Methodology Advisory Committee Paper November 1998

Training of Methodologists in the ABS

by

Gemma Van Halderen

Phone: (02) 6252 6302 Fax: (02) 6252 8015

Milan Bhattacharjee

Phone: (02) 6252 6966 Fax: (02) 6252 8015

CONTENTS

List of Issues for Discussion

Section 1: Introduction

- 1.0 Methodology Division
- 1.1 Aim of this paper
- 1.2 Methodology Division Staff
- 1.3 Recruitment
- 1.4 Individual Development Plan

Section 2: Methodological Training and Development

- 2.1 Current Approaches
- 2.2 Development Opportunities
- 2.2.1 First few years (the 0-2 years experience group)-'junior' methodologists
- 2.2.2 Subsequent years (the 2-5 year experience group)-'working' methodologists
- 2.2.3 Later years (the 5 plus years experience group)

Section 3: The Challenges of Decentralisation

- 3.1 Matrix Management
- 3.2 Constraints
- 3.3 Supporting and Enhancing Professional Development of MSC staff

Section 4: Suggested Improvement Strategies

- 4.1 First few years (the 0-2 years experience group)-'junior' methodologists
- 4.2 Subsequent years (the 2-5 years experience group)-'working' methodologists
- 4.3 Later years (the 5 plus years experience group)

List of Issues for Discussion

- **1.** Section 2 contains current approaches to methodological training and development of staff in the Methodology Division. What are your views on these approaches? Do you think these approaches adequately address the methodological development of staff?
- **2.** In Section 4 we have suggested improvement strategies for the development of methodologists. What are your views on these strategies? Are they practical? Do you have any other suggestions particularly for staff in 5 plus years of experience group?

Training of Methodologists in the ABS

Section 1: Introduction

1. Methodology Division

The Methodology Division (MD) is responsible for the development and application of mathematical, statistical and econometric analysis techniques in the work of the ABS. It is also responsible for the management of all household surveys run by the ABS.

MD includes two groups. There are specialists (mathematical statisticians, time series analysts, and econometricians) and there are those responsible for developing and managing all ABS household surveys. The specialists are locally referred to as 'methodologists' and are the scope of this paper. References to Methodology Division in this paper should be read as references to these specialists in the Division.

1.1 Aim of this Paper

The aims of this paper are to:

- provide an overview of approaches that are currently being used for the methodological development of MD staff at various levels of their work experience in the Division;
- highlight issues and deficiencies of the current approaches, particularly for the more experienced staff; and
- outline strategies for providing cost effective and relevant methodological development opportunities for methodologists in the division.

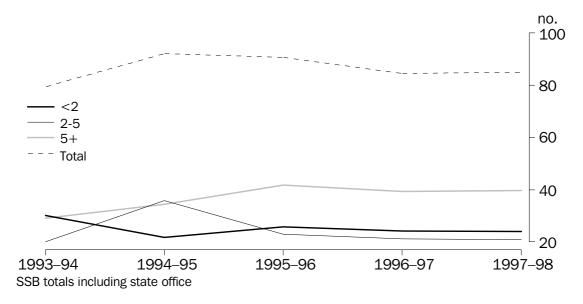
1.2 Methodology Division Staff

Approximately 100 staff are employed in the Methodology Division of the ABS, 80% in Canberra and 20% in Sydney, Melbourne, Adelaide, Perth, Hobart and in the near future, Brisbane. The staff in methodology division are primarily recruited with analytical skills in the fields of mathematical statistics, econometrics, and time series analysis. An analysis of the last 3 years of graduates recruited to MD indicates the following education levels and fields of interest to our division.

	1995 intake		1996 intake		1997 intake	
Methodologi	Three/four	Higher level	Three/four	Higher level	Three/four	Higher level
sts	year degree	degree	year degree	degree	year degree	degree
Mathematical	6	-	8	4	7	4
Statistics						
Econometrics	1	-	4	-	3	-
Time Series	-	-	1	-	-	-

The following graph 1 reveals that the staffing situation for Maths/Stats and Time Series staff in MD over the last five years is dynamic, yet balanced. Staff in the division leave or move for a variety of reasons and at various levels. For example, staff may move back to their home state (either still in the division or elsewhere in the ABS), may move to another area in the Division or the ABS, may leave the ABS entirely such as to undertake further study or further their career in the private sector or APS.

1. STAFF NUMBERS, by experience



1.3 Recruitment

Recruitment is and continues to be the main source of new methodologists to the Division. Each year about ten to twelve new graduates with Mathematics/Statistics and /or Economic background are recruited. A significant effort is put into this recruitment process with one or two senior members of the Division spending about six weeks visiting the universities, interviewing applicants, and making final decisions about the placements within the Division.

An important component of the recruitment process is the offering of cadetships to a select group of three to four third year University students each year, to provide financial encouragement to complete their honours course. These cadets are invited to spend one month with the ABS in Canberra before the commencement of their honours year so they can learn something about the work methodologists do and the challenges they face. After the successful completion of their honours course cadets commence work at the ABS. Over the years many valued officers have been recruited through this cadetship scheme; though very good recruits are obtained from the routine graduate recruitment campaign as well.

1.4 Individual Development Plans (IDP)

During 1997, MD developed and implemented a people management strategy to identify roles undertaken by staff in the Division with the aim of identifying staff

learning needs to ensure that training and development activities are appropriately aligned with organisational, workgroup and individual learning needs.

The people management strategy included the description of ten major identified roles of MD staff and the set of skills and knowledge required to perform each role competently. The strategy also included individual development plan for each staff. IDP is used as a tool to prioritise and monitor learning and development priorities, opportunities and activities for staff in consultation with their supervisor.

IDPs were used by 1997-98 by a number of staff. However, it received mixed success across the division. In particular, the development of IDPs for staff became confounded with the ABS wide trial of performance management and its staff development linkages.

In 1998, a Performance Management Scheme (PMS) was introduced, first on a trial basis and now more formally, in the ABS. This scheme enables staff to communicate expectations and performance standards in the workplace; and what training and development opportunities are needed to undertake their job. Agreements between a staff member and their supervisor are negotiated to outline key result areas over the agreement period; objectives for the period and how performance will be measured. These agreements are documented and agreed to by the staff member and their supervisor. During the course of the agreement period, feedback is provided to staff on how they are progressing and at the end of the period, an appraisal is given.

Section 2: Methodological Training and Development

2.1 Current Approaches

Once recruited to the ABS, methodologists are exposed to a range of development opportunities. These opportunities evolve as experience in the Division increases.

As experience levels increase, a subtle but important change occurs between structured training and development opportunities to less structured and more adhoc, self driven, training and development opportunities. Considerable efforts and refinements have occurred to internal strategies for developing new methodologists in the Division. The same cannot be said for our more experienced methodologists.

As experience levels increase, individuals initiate and make career decisions to develop a area of expertise. For example in forms evaluation, weighting techniques, confidentiality techniques. However as experience levels increase methodologists also require development, skills and expertise in management and corporate affairs and these can tend to dominate or take priority over technical development and specialisation.

The following table is a broad summary of the training and development opportunities for methodologists in MD, and an indication of the involvement and frequency which these opportunities arise. More details follow in section 2.2.

Training and development	0-2 years	2-5 years	5+ years
opportunity			
Formal 'ABS' statistical	Attend	Attend/present	Attend/present
courses			
Formal 'ABS' general	Attend	Attend	Attend/present
courses			
Formal 'external' courses		Attend	Attend
Professional forums	Encouraged	Encouraged	Encouraged/attend/present
Professional papers			Adhoc
Staff exchanges and visits			Adhoc
Internal seminar series	Attend	Attend/present	Attend/present
Rotations	Rapid	Slower	Sporadic
On the job training	High	Medium	Low
Study for	Rare	Adhoc	Adhoc and rare
additional tertiary			
qualification relevant to			
MD			
Special projects relevant to		Rare	Adhoc
MD & ABS			

2.2 Development Opportunities

An overview of the training and development opportunities available and most prevalent for methodologists is presented below.

2.2.1 First few years (the 0-2 years experience group) - 'junior' methodologists

It is important that methodologists new to the ABS acquire a common methodological skill set. This is achieved through two main processes - an internally run survey methods course coupled with an internal rotation process that provides a range of on-the-job experiences to broaden practical knowledge of the ABS environment.

Management and staff in the Division are strongly supportive of the need for 'junior' methodologists to gain a methodological skill set and on-the-job experiences. The Division openly acknowledges that in the first six months, new recruits could spend well over 50% of their time on development processes.

A. Formal 'internal ABS' courses

Methodology Division presents a survey methods course (based on Cochran,1977) over a semester long period. It is structured like a university course with tutorials, exams and a project. It commences in late February with a one week intensive training period which our State Office (SO) staff can attend. There on, three lectures a week are given and attended by Central Office (CO) staff, with SO staff encouraged to continue via self-learning and with the assistance of their supervisors in the SO.

More generally, the Division presents an introductory course on the role of the division within the ABS as well as special topics which are relevant to the division, for example ABS approach to sample design, philosophies and procedures to do with edit reviews and so forth. Within the Division, some sections present more localised training courses such as 'Household Collections' or 'Economic Collections' where practical and theoretical aspects of these collections are covered.

The ABS presents more generic training on topics such as our computing environment (SAS in particular is used though we also have a number of microcomputer packages), about their career expectations, about writing skills, general orientation to working in the public sector, and so forth. They also provide initial management type courses such as introduction to supervision.

B. Rotations

A formal rotation scheme operates within Methodology Division that exposes methodologists (at all levels) to a variety of work experiences and clients. In the first year to eighteen months junior methodologists are provided with the opportunity to work in two or three different areas of the Division, such as on sampling design, statistical consultancy projects, time series analysis.

The rotation scheme operates mainly in the mathematical statistics program of the Division. The econometric and time series analysis sections are not exempt from the rotation process but rotations to and from these sections are more adhoc and opportunistic.

C. On the job training

New recruits and junior methodologists receive considerable input and assistance from supervisors during their first few years. Supervisors and managers pay close attention to the work performed by these staff as well as the variety and range of work being undertaken. This aids in providing a range of experiences and opportunities for expanding knowledge and methodological skills.

D. Other opportunities for junior methodologists

The Methodology Division hosts a regular *seminar series* where staff from within the Division (or invited speakers from other divisions in the ABS or visitors to the ABS) present topics of relevance and interest to the division. These seminars are mainly focussed on the application of methodological techniques in the workplace rather than the techniques themselves. These seminars provide an excellent opportunity for all staff, especially our junior methodologists, to gain a broad knowledge of the work undertaken in the division. In addition, it is an opportunity to practice and refine presentation skills to an local audience.

There are a number of *external courses* that are available to methodologists. For example, the ANU Social Science Data Archives runs a series of one week statistical courses (ACSPRI courses) in topics such as regression analysis, etc. Priority is given to staff who have an immediate need for more specialised skills in, for example regression, as well as those staff without a pure mathematical/statistical background.

Methodologists are encouraged to attend professional *conferences* conducted by associations such as the Statistical Society of Australia. Priority to attend these conferences is given to staff presenting or contributing in some way to the conference. The Young Statisticians Workshop is one conference that our junior methodologists attend. Methodologists are also encouraged to belong to Statistical Societies and attend Seminar Series but it is at individual initiative and expense.

Professional papers are a means by which methodologists can make more concrete and visible contributions to the ABS and professional field of statistics or econometrics. All methodologists are encouraged to write professional papers but only one staff in the 0-2 years experience group has co-authored a paper in the last three years.

2.2.2 Subsequent years (the 2-5 years experience group) - 'working' methodologists

After the first two years, methodologists continue to gather a range of in-depth experiences. This sometimes becomes a constraint to gaining a breadth of experience.

Procedures for developing methodologists in this experience group are less formal than for junior methodologists although attention is still paid to the methodological development of individuals in this group. Development starts to become driven by opportunity and adhoc need rather than in any highly structured or formalised manner. Personal motivation and drive become contributing factors to the development of individuals in this group.

The primary training opportunities for methodologists in this group are formal 'internal and external' courses, internal seminars, and on the job training. In addition, these methodologists are encouraged to become more involved in professional forums and prepare professional papers, and often pursue formal study.

A. Formal 'internal ABS' courses

In 1997-98 the division developed a Model Assisted Methods (MAM) course based on Sarndal, Swensson and Wretman (1992). This course is currently presented by MD staff. It is being conducted over a semester period with 3 hours of lectures and one hour tutorial each week. A commitment of up to eight hours per week is sought from individuals (and their supervisors) wanting to attend the course. In other words, up to 20% of the working week is devoted to attending and learning the course material. Out of 8 participants of this course only one is in the 2-5 year group.

As experienced methodologists, this group tend to find themselves presenting rather than attending other 'internal' courses such as the Household and Economic Collections training sessions, Basic Statistical Analysis course, and Basic Survey Design course.

The ABS presents more generic training to this group in management principles (staff, personal, time, project) and the Professional Statistical Program that includes a brief overview of topics such as time series analysis and data management.

B. Formal 'external to the ABS' courses

Priority to attend *external courses* such as the ANU Social Science Data Archives one week statistical courses (ACSPRI courses) is given to staff who have an immediate need for more specialised skills in, say regression, as well as those staff without a pure mathematical/statistical background (eg. they have a mathematics degree rather than a statistical degree).

C. Internal ABS seminar series

Staff in the 2-5 years experience group attend internal seminars similar to 0-2 years experience group and are encouraged to present seminars.

D. On the job training

As experience and knowledge grow, methodologists are making the transition from high supervision to medium-to-low supervision requirements. They may also become supervisors themselves.

A range of experiences and opportunities for expanding knowledge and methodological skills continue to be sought by both individuals and their managers. Individuals often initiate change and training opportunities.

E. Study Leave

The ABS has a formal study leave scheme, and staff are encouraged to continue their

university education by availing themselves of the provisions of this. They can obtain up to five hours paid leave per week during semester, to attend courses. The econometricians in particular are encouraged to pursue external studies, as ABS do not have a large pool of experience to provide all their training needs internally.

F. Professional papers

Professional papers are a means by which methodologists can make more concrete and visible contributions to the ABS and professional field of statistics or econometrics. All methodologists are encouraged to write professional papers and working methodologists are becoming more involved. Papers include those prepared and presented at the Methodology Division Advisory Committee (MAC), the ABS working paper series, Australian Economic Indicators articles, or refereed journal articles.

G. Professional forums

At a less formal level, the ABS encourages staff to attend statistical talks of interest at local forums, for example at the Australian National University. Many staff are members of the Statistical Society of Australia, and attend the regular meetings of the local Canberra branch of the society. Some also attend and present papers at the annual meeting of the Statistical Society of Australia. The ABS usually pays travel, accommodation and salary costs for between 2 and 4 people to attend the event, and assists where possible other staff who wish to attend.

H. Other opportunities

Rotation continues throughout their career in mathematical statistics in the ABS, though as staff grow more experienced the placements are for longer, and are decided on a more individual basis. Included in the later stages of this rotation scheme, for more experienced officers, are outpostings to other areas of the ABS. Typically this occurs when a client area has a particularly large task where Division involvement is required, and benefits exist for staff development and for the successful completion of a large and usually complex task.

Opportunities have been provided to senior staff to work in Overseas statistical organisations on short term or long term secondments and on exchange programs. Some staff have undertaken self-initiated travel to overseas Statistical Organisations to gain and exchange experience.

2.2.3 Later years (the 5 plus years experience group)

As experience and knowledge grows, so does the reliance on methodologists to provide role models to our more junior staff. Managerial and leadership responsibilities become increasing important part of a methodologists duties.

The continued development and training of our more experienced staff becomes more self driven and opportunistic. Professional forums and papers, staff exchanges and visits, and special projects are the areas of development opportunities for staff with more than 5 years experience.

A. Professional papers

Although the number of MAC papers increased during 1997 and 1998 as compared to 1996, 71% of authors who contributed papers were in 5+ experience group, 25% were in 2-5 years group and *only* 4% were 0-2 years *group*.

Year	No. of papers	No. of authors	Staff Experience group (0-2)	Staff Experience group (2-5)	Staff Experience group (5+)
1996	3	3	nil	group (2 5)	3
1997	8	14	1	4	9
1998	9	11	nil	3	8

B. Professional forums

During 1997-98, among the staff who visited overseas to attend conferences, 8 out of 9 staff were from the 5+ years experience group and only 1 staff from the 2-5 years experience group.

Year	No. overseas	No. of staff	Staff	Staff	Staff
	visits	visited	Experience	Experience	Experience
		overseas	group (0-2)	group (2-5)	group (5+)
1997 (Jan-	6	6	nil	1	5
Dec)					
1998 (Jan	3	3	nil	nil	3
-September)					

The Division presents an award each year, called the Ken Foreman award, to a promising young methodologist to further their professional development. It consists of an overseas trip including attendance and presentation of a session at an international conference. It has been running for three years and successful methodologists have all been in the 5+ years experience group.

C. Staff exchanges and visits

Opportunities arise, or are sought, by methodologists to work in international statistical organisations such as NZ Statistics Department, Office of National Statistics (UK), Statistics Canada, South Pacific Commission. Methodologists work in these offices, on exchange, secondment or request. These opportunities provide excellent on-the-job work experience.

Experienced methodologists from MD have visited a number of statistical organisations in overseas countries such as Papua New Guinea and South Africa and have provided assistance on methodological work. Again this is seen as providing good development opportunities.

The Division hosts several international visitors (experts) each year, for example in

1998, David Morganstein from Westat and Tom Poldfelt from Stats Sweden. These visitors provide an excellent opportunity for methodologists to network and exchange ideas to our mutual benefit. Likewise, methodologists often visit other statistical organisations to share ideas and techniques. These visits tend to be undertaken by our more experienced staff.

D. Special projects

From time to time special projects arise, either internally or with other organisations (eg. Australian Taxation Office) which require methodological input. These present an opportunity to further the development of a methodologist.

E. Other opportunities

More experienced methodologists continue to be involved in more formal internal and external training courses, but more often as presenters rather than attendees. During 1998 MAM course 75% of participants were in 5+ years group. External training is more sporadic and for identified needs. ABS offers leadership and management courses (eg. ABS Leadership Program, ABS Graduate Certificate in Management).

Section 3: The Challenges of Decentralisation

3.1 Matrix Management

MD works in a matrix management environment whereby both Central office and State Office management take collaborative approach to assist staff in their professional development.

3.2 Constraints

The following forces act to limit training & development opportunities for staff who work at the Math/Stats Cell (MSC) in State Offices:

- Less rotation opportunity due to small number of staff.
- Less breadth of work, usually limited to a few surveys. Typically very little opportunity to get involved with Time Series or Household Survey issues, or large scale analytical or methodological projects.
- Smaller demand for maths/stats training, and indeed for any other training, means that these courses are offered less frequently than in CO.
- It becomes more difficult to release staff for training because:
 - courses are infrequent. If the dates clash with heavy work commitments then waiting for the next course may mean waiting for 1-2 + years.
 - less variety of input from supervisors & managers. This is associated with rotation but refers to the sort of technical & other guidance, support etc received from supervisors rather than just the work duties.

3.3 Supporting and Enhancing Professional Development of MSC staff

A. Formal 'internal ABS' courses

MSC staff from across Australia attend the one week intensive survey methods one training period in CO. They are encouraged to continue via a variety of self-learning and distance learning techniques, with the assistance of their supervisors in the SO. There is a smaller number of recruits within MSCs that require this training.

MSC staff also attend the more localised training courses such as 'Economic Collections' where practical and theoretical aspects of these collections are covered.

In 1998 the Division presented an abbreviated version of the model assisted methods course in the Melbourne office. MSC staff were invited to attend the three day

course. At this stage there are no plans to replicate this training on a regular basis outside CO.

B. Formal 'external to the ABS' courses

Priority to attend *external courses* such as the ANU Social Science Data Archives one week statistical courses (ACSPRI courses) is given to staff who have an immediate need for more specialised skills in, say regression, as well as those staff without a pure mathematical/statistical background (eg. they have a mathematics degree rather than a statistical degree). The main restriction on attendance at these courses is financial (as well as staff availability), and because the courses are held in Canberra over a week, MSC staff are faced with travel costs as well as course fees.

Opportunities arise for attendance at other external courses such as a recent multi-level modelling course conducted at Macquarie University, Sydney. MD, including MSC, staff are able to attend these courses subject to available funds, time and development needs.

C. Rotations

MSC staff are not part of the formal rotation process in place in CO, however they are not totally excluded either. Staff are able to initiate discussions to move between offices or sections and MD managers welcome such discussions. Rotations continue to occur from CO to MSCs. However MSC staff would not gain the same methodological development opportunities within their SO outside the MSC. Rotation to another office involves expense and disruption to the individual, office and other staff. In addition, there are real constraints on the availability of positions.

In Sydney, the MSC is co-located and co-managed with the Statistical Consultancy unit. This has the advantage that staff can undertake a broader variety of work for both internal and external clients, thereby broadening their methodological experiences. In other States, the MSC staff are located with their major client groups and little sharing or cross-fertilisation with statistical consultancy units occurs. Victoria is moving towards the Sydney model.

D. Internal ABS seminar series

MSC staff visiting CO are welcome to attend these seminars but often this is not practical. Video-taping of seminars has been unsuccessfully tried. Local seminar series (eg. a seminar series in the NSW office) suffers from a smaller pool of possible presenters and limited range of methodological presentations.

E. On the job training

On the job training is a major component of MSC staff development process. A range of experiences and opportunities for expanding knowledge and methodological skills are sought by both individuals and their managers. The opportunities for MSC staff are limited to gather a breadth of methodological issues.

F. Study Leave

ABS study leave is available to all ABS staff, regardless of their location.

G. Professional papers

All methodologists are encouraged to write professional papers, including MSC staff.

H. Professional forums

All methodologists, including MSC staff, are encouraged to attend methodological talks of interest at local forums. As in CO, many MSC staff are involved with local professional societies - often in a committee role. The NSW office hosts regular NSW Statistical Society of Australia meetings thereby providing the opportunity for MSC and other ABS staff to attend meetings without additional travel or expense.

I. Staff exchanges and visits

As in CO, MSC staff are able to negotiate exchanges or visits to other statistical organisations, and are encouraged to express interest when such exchanges arise. Last year, a staff member from MSC (Victoria office) spent a week in NZ attending a training session.

J. Special projects

From time to time special projects arise, either internally or with other organisations (eg. Australian Taxation Office) which require methodological input. These present an opportunity to further the development of a methodologist. These special projects often arise in Canberra and are undertaken in Canberra. However, this is not always the case. A recent example is the Sample Frame Maintenance and Procedures project that was and is being undertaken by our Victorian MSC.

Section 4: Suggested Improvement Strategies

Through discussions with directors in MD, various strategies for improving current approaches to the development of methodologists have been suggested. Strategies have also be identified through discussions with universities and informally through discussions within the Division. The following outlines improvement strategies that could be adopted for developing and enhancing methodologists, particularly experienced methodologists, in the Division.

4.1 First few years (the 0-2 years experience group) - 'junior' methodologists

- Individual development plans to include presentation of formal and informal seminars by staff of this group. This would boost their confidence, presentation skills and provide encouragement for further development.
- Visitors (ABS, non-ABS and international) to CO to be strongly encouraged to provide seminars and seminar material for storage in the NOTES environment and dissemination to all MD staff, including MSC staff.

4.2 Subsequent years (the 2-5 years experience group) - 'working' methodologists

- Supervisors to nominate appropriate staff to attend MAM course through consultation as part of individual development plans.
- Supervisors would provide more encouragement and motivation to nominate for Ken Foreman award. Staff in the 2-5 years experience group to be targeted to lodge application for nomination. Furthermore in consultation with individual staff, supervisors to nominate staff to lodge application.
- Staff in this group to be targeted to present training sessions, both as part of individual development plans as well as through supervisors nominating individuals. Training sessions include SM1 and MAM courses, as well as ABS courses like BSA and BSD.
- Allocating a definite number of days for each staff member to methodological development. This could take the form of conferences, professional papers, formal courses, seminars, MAM, etc, but it is an upfront commitment by the staff member and management to their professional development. It could form part of a performance agreement.
- Opportunities should continue to be sought for and by staff to work on short term methodological projects, including opportunities for higher duties, rotations, in/out postings.

4.3 Later years (the 5 plus years experience group)

- Performance Agreements should be used to encourage professional development, for example
 - allocating a set number of days devoted to professional development
 - outlining an agenda for professional development opportunities for the year such as attendance at courses, conferences, preparing/presenting professional courses, seminars, attendance/presentation of SM1 and MAM
 - defining a professional paper to be developed and presented during the year, perhaps in conjunction with a professional conference or at a MAC meeting.
- Contribute to the future joint venture distance learning programs with Australian Universities by providing direct input into the course design, development and presentation.

- During Forward Work Program discussions, areas of methodological research and development should be identified and MD staff encouraged, through the nomination or assigning of special projects, to become role models and experts in these fields. This would induce self learning by the individual. Sharing of this expertise would form an integral part of the special project. Examples of special projects could be the design, development and delivery of a training course in a methodological area (similar to the development and presentation of MAM in 1998), either for internal presentation and delivery; or external presentation and delivery such as at a local university as part of a degree (post graduate or under graduate) or through the proposed distance learning course by Newcastle and Wollongong universities and the ABS. Other examples of special projects are weighting methodology for household surveys and testing strategy for tax reforms.
- Staff to propose and/or Senior management to nominate staff to attend specific courses for further enhancing and/or updating current methodological expertise.
 Courses could be internal, distance learning courses or formal university courses.
- Forward Work Program to include provisions for methodologists to visit state
 and central offices to provide assistance and share expertise. Visits to state
 offices should include presentation of a seminar that is relevant to the state office,
 preferably drawing on presentation material already in existence in MD, eg. from
 a recent CO seminar. Reciprocal arrangements should apply when SO staff visit
 CO.
- Use of Notes library facilities to share knowledge more efficiently.