This paper presents a model to enhance the research skills of junior academic staff through mentoring by senior staff, relating the application of this model to the University of Tasmania (Australia). The model provides opportunities for learning through reflection, interpersonal relationships, and the application of technology to enhance reflection and communication. The paper goes on to discuss the roles of mentors and mentees and the setting up of a mentoring scheme. A workshop format with a facilitator is especially recommended for exploring roles, reaching agreement on goals, and developing understanding and trust. Specific advice on the selection of mentors and mentees, gender issues, learning, reflection, communication, evaluation, the usefulness of technology (particularly electronic mail, teleconferencing, and videoconferencing), and planning is included. Comments from department heads, mentors, and mentees in regard to the strengths and weaknesses of the mentoring program at the University of Tasmania are included. A separate administrative "Report on Mentoring for Research CSDF Project, 1996, University of Tasmania," prepared as a project description and to report on the grant funding received that resulted in this document, is appended. (MDM)
A Model of Research Mentoring for Higher Education - an overview

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Introduction
One of the fundamental dilemmas facing professionals is how to keep a competitive edge so that they can continue to contribute to the work of their organisation despite changes in career and work environments. The practice of life-long learning has become a 'catch cry' yet there are few examples of effective practice. A model of to enhance research skills of academic staff who are less experienced has prompted this project as an example of coherent professional development.

The model provides opportunities for learning through three elements that are important to professional development. The first of these is reflection. Reflection is based on self assessment of skills, knowledge and the reasoning that underlies life and career decision making. It invokes values, both individual and organisational, setting goals, following with action, evaluation and review of outcomes.

The second element is inter-personal relationships, demonstrated here through a model of mentoring, that contributes to continued learning spanning learning styles, role-models and human dynamics. Mentors and mentees learn from each other. They provide support and nurture growth both within the organisation and in their own personal sphere. Role modelling by faculty or external mentors through teaching or research experience situations are important examples of strategies that promote an individual's own learning.

The third element is the application of technology to enhance the communications in the reflection and mentoring processes through use of e-mail, tele- and video-conference. Technology enables communications to be on a global scale and increases the potential of access among a diverse population to mentors, knowledge and discourse on a wide scale.

Mentor-mentee relationships are learning situations. They are usually not planned but develop as a particular working relationship between two people, one of whom, the mentor, is more experienced than the other, known as the mentee. Chance encounters and unplanned learning are not efficient when there is an imperative to learn skills and become proficient in a new area. Current pressures in the workplace demand efficient and effective time and effort expenditure with results that meet job requirements.

The model described here provides a framework for individuals and their mentor and for groups with mentors within a research environment in higher education. Its foundation is a collegial approach to change by supporting the development of a trusting and collaborative work culture. It seeks to extend the work of Murray (1991) in theoretical and implementation processes to impart understanding of the concept of learning through reflection and through the application of technology to aid communication.
Mentoring and implementation issues are explored so that concerns and clarification of roles can prevent problems emerging further into a programme. Mentor schemes can be non-productive in outcomes because of the absence of initial considerations of how adults learn, the roles of participants, human and organisational factors in implementation, and the part all these play in the day to day practice of mentoring.

Mentoring has become attractive in professional development but simple understanding of the concept without implementation considerations does not ensure success. Likewise, implementation may be problematic and the process may become a token commitment on the part of individuals as well as organisations. Argyris and Schon (1974) argue that popular professional acceptance of reflective practice may be indicative of poor understanding implying a superficial and convenient commitment to implementation. As reflection is fundamental to mentoring it risks the same distortion of espoused policy and motivation.

The generic model of mentoring described here considers the theoretical basis of reflection in learning, ensures implementation factors are favourable and recognises evaluation of outcomes as a basis for improving the process. The model can be used for private study preparation by mentors and mentees, for an introductory workshop of mentors and mentees and for working with groups of mentees and their mentors in contexts that involve

* collegial learning,
* work shadowing,
* job exchange,
* induction of new staff,

and situations where there is a dependence of one partner on the experience of another.

At the University of Tasmania the program was targeted towards enhancing research development among less experienced teaching staff in professions such as nursing, education, the creative arts and business. A change in expectations of higher education and the disciplines meant that staff were required to attain research skills quickly in order to teach in, and lead research programmes themselves. Mentoring was chosen as a process to help meet these imperatives.

Mentors were chosen to be external to the university; a feature designed to increase networking and links with other institutions as Tasmania has only one university and it is an island state of Australia.

The results demonstrate that participants learn more efficiently, become motivated and through agreed planning, achieve goals. Human factors such as increased confidence, understanding how learning occurs, better communication skills and improved time and task management emerged in addition to gains in knowledge. The organisation benefits from a cost-efficient investment in its people through increased links among professionals, and a confident and skilled staff working in a
trusting learning environment. These factors will be described in detail with participant observations.

The model
Two key elements within the framework of the model are:

1. reflection on the roles of mentor and mentee, and
2. action planning.

Reflection is a basic element of learning and self evaluation. With the roles reversed, the educator becomes a student or mentee learning with a mentor. Time and task management are the most common, yet difficult to put into practice factors, in efficiency and effectiveness in our working and private lives. It is usually left to the individual to work out their commitment, time management and stress capacity. Reflection and planning introduce processes in which the mentee, mentor and head of department can have input to the consequences; importantly, the mentee is not alone.

Essential processes such as negotiation and support from immediate superiors or head of department, effective communication skills, building trust, providing and receiving feedback, setting realistic goals and maintaining discipline in meeting timelines emerge from the reflection process. Experiencing the processes and receiving guidance are valuable learning exercises which are often alluded to but are rarely given adequate time and recognition in implementation. Similarly professional interaction is assumed but if not built in to the implementation process the reflection process becomes 'closed' and participants do not benefit from critical appraisal and mutual problem solving. Thus the important factor of utilising reflection for changing professional practices and culture may never be achieved.

The mentor, the mentee or the head of department seeking to explore the mentoring model, will have specific objectives in mind. As a broad strategy, mentees will be considering their career; mentors will consider the widening of their network and heads will consider the contribution of the process to their department. Most important, there needs to be interaction and discussion in the beginning so that all parties are comfortable with each other's understanding of the objectives and support so that a sense of trust can begin to be nurtured.

It is pertinent to return to the origin of the word, 'Mentor'. In Greek mythology, Mentor was the counsellor appointed by Odysseys to teach his son. But interestingly Athena, a Goddess, assumed Mentor's form when she gave advice to Odysseys on his journey. The female taking the male form allowed better access and was a cultural ploy, or perhaps female qualities such as intuition were specific attributes of the female form of the mentor. In our experience, women academics seek a female role model in an academic culture. This aspect is discussed in more detail below.

Above all, mentoring processes are human processes. Many of the considerations are therefore human qualities that may be applied to situations beyond the work environment such as at home, with friends.
and in personal relationships where we respect and nurture the human being. In our busy environment, expectations of individuals often ignore the support each of us needs to be effective in a human resource system such as work.

Setting up a mentor scheme
Individuals usually seek mentors themselves but from an institution's point of view, setting up a scheme with goals that fit department and institution strategies engages a larger group of people in a collegial environment of learning. The cost effectiveness enables more people to benefit from the visit of one mentor. The efficiency in learning is enhanced by eliminating time and effort on organisation. The mentee is not the one who is travelling distances to keep the meeting, but steps into immediate dialogue.

A workshop format with facilitator is specially recommended for exploring roles, reaching agreement on goals and objectives and developing understanding and trust. The busy academic setting rarely allows for individuals from different departments to meet and learn from each other about approaches and progress. Cross department meetings became a feature that was built into our scheme by mutual agreement following a desire to share experiences and to learn from other mentors. This is relevant as discipline areas become blurred and non-traditional research areas begin to define rigour and scholarship. It is also relevant to enable changes in practices to occur, to develop cohesion and broaden understanding about learning approaches.

A facilitator or workshop leader, enables all participants to be equal participants, removing the hierarchy of an individual's position in an organisation or institution. The facilitator must be able to provide content about processes and take the group through exercises with the benefit of comments from the group collective. Participants become conscious of other people's views, new ideas and opportunities. The facilitator is alert to difficult and sensitive issues that need to be clarified and tries to gain consensus along the way. Facilitation is helpful to generate new, relevant ideas that can emerge from a workshop that actually clarify and refine ideas that are of value to the institution as well as the individual.

The management of the programme, dealing with difficulties, setting up and maintaining communication and providing gentle pressure to move the scheme along time lines are effective functions of programme coordination. The coordinator is able to assist with issues that deal with the head of department or budget heads involving institutional or external grant support. Individuals are usually less effective on their own in seeking openings during the critical time of operation. A coordinator also knows and understands how the organisation works and is able to provide advice at critical times to sustain organisational support for the mentoring process. The coordinator needs to have a clear understanding of expectations and how to work towards those goals. Another important factor is that coordination eliminates time spent by participants in scheduling meetings.
The workshop programme
Participants benefit from pre-workshop preparation such as a package of information. Exploration of roles, any concerns and pitfalls can be identified and a participant can begin to reflect on the focus of her work. The programme for the workshop was negotiated by the coordinator after discussions with the heads of department whose staff were participants.

A two-day workshop is recommended. On the first day the roles, commitment and concerns of participants are explored. This can be an unsettling experience because fears emerge about the mentor-mentee relationship not working out. It is easier to encounter these anxieties at the outset when there is no specific context at stake. The organisation's support is another important factor. A senior executive was invited to open the workshop and declare institution support.

The second day explores the notion of action planning and results in individual action plans and negotiations with the mentor. Departmental groups may also agree on objectives for mutual support for the group, from the mentor and other internal mentors who are interested in supporting the scheme. Internal mentors (more experienced staff from the institution) also expressed interest in participation. They can have an unclear view of their role but this is not a problem so long as they are open to the learning environment and do not have grandiose or over competitive motives. In our case internal mentors were seeking to understand and refine the mentor role for their own future involvement as local mentors.

Discussion at the workshop revealed interest in learning from each other's experiences. Participants wanted to meet each other during the year.

Groups of participants were formed by consensus as follows:

* individuals to meet with the mentor and develop individual plans
* departmental groups to meet with the mentor for general dialogue
* internal mentors to organise informal departmental discussion seminars and
* cross-department groups together with their mentors to meet to share ideas and progress.

Who are the mentors?
A mentor is a more experienced peer, a 'new' generation professional expert, a leader in a field who is interested in professional dialogue with a less experienced professional. We want to learn from those who have succeeded in meeting current challenges and who are interested in helping others get there too.

Fundamental to the choice of mentor are the purpose: what do we want to learn, and, who will be the guide.

It is useful to identify a few people with specific skills or the range of experience, who could be approached in case the first choice is unavailable. Good mentors are usually busy, they do need to seek
approval from their own institution where their primary duties lie, and
tend to take part for a specific period of time, the lifetime of the goals
and remain committed until the objectives are reached.

Identification of mentees and mentors involves discussions by the
coordinator with the head of department and interested staff. Individual
staff volunteer to take part and collectively identify the focus of the
mentoring process. The head of department guides the direction
towards the organisational goals and departmental strategies. It is
important to allow adequate time to discuss the needs and identify
potential mentors who can fulfil the objectives.

Gender and role models
If the mentoring process functions in the framework of objectives and
goals then gender differences should not be an issue. However it is an
aspect that needs to be treated sensitively. Many women seek other
women as role models. Thus the gender of the mentor is part of the
role model objective and not one of relationship. Women role models
share experiences of their own career development and provide insights
to less experienced staff who often happen to be women. Aspects of
juggling family responsibilities, styles of mentor leadership, and personal
traits are additional aspects under scrutiny in the process, valuable to all
less experienced staff.

There are different mentors for different purposes. Mentors change
with needs. It is helpful to keep the purpose- individual and
departmental objectives- in focus. Mentors can become personal
friends or confidantes, move away or are overtaken. People move on in
their careers and needs change. Returning to the objectives helps
recognition of boundaries or limits of relationships as well as retaining
the confidentiality of dialogue.

Other experienced colleagues within the institution can act as 'internal'
mentors, the 'reality' coaches who can help translate the external
mentor's approach to strategies that work locally. They contribute to
the culture within the institution and often as co-workers tend to be
ignored because of hierarchical nature of job positions.

The mentees
For the mentee it is often the reversal in roles, becoming a learner, that
takes getting used to. Some of the learning includes developing the
confidence, understanding how to formulate questions, asking questions,
listening; seeking and receiving advice and following through, discussing
outcomes and planning the next stage.

It is thus important to set realistic and attainable goals that fit in with a
wider vision but do not necessarily become the vision. If the task is too
great then expectations may not be achieved and the scheme is seen to
fail or leaves participants frustrated. Sometimes it is difficult to identify
exact goals. The mentor can help focus on immediate tasks and narrow
down the choices by offering options and possible outcomes within the
timeframe. The mentor does not have a crystal ball and it is the mentee
who ultimately decides what can be achieved out of the relationship.
Learning
The foundation of mentor-mentee relationships is in learning and reflection on learning. Both mentor and mentee learn from the process. The pair at different parts of a continuum of learning.

An introductory package provided participants with prompts to think about their roles, involvement and commitment; their expectations and vision. Reflection on personal outcomes and gains or difficulties provide a record of progress and review that can be motivational as well as a record for other processes such as appraisal.

Each of us is different in approach and expectations. For many academics knowledge about how others learn is helpful in their own assessment of needs and in addition can become reflected in a re-appraisal of the approach they then have to teaching. Current understanding about the brain suggests that it needs time to retain new knowledge in memory and to make connections with previous understandings. The processes are complex but allowing time to think and reflect provides opportunity for deeper understanding and creation of new ideas. Discussion, questioning and listening to other responses is active learning; it is surprising how we learn about many different ways of approaching a problem from other people's engagement with a task. Many of the mentees noted that their own mentoring experience had a major impact on the way they taught; they noted planned changes to increase learner autonomy as one of the outcomes.

Learning is closely allied with planning our time and tasks. A cycle of planning, doing, evaluating and reviewing improves efficiency and effectiveness. The action planning process was a self-contract and commitment. It provided the personal nudges, the feeling of guilt if things got behind schedule.

From an institutional perspective a variety of perspectives about learning can be appealing to different disciplines and is a useful approach to motivate sceptics, broaden understanding of learning across disciplines and increase the collaboration among learners. Mentoring is a vehicle for observing these processes.

Reflection
Engaging in conversation or dialogue is a human process. It may be difficult to make the opening remarks in dialogue. Thinking about what you want to learn through mentoring, where your career has come from and where you want to get to are good starting points. Reflecting on your vision, talking with your head of department or other colleagues whom you respect can initiate introductions to mentors and other helpful colleagues.

Reflection is a style of communication, communication with oneself. Becoming aware of your thinking, reasoning, considering other people's views, making your own views clear to yourself then to others are all part of reflection. Noting your considered opinions and what has influenced their origin is a good way to clarify ideas for yourself and a good opening conversation point with the mentor. The mentor is a guide who, if well skilled, is able to prompt responses from the mentee which progress toward self clarification.
Thought and idea development can be followed really well with E-mail. E-mail provides a record of considered thought development; the history of the evolution of ideas can be surprising and satisfying in retrospect.

Communication
Communication is essential to development of ideas. It initiates thinking and thinking and reflection result in dialogue that can lead to effective action. New ideas can emerge because the communication is open and exploratory.

Communication means keeping relevant people informed of progress and intentions. This is particularly useful for heads of department who can be part of the process without unnecessary of inappropriate intrusion. When communication functions well there is an ongoing synergy that contributes to motivation, enthusiasm and productivity because progress or potential progress, is clearly evident.

Evaluation
Evaluation of the project was on-going and the feedback was interpreted and assessed in terms of the goals and directions of the scheme as a whole and for each participant.

On-going formative evaluation that seeks feedback from all participants is useful for input and open consideration. Concerns can be aired and rectified; successes provide motivation and enhance culture change. Open-ness increases trust so that when the mentoring process is evaluated the evaluation process does not merely become one of accountability but of continuous improvement. Brain storming, dealing with concerns, sharing gains and the accompanying discussion allows participants to observe what others are experiencing, offer solutions and come to consensus on how to proceed. The implicit skills learned in this way are valuable outcomes for growth and expertise. Summaries were posted by E-mail to all participants and heads of department. Each stage was evaluated by open questionnaire seeking written comment.

Technologies
Technology can greatly assist communication through E-mail, telephone and videoconference applications. Once mentor-mentee relationships are established through initial contact, conversations can be carried out, draft manuscripts reviewed, proposals critiqued and questions posed and answered all without the necessity of face-to-face meetings. In our experience, the use of technology in the forms listed below was particularly useful to maintain the dialogue and project development during the intervals between mentor visits. It reduced costs so that the mentors visited about four times each during the programme, and were able to utilise the contact time for special purposes such as critiquing presentations, engaging in group dialogue and acting as an advocate where necessary.

(i) E-mail
E-mail is useful for announcing meetings, sending out and receiving evaluation questionnaires, inviting comments and obtaining agreement.
E-mail lists were established for the above four sub-groups of participants and an additional one that included the heads of department and the Deputy-Vice-Chancellor. E-mail was used by mentor-mentee pairs and within their discipline groups as an engagement mechanism for floating and developing ideas, refining of draft manuscripts and for exploring digressions to enrich the original concepts. E-mail was found to develop skills in reflection, composition of written responses and allowed matters to remain 'on the boil' rather than closed when one deals with them on one's own. The engagement developed and maintained enthusiasm at the end of the everyday schedule.

Participants' comments
initiating/maintaining contact, widening networks, written expression/reflection, critiquing draft material, informing inner and wider group, 'signposting', administering questionnaires, negotiating action plans and outcomes, E-mail forever!, thought I had my networks- there was more! kept me (head of department informed in an unobtrusive fashion, I learned to write E-mails, Something to look forward to, receiving is a gentle reminder, I was invigorated by the amount of trust shown (mentor).

(ii) Teleconference
One group decided to meet bi-weekly and followed with a telephone conference with their mentor. This group performed a role play of a meeting to other participants to demonstrate what occurred at their meetings.

The beneficial technology applications can be summarised as follows:

* e-mail
  initiating/maintaining dialogue, widening networks, written expression/reflection; critiquing draft material, informing inner and wider group 'sign-posting' administering questionnaires negotiating

* videoconference
  individual and group involvement reduces stress of travel (for mentor) institution funded (no extra costs)

* teleconference
  summary of group meeting feedback on draft materials regular, planned event

Action planning
Action plans are contracts with yourself in which you agree to set out goals and timelines which enable you to organise and review activities with the help of the mentor. Planning is strategic with particular successes in mind. It sets out a personal vision in the context of the organisational vision and places the mentoring opportunities in a realistic context of time and activities. Reflection and pre-planning preparation
help clarify the context and enable new ideas to emerge at the planning meeting with the mentor.

Action plan meeting
Plans involve the participants who are involved in helping make things happen, the mentor, mentee, head of department etc. Planning is a cyclic process beginning with the plan, action to carry it through, evaluation of results followed by a review of the plan for the next stage. A new or modified plan based on the review is then formulated and the cycle repeated. It becomes a part of professional life to work to plans rather than to drift through one's career and through an organisation.

Review
Review follows evaluation and incorporates the outcomes of evaluation for improvement. For individuals it allows reflection, affirming of ideas or revision based on the new information at hand. These processes can lead to a change in culture from one where individuals are competing and alone, to collaboration, trust and confidence; to be able to remain competitive but also share knowledge and stimulate colleagues. Most mentors are involved because they want to return the support they have received somewhere, sometime to others.

Outcomes
Comments from participants describe the particular learnings.
1. From heads of department -

   (a) involvement
   One head of department was directly involved as a participant. All have sought feedback from participants on individual progress. One department relied on the mentor for maintaining direction until the end of the programme.

   (b) support
   All made a commitment of resources in addition to the grant. This extended the lifetime of the programme and allowed development to occur at appropriate times.
   The institution's expectations from research need to be met with support for staff.

   (c) additional observations
   The mentoring programme has been of great value to my staff involved in it. The use of an 'outside' expert has allowed a qualitatively different interaction to occur regarding the staff member's research.

   It is difficult to separate out what would otherwise have been done in research if the programme were not in place. Obvious financial support has contributed to the role of the 'visiting scholar' in the departmental research culture. The framework has enabled links with appraisal outcomes and conference presentations to provide a comprehensive plan of action for career development.

   (d) advantages
   The 'signposts' and accountability points are better than the serendipity of research.
The pressure of 'consistent continuous guilt' about work not done maintains the concept of research at the forefront so it does not get replaced by teaching and other duties.

(e) disadvantages
There is potential internal conflict in the advice of the mentor and the supervisor; knowledge helps but that could leave the 'student' in the middle. Good communication and people skills help resolution.

2. From mid-programme brainstorm on positive outcomes (in decreasing order of importance):
- support, collegiality, progress, focus, forum, goals, structure, stimulation

on concerns with the project (decreasing order of importance)
- time management, mixed priorities, high expectations, giving time to others, finding a mentor

3. Mentee comments:
- dialogue with mentor has triggered writing up; mentor has been critical friend regarding conference paper; benefits of cognitive dissonance at group meetings; spin-off in teaching and opening up of other areas; position of mentor, supervisor (tormentor) and mentee; influence of mentor on supervisor and boss; timely support; enlightening on multi-dimensional roles of mentors; improved writing skills; confidence; increased depth of research; gentle non-threatening pressure for accountability kept on track; working to a structure was productive.

4. Mentor comments
- E-mail came in bursts; productivity checks; critiquing; fine balance of roles; development of trust; widened networks; guidance; active listener; practiced and experienced trust; guidance provider not as an agent of research; role modelling that went beyond immediate (obvious and negotiated )goals; freedom but the responsibilities and confidences were great.

5. Internal mentors
- 'rational therapist'; engaged groups in formative discourse, riskless but obliged conversations with peers.

6. Coordination
- source of information; communication links; high energy attention to detail; made transitions smooth; emails encouraged a commitment to project; reliable accurate information sharing; interested now in a greater understanding of theoretical underpinnings and cross discipline interaction; variety of approaches were challenging; combined different disciplines and events in a seamless manner; scheme needs to be semi-formal - hard for individuals to initiate; I was a reluctant participant because of time commitments but have gained enormously from structured approach; collaboration and facilitation have outstripped the management-accountability outcome; different journey to research culture.

Participants were invited to contribute a brief paper describing their thoughts on the mentoring programme. The papers form the major part of
this collection together with workshop materials and sample surveys, plans and a copy of the original submission.

The papers revealed many subtle learnings and allowed all participants to share their personal experience.

We highly recommend the approaches described here as a valuable and successful way to increase productivity and move toward a collegial research culture.

Costs
The University of Tasmania scheme was supported by a Commonwealth Staff Development Fund grant ($31,600) and internal departmental funds ($9000) over 20 months (extended from original 12 months by internal contributions) for about 30 participants and 4 mentors.

Conclusions
The processes described derive a model which demonstrates how life long learning can be implemented. The costs can never be nil; individuals have their expectations and institutions should direct support in a cohesive way. If this model is adopted it leads to self-directed life long learning which is often alluded to but rarely are there indications of implementation. A self study interactive guide has been developed as an outcome of the evaluations of this scheme. It outlines the above processes and provides opportunity for individuals to plan their development and for supervisors to consider organisational implications. Further information about the guide is available from the author.

Often the expectations of an individual to perform, as well as identify the processes involved, are too time consuming to be practical. It is hoped that the above discourse encourages further exploration into the implementation processes of life long learning among professionals. It is then that lip-service becomes the exposed management/accountability style diminishing potential outcomes. Pro-active interventions for development will be necessary until we have professionals, students and practitioners, who by nature, extend these ideas to the changing roles they need to play across the spectrum -mentee to mentor.

Summary
Professional development for academics can be a lonely process if there is no worthwhile interaction with others who can enrich individual learning, provide direction and support. A program to enhance research capabilities of academic staff that is aligned with the departmental research plan, focussed, and with achievable outcomes for a 12 month period was set in place at the University of Tasmania. A mentor from interstate was nominated by each departments in consultation with its academic staff. The use of E-mail, videoconference and teleconference were essential in maintaining communication, providing feedback and gentle pressure throughout the program.

The program was based on a negotiated action plan for each staff member and her/his mentor under an umbrella theme that fitted the departmental research plan. In addition the five discipline groups met as a
cross-discipline group and the mentors themselves formed a supportive group. Evaluation was based on outcomes at the end of the 12 month period at the individual, departmental, cross-discipline and mentor levels. A coordinator of the grant managed the day to day details. liaised with departments and participants of the scheme.

References


Program Description
Participation in the Commonwealth Staff Development Funded program was based on identified needs particularly from Nursing, Education and Art in 1995. The proposal was based on a model of negotiated individual action plans and departmental support for staff particularly involved in study for higher degrees, those inexperienced in research or starting research; the appointment of an agreed mentor external to the University and a commitment to support the program in kind or in dollars to meet costs of agreed action plans. Women were particularly encouraged to apply as this was an affirmative action program.

It has involved

- 6 departments (Art 8 participants, 2 since have left uni; Performing Art, 3 participants; Early Childhood and Primary 3; Education, Secondary and Post Compulsory Education 5, 1 left; Nursing 7; and Management, 1);
- participants of whom there are 4 mentors (of which 3 are women), 2 internal mentors (including 1 woman) and 24 mentees of which 17 are women; 79% of all participants are women.
- about 10 other interested people for part of the time including 3 staff who have since left the University; and 7 heads of department of whom one has been an active participant.

The grant paid for mentors' travel and accommodation, small honoraria, the April 11, 12 initial workshops, October 11 conference and February 11, 1997 conference.

The program began with discussions with Heads of Departments and a call for staff participation that was brokered by the Coordinator of Academic staff Development through departmental meetings, meeting with individual interested participants and discussions involving mentors. It was a matter of juggling departmental ownership within the guidelines and ensuring participants were aware of the aims of the program. Printed material was sent to each participant for information. The uncertainties of restructuring and other departmental business delayed the finalisation of commitment such that the program commenced in April.

A two-day initial workshop facilitated by Hilary Langford and Ron Passfield (external consultants) explored the roles of mentor and mentee and provided opportunity for participants to develop action plans which participants then reviewed with their Heads of Department for budget and time constraints.

Visits by the mentors were arranged by the Academic Staff Development Unit (Professor Christine Deer (UTS) 4 visits; Professor Len Cairns (Monash, Gippsland 2 visits; Professor Sue Rowley (UNSW) 6 visits; Professor Irena Madjar (U Newcastle) 4 visits). In addition several staff visited their mentor themselves where opportunities presented.

On three occasions the interdisciplinary groups were able to meet (April, October, February). The interest in sharing experiences has resulted in the program operating primarily at the individual level between mentor and mentee, but also with the discipline area, across the disciplines and
among the mentors. The additional levels of interest emerged from the 2-day initial workshop and although minor, have established opportunities for widening collegial links.

E-mail has been widely used between participants and their mentor, one video conference has taken place in Education and regular discipline group meetings occurred in Education and Nursing. Nursing also engaged in telephone conferences after their monthly group meetings.

Outcomes
Below are summaries of the contribution of the application of technology and the mentors to research development, management skills and accountability:

Technologies
- e-mail
  - initiating/maintaining dialogue,
  - widening networks,
  - written expression/reflection;
  - critiquing draft material,
  - informing inner and wider group
  - ‘sign-posting’
  - administering questionnaires
  - negotiating

- videoconference
  - individual and group involvement
  - reduces stress of travel (for mentor)
  - institution funded (no extra costs)

- teleconference
  - summary of group meeting
  - feedback on draft materials
  - regular, planned event

Mentors
- inter-state, ‘new generation’, discipline experts; also became ‘learners’ and ‘role’ models
- internal ‘senior’ faculty members
- cascade effect in dept

Research development
(i) Research culture/discourse
- one-to-one
- departmental group and mentor
- interdisciplinary groups and mentors
- mentors
- increased dialogue
- increased learnings
- ‘gentle pressure’ from structure
- relevance to teaching
- growth in confidence
- role reversal
Management of time/tasks/reality
- interaction with mentor, supervisor and Head of Dept (triangulation)

Accountability
- planned career development associated with and supported by other departmental/budget/personnel processes

Heads of Department were interviewed in February 1997 and the results are summarised as follows:

- **Involvement**
  One head of Department has been directly involved in the program. All have sought feedback from participants and mentors on individual progress and general perceptions of scheme. One department has not had feedback due to nature of group project and relies on mentor for maintaining the direction.

- **Support**
  All indicated that they have discussed the action plan with the staff involved and have linked these with other staff development activities such as conference leave to facilitate planned outcomes. This has amounted to about $7000 to five of the mentees. Heads indicated that the University’s expectations from research need to be met with support for staff.

- **What would have happened anyway versus framework of program**
  It is difficult to separate out what would otherwise have been done in research if the program were not in place. Obvious financial support has contributed to the role of the ‘visiting scholar’ in departmental research culture. The framework has enabled links with appraisal outcomes, conference papers to provide a comprehensive plan of action for career development.

- **Advantages**
  The ‘signposts’ and accountability points are better than the serendipity of research. The pressure of ‘consistent continuous guilt’ about work not done maintains the concept of research at the forefront so it doesn’t get replaced by teaching and other duties. There have been gains in intangible experiences — high commitment, motivation, ideas, confidence, knowledge, collaboration in, and working up, grant applications and a lessening of loneliness of the researcher. Departments need external ‘visitors’; ‘critical friends’ are valuable.

- **Disadvantages**
  There is potential internal conflict in the advice of the mentor and the supervisor; knowledge helps but that could leave the student in the middle. Good communication and people skills help resolution. Competing demands and resources add to pressures on time and tasks.

In Visual Art Department and the Centre for Performing Arts an initial agreement was reached between the Heads to nominate the same mentor. An initial large collaborative project was quickly abandoned because other issues began to emerge that needed to be addressed first. In hindsight the collaboration was not a success in terms of a large collaborative project because in the Performing Arts the concept of research is less defined than in Art. The Pressure of other duties intervened and reduced participation by PA participants but the mentor’s influence has been valuable for individual projects.
Other Outcomes

Internal Mentors
Both internal mentors were unsure of their role but were willing to provide informal opportunities for intellectual discourse and information about institutional functions and procedures. Research approaches need to be pragmatic and focussed. One mentor described her role as a ‘reality therapist’. They played an important role initially while waiting for their mentor to be identified by seeking agreement that regular (monthly) informal discussion groups be held.

Mentees
For evaluations during the course of the program see Appendices.

Evaluation in February 1997 see Appendices

Coordinator’s role
See Appendices Feb 11 97

Significant learnings
There is a considerable amount of material in the literature and on the WWW on mentoring but nowhere was there an identical model to meet the needs of the University at the time of writing the submission in 1995.

A previous grant had enabled novice women researchers at the University of Tasmania to benefit from the CSDF with small external seeding grants. The evaluation of that program suggested a continuation of the emerging group support a significant outcome.

In the current program the model successfully crossed discipline boundaries. It has potential for wider application such as crossing section boundaries for academic, administrative and technical staff.

Significant elements of the program were
- the initial exploration of roles of mentor and mentee at the beginning of the program,
- the development of an action plan
- use of technology (email, video and teleconference) for communications (although for CPA and Visual Art, the visual nature of the discipline requires face to face contact for project work)
- the framework of coordination by which events accountability stages occurred according to the negotiated signposts and
- continuous evaluation and feedback

Negotiation to meet departmental and individual needs was important to ensure participants were in control of the program to effect maximum benefit to their individual research.

The program started in April because it was difficult to find mentors who could spare the time.; it was also important that sufficient negotiation time was available for understanding and commitment.

Other contributed funds
A commitment was sought from departments to contribute as appropriate to agreed action plans to enable staff to carry through negotiated activities. An amount approx $9000 for conference travel has come from departmental budgets. In addition the Academic Staff Development Unit has provided infrastructure support and coordination. This commitment has resulted in the budget being underspent but has allowed projects to progress faster.
Permission is ought to spend the remaining funds during the first half of 1997 to fund visits to the University of Tasmania. An amount of approx $10,000 is earmarked as follows:

Nursing: $1727 visits by Prof I Madjar (UNewcastle) 29-31 May and Prof Jocelyn Lawler (U Sydney) in June

CPA $1934
Dr Alison Richards April 4 and June 20 for drama;
Dr Shultz (U Wollongong) June 12,13 for music

ECP Education: $2837, Prof Rob Gerber, (UNE) May, June

Sec PC Education $3421

Art: $1934
Les De Favero, Sydney College of the Arts (research from the practising artist's perspective), May, June

Publications etc

Note:
A folder of papers by participants (mentors, mentees, coordinator) and a report will be published in April 1997 and available at a cost of postage $10 to interested parties outside the University of Tasmania.


Sankey, J., Describing a realm of practice etc presented at Daring to Change: Nursing research into the health of children and their families. Hobart, November, 1996

Hodgman, J 'VALUED' video and study guide, cost $20.00, 30 mins, ISBN number, 0 644 46265 5.

Merritt, L. video and study guide

McGill, M.
"I can't believe I said that": teachers reflecting on what they actually say when they teach. Australian Teacher Education Association Conference, Launceston Tasmania July 1996

"Looking at what we say: some tools for analysing communication patterns in teaching" 5th National NCVER/University VET Conference/Workshop Launceston Tasmania July 1996

Video - Analysing Learner-Teacher Interaction (40 mins) Department of Secondary and Post-Compulsory Education (distributor)

Paper accepted for 7th International Conference on Thinking "I've a right to think": thinking, learning and teaching June 1997

Johnston, R. 'Interpretations of the environment - the good, the bad and the ugly', 'Making Connections: Theory into Practice' (Conference Program for the 26th Annual Conference of the Australian Teacher Education Association), Australian Teacher Education Association Inc., Launceston, July 1996.
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