
Gains	%
Reassurance	38%
Support from colleagues	100%
Obtained expert help	62%
Developed skills in managing/contributing to rural service change	38%
Become a better rural HSM	25%
Contributed to the improvement of an aspect of my health service	75%
Increased my network and resources in rural health	100%
Benefits from involvement in the advanced learning set	
Solutions to intractable/difficult health service delivery problems	12%
Increased effectiveness by finding other ways to deliver better services	88%
Cost savings	88%
Improved networks and access to resources	88%

Table A6 Per cent of participants rating the contribution of program to the seven objectives and the mean ranks (the lower the mean rank, the better the contribution)

Objectives of EALS (N=10 full participants)	Extent of program contribution to objectives			
	Mean rank*	Very good %	Good %	Moderate %
1. connecting managers in rural and remote health services	1.6	50	40	10
2. increasing networking	1.6	50	40	10
3. decreasing isolation	1.8	30	60	10
4. management development in your service	2.1	20	50	30
5. Organisational development/change	1.8	40	40	20
6. other benefits specific to your service	1.9	20	70	10
7. the contribution of technology to the overall purpose of the program	2.2	20	40	40

Table A7 Factors facilitating and inhibiting progress

Factor	Facilitator	Inhibitor
Technology	<p>"It was great to use IT in different ways, has a flow-on benefit, this is the real strength of the program."</p> <p>"I have increased networking from outside the group using electronic networking."</p>	<p>"This was a nightmare for me but due to my work circumstances not problems with program. We had software problems, sharing the computer with many staff which meant lack of access to a compute."</p> <p>"We did not have the infrastructure to use it efficiently and connecting multiple sites was a problem. We all worked on different projects and only really connected face to face."</p>
Networking/ Relationships	<p>"I was able to put faces to names. With the personal contact, I am more likely to call them for help or to discuss problems."</p> <p>I built networks with staff in different regions dealing with different disciplines and issues within disciplines."</p> <p>"I was able to share my project planning with peers and got feedback and support."</p> <p>We got together to support each other particularly in the more remote areas."</p>	<p>"It was difficult to identify with the rest of the group, which fell apart with not having a shared project. It is no criticism of the program but the situation I found myself in."</p> <p>"Relationships did not formalize as expected, and we did not get to a learning set situation."</p> <p>The group did not gel and did not make contact except when asked. Our numbers dwindled from 5 to 2. Motivation, structural changes and recruitment impacted on priorities."</p>
Resources	<p>"I was able to talk to EALS co-ordinator about complex and multi-faceted situations and she linked me with people who could help or get relevant literature."</p> <p>"Co-ordinator's structured approach to learning and her listening skills were extremely good. I was happy to be mentored by her and gained from this association."</p>	<p>"Having to fund teleconferencing did not help."</p> <p>80% of our work is clinical loading, unlike those in management positions who find it easier to attend workshops. Clinical work is our priority. We started with momentum and lost it because of staff shortages."</p> <p>"We have limited budget and time for staff development.... It would have been an incentive if we had travel and accommodation supported by the project as it was a bureaucratic hurdle to access whatever funding was available."</p>
Program design	<p>"The program prepared me for ongoing change. As HS manager, I will be in charge of implementing the change."</p> <p>"The program allowed us to look at what we have achieved or did not in our services, and have better implementation of changes."</p> <p>"The program provided networking, contact with people whose health services are undergoing similar changes. The workshops were the best link, and we felt supported that we were not the only ones undergoing change."</p>	<p>"The initial half-day seminar was not enough to know what action learning was or what a learning set was. We did not have time to formalise objectives."</p> <p>"The idea of EALS is excellent but it assumes equal playing fields in terms of IT infrastructure available."</p> <p>"The difficulty in our situation is that we had individual projects. It would have been more advantageous if our projects were streamed into one focus so that we could work together."</p> <p>Groups need to be from the same regional areas and not too geographically spread."</p>



Factor	Facilitator	Inhibitor
Health service change	"As our service has become now a regional service, with more than one person participating, this has led to an increase in knowledge base."	"The flux of change in the health dept made it difficult to cope with the transition to change... so it is not a reflection on the value of the program." "The program co-ordinators did everything they could to make program work, but there were too many obstacles within our health service."

