

# Australian Council for Educational Research

fifty-fourth annual report

# 83-84



fifty-fourth  
**ANNUAL REPORT**  
1983-84



The Australian Council for Educational Research Limited  
Radford House, Frederick Street, Hawthorn, Victoria 3122

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## Members of Council for 1983-84

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### **CO-OPTED MEMBERS**

G.F. Berkeley, BA, BEd, MEdAd, AIE(Lond.)  
Director-General, Department of Education, Brisbane, Queensland

L.D. Blazely, BSc(Tas.), MEd(Melb.)  
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Associate Professor of Psychology, Department of Psychology, University of Newcastle, Newcastle, New South Wales

\*Professor B. McGaw, BSc, BEd(Qld), MEd, PhD(Ill.), FACE, MAPsS  
Dean, School of Education, Murdoch University, Perth, Western Australia  
(to 31 December 1983)

\*Associate Professor Millicent E. Poole, CE, BA, BEd(Qld), MA(UNE), PhD(La T), MACE, MAPsS  
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R.B. Winder, BA(Syd.), MACE  
Deputy Director-General, Department of Education, Sydney, New South Wales

### **MEMBERS APPOINTED BY THE STATE INSTITUTES OF EDUCATIONAL RESEARCH**

#### **New South Wales**

Associate Professor N.L. Baumgart, BSc, MEd(Qld), PhD(Macquarie), FACE

\*Member of Executive Committee

Associate Professor of Education, School of Education, Macquarie University, North Ryde, New South Wales

### **Victoria**

\*G.J. Whitehead, TPTC (Burwood TC), BCom, MEd(Melb.), PhD(La T)  
Principal Research and Development Officer, Education Department,  
Melbourne, Victoria

### **Queensland**

N.D. Alford, BA, MEd(Qld), FACE  
Executive Officer, Board of Advanced Education, Brisbane, Queensland

### **South Australia**

E.R. Sandercock, BSc, PhD(Adel.), Grad.Dip.Management (Capricornia  
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Principal Lecturer in Education, South Australian College of Advanced  
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### **Western Australia**

A.S. Ryan, BA, DipEd(W.Aust.) MS, PhD(Flor.)  
Head, School of Foundation Studies, Western Australian Institute of  
Technology, Bentley, Western Australia

### **Tasmania**

Professor P.W. Hughes, BSc, MSc(Oxon.), PhD(UNE), FACE  
Head of Department of Teacher Education, Centre for Education,  
University of Tasmania, Hobart, Tasmania

### **Northern Territory**

N. Bowman, BA, MEd(Melb.), PhD(Ill.), MACE  
Director of Research, Education Department, Darwin, Northern  
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### **New South Wales—Newcastle Branch**

Professor J.B. Biggs, BA(Tas.), PhD(Lond.)  
Professor of Education, Department of Education, University of New-  
castle, Newcastle, New South Wales

## **OFFICIAL REPRESENTATIVES**

### **Directors-General of Education**

G.J. Spring, BA, MEd(James Cook), MACE, FAIM  
Secretary, Northern Territory Department of Education, Darwin,  
N.T.

### **Commonwealth Department of Education**

C.L. Beltz, PolSocDrs(Nijmegen), MACE  
First Assistant Secretary, Programs and Development No.2 Division,  
Commonwealth Department of Education and Youth Affairs, Canberra,  
Australian Capital Territory

## **STAFF REPRESENTATIVE**

K.J. Piper, BA, DipEd(Syd.), MEd(Melb.)

## **DIRECTOR**

\*J.P. Keeves, BSc(Adel.), DipEd(Oxon.), MEd(Melb.), PhD(ANU),  
fil dr(Stockholm), FACE, FASSA

# Annual Report of the Director

Presented at the Meeting of the Council on Friday 5 October 1984.  
This report covers the period 1 July 1983 to 30 June 1984.

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## INTRODUCTION

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The Panel that reviewed the program of research, development and service of the ACER in October 1983 advocated a general reorientation for the ACER and for its program. They argued that the ACER had a central role to play in education in Australia, and that it should continue to be strongly supported, but that the institution should become more open to ideas from outside and would profit from a greater interchange of personnel with other institutions. However, in the time available to them the Review Panel were unable to indicate how this reorientation might be achieved and along what lines the opening up proposed might occur. Consequently, it would seem appropriate to consider ways in which this reorientation might take place and the directions in which new developments might proceed.

### **Involvement in Supporting Educational Research in Australia**

The marked expansion in educational research that took place in Australia in the years following the conference on educational research, held in Melbourne by the ACER in May 1967, was highly productive. In the decade from 1970 to 1980, the annual number of graduates from higher degree programs in this country increased approximately sevenfold. Educational research attracted scholars from a wide range of disciplines—the humanities, the social sciences, and the behavioural sciences—towards a significant attack on educational problems. The multidisciplinary nature of educational research was clearly recognized, and truly interdisciplinary studies started to emerge. However, a conflict developed between the advocates of a scientific and strongly empirical approach to educational research and those who saw that educational problems were more appropriately tackled by the methods of historical, ethnographic, or anthropological research. In addition, there have been those who have argued strongly that neither the scientific nor the humanistic paradigm is appropriate for educational research, whose only effective mode of operation lies in evaluation, action research, and participatory research. The way ahead clearly lies in the combination of the different paradigms which are complementary to each other. However, it can be argued that the rifts which occurred within the ranks of those engaged in educational research contributed to the very substantial reduction in the resources available for educational research in Australia. Perhaps the financial constraints imposed on education in the late 1970s and the early 1980s would have led to a cutting back of the research effort, without the conflict that took place. Nevertheless, the consequences were that educational research units within universities were closed, the research sections of education departments were greatly reduced, the Education Research and Development Committee was terminated, and the program and role of the



Curriculum Development Centre was significantly changed. Since 1981, concerted efforts have been made to establish what has been proposed as an Australian Educational Research Grants Scheme. Nonetheless, the divisions of both a methodological and a territorial kind remain within the educational research community. Consequently, proposals which were thought to be gaining universal endorsement have been rejected by subgroups and apparently by those who might have provided the financial support for such a scheme. The challenge for the immediate future is for those engaged in educational research to resolve their differences, and to co-ordinate their efforts to ensure that critical problems in education are tackled through programs of research that make full use of the theoretical and methodological contributions that the various disciplines and the different research paradigms might make towards the investigation of particular problems.

Fifty years ago, the Australian Council for Educational Research was able to provide the leadership necessary for the effective establishment and the co-ordination of education research activity in Australia. Now, the question for the ACER is whether, through the State Institutes affiliated with it, through the Australian Association for Research in Education and the Australian College of Education, through its links with the Commonwealth and State Education Departments and the staffs of universities and colleges of advanced education, as well as through the variety of specialist groups in the field of educational research, it can help to unite and co-ordinate efforts towards a more effective investigation of educational problems. A very significant contribution which the ACER could make towards this goal would be through a greatly expanded program of publication of the results and findings of educational research. Moreover, an important step in this direction would be to bring the State Institutes of Educational Research and the Australian Association for Research in Education closer together. Both are now very significant associations of persons who are interested in the conduct of educational research. Unless the ACER is able to undertake this leadership role of helping to unite the field of educational research in Australia, it is clear that the effective investigation of educational problems will suffer from a lack of collaboration between interested parties, a lack of co-ordination of effort, and more importantly the possible failure to investigate certain problems that will become critical for educational policy and practice in the years ahead.

### **Involvement in Asia and the Pacific**

In the past 12 months, the ACER has been formally accepted as an APEID (Asian Program of Educational Innovation for Development) Centre. This involves participation in programs of educational innovation and development in the Asian-Pacific region under the auspices of Unesco. As a consequence, the ACER has been represented at two seminars held in Tokyo, which have been directly concerned with the advancement of educational research in the region. The aspects of research under discussion at these seminars have been 'Educational Research with Special Reference to the Exchange of Research Outcomes' and 'The Contribution of Interdisciplinary Research to the Development of Education in Asia and the Pacific'. Both

seminars have been extremely stimulating and have led to the publication of reports that will sensitize research workers in the region to important and highly relevant issues and might be expected to influence in significant ways the conduct of educational research within the region. At a time when the role of Unesco is being challenged and when there is the threatened withdrawal of support by affluent nations, it would seem appropriate to assess the effectiveness of the educational programs of Unesco in the region of direct concern to Australia. First, it is of interest to note that China has recently entered Unesco, and its representatives are taking an active part in the programs of the Asian-Pacific region. Secondly, the role of the Japanese National Commission for Unesco and the National Institute for Educational Research in Tokyo in promoting a series of six seminars on educational research for APEID Centres in the region since 1979 is impressive. It is important to recognize that all costs of attendance at the seminars have been borne by the Japanese, who see the conduct of these seminars not only as a contribution to educational research in the region, but also as a positive way of fostering programs of co-operation and collaboration between countries within the region. Thirdly, the effectiveness of the seminars is beyond question, and the program is being extended into the field of curriculum and will include comparative studies in the area. It is necessary to pay tribute to the work of the National Institute for Educational Research in conducting these seminars with impressive efficiency and concern for the welfare of the participants. Above all it is necessary to reaffirm the contribution that can be made by Unesco, in sponsoring such programs of exchange of ideas on research and information on curricular matters, for the advancement of educational research and practice within the region.

It is evident that the ACER, through the APEID program, has suddenly during the past 12 months been drawn into research and curriculum development in the Asian-Pacific region. Our contribution to this work can only increase, which would seem both highly desirable and necessary. However, the reasons for our involvement in such programs outside Australia must be made clear, not only to ourselves but to our colleagues in the region. We enter the program as an equal partner; but we must recognize that we can assist in many ways, including the provision of internship programs for colleagues who wish to come to Australia for research experience and training. At the same time, members of our staff who have expertise in particular areas must be ready to provide training workshops outside Australia over extended periods of several weeks. During the past 12 months, members of staff have conducted workshops in China on cross-sectional surveys and sampling, and in Singapore on test development. However, we must recognize that we have as much to gain from our involvement in these activities for the conduct of our own program of research, development, and service as we have to give.

In addition, it would seem likely that the long-term future of the Australian people, particularly with regard to our economic and commercial affairs, rests not with Britain or the United States but with the rapidly expanding markets of the Asian-Pacific region. Moreover, it would appear that the region is likely to become a growing force in the political world as well as a

very vigorous centre of technological development. Australia will not be able to remain apart from the region. If the activities of the region continue to grow at the current rate, Australia will of necessity be drawn into the region or become a backwater. It is essential that we enter the region under conditions that make us an equal partner, and this will require a gradual reorientation of many of our attitudes and values. As a consequence, any failure on our part to seek active involvement at this time in the educational programs of the region could in the long term be to Australia's serious disadvantage. From a more positive viewpoint, it would appear that we have much to gain, particularly if the current rate of technological development is maintained within the region.

### **The Third Phase of Educational Reform**

If Australia is to contribute to the future of the Asian-Pacific region, it is necessary to identify the potential long-term developments for education in the region. The past century has seen two major phases of educational reform in Australia as in other developed countries. The first has been the introduction of free and compulsory education. Associated with this reform was the development of modern industrial society. The second phase of reform occurred after World War II through the marked growth of universal and comprehensive secondary schooling, with the opportunity for a substantial proportion, but still barely 40 per cent, to complete 12 years of schooling, as well as through the significant expansion of tertiary education from the 1960s onwards. It is on this phase that our post-industrial society has been built, with a strong research capacity and an emphasis on the circulation and use of information. Developments in the second phase are not complete in Australian society, with still a seemingly low proportion, in comparison with some other OECD countries, engaged in education at the upper secondary and tertiary levels. The current program of research studies, not only in the Social Context of Education Division but also in the Learning and Teaching and the Measurement and Evaluation Divisions at the ACER, are in the main directed towards aspects of the developments taking place in Australia in connection with the extension of the second phase. It is, nevertheless, necessary to turn our attention towards the issues that will arise during the third phase, which is emerging in Australia long before the second phase is completed.

The onset of the third phase has come with unexpected suddenness, owing its origins to the impact of technological change. The introduction of new technology, which extends far beyond the advent of the micro-computer and related advances in electronics, will have an effect on education in three distinct ways. First, new technology will give rise to a rapid change in the skills required to work efficiently in industry and commerce in all areas. Education will have a clearly identified function associated with the acquisition and effective use of these new skills. Secondly, the new technology is expected to reduce the demand for labour and, with the decrease in the time required from many in our society for work-related activities, there will be an urgent need for educational programs that are associated with the creative and constructive use of leisure time. Thirdly, the new technology has the potential to transform the manner in which education is conducted. But it is

necessary to acknowledge that new approaches to education will be slow to gain recognition in schools and traditional tertiary institutions.

It must also be noted that the three ways outlined above where new technology will have an impact on education will, in the main, be outside the formal educational institutions as we know them. The new frontiers of education will be in the fields of non-formal education and in recurrent education programs. Schools and tertiary institutions will continue to demand a greater proportion of the resources available for education, but they may seek to use these resources in ways that will not facilitate the growth of the third phase. Admittedly a good school career and success at a university will be of value in two ways. First, they will be of use at the initial point of entry into employment, but the advantage gained in this way might only last for a relatively few years. The second advantage gained by those who have succeeded at school and university will only exist if the programs provided in educational institutions have developed in the student a flexibility of thought and a skill of learning how to learn together with a desire to go on learning throughout life. A future in a career will only exist for those who have the aptitude, the willingness, and the resources to continue with learning throughout their lifetime.

The new facilities required for education will be those necessary to mount recurrent educational programs. It would be unfortunate if more resources were provided for splendid buildings used for only part of the year. The challenge will be to harness the new technology to provide less formal educational services with a flexibility that the changing circumstances demand. New educational systems and new approaches to curriculum development will be required. Here is a field for research into education that requires imagination and immense effort if the third phase of education reform is to be successfully introduced within the next 20 years. The returns for a society that can accomplish the introduction of the third phase are likely to be substantial.

At the same time there is a growing awareness in the Asian-Pacific region, if not within Australia, that a rapidly changing society imposes immense strains on that society and that education has an important function in the maintenance of the morality and the acknowledged values of society. Currently, a strong area for research in the countries of the region is concerned with these questions. The research issues emerging as critical ones within the Asian-Pacific region are complex, demanding an interdisciplinary approach and a range of research strategies so that the investigation of these problems can be carried out successfully.

The abolition of the Education Research and Development Committee (ERDC) removed from educational research the forum where the problems confronting educational research in Australia were being debated, where co-ordination of research efforts could occur, where priorities for research within this country could be identified, and where research workers were being trained to tackle a new range of tasks in new ways. In conclusion, it is necessary to ask whether the Australian Council for Educational Research can contribute to filling the void left by the termination of the ERDC, and can share in future developments in the field of educational research with colleagues in the Asian-Pacific region.

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## REVIEW INTO THE OPERATIONS OF THE AUSTRALIAN COUNCIL FOR EDUCATIONAL RESEARCH

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### Introduction

In 1980, the then Chairman of the Education Research and Development Committee, Mr S.S. Dunn, suggested to his Committee, which subsequently recommended to the Commonwealth Minister of Education, that a review of educational research in Australia should be undertaken. Such a review would inevitably have involved an examination of the program of research, development, and service of the Australian Council for Educational Research (ACER).

Following the closure of the Commonwealth Curriculum Development Centre and the Education Research and Development Committee in April 1981, the Director of the ACER proposed to the Executive Committee at its December 1981 meeting that a review of the operations of the ACER should be carried out. The ACER Executive Committee endorsed the proposal and, at its next meeting in April 1982, asked for a detailed plan to be prepared that could be submitted to the Executive and subsequently to the Council.

The Review Panel as finally selected comprised:

- Chairman: Mr D.A. Swan—Director-General of Education, New South Wales
- Members: Professor M. Clay—Professor of Education, University of Auckland, New Zealand  
Professor W.W. Cooley—Learning Research and Development Center, Pittsburgh, Pa., United States of America  
Professor G.V. Stanley—Professor of Psychology, University of Melbourne.

The Terms of Reference were as follows:

To examine and make recommendations to the Executive Committee and Council on the program of research, development, and service of the Australian Council for Educational Research with particular reference to:

- 1 the processes used to identify and select an appropriate program of research, development, and service for the ACER;
- 2 the quality, relevance, and usefulness of the research, development, and service activities undertaken by the ACER within the resources available to it;
- 3 the procedures and techniques employed in the program of research, development, and service by the ACER;
- 4 the procedures employed to disseminate through publication and in other ways the products of the program of research, development, and service undertaken by the ACER; and
- 5 the desirable future directions of the work of the ACER.

The Terms of Reference addressed professional issues of research, development, and service and not managerial and administrative issues. Inevitably, there was overlap in these matters and, in its Report, the Review Panel saw it as appropriate to address issues of administration and management to the extent that they impinge upon the five Terms of Reference.

The Review Panel sought to be forward-looking, to provide to the ACER some ideas about how to approach the latter part of the century in the present context of limited funding and diverse educational interests. The Review Panel acknowledged, as did all the submissions from invited organizations, the quality of the work that the ACER had produced and, similarly, the Panel and the submissions saw the need for the existence of the ACER as an independent organization for educational research. The Panel did not seek to be an evaluating body judging past performances, rather it sought to analyse the present organization of research, development, and service in this wider context to see how the ACER could contribute to its fullest in Australian education in the coming decades.

### **Overview (of Report of the Review Panel)**

The following is an extract from the Report of the Review Panel.

In conducting this Review of the ACER, which we hope will make a constructive contribution to its future development, the Panel has been conscious of the distinguished contribution that the ACER has made to educational research in Australia. The submissions to the Review Panel have also been set within this context of appreciation. The Panel is optimistic that over the next 50 years the ACER's contribution will be even more valuable than were its first 50 years. The Panel hopes that this Review might contribute to that important goal.

The history of the ACER's methods of financing has over the years produced a certain tension in the organization. The ACER is a disseminator of research information and research instruments (tests) and in part its research program is dependent on these services. The organization as a result is attempting to be both a research institution as well as a viable commercial enterprise, the profits from which can be channelled back into its research, development, and service activities. Further, an important component of these sales are the psychological tests, the development of which has given the ACER a national and international reputation during its earlier years.

There is a belief among a number of the organizations making submissions to the Review that the quality of the tests marketed by the ACER should be maintained according to the standards of the day, which implies recent normative studies and the adaptation of overseas tests for Australian conditions. The Panel has sensed from the submissions that a disquiet in this area has been developing slowly over recent years. We consider it essential that the ACER conduct a thorough examination of test usage in Australia and professional and public attitudes towards testing. We believe that such an examination would probably identify some valid objections to tests that would indicate improvements that ACER might make in test development work or in test usage. Such an examination would probably also uncover

some invalid objections that would have implications for the development of a public information effort.

Test development and maintenance are time consuming and the ACER is now also involved in a wide range of other activities. There is a fundamental dilemma for the ACER here: it is not large enough to be able to pursue all the activities it would see as desirable, but on the other hand its history and predilections have determined that it cannot easily detach itself from one of its main activities, test development.

The Review has revealed that, in adapting to financial constraints over the past years, the ACER's efforts have become somewhat thinly spread, with a large number of projects for the number of staff and amount of finance available. One would not expect ACER's program to be so diversified as necessarily to provide examples of all types of research methodologies. Nor need its staff be qualified to study all levels in the education system. There has been little attention, for example, to studies of teachers teaching, or of changing teachers' classroom behaviours. The theoretical interest of the last decade in applied behaviour analysis, and its contribution to classroom and clinical interventions, and the linguistic or anthropological studies of language and cultural differences are two examples of areas in which the ACER has shown little interest. In more general terms the ACER has not been involved in research which touches the learning of individuals or (except in one or two instances) the teaching procedures of classrooms. Special education and pre-school education have not received attention.

The Panel sees it as entirely appropriate that the ACER should be selective in its program priorities and emphases, but that staff should be aware of what current and relevant educational research areas fall outside their expertise.

The question of program priorities, program identification, and selection and quality control are therefore essential to the ACER. The Review has concluded that, with the exception of the commissioned research, program identification is very much an inhouse activity at the ACER and very dependent upon the Director. The Panel sees a need for the ACER to broaden its processes so as to take fuller account of the views of the wider educational community. This can be achieved in a number of ways: a changing emphasis of the role of the Director away from internal management to more contact with the educational community, greater input from Council into program priority determination and re-consideration of the representativeness of its membership, greater consideration of the need for research co-ordination in the context of the multiplicity of research capacities across the country, greater use being made of 'needs' surveys, and greater use being made of the concept of 'user conferences'.

The Review acknowledges the importance of staff input into the process of program identification and sees this best achieved by the presence at the ACER of an active internal management advisory group that can present staff ideas to the Director. These ideas should be debated at policy meetings where the Director will make a significant contribution not only by his personal standing but also because of regular contact with the educational community. Such debate should occur within the context of the resources available within the ACER.

The chief aim for the future would be to bring the ACER closer to the educational community. In addition to the methods described above, the Panel sees this being achieved by more staff exchanges between the ACER and other organizations, more use of other organizations in disseminating the findings of the ACER's research and development, and more visibility of ACER staff in discussing project proposals or project results.

By this process, the research, development, and service activities of the ACER will be exposed to questions of what is relevant, and to the needs of educational systems, teachers and students. Such a process will guide the ACER into more research that can only be seen as leading to improving school practices and as a result will increase the credibility of the ACER with one of its major clients, the schools. This will greatly develop the ACER's role as an educational leader as opposed to a passive reactor to perceived issues.

It is not argued that the ACER should change its role as a professional organization providing independent advice about key national educational issues. Indeed, its continuing capacity to do this is its very *raison d'être*. What is raised here is a question of emphasis. The panel sees a more active role for the ACER in the future but one that does not compromise its integrity or its ability to provide quality research.

The submissions to the Review have commended the quality of a great number of the ACER publications and the Panel seeks to strengthen the ACER's ability to provide such work by a number of suggestions related to procedures, dissemination, and organization. More specifically there is the need for a reconsideration of the technological capacity of the ACER, for a continuing development of the trend at the ACER to use a broad range of research methodologies, for a continuance of the principle of disseminating results in a form suitable to various audiences, for increased attention to theoretical components of research studies, for strengthened review and publication policies, and for a reconsideration of the administrative organization of the ACER.

By nature, reviews tend to look to areas of deficiency and seek improvements, and pay little attention to the qualities that exist in an organization. The Panel feels that the Review is not free from this fault. It is accepted, as do so many of the submissions, that the ACER has produced noteworthy work. This is basically the final justification for an organization and the ACER has justified its existence by this quality. The Panel hopes therefore that the Review is seen in this light.

#### *Publication*

Report of the Review into the Operations of the Australian Council for Educational Research. (Chairman: D.A. Swan). Hawthorn, Victoria: ACER, 1984.



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## PROGRAM IN SOCIAL CONTEXT OF EDUCATION

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### Advisory Committee

Professor P.H. Karmel (Chairman), Mr C. Beltz, Professor D. Beswick, Dr G. Elsworth, Associate Professor Daphne Keats, Associate Professor Millicent Poole, Professor R. Selleck, Dr J.G. Ainley, Mrs Margaret Batten, and Dr T.H. Williams (The Committee met twice during the year.)

### Overview

The Division's research program was characterized by four emphases during the year: retention and participation in schooling; organizational structures in the post-compulsory years of secondary school; participation in mathematics and technological studies; and the transition from school to post-school activities.

Two related studies undertaken by Dr Ainley, Mrs Batten and Ms Miller focused on the question of factors affecting retention in school to the post-compulsory years. One of these combined departmental data, survey information, and case-study observation in Victorian schools. The other addressed similar issues in a national survey. The second emphasis, was also concerned with factors affecting retention in schools, the kinds of programs offered, and the costs of these programs. This study is being undertaken by Mr McKenzie. The third focus was embodied in a study undertaken by Dr Jones with sponsorship from the Institution of Engineers, Australia, private industry and government agencies. The study focused on factors affecting retention in mathematics courses during high school. The fourth emphasis in the program was the continuing longitudinal study of youth in transition which entered its sixth year with support from a consortium of government agencies.

Over the coming year further work will be undertaken on retention as a development of the earlier work by Dr Ainley and Mrs Batten who will undertake separate but related projects in this area. Mr McKenzie will pursue related issues from an economic perspective. Dr Jones will complete his current research into retention in mathematics and may pursue further work in this area. Dr Williams and his assistants will develop further the longitudinal study by continuing with the present two samples and by introducing a third (14-year-old) sample into the program.

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## EVALUATION STUDIES OF PARTICULAR POLICIES AND PROGRAMS

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### **Patterns of School Organization**

Phillip A. McKenzie

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(This project was funded from the ACER Core Grant.)

This study is concerned with the inter-relationships between enrolment numbers, curriculum and organizational structures, and resource usage in secondary schools. The impetus for the study has been provided by current interest in increasing retention rates to the senior secondary year levels. The study aims to contribute to this debate by an analysis of the resource implications of school curricula and organizational changes designed to improve retention rates. A general model of the relationship between the major characteristics of curricula and organizational structures and resource costs has been developed, which examines changes in per student operating costs, as enrolments rise, in terms of changes in the spare capacity of those structures. The model will be tested on data pertaining to existing and proposed forms of secondary school organization. A desired outcome of the study is a relatively simple means for school and system level administrators to assess the likely resource implications of particular types of organizational change.

#### *Publications*

Ainley, J. and McKenzie, P. Staffing government schools. *Unicorn*, 1984, 10(2), 191-6.

McKenzie, P.A. *The Development of Upper Secondary Colleges in Victoria: Some Resource Implications*. Hawthorn, Victoria: ACER, 1984. (mimeo.)

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## NATIONAL STUDIES OF EDUCATIONAL OUTCOMES

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### **Youth in Transition**

Trevor H. Williams, Jeffery J. Clancy, Jennifer Slater

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(This project was funded in part by grants from the Commonwealth Department of Education and Youth Affairs, the Commonwealth Schools Commission, the Commonwealth Tertiary Education Commission, and the Bureau of Labour Market Research, and in part from the ACER Core Grant.)

'Youth in Transition' entered its sixth year during the period in question. The older of the two samples received their sixth yearly questionnaire and the

younger sample their third through the mail in December 1983. At the time members of the samples were about 22 years of age and 17 years of age respectively. Follow-up mailings continued through the first quarter of 1984. The older group returned 80 per cent of the questionnaires sent and the younger group responded by returning 82 per cent.

Analyses concerned with weighting adjustments to compensate for sample attrition were completed and data analyses are underway. Publications planned for the coming year include a paper on social-psychological influences on retention in school, a volume describing the first six years of the study and the data obtained during that period, and a revised version of the stocks and flows analyses prepared in 1983.

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## **Secondary School Mathematics and Technological Careers**

Warren B. Jones

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(This project was funded from the ACER Core Grant and from grants received from the Institution of Engineers, Australia [Victoria Branch].)

This study, undertaken in collaboration with the Institution of Engineers, Australia (Victoria Branch), grew out of a concern about the apparent decline in the numbers of secondary school students taking advanced mathematics courses and the effects of this on the development of careers in technological fields.

Specifically, the study is concerned with an exploration of the factors which might influence a young person, in the first instance, to take mathematics or not in Year 12 and, in the second instance, elect to take advanced mathematics as opposed to an ordinary or basic level of mathematics. Particular attention is given to the low participation rate of females in mathematics courses.

Work commenced on the project in July 1983 using a sample of students who had participated in the IEA Mathematics study in 1978. Data have been obtained from a mail survey, conducted in December 1983, of 5337 18-year-olds, a group for which ACER had already gathered in 1978 a great deal of information on mathematics achievement and attitudes. The survey produced two subgroups of young people: those who had completed Year 12, the group of particular interest to this study, and those who had left school early before completing Year 12.

In the next stage of the project, data for both groups will be analysed and a draft report produced by the end of 1984. The final publication of a report on completion of the project is scheduled for June 1985.

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## Secondary School Retention Project

John G. Ainley, Margaret Batten, Hilary Miller

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(This project was funded in part by a grant from the Victorian Education Department and in part from the ACER Core Grant.)

This study was concerned with the retention of students from Year 10 to Year 12 in the government high schools of Victoria. Its primary focus was on understanding the differences in retention rates between schools. It examined retention rates, and the views of students, teachers, parents and former students. The study made use of analyses of official records, quantitative analyses of questionnaire data, and qualitative methods.

It was found that differences between schools in retention rates were associated with both the environment in which the school was located (socioeconomic status, percentage of students from a non-English-speaking background, and whether the school was in the city or country) and the offering of an alternative program at Year 12. Even though relatively few high schools offered such programs at Year 12, for those schools the retention rate was higher than would have been expected.

More detailed studies of 16 schools revealed a variety of ways in which school policies were associated with differences in retention. In general, schools with high retention either had well co-ordinated programs, provided alternative programs, and matched programs to student aptitudes or had an academic orientation and successful HSC records.

Students in the 16 schools placed greatest importance on the personal investment value (career, job) in deciding to remain at school. However, enjoyment and interest in school were middle-ranked reasons for continuing at school. Among Year 10 students, an intention to remain at school was linked to feeling successful and the perceived quality of school life. It was also found that both curriculum factors and the extent of co-ordination of the school program related to the quality of school life.

In addition to producing a final report at the conclusion of the study, a series of progress reports were provided during the course of the study.

### *Publication*

Ainley, J.G., Batten, M., and Miller, H. *Staying at High School in Victoria*. (ACER Research Monograph No.23). Hawthorn, Victoria: ACER, 1984.

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## **Post-compulsory Schooling Project**

John G. Ainley, Margaret Batten, Hilary Miller

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(This project was funded in part by a grant from the Commonwealth Department of Education and Youth Affairs, the Commonwealth Schools Commission, and the Commonwealth Tertiary Education Commission and in part from the ACER Core Grant.)

This study was undertaken at the request of a group of Commonwealth Government agencies for the purpose of providing information about patterns and trends in retentivity in government schools. The project was intended to provide information as soon as possible and, to that end, five progress reports have been provided to the agencies and the States involved since December 1983. The project commenced in September 1983.

Analyses have been conducted at three levels to provide complementary perspectives on patterns and trends in retention rates. These involve the analysis of data for state systems of education, the analysis of differences between schools, and the analysis of student responses to questionnaires.

The analyses at the state system level have examined patterns and trends in relation to the provision of equivalent courses through TAFE, and in relation to participation in non-government schools. It notes the significant contribution of full-time programs of study in TAFE equivalent to Year 11 and Year 12. These analyses were based on official data.

For the examination of differences between schools, data about retention rates over several years were gathered for the government schools which had participated in IEA mathematics study in 1978. By using this combined set of data, it was possible to examine factors which were related to school retention rates.

In late 1983, a survey was undertaken of Year 10 students (over 8000) and Year 11 students (over 6000) in the government schools of six education systems. The responses to those surveys provided information concerning students' reasons for remaining at or leaving school and their future intentions regarding school and work.

The final report of the study is near completion.

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## **STUDIES IN THE EDUCATION OF SPECIAL GROUPS**

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### **Alternative Year 12 Curricula**

Margaret Batten

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(This program was funded from the ACER Core Grant.)

The Victorian Secondary School Retention Study found that schools which offered an alternative course at Year 12 had higher than expected retention

rates. Past and present students from these schools were more satisfied with the quality of their school lives and the relevance of their courses than were students from schools with only academic Year 12 courses.

One of the alternative Year 12 courses in Victoria is the Schools Year Twelve and Tertiary Entrance Certificate (STC) course, available in 44 schools in 1984. The present study plans to undertake an evaluation of the course, which will involve: an analysis of the assumptions underlying the course, and of the extent to which these assumptions are realized in course structures and curriculum processes; the construction of a profile of students in alternative and traditional Year 12 courses, and the monitoring of students' responses to the courses; and an examination of students' perceptions of the outcomes of the courses.

A survey will be undertaken in the 44 STC schools of a cohort of students as they proceed from Year 11 to Year 12 and then to their first post-school year. Detailed studies will be undertaken of some of these schools and their students.

A similar study may be undertaken in some schools which offer alternative Year 12 courses in South Australia.

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## STUDIES OF SCHOOL AND HOME PRACTICES

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### **School Structures and Affective Responses**

John G. Ainley, Margaret Batten

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(This project was funded from the ACER Core Grant.)

This project has had only a small amount of time over this year as the project officers have been engaged in two studies of retentivity in schools. The project encompasses the complementary interests of staff in the conceptualization and measurement of affective outcomes and social behaviour of schools, and in the characterization of organizational structures within schools. Over the year the Quality of School Life Questionnaire has been used by several schools and groups with data being provided to the ACER for use in revision of the instrument. Data from the study of Victorian retention rates were used in the development of the questionnaire.

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## PROGRAM IN MEASUREMENT AND EVALUATION

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### Advisory Committee

Professor D. Spearritt (Chairman), Associate Professor N. Baumgart, Mr L.D. Blazely, Mr A.R. Farmer, Professor J.A. Keats, Dr L.D. MacKay, Professor B. McGaw, Dr V.J. Russell, Dr E.R. Sandercock, Mr G. Spring, Dr J.F. Izard, Dr H.A.H. Rowe, Mr G.P. Withers. (The Committee has met twice during the year.)

### Overview

In the 1983–84 year the meetings of the Advisory Committee have addressed a number of important issues relating to either the work of the Division or measurement and evaluation concerns in the wider context of the ACER. Advice has been provided to staff of the Division with respect to future directions, services to Education Departments, and the need to address multiple audiences in addition to reviewing progress on existing projects and examining proposals for future projects. The Committee has examined matters referred for comment by the Executive Committee of Council and has provided advice to the Council.

Preparation of documents for the Review Panel's visit to the ACER in the latter part of 1983 provided a valuable opportunity to review existing procedures, and to examine the provision of instruments for a variety of clients. The *Report of the Review into the Operations of the Australian Council for Educational Research* identified areas where the ACER could provide greater assistance in the wise use of tests and encouraged the staff of the Division to be more active in liaison activities with education authorities, teachers, and psychologists.

The Division's program of research, development, and service has resulted in the publication of a number of instruments. While it is not possible to comment on all of the publications, some are mentioned here because of the significance of particular features.

In the career guidance area several instruments and associated materials were published. *The Work Aspect Preference Scale* developed by Dr Robert Pryor in New South Wales was prepared for publication and released in 1984. An Australian version of the *Career Development Inventory* has been published. Both of these instruments are able to be administered in an economic way and, if desired, the answer sheets can be scored by the ACER Optical Mark Reading (OMR) equipment.

When the OMR equipment was first used, it was expected that its use would reduce the cost of processing test responses. The use of this equipment in processing answer sheets from the October–November 1983 norming programs, which were part of the regular schedule of test revision and maintenance, has shown that this expectation has been realized. The time between the collection of data and the production of the teachers handbook has been reduced considerably. For example, the *Progressive Achievement Tests in Mathematics* (adapted for Australian use) were administered in

October–November 1983. The processing was completed, the manuscript finalized and passed to Publishing, and the typesetting was completed before the end of June 1984. This reduction of time with more efficient production of reference group data has occurred for other tests also. For example, draft versions of new teachers handbooks (which include revised norms) have been prepared for the *ACER Primary Reading Survey Tests A–D* and the ACER Paragraph Reading Test, from data collected at the same time.

Another area which has received greater attention than in the recent past is the involvement of staff in increasing personal contacts as a vital strategy in dissemination, as recommended by the Review Panel. These personal contacts have been facilitated by the willingness of education authorities to contribute to the costs incurred in visits to various States. Workshops and seminars have been conducted on test-related topics in Queensland, New South Wales, Victoria, Western Australia, South Australia, Australian Capital Territory, and the Northern Territory.

Finally, as a consequence of funding constraints in Victoria, there has been a marked change in the number of persons working in the area of test research and development at the ACER. Four staff returned to the Research and Development section of the Education Department of Victoria after working for an extended period on the Australian Co-operative Assessment Project (ACAP). Three staff who had been gaining practical experience in test development techniques completed terms of secondment. This contraction in staff within the Division must reduce the ACER's capacity to cater for changing demands for valid instruments.

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## DEVELOPMENT OF TESTS AND INSTRUMENTS FOR USE BY TEACHERS AND GUIDANCE OFFICERS

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### **Career Planning and Guidance**

Janice J. Lokan

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(This project was funded from the ACER Core Grant.)

During 1983, work was undertaken on the norming of the Work Importance Study (WIS) Values Scale and Salience Inventory, and Australian versions of Holland's Self-Directed Search, including a preliminary Occupations Finder, and Vocational Preference Inventory (VPI). The normative data collected during 1983 on the VPI, SDS, Values Scale, and Salience Inventory have all been entered onto the SPECTRA (mostly via the OMR) and edited, so that they are now ready for merging and file building. With the author's permission, only the interest scales have been included in the Australian VPI, which has been set up on an optical-mark-reader sheet to facilitate analysis. Many of the papers presented at the ACER seminar on Australian work involving Holland's theories and instruments have been edited for publication as a monograph 'Holland in Australia: A Vocational Theory in Research and Practice'.



The booklet, machine-scorable answer sheet, and the *Manual* for the *Career Development Inventory—Australia* (CDI-A) have been printed. All materials for the Work Aspect Preference Scale (WAPS) were published. While the WAPS was developed by a psychologist who is not an ACER staff member, a considerable amount of time from within the Career Planning and Guidance project has been given to the review and production of the materials.

### *Publications and Papers*

Lokan, J.J. Values and Role Commitment in Australian Students. Paper presented at the Annual Conference of the Australian Association for Research in Education, Canberra, 1983.

Lokan, J.J. *Career Development Inventory—Australia: Manual*. Hawthorn, Victoria: ACER, 1984.

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## **Victorian School Achievement Tests**

Jackie Sykes, Lee Waddell, Lesley Howard Murdoch, Meredith Doig

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(This project was funded by the Victorian Education Department, and staff working on the project were seconded from that Department. The project was transferred back to the Education Department in January 1984.)

As a contribution to the Australian Co-operative Assessment Program, this project, established in July 1980, was a joint venture between the Victorian Education Department and the ACER. The aims of the project have been to provide materials which could assist teachers to evaluate the progress and development of their students in oral and written language and social learning. Materials have been designed for use mainly at the upper primary and lower secondary levels although it was envisaged that, in the long term, Years 3 to 9 could be included.

### **Oral Language**

The ACAP Oral Language Project Advisory Committee reviewed the project and produced an Interim Report on 2 December 1983. The Advisory Committee reaffirmed their support for the work of the project towards producing a national package on oral language. The Committee noted that, of the three types of material (print, video and audio) recommended for development by the National Conference on the Assessment and Evaluation of Oral Language (1982), three documents in two formats had already been produced. These are *Oral Language Education—A Focus on Development* (print), and *To Talk of Many Things* (video). All of these had been field tested in collaborative inservice settings in several States including Victoria, Western Australia and South Australia with other States reviewing and commenting. Since the Advisory Committee's Review, a third video program has been edited into a trial version and field tested in Victoria, and the narration script revised. Work has continued on writing up the data resulting from

collaborative efforts between Victoria and Western Australia. A substantial print document should appear by the end of 1984. Some work has been done towards planning audio-tape material. However, it is not known whether limitations of time and resources will permit the completion of this segment of the material by the end of 1984.

### **Writing**

The Writing Attitude Scale has been finalized. Design for typesetting is almost complete. The associated manual has been entered on to the word processor. Arising from developments in the school-based workshop groups, materials for an exemplar model are being designed. The purpose of the model is to show the use of assessment resources in curriculum implementation and development at the classroom level. Its major focus is on the writing development of individuals within this context. The model entitled 'The Book of Me' represents the third developmental phase of the assessment in writing education project. A theoretical framework for evaluation guidelines in narrative writing continues to be developed.

### **Social Studies/Learning**

The eight draft booklets on Assessment in the Social Sciences/Social Learning have been distributed to the States and feedback has been obtained. A potential bibliography of curriculum and evaluation materials relevant to this area has been compiled. A video on 'Collaborative Evaluation' has been planned to complement the written materials.

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### **Item Banking**

John F. Izard, Raymond J. Adams

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(This project was funded by ACER's income from sales and by the residue of a grant from the Victorian Education Department. Mr Adams was seconded from the Victorian Education Department.)

The experimental computerized adaptive testing program (using a RAPT data base) written in BASIC for Apple II has been completed to a stage where classroom trials are possible. Simulated data trials suggest that the model is effective. It is hoped that some classroom trials can be undertaken in the next financial year. Work is proceeding on the development of test analysis programs for use by teachers with their own tests.

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## **Biology Item Banking Project**

David W. Brown, Jeffery J. Sewell (consultant)

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(This project was funded by ACER's income from sales. Mr Brown was seconded from the Victorian Education Department.)

Following developmental work undertaken since February 1982, the Australian Biology Test Item Bank is within sight of publication. Almost all multiple-choice item writing was completed by December 1983, and trial testing of the items was carried out in over 100 selected government, Catholic, and independent schools in New South Wales, Victoria, South Australia, Western Australia, and the Australian Capital Territory. Analysis of the test data provided empirical evidence on the items.

The final selection or modification of items took into account not only the statistical data, but also the constructive criticisms made by teachers and students. Selected items from the out-of-print ACER Biology Achievement and Diagnostic Tests were field tested and included, so that this valuable material would not be lost.

Throughout the project, the items have been processed on the in-house word-processing system, enabling final copy to be sent direct from Wang diskette to the Itek typesetter. The item bank will be published in two volumes. Volume I (containing items assessing the most common Year 11 courses) is projected for publication in early 1985, while Volume II (Year 12) will be available during September 1984.

### *Paper*

Brown, D.W. and Sewell, J.J. *Using the ACER Australian Biology Test Item Bank for Instruction and Assessment*. Workshop paper presented at the Victorian Science Teachers Association Conference, 'Science Teaching—Present and Future' at Monash University, December 1983.

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## **DEVELOPMENT OF TESTS AND INSTRUMENTS FOR USE BY PSYCHOLOGISTS**

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### **Non-Verbal Ability Tests**

Helga A.H. Rowe

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(This project was funded from the ACER Core Grant.)

This project has been in existence for the past three years. During this time a domain-referenced battery of non-verbal tests for the assessment of general and more specific abilities was developed. The *Non-Verbal Ability Tests*, abbreviated as NAT, can be administered to individuals or groups from

the age of eight years to adult, and do not require verbalization, reading, or writing in either the administration or the completion of the largely figural and diagrammatical stimulus material. The assessment yields an ability profile, the level and shape of which can be interpreted for individuals and groups.

At the core of the theoretical model underlying the NAT and its procedures lies the notion of ability or intelligence as a functional system. Briefly, the NAT model assumes that general ability and intellectual achievement originate not from isolated skills and discrete abilities, but from the co-operation and interaction of many component skills—all of which are necessary, but none of which are sufficient in themselves to ensure adequate intellectual functioning. When one part of the functional system is weak or lacking, other aspects and often the whole system are affected and incapacitated to a greater or lesser degree, depending on the pattern of strengths and weaknesses and the demands of the tasks with which the individual is confronted.

The rationale for the battery rests on three premises which were derived from the existing body of knowledge in experimental and developmental psychology, and from psychometrics.

Premise 1 is that not all individuals operating at the same level of intelligence—for example, measured IQ, NAT score, etc.—manifest the same pattern of cognitive strengths and weaknesses. Rather, they constitute a heterogeneous group. The same is true for individuals with learning disabilities, underachievers, and low achievers.

Premise 2 is based on the belief that intellectual ability is to a large extent dependent on the efficiency of the individual's information-processing capacity, and not the outcome of a unique, generalizable, somewhat magical characteristic or substance 'intelligence'. Under this premise, manifestations of temporary or lasting intellectual difficulties or deficits are not necessarily the result of a generalized intellectual weakness, but might be explained in terms of an imbalance in the individual's information processing abilities—for example, over- and under-use of certain cognitive strategies, the use of problem-solving strategies which do not match the requirements of the task, cognitive style, etc.

Premise 3 is that intelligence is malleable. Research over the past 15 years has provided evidence that a large number of intellectual skills can be developed, increased, and compensated for, as a result of appropriate training and experience. The ability profile provided by the NAT can provide 'diagnostic' information which will be of assistance to those whose aim it is to increase the intellectual efficiency of children and adults, or to help those who have to learn to compensate for the lack of certain cognitive skills by utilizing others.

The products consist of 18 paper-and-pencil tests which assess general ability of the 'g' type—perceptual, conceptual, memory, attention, and concentration skills; a substantial *Manual for the Non-Verbal Ability Tests*; and a monograph entitled *Language-Free Evaluation of Cognitive Development*.

Analyses of trial data obtained from a variety of age and ethnic groups, including a sizeable sample of Aboriginal students from the Northern Territory and a group of institutionalized mentally retarded adults, provided evidence of the validity of the battery. It was possible to show that the scores obtained on the NAT correspond to differences in 'real' abilities or disabilities between individuals, and that the meaning of the NAT score is the same across the age range and for ethnic groups. In addition to this, variables leading to successful performance could be identified for all areas measured by the NAT.

#### *Tests, Publications, and Papers*

Rowe, H.A.H. Ability assessment. *Australian Educational and Developmental Psychologist*, 1984, 1(2), in press.

Rowe, H.A.H. *Language-Free Evaluation of Cognitive Development*. Hawthorn, Victoria: ACER, in press.

Rowe, H.A.H. *Manual for the Non-Verbal Ability Tests*. Hawthorn, Victoria: ACER, in press.

Rowe, H.A.H. *Non-Verbal Ability Tests*. Hawthorn, Victoria: ACER, in press. 1 Matching Shape (P); 2 Matching Direction (P); 3 Categorization (C); 4 Picture Completion (C); 5 Embedded Figures (C); 6 Figure Formation (C); 7 Mazes (C); 8 Sequencing (C); 9 Picture Arrangement (C); 10 Visual Search (P, A); 11 Simple Key Test (A); 12 Complex Key Test (A, C); 13 Code Tracking I (A, P); 14 Code Tracking II (A, P); 15 Visual Recognition (M); 16 Auditory Recognition (M); 17 Auditory Recall (M); 18 Visual Recall (M)

Rowe, H.A.H. Problem solving strategies. *set*, 1984, No.2, in press.

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## TESTING SERVICES AND PROGRAMS

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### **Australian Scholastic Aptitude Test**

Graeme Withers, Allyson Holbrook, George Morgan,  
Raymond J. Adams

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(This program was funded from income from users.)

The ASAT Series M has been prepared for administration to the Year 12 populations in the Australian Capital Territory, Western Australia, and Queensland. No changes were made to the format and structure of the test, and it conformed with the specifications as agreed in 1976. In addition, the final version of ASAT Series M was submitted to an external panel, who examined the test for possible test and item bias and reported to the ACER on the quality of the test from this perspective.

A meeting of users was convened in March to discuss research and other matters and a final report on ASAT L was tabled at this meeting.

Item preparation and trial testing again took place: the latter was conduc-

ted in New Zealand in March 1984, with assistance from the New Zealand Department of Education and the New Zealand Council for Educational Research. New editions of the Sample Collection of Questions and the Students Information Booklet were also prepared.

#### *Tests, Publications, and Papers*

*Australian Scholastic Aptitude Test: Series M.* Hawthorn, Victoria: ACER, 1984.

Adams, R.J. and Withers, G.P. A Report on the 1983 Australian Scholastic Aptitude Test (ASAT Series L). Hawthorn, Victoria: ACER, 1984. (mimeo.)

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### **ASAT Special Testing Program**

Noel McBean

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(This program was funded from income from users.)

The program continued in its established pattern during the period July 1983—June 1984. An increase in the number of candidates tested was in part caused by the newly structured admission system operating in South Australia through the South Australian Tertiary Admission Centre. Relevant figures are:

Humanities content (100%)—1470 candidates, 14 institutions;

Humanities/maths sciences (66%/34%)—840 candidates, 6 institutions;

Humanities/maths sciences (50%/50%)—108 candidates, 3 institutions.

In co-operation with Monash University Higher Education and Research Unit, three new tests have been tried out on a sample of HSC students in the Melbourne metropolitan area, and follow-up studies relating HSC performance and ASAT scores are in progress.

Preparatory work for the transfer of the program's scoring and reporting service to a computer base using OMR answer sheets has been completed for the commencement of the 1984–85 program.

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### **Co-operative Scholarship Testing Program**

Evelyn Watson

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(This program was funded from income from users.)

This program has been conducted since 1962 for a number of independent schools in all Australian States. It provides a battery of tests at two levels: Level 1 for entrance to secondary school; and Level 2 for continuation beyond either Year 8 or Year 9 (depending on the State). The areas examined at Level 1 are Written Expression, Humanities, and Mathematics. At Level 2, a Science component is included with the Mathematics. The

overall regulation of the program resides in a policy committee representing independent schools and the ACER. The administration of the program, including development of tests, test marking, and score reporting, is carried out by the ACER. Test scores, standardized by level and by State, are returned to schools. The use made of these scores varies, but it provides an important element in assessing scholarship candidates.

In 1984, nearly 9700 candidates registered for scholarships offered by 95 schools. The candidates sat either at participating schools or at one of the 53 country centres or 48 overseas centres set up by the ACER. Development and trial testing of items for future use is an ongoing part of the program.

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## **South Australian Co-operative Entry Program**

Evelyn Watson

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(This program was funded from income from users.)

This annual program was conducted for the second time in 1984 for independent schools in South Australia. The program involves the provision of a battery of tests at one level only: entrance into secondary school. The tests provide two types of measure: a measure of level of achievement, and a measure of scholastic aptitude. The areas examined in the achievement tests are reading, mathematics (problems and computations), and language usage. The areas examined in the scholastic aptitude tests are humanities, mathematics comprehension, and written expression. The overall regulation of the program resides in a policy committee representing South Australian independent schools and the ACER. The administration of the program, including development of tests, test marking, and score reporting, is carried out by the ACER. Standardized test scores are reported to the schools.

The use made of these scores varies, but it provides an important element in assessing achievement prior to the point of entry to secondary schools, and in assessing scholarship candidates.

In 1984, just over 2000 candidates registered for scholarships and/or places offered by 13 South Australian schools and one Victorian school. The candidates sat either at participating schools or in one of the 10 country and overseas centres set up by the ACER. Development and trial testing of items for use in succeeding years is an ongoing part of the program.

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## **Miscellaneous Testing Services**

Noel McBean, John F. Izard, Evelyn Watson, Graham Ward

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(These services were funded from income from users, and income from sales.)

### **V-LINE**

Test papers completed by apprenticeship applicants were marked, scores converted, and results reported to V-LINE.

### **ETS Testing Program**

This program becomes more demanding in terms of time from year to year as the information and advisory aspect continues to grow. Twenty-four separate test administrations were arranged and conducted during the 12-month period.

### **Psychological Corporation Testing Program**

Arrangements for testing candidates throughout Australia who are required to take the Miller Analogies Test continues to be ACER's responsibility. The Corporation charges US\$15 for every test administration and arrangements must comply with regulations laid down. As far as possible the expenses are recovered by charges to the candidates, who are all applicants for postgraduate study in USA or Canada.

### **Applicants for Nurse Training**

A two-hour version of the ASAT is used in three States to test nurse applicants. The numbers have built up over two years and now appear to be stable. The program is small and continued monitoring is required to check its viability in a situation of rising costs.

### **Year Eleven Entry Tests**

This small program is an offshoot of the Co-operative Scholarship Testing Program and basically is an additional service program at an older age level for schools making use of CSTP test materials. It has shown growth from year to year and is considered useful and viable within the context of the CSTP.

### **Nauru Scholarship Testing Program**

Test papers for the award of scholarships at two levels were again prepared for the Nauru Department of Education. The ACER undertook the marking of written expression papers from this program.

### **Committee on Overseas Professional Qualifications (COPQ)**

Trial test papers of a new Physiotherapy test were marked and analyses and interpretation of the results supplied. A workshop was conducted for COPQ members and the chairmen of all the expert panels in a number of disciplines.



The workshop was concerned with the procedures which should be followed in the preparation of trial tests, and the interpretation of test data for the purpose of selecting final forms of the various test instruments which the committee requires.

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## **Optical Mark Reading and Test Scoring Services**

Janice J. Lokan

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(The initial developmental work to establish these services has been funded from the ACER Core Grant. Services to users are funded from income from those users.)

The ACER has a Longines LD-7540 Optical Mark Reader (OMR). This OMR facility is now able to be used in ACER research and development projects. The service offered to outside clients as well as to internal users has a comprehensive test-scoring, analysis, and reporting program. The new system has resulted in considerable savings and processing costs and processing time for typical ACER projects, particularly in the processing of norms. Specially designed answer sheets for several tests and attitude scales are now available.

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## **MAINTENANCE OF EDUCATIONAL AND PSYCHOLOGICAL TESTS**

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### **Maintenance of Psychological Tests**

Marion M. de Lemos

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(This project was funded by ACER's income from sales.)

The norming of the Australian adaptation of the *Differential Aptitude Tests*, the adapted version of Advanced Form R of the *Otis Lennon School Ability Test*, and the *ACER Higher Tests ML-MQ* and *PL-PQ* has been completed. The analysis of the data from this norming program, the construction of norms, and the preparation of the manuals are proceeding.

A multiple-choice format of the B66 Aptitude Test has been prepared for the Public Service Board in Canberra. This format was developed on the basis of an analysis of the open-ended responses given by a sample of approximately 1000 candidates who took the open-ended form of the test in 1983. Item analyses of the 1983 test data have been undertaken to examine the reliability and the item statistics of the open-ended form of the test. The multiple-choice format of the test will be used by the Public Service Board for its 1984 testing program, and similar analyses will be undertaken on the

1984 data to enable a comparison of the item and test statistics of the open-ended and multiple-choice formats of the test.

A number of queries have been received from test users, relating to the new norms for the ACER Intermediate, Higher, and Advanced level tests. These queries have drawn attention to problems associated with relating the new norms on these tests to the earlier norms, and to problems of obtaining appropriate norming samples for age levels beyond the age of compulsory schooling. Consideration is being given to various ways in which information on the relationship between the old norms and the new norms may be obtained and presented to test users, and to ways in which norms for age levels beyond the age of compulsory schooling may be obtained.

#### *Publications and Papers*

de Lemos, M. The Australian Adaptation and Norming of the Differential Aptitude Tests. Display and Discussion Paper presented at the 18th Annual Conference of the Australian Psychological Society, Sydney, August 1983.

de Lemos, M. Test development at the ACER: A historical perspective. *ACER Newsletter*, 1983, No.48, 2-3. (Reprinted in the *Bulletin of the Australian Psychological Society*, 1983, 5(5), 23-5.)

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## **Maintenance of Educational Tests**

Graham Ward

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(This project was funded by ACER's income from sales.)

### **Progressive Achievement Tests in Mathematics**

The revision of the NZCER PAT Mathematics tests was completed. The sets of tests at three levels of difficulty were prepared using a Rasch calibration procedure, and the tests were used in a standardization study in November 1983. Percentile rank and stanine scores were prepared together with Rasch-scaled achievement scores.

The Teachers Handbook has been finalized and is now being published. An OMR answer sheet was designed for use in the standardization program and will be made available as the standard answer sheet for the series for hand-scoring or for scoring through the ACER Test Scoring Service.

### **Norming Program 1983**

Testing for a norming program to produce norms for a number of ACER tests was conducted in November 1983 in a sample of 76 primary schools and a sample of 76 secondary schools drawn from all Australian States and Territories. In addition to the *Progressive Achievement Tests in Mathematics* at Years 3-8, the *Primary Reading Survey Tests* were tested at Years 3-6, the *Paragraph Reading Test* at Year 7, the *Class Achievement Tests in Mathematics* (CATIM) tests at Years 4-7, and a number of the *Review and*

*Progress Tests* (RAPT) at Years 3–7. The program involved 52 sets of year norms and a total of some 25 000 sets of student answers.

The *Progressive Achievement Tests*, the *Primary Reading Survey Tests*, and the *Paragraph Reading Test* were answered on OMR sheets, and these were read directly using the OMR reader. The CATIM tests were answered on special answer sheets and these were recoded onto mark sense cards. The RAPT tests were marked and the responses coded onto mark sense cards. Computer files of item responses were built and the ACER Test Scoring Service programs used to return results to schools. The return of results was completed in March 1984.

Norms have been prepared for the *Progressive Achievement Tests in Mathematics*, *Primary Reading Survey Tests*, *Paragraph Reading Test*, and CATIM tests. The Primary Reading Survey Tests and Paragraph Reading Test Teachers Handbooks have been revised, keyed into the word processor, and circulated for comment. Work is proceeding on the revision of the CATIM Teachers Handbooks.

### **Norming Program 1984**

Preparations have begun for a standardization program for the Progressive Achievement Tests in Reading Vocabulary and Reading Comprehension at Years 3–9. Testing is to be undertaken in October 1984. The samples of primary and secondary schools have been selected and the State Education Departments and Catholic Education Offices have been approached. Work has begun on preparing the letters to schools and return sheets, the Information for Test Co-ordinators and the Information for Teachers documents, together with the Instructions for Administration.

### **ACER Short Clerical Test, Form C, D, E**

The revised Manual is being published. An examination was made of the results from the equating study to test the effect of handedness on the test scores in the Checking sub-test.

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## PROGRAM IN LEARNING AND TEACHING

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### Advisory Committee

Dr G.A. Ramsey (Chairman), Dr N. Bowman, Professor J.B. Biggs, Dr A. Cross, Associate Professor R.L. Debus, Professor P.W. Hughes, Dr A.S. Ryan, Mr A. Trethewey, Dr G.J. Whitehead, Mr S.F. Bourke, Dr M.J. Rosier, The Director (The Committee met twice during the year.)

### Overview

The current program of the Learning and Teaching Division has several foci. Perhaps the most important is concerned with the curricula of Australian primary and secondary schools. Several studies directly related to the school curriculum are being undertaken. The Second IEA Science Study is specifically involved in the mapping of the science curriculum at the upper primary school, the middle secondary school, and the pre-tertiary levels. It is concerned, first, with the 'prescribed' curriculum, as specified by the appropriate authorities in the educational system; secondly, with the 'translated' curriculum, representing the detailed implementation of the curriculum by the classroom teacher and the school and thus the opportunity provided for students to learn specified content and skills; and thirdly, with the 'achieved' curriculum, as demonstrated by students' performance on achievement tests and attitude scales. These three stages in the teaching and learning of the science curriculum of the schools are being investigated and the relationships between the stages examined. Student learning is influenced by many factors in addition to time available and opportunity to learn the content and skills tested, and the mapping of the curriculum in Australian schools must consider the other factors that influence student performance. A second study being carried out is concerned with community needs and expectations in the language area. It is hoped that the evidence provided by the study will be of value and assistance to the Senate Standing Committee on Education and the Arts which is undertaking an inquiry into the development of a national language policy for Australia.

During the past year, work has commenced on a new and important investigation into devolution of responsibility for the curriculum. In many parts of Australia, there has been not only a decentralization of the administration of education from a central office to regional offices, but also a substantial devolution of responsibility for the curriculum from central control to determination by schools, their teachers, and their councils. The nature and extent of the changes that have occurred have not been fully documented, nor have the consequences of these changes been examined with respect to the determination and development of the curricula of the schools and of the methods of teaching and learning employed in the schools. It is essential that these issues should be investigated in a significant and sustained program of research.

A second focus of the research being undertaken within the Division has

been concerned with studies of teaching behaviours. A report of an extremely interesting investigation involving the analysis of a complex body of data has examined the variation in teaching behaviour with respect to class size. In connection with this study, a technique of multilevel analysis has been employed which, when used in conjunction with other analytical procedures, has helped to tease out the relationships between class size and achievement in the natural classroom setting, where a contrived experimental study has not been imposed. In addition, the IEA Classroom Environment Study has been completed as far as the second phase, and a detailed report prepared on teaching practices and their effects on both achievement and attitudes in Year 5 mathematics classrooms in Victoria. Planning has started for the third phase of the investigation: that is to be an experimental study in which efforts are made to change teachers' classroom behaviours and in which the effects of such changes on students' achievement and attitudes are examined. It would seem important that this investigation should be carried through to this third and final phase. However, it will be necessary for appropriate teaching behaviours, which are not only malleable but also likely to influence student learning, to be carefully identified before attempts are made to change teachers' classroom practices.

A third focus has been concerned with the studies of language learning of different cultural groups. A report of the work carried out by Mr John Mills, prior to his retirement through permanent disability, has recently been published by the Commonwealth Department of Immigration and Ethnic Affairs in the Studies in Adult Migrant Education series with the title: *Evaluation for the On-Arrival Stage of the Adult Migrant Education Program*. In addition, during the year the report of a study which was being carried out by Mr Mills before his retirement has been completed by Mr G.P. Withers and forwarded to the Commonwealth Department of Education and Youth Affairs. This project has involved the evaluation of the three forms of the Short Selection Test which was used to determine the levels of proficiency in English of private overseas students who wished to study in Australia.

In the studies conducted within the Learning and Teaching Division, there is not a reliance on one research methodology. This is well exemplified by the study carried out by Mr R.J. Adams, on secondment from the Victorian Education Department, and reported in the publication, *Sex Bias in ASAT?* which has received widespread publicity, particularly in the Australian Capital Territory. In this study a variety of investigational procedures were employed to ensure a thorough examination of the factors contributing to differences in performance on ASAT of male and female students at the Year 12 level. The following research strategies were used and reported on: a mathematical model for the effects of retention differences on differences in performance was developed and tested; four attitude scales were developed and survey procedures were used to obtain data on students' attitudes; students were interviewed in order to probe differences between male and female students in different schools and school systems with respect to their views on the ASAT test; secondary data analyses were undertaken, with the complete population of students in the Australian Capital Territory, in an

attempt to identify bias in the test items; and a causal model was developed, the model tested and path coefficients of the model estimated with the data available for the three school systems using the ASAT test. All of these procedures of investigation were seen as necessary and each provided insights into the nature of the apparent sex bias in ASAT. It is clearly important that reliance should not be placed on one and only one research strategy, but that different procedures of inquiry should be used as are appropriate to answer the research questions being investigated.

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## EVALUATION STUDIES OF PARTICULAR POLICIES AND PROGRAMS

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### **Devolution of Curriculum Development**

Andrew Sturman

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(This study was funded from the ACER Core Grant.)

This study is concerned with the processes by which schools make decisions concerning the curriculum. In particular the study focuses upon the relationships that schools have with their communities and their regional offices with respect to curriculum decision making. Five general purposes are envisaged for the study:

- 1 to describe which participants are involved in decision making and to establish the type of decisions made by the different participants;
- 2 to establish any key factors contributing to the decision-making processes;
- 3 to illuminate the advantages and disadvantages of different decision-making processes;
- 4 to compare decision-making processes across different schools and different systems;
- 5 to relate the findings and comparisons to organizational theory in order to help illuminate present practices and anticipate the effects of changing policies.

The study is in its early stages and is not due to be completed until July 1987. Case study methodology will be employed and the study is likely to be conducted in three different States.

Two articles have been prepared for submission to different journals, one on the philosophy of case study methodology and the other on educational ideology and its relationship to curriculum decision-making processes.

### **Second International Science Study**

Malcolm J. Rosier, John P. Keeves, Christopher M. Kay (to December 1983), S.B. Thoradeniya (to December 1983), Joan Richardson (from March 1983)

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(This project was funded from the ACER Core Grant. The costs associated with printing and postage for documents sent to other countries, for data processing, and for international travel of the International Co-ordinator (Dr Rosier) and members of the International Steering Committee for the study have been covered by a grant from the Japanese Shipbuilding Industry Foundation, Tokyo, Japan. Mr Kay was seconded from the Victorian Education Department. Mr Thoradeniya was seconded from the Ministry of Education, Sri Lanka, under the UNDP Fellowship Program.)

The Second International Science Study is being conducted by the ACER under the auspices of the International Association for the Evaluation of Educational Achievement (IEA). The International Centre for the study is located at the ACER, and Dr Rosier is the International Co-ordinator of the study.

The aim of the study is to describe science education around the world, including an analysis of the science curriculum, measures of student achievement and attitudes, and information about characteristics of students, teachers, and schools. Within each educational system, these data will be used to explain differences between students with respect to their achievement and attitudes. The analyses will be replicated in the 25 educational systems participating in the study, in an endeavour to identify common patterns of relationships across systems.

Some of the systems in the study also took part in the first study in 1970, and for these systems the study will offer the opportunity to examine changes in curriculum, achievement, and attitudes over the intervening period.

The study is being conducted at three population levels:

Population 1 contains 10-year-old students in Years 4-6;

Population 2 contains 14-year-old students in Years 8-10;

Population 3 contain Year 12 students, including both those studying science and those not currently studying science.

During the period under review, the main activity of the study in Australia was the conduct of the extensive testing program, involving several hundred government and non-government primary and secondary schools drawn from all States of Australia. Work on assembling the information gathered by means of the testing program into datafiles for analysis is still proceeding, although priority has been given to the preparation of school reports, in which the results on the science tests for each student in the sample were returned to the schools from which the students were selected. It is intended that an initial report based on the Australian data should be published during 1985.

Similar large testing programs have been taking place in the other systems, and they in turn have been working on the development of their national datasets. The schedule for the study calls for the submission of the national datasets to the International Centre by the end of 1984, where the data will be checked prior to undertaking specified cross-national analyses. The specification of the structure of the datasets and the nature of the analyses to be carried out are tasks undertaken in a co-operative manner by the National Research Co-ordinators from the participating systems. This work is partly done by correspondence with the International Co-ordinator, and partly at the annual meetings of the National Research Co-ordinators. The most recent meeting, which was held in New York in September 1983, was organized by the United States National Center for the study at Teachers College, Columbia University, and supported by a special grant from the National Center for Educational Statistics (NCES), Washington, United States of America.

Some preliminary results of the Australian science curriculum analyses were presented by Mr Kay at the 1983 annual conference of the Australian Science Teachers Association, enabling teachers to obtain a general picture of the science curriculum at a time when much curriculum development is taking place at the school level. Further results from the study will show how the patterns of science curriculum and patterns of participation in science are associated with student achievement and attitudes. For example, the results will show the extent to which girls are studying science in general, and physical sciences in particular, and also their levels of achievement relative to male students.

At the cross-national level the study will provide comparable results obtained from other educational systems. Of particular interest to educators in Australia will be the measure of achievement from other educational systems in the Asian-Pacific region, including Papua New Guinea, Singapore, Thailand, Hong Kong, the Philippines, Japan, China, and the Republic of Korea. It is planned to publish the first reports of cross-national analyses in 1986, provided that the data from the participating systems are received in time to be incorporated into the reports.

#### *Publications and Papers*

- Kay, C.M. *Analysis of Science Curricula in Australia*. Hawthorn, Victoria: ACER, 1983. (mimeo.)
- Keeves, J.P. The Second IEA Science Study—General Overview and Commentary. In T.J.H.M. Eggen (Ed.), *Open Session: General Assembly, 1983*. Enschede, The Netherlands: Twente University of Technology, 1983, 72–3, 82–4.
- Keeves, J.P. A természetidomanyok iskolai tanulásának fogalmi rendszere. *Pedagogiai Szemle*, 1983, 23(12), 1170–6.
- Rosier, M.J. *Codebook for International Instruments*. Hawthorn, Victoria: ACER, 1983. (mimeo.)
- Rosier, M.J. and Kay, C.M. *A Report on the Position of Science Education in Australia*. (A Report Prepared for the APEID Regional Meeting on 'Science for All', Bangkok, September 1983.) Hawthorn, Victoria: ACER, 1983. (mimeo.)



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## STUDIES IN THE EDUCATION OF SPECIAL GROUPS

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### **Sex Bias in ASAT**

Raymond J. Adams

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(This project was funded by the Commonwealth Department of Education and Youth Affairs, the ACT Schools Accrediting Agency, the Board of Secondary School Studies, Queensland, and the Tertiary Institutions Service Centre, Western Australia.)

This project was concerned with determining the origins of the sex differences that have been observed in students' performance on the Australian Scholastic Aptitude Test (ASAT). The investigation was undertaken in the three examining regions that currently use ASAT for moderation at the Year 12 level: Queensland, Western Australia, and the Australian Capital Territory.

Because of the complex nature of sex differences research, five distinct areas were addressed:

- 1 the effects of retention rate differences between males and females,
- 2 the possibility of item bias,
- 3 differences in attitudes towards ASAT,
- 4 differences in preparation, and
- 5 the effect of differential course selection.

The possible effects of retention were modelled using a mathematical model based on the assumptions that there existed a normal distribution of aptitude, as measured by ASAT, in the population, and that those students who were retained to sit ASAT would be the students with greatest aptitude. Item bias was investigated using latent trait theory, classical test theory, and factor analysis to analyse raw ASAT data held at the ACER. The instruments, a questionnaire and an interview schedule, were designed to study attitudes, preparation, and the differential coursework effect. The questionnaire data were later merged with students' standardized ASAT scores, to permit more detailed analyses to be carried out.

The major conclusion of the study was that there was no significant direct sex effect on ASAT scores. Important variables in determining ASAT performance were English assessments, time spent studying mathematics, and confidence in success on ASAT. Females were found to have significantly less confidence than males and this reduced their ASAT scores. It was also found that the greater retention rate of females may account for a substantial part of the observed sex differences.

#### *Publications and Papers*

Adams, R.J. *Sex Bias in ASAT?* (ACER Research Monograph No.24).  
Hawthorn, Victoria: ACER, 1984.

Adams, R.J. Sex Differences in ASAT and Retentivity. Paper presented at

the Annual Conference of the Australian Association for Research in Education, Canberra, November 1983.

Adams, R.J. Some Contributions to Sex Differences in ASAT Scores. Paper presented at the 10th International Conference of the International Association for Educational Assessment, Perth, June 1984.

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## **Evaluation of the Short Selection Test**

Graeme P. Withers, Stephen J. Farish

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(This study was funded by the Commonwealth Department of Education.)

The Short Selection Test is an instrument administered to overseas students who wish to study in Australian senior secondary and tertiary institutions. An evaluation of its psychometric properties was conducted, and a draft report disseminated for comment in August 1983.

Following the examination of the draft report, it was decided to conduct a supplementary analysis of a large sample of students from one overseas post, to verify certain aspects of comparability between various forms of the test. Accordingly a sample was drawn, results analysed, and commentary built into the final report on the study. This report was presented to the sponsors of the study in March 1984.

### *Publication*

Withers, G.P. An Evaluation of Three Forms of the Short Selection Test (SST): Investigation of the Proficiency Levels of Private Overseas Students in Australia. Hawthorn, Victoria: ACER, 1984. (mimeo.)

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## **STUDIES OF SCHOOL AND HOME PRACTICES**

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### **Educational Environment and Student Achievement**

John P. Keeves

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(The project was funded from the ACER Core Grant.)

Within this project, detailed analyses have been undertaken of data collected in the Australian Capital Territory in 1969 at the Year 7 level from mathematics and science classes in order to examine relationships between class size, students' attitudes, teaching behaviours, teacher and classroom characteristics, and the educational outcomes of achievement and attitudes in mathematics and science. The analytic procedures that have been employed at the three different levels of analysis—between students, between classes, and between students within classes—and the multilevel analyses that were carried out have been used to investigate these

relationships in a logical and systematic way and in a manner that has not previously been employed in classroom research studies. The findings of the study throw new light on the highly controversial issue of the commonly observed phenomenon of a positive relationship between class size and achievement in studies undertaken in the natural classroom setting. They also provide a valuable examination of the problem of the appropriateness of the use of different levels of analysis in the exploration of questions associated with classrooms, teachers, and the learning of students within classrooms.

#### *Publication*

Larkin, A.I. and Keeves, J.P. *The Class Size Question: A Study at Different Levels of Analysis*. (ACER Research Monograph No.26). Hawthorn, Victoria: ACER, in press.

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## **IEA Study of Written Composition**

Graeme P. Withers

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(This study was funded from the ACER Core Grant.)

Testing for the main study, based on topics developed in the trial stage during 1982, was conducted in the latter half of 1983. Each script was marked by the ACER marking team using a standard impression technique, and these results were returned to schools. All manuscripts were retained by the ACER, but where a student had requested work to be returned, photocopies were sent.

In May 1984, a meeting of national co-ordinators was convened at the University of Illinois, Champaign-Urbana in the United States. This meeting revised the scoring schedules for each task, based on first experiences with the main body of data, and developed a set of criterion examples of essays, for each level of the five-point scale and for each scoring criterion. In all, several thousand essays were scored by the panel during the meeting, and details of intermarker and mark-remark reliability are awaited.

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## **The IEA Classroom Environment Study: Teaching for Learning Study**

Sidney F. Bourke

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(This project was funded from the ACER Core Grant.)

The first phase of this project consisted of a teacher survey which was undertaken and reported in 1983. The second phase was a correlational study which is summarized below. A possible third phase would consist of an

experimental study in which teaching practices were manipulated in order to determine their effects on student cognitive and affective outcomes.

The recently completed second phase of this project was a process-product study of teaching and learning in mathematics lessons at the Year 5 level, with a focus on classroom teaching practices and a strong emphasis on the context in which teaching and learning took place. Effective teaching was defined as teaching which promoted desired cognitive or affective outcomes. Data were gathered in natural classroom settings by means of low-inference observation schedules, use of student and teacher questionnaires, and student cognitive tests. Student cognitive outcomes of interest were measured by a standardized test and class-specific tests. Various attitudes to mathematics were also assessed: a general liking of mathematics, enjoyment of mathematics for its own sake, the importance of mathematics for future employment, and the usefulness of mathematics in everyday life.

Three types of analyses were undertaken with the class used as the unit of analysis throughout. First, the teachers, students, classrooms, and teaching practices were simply described by reference to individual variables. Secondly, using multiple linear regression, the individual variables were combined into constructs as measures of student and teacher backgrounds, classroom contexts, quantity of instruction, instructional practices, management practices, and student perceptions of the teacher and classroom. Finally, again using multiple linear regression, a four-stage causal model of the relationships between the various contextual and teaching practices constructs and the six student outcomes already described was developed and tested. The relationships between constructs and between individual variables and outcomes were investigated.

The results indicated that both classroom context and instructional practices were related to the cognitive and affective outcomes, sometimes, but not always, in consistent ways. Important classroom contexts and teaching practices were identified and, although no attempt was made to prescribe how mathematics should be taught in primary schools, active teaching, using some of the features of the direct model of teaching, was found to be functional for the achievement of some cognitive and affective outcomes. For the outcomes measured, some consequent implications for practice were evident.

The draft National Report of the study was completed in June 1984. The draft International Report is still being jointly written by six authors: Professor Doris Ryan and Dr Angela Hildyard (OISE), Professors Lorin Anderson and Garrett Mandeville (University of South Carolina), Mr Norbert Schieber (University of Hamburg), and Mr Sid Bourke (ACER).

### *Publications*

Bourke, S.F. Insights into the teaching of mathematics in primary schools. *VIER Bulletin*.

Bourke, S.F. The study of classroom contexts and practices. *Teaching and Teacher Education: An International Journal of Research and Studies* in press.

Bourke, S.F. *The Teaching and Learning of Mathematics: National Report of the Second Phase of the IEA Classroom Environment Study* (ACER Research Monograph No.25). Hawthorn, Victoria: ACER, in press.

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## Language Education and Community Expectations

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Kevin J. Piper

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(This project was funded from in the ACER Core Grant.)

The Language Education and Community Expectations study has set out to investigate community perceptions of priorities in language education in the junior secondary school. The study has both short- and long-term aims. In the short term, the intention is to provide information which will be of use to the Senate Standing Committee on Education and the Arts in its inquiry into the development of a national language policy for Australia, and to those charged with the implementation of such a policy. In the longer term, the aim is to develop a framework for language education which incorporates perceived community expectations, and which will be of use to curriculum developers in language education at both system and school level. A further long-term aim is to allow comparisons to be made between community expectations and current practice in language education in Australian schools, and between community expectations and recent initiatives in curriculum development at national and system levels.

The investigation is being carried out by means of a national questionnaire survey of a number of school and community groups designed to tap community expectations on all aspects of language education in the junior secondary school. Surveys of school community groups—teachers, parents, and students—and of employers and professional linguists have been conducted, and an interim report on the school community survey data has been prepared. Negotiations are still underway for the surveys of ethnic and Aboriginal community views. It is anticipated that a general report of the study will be available by December 1984, with one or more further reports to follow during the first half of 1985.

### *Publication*

Piper, K.J. and Miller, H. *Language Education and Community Expectations: An Interim Report*. Hawthorn, Victoria: ACER, 1984. (mimeo.)

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## **Models of School Learning**

Mark R. Wilson (from May 1984)

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(This project was funded from the ACER Core Grant.)

The aim of this project is to develop and apply methodologies sensitive to the issues and problems of research in school learning. The immediate goals are to report work already done on a psychometric model (called Saltus) for the analysis of data arising from the investigation of hierarchical learning and to apply the Saltus model to data collected in an Australian study of hierarchical learning and investigation of the usefulness of the feed-back provided by Saltus to both the researcher and the classroom teacher.

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## **PROGRAM OF SURVEY AND PSYCHOMETRIC SERVICES**

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### **Survey Research Services**

Malcolm J. Rosier

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(This project was funded from the ACER Core Grant.)

The Survey Research Services project provides assistance on request to ACER staff, particularly in drawing samples from the ACER Primary and Secondary School Sampling Frames. Under certain conditions it may provide consultancy services to persons from other institutions.

During the period under review, sampling assistance was provided for the Commonwealth Department of Education and Youth Affairs for the national study on English as a second language, and to the Anti-Cancer Council for the national study on smoking among school students. Dr Rosier continued to act as International Sampling Referee for the Second International Study of Mathematics.

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### **Studies in Criterion-Referenced Measurement**

George Morgan

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(This project was funded from the ACER Core Grant.)

The main aims of this project are to keep the ACER informed of developments in the fields of criterion-referenced testing and latent trait test theory, and to undertake theoretical and practical research in these areas.

During the past year, research continued into the feasibility of applying Bayesian statistical methods in the analysis of test data modelled by Rasch and other types of latent trait test models. A method was developed for computing approximate marginal posterior distributions of persons' abilities and difficulties of items in the Rasch model. These marginal posterior distributions will enable the specification of accurate error (credible) intervals for small test data sets, arising from a few persons and/or items. Practical applications of the above work are being developed in the area of computerized testing and the analysis of test data within the classroom environment.

Part of the work in this project was carried out in Chicago, from November 1983 to February 1984, when the project officer was a Visiting Scholar in the Department of Education of the University of Chicago, Chicago, United States of America.

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## Computing Services

Christopher M. Kay (to 31 December 1983), Raymond J. Adams  
(from 1 January 1984), Malcolm J. Rosier

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(This project was funded from the ACER Core Grant. Mr Kay and Mr Adams were seconded from the Victorian Education Department.)

The ACER has continued to use two computing facilities. Work on small data sets is carried out on the in-house mini-computer while the FACOM computer at the Swinburne College of Technology is used to maintain larger data sets through two terminals located at the ACER.

During the year an IBM/PC was purchased and a feasibility study is being undertaken into the use of an IBM/PC for research purposes, both for the analysis of data and for the word processing of reports and project documents.

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## Statistical Analysis and Psychometric Services

Stephen Farish (to 31 December 1983), Mark R. Wilson  
(from 21 May 1984)

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(This project was funded from the ACER Core Grant. Mr Farish was seconded from the Victorian Education Department.)

The Statistical Analysis and Psychometric Services project provides assistance to ACER staff on the selection and application of appropriate statistical and psychometric techniques to solve problems arising from their research. Assistance can be in the form of brief responses to informal requests for advice, extended involvement in the programs of particular projects, and preparation of explanatory papers and seminars on topics which are seen to be of general interest to ACER research staff. To date, assistance of this last type has been concentrated on the topic of Variance Estimation for Complex Sampling Techniques. A monograph, concerned with the estimation of sampling errors in item calibration, has been prepared for publication as an ACER Occasional Paper. Further topics to be included are log-linear modelling, latent trait analysis of attitude scales, and microcomputer techniques for the development and use of tests.

### *Paper*

Farish, S. *Investigating Item Stability*. (Occasional Paper No. 18).  
Hawthorn, Victoria: ACER, in press.



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## PROGRAM OF ADVISORY SERVICES

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### Educational Advisory Services

Peter Jeffery, Judith Eppinger

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(Advisory Services were funded from ACER's income from sales.)

The flow of requests for the personal assistance of Advisory staff from all sections of the clientele using ACER's services has continued to increase, although the major efforts of staff have been directed towards dissemination through publications. Advisory staff have continued to use the telephone to facilitate and personalize replies to enquiries wherever it was judged appropriate. This has to a large extent made it possible to give at least some help to the large number of enquirers. Visits by small groups of teachers to the ACER have increased. Some external workshops have been conducted where groups of schools join together for the purpose of studying educational testing. A one- or two-day workshop on 'Testing for Teaching Purposes', has proved popular. This work has replaced the mounting of displays at in-service activities and conferences throughout the country, which was a feature of the first half of the year but which was confirmed as not being effective when the effort was subjected to close analysis. Displaying has now been restricted to two or three selected national conferences each year, although materials are displayed by staff when conducting workshops. Articles on various topics have appeared or are in press in a number of journals, and additional writing is proceeding.

The Review Report Series reached an anniversary point during the year with the publication of the fiftieth review. Because of the emphasis placed on other activities, it has been possible to organize only five reviews in the past twelve months, but many of the reports have been reprinted to meet demands for them.

Advisory staff have increased their competence in the field of micro-computers and are able to assess, review, and demonstrate testing and teaching materials available in this format. Microcomputer software and its capabilities are now demonstrated in workshop contexts.

An internal review of the operations of the Test Library was conducted by Advisory Services and a report prepared for the Measurement and Evaluation Advisory Committee. The report indicated that the service was under strain through minimum staffing and equipment, and proposals were outlined to overcome the problems. There has been an observable increase in demand on Test Library services as funding restrictions in the community have begun to bite deeper into the resources available.

Finally, Advisory staff contribute to the ongoing use of *set: research information for teachers* by encouraging the copying and use of *set* items by in-service providers. Items are also used to supplement answers to enquiries received.

### *Publications and Papers*

*ACER Newsletter* Nos 48, 49, 50.

Jeffery, P.L. Educational tests in Australia. *Primary Education*, 1983, **14**(6), 4, 14.

Jeffery, P.L. Asian Regional Seminar on Dissemination of Educational Research. *Australian Educational Researcher*, 1984, **11**(2), 52.

Jeffery, P.L. How teachers gather information. *Primary Education*, 1984, **15**(2), 15-16.

Jeffery, P.L. Obtaining standardized tests in Australia. *Secondary Administrator*, 1984, **2**(1), 16-17.

*Review Reports* Nos 45, 48, 49, 50, 51.

Jeffery, P.L. The research dissemination activities of the Australian Council for Educational Research. *Australian Educational Researcher*, 1984, **11**(2), 41-9. Also in *Bulletin of the Australian Psychological Society*, 1984, **6**(2), 14-17; *South Pacific Journal of Teacher Education*, 1984, **12**(1), 66-72; *Australian Journal of Remedial Education*, 1984, **16**(1), 24-7.

Jeffery, P.L. and Tan Wee Kiat. *Dissemination and Utilization of Educational Research: Report of a Regional Seminar, Tokyo, November 1983*. Tokyo: National Institute for Educational Research (NIER), 1984.

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### **Psychological Advisory Services**

Meredith J. Shears (to 31 December 1983), Christine Martin, Josephine Jenkinson (from 2 April 1984)

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(Advisory Services were funded from ACER's income from sales.)

Requests for advice on a wide range of psychological tests continued at a high level, and there was an increase of approximately 15 per cent over the previous year in the number of new test users seeking approval to purchase restricted tests. The absence of a full-time member of staff in the first three months of 1984 created a number of difficulties and meant that work during this period had to be restricted to the handling of day-to-day enquiries.

Demand for advice during the year was particularly high in the areas of speech and language testing, career education and vocational counselling, and special education. These demands are being met as far as possible by the provision of annotated bibliographies, brochures covering specific tests or topics, and the proposed inclusion of special education in future catalogues and bulletins. A substantial number of enquiries was also handled in relation to general issues in testing, such as use of tests for coaching purposes, reporting of test scores, use of tests for demonstration purposes in various tertiary and TAFE courses, and test security in relation to freedom of information

legislation—enquiries which suggest areas in which ACER policy might need to be more clearly formulated and documented in the future.

Two issues of the *ACER Bulletin for Psychologists* were prepared and distributed. Revisions of three Annotated Test Bibliographies were completed, and a further revision, No.2: *Language Tests*, is in process of publication. Several brochures were prepared to publicize new ACER tests. An article was prepared for publication in *set*.

Monitoring of journals, test catalogues, and other sources continued in order to keep Test Library acquisitions up to date, and to keep abreast of research information essential for the handling of many enquiries. Two new tests and a number of other manuscripts submitted to the ACER were reviewed for possible publication.

Meetings and conferences attended during the year, for which displays were prepared, included the annual APS Conference at the University of New South Wales, and a conference of careers teachers and guidance officers at Geelong.

An attempt is being made to expand the range of activities undertaken in the psychological advisory area, in particular in the conduct of workshops for test users in specific areas of testing, and in the production of more research-based advisory documents.

#### *Publications and Papers*

*ACER Bulletin for Psychologists* No.34, September 1983; No.35, March 1984. Annotated Test Bibliographies:

No.2 *Language Tests* (Rev. June 1984, in press).

No.8 *Creativity* (Rev. August 1983).

No.9 *Neuropsychological Assessment* (Rev. August 1983).

No.10 *Social and Vocational Competence in Special Education* (Rev. August 1983).

Jenkinson, J. *The integration issue: Change and challenge. set* (research information for teachers), in press.

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## **PROGRAM OF LIBRARY AND INFORMATION SERVICES**

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### **Library**

Margaret A. Findlay, Julie C. Badger, Elspeth Miller, Lula Psiliakos, Christopher J. Walker-Cook.

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(The Library was funded from the Core Grant and from ACER's income from sales.)

A library and information service is provided to the ACER staff and, through the interlibrary loan system to the Australian education community. Library usage by staff was at a high level during the year, and 4403 items were borrowed from the collection. Once again, requests from non-ACER staff through other institutional libraries continue to reflect the value of the collection. During the period, requests for interlibrary loans from other libraries totalled 1182.

Every endeavour is made by project staff to ensure that new additions to the collection reflect research and development activities in the fields of education relevant to the on-going educational research activities. The library collection now totals 22 000 titles.

Computerized information searches are undertaken for research staff through Australian and overseas networks, such as AUSINET and DIALOG, by using a dial-up link and terminal. The Library uses the electronic mail system, ACIMAIL, for communication with other participants in the system and for interlibrary loans.

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### **Australian Education Thesaurus**

Margaret A. Findlay

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(This project was funded by the Australian Education Council.)

During the year, the final modifications were made to the draft of the Australian Thesaurus. These modifications included the suggestions made by other education information services and by interested subject experts, following the circulation of the draft thesaurus in early 1983.

The ERIC Processing and Reference Facility in Bethesda, Md, USA completed the modifications and produced the tapes for the final thesaurus. These tapes are used for the computer typesetting of the hard copy publication.

In addition to the hard copy publication, the thesaurus file will be included in the database of the *Australian Education Index* and will be available for online searching. This activity will enable searchers to consider the terminology during a search in order to improve the effectiveness of the search results.

Procedures will be introduced to ensure that the thesaurus is kept up to date. It is not intended to publish a new edition for at least two years. However new terms will be announced regularly in issues of the *Australian Education Index*.

#### Publication

Lavender, G. *Australian Thesaurus of Education Descriptors*. Hawthorn, Victoria: ACER, in press.

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## Australian Education Index

Margaret A. Findlay, Elspeth Miller

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(This project was included in the ACER Core Program.)

This project continues to provide access to educational information through the quarterly publication, the *Australian Education Index* and the AEI database which is available at present for online searching through the system, AUSINET. During the period under review, over 3000 items were indexed and added to the file. Documents are selected from a wide range of sources in both published and unpublished forms. The comprehensiveness of the coverage is essential and a consistent program is maintained to ensure that new journal titles are added to the list of journals for regular scanning and that all relevant new monographs and reports are acquired and considered for inclusion.

At the end of June 1984, the number of records in the computerized database totalled 18 000. This is updated quarterly in February, May, August, and November. Usage for the year of the online files has increased and totalled 365 hours.

Commencing with indexing for the March 1984 issue of the *Australian Education Index* and the first update of the database, terms from the new *Australian Thesaurus of Education Descriptors* were assigned to documents instead of ERIC (Educational Resources Information Center) descriptors. The Australian Thesaurus was developed by the ACER to provide information services in Australia with appropriate terminology for subject analysis. It is intended to mount this thesaurus file into the AEI database in order to provide database users with the facility to search the terminology while undertaking online searches.

Documents relating to TAFE and library and information science are identified, collected, and indexed by the two specialized clearinghouses, the National TAFE Clearinghouse (TAFE National Centre for Research and Development) and Australian Clearing House on Library and Information Service (Footscray Institute of Technology). Both these bodies prepare records for the hard copy AEI and the database and, in addition, take responsibility for the dissemination of the information by means of specialist hard copy indexes.

### *Publications and Papers*

*Australian Education Index* (M.A. Findlay and E. Miller, Eds). Vol.26 (3 and annual cumulation); Vol.27 (1, 2). Hawthorn, Victoria: ACER, 1983-84.

Findlay, M.A. Constructing national databases—A centralised operation. In B.J. Cheney (Ed.), *Information Management: Proceedings of the UALA Second National Conference on Library Automation, 28 November-1 December 1983*. Melbourne: Victorian Association for Library Automation, 1984, 103-14.

Findlay, M.A. Database development in Australia. In *Fifth National Online Meeting, New York, April 10-12 1984*. Marlton, NJ: Learned Information, 1984.

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## **Bibliography of Education Theses in Australia**

Margaret A. Findlay, Penny Martin

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(This project was funded by the Australian Education Council.)

Two issues of the *Bibliography of Education Theses in Australia* were compiled and published during the period under review. The first of these issues included citations and abstracts of 303 theses for higher degrees which were accepted at Australian universities and colleges in 1981. The second included citations and abstracts for 238 theses accepted in 1982.

In September 1983 and May 1984, the records of the files for 1981 and 1982 respectively were included into the Australian Education Index database.

Details of the theses were collected with the assistance and full support of libraries and faculties of education of the universities and colleges. The project team appreciates this assistance and support.

### *Publications and Papers*

Findlay, M.A. and Martin P. *Bibliography of Education Theses in Australia: A List of Theses in Education Accepted for Higher Degrees at Australian Universities and Colleges in 1981*. Hawthorn, Victoria: ACER, 1983.

Findlay, M.A. and Martin P. *Bibliography of Education Theses in Australia: A List of Theses in Education Accepted for Higher Degrees at Australian Universities and Colleges in 1982*. Hawthorn, Victoria: ACER, 1984.

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## Australian Education Review

John P. Keeves (to 31 December 1983), Phillip A. McKenzie  
(from 1 January 1984)

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(This project was included in the ACER Core Program.)

During 1983–84 two numbers of the review were published. Because of the potentially broad interest in Australian Education Review No.21, *Computing in Schools*, the print run was doubled and additional promotional activities were undertaken. The favourable reception and rapid sales of the number have justified these efforts. To improve the dissemination of the review and to encourage contributions, a statement of the purposes and editorial policies of the series has been prepared. The statement will be published in the July 1984 edition of the *ACER Newsletter*.

### *Publications and Papers*

Anderson, J. *Computing in Schools: An Australian Perspective*. (Australian Education Review No.21). Hawthorn, Victoria: ACER, 1984.

McKenzie, P.A. *Recurrent Education: Economic and Equity Issues in Australia*. (Australian Education Review No.20). Hawthorn, Victoria: ACER, 1983.

McKenzie, P.A. The Costs of Recurrent Education. Paper presented to the Annual Conference of the Australian College of Education, Canberra, May 1984.

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## set: research information for teachers

Peter L. Jeffery

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(This project was funded from ACER's income from sales.)

The joint publishing of *set* with the New Zealand Council for Educational Research continues to serve well the educational and psychological communities in Australia. Evidence of the usefulness of this project comes from statements from research colleagues in many parts of the world, from examination of the subscription levels, estimates of the amount of secondary use of the materials, and continuing praise from teachers. *set* was consistently praised by many of those who made submissions to the Review of the ACER and the *set* project was singled out for specific endorsement by the Review Panel.

The subscription level has continued to rise steadily and now amounts to some 4000 schools and individuals. Secondary use, by purchase of single items which are out of print or by photocopying issues of *set* in schools and tertiary institutions, is also increasing. Reprinting of *set* items by journals

circulating to teachers in some States has been encouraged. *set* has become a prescribed text for certain teacher education courses and many education students use *set* material in making an approach to studying the research literature in education.

Promotional work this year included the mailing of an 'invitation to contribute' to the education staff in all tertiary institutions in Australia. The result has been a strong flow of items from an interesting range of education-related disciplines. Continuing efforts have been made, through publication of the *set* index in chart form, to encourage teachers to use *set*. Special attention will be given in future to the identification of teachers who could become authors of *set* items.

The *set* Advisory Committee has been strengthened by obtaining invited representation from some sectors of the education community which had not been represented formerly. The Committee will continue to be expanded until all States and interests are represented.

Unfortunately it must be reported that difficulties with shipping *set* across the Tasman Sea have so delayed the first issue for 1984 that it will not be distributed in Australia until July. Thus there has been only one *set* in the period under review. This is a very serious problem which is receiving maximum attention to eliminate any possibility of repetition.

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## General Information Services

Robin G. Rowlands (Honorary Staff Member), John P. Keeves

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Two issues of the *State Institute News* have been compiled for circulation to the members of the State Institutes of Educational Research. Work has continued on a review of curriculum change in the teaching of physics at Year 12 level in Australian schools.

Information concerning projects and facilities of related institutions such as the VIER, the AARE, and the Australian College of Education was supplied to those requesting it.

### *Publications and Papers*

Keeves, J.P. Australia: National Case Study on Recent Developments and New Trends in Teaching and Learning Methods and Techniques: Report to Unesco, Paris. Hawthorn, Victoria: ACER, 1984. (mimeo.)

Keeves, J.P. Developments in the Conduct of Educational Research. Paper presented at the Invitational Seminar on Educational Research to the Year 2000 held by the New Zealand Council for Educational Research, Wellington, New Zealand to mark the Fiftieth Anniversary of the founding of NZCER, 14-15 June 1984.

Keeves, J.P. Educating for Leisure at a Time of Technological Change. Paper presented at the Annual Conference of the Australian College of Education, Canberra, May 1984.



Keeves, J.P. Educational science and technology: An alternative course in teacher education. In *Aligning Post-Secondary Education with Social and Technological Change: Proceedings of Victorian Post-Secondary Education Commission Seminar*, Deakin University, Geelong, 15-17 February 1984.

Keeves, J.P. Reshaping the secondary curriculum. In *Education—Purposes and Content: Papers from the Symposium held at The University of New South Wales on 10 November 1983*. (The University of New South Wales Occasional Papers No.9). Kensington, NSW: 1984, 25-8.

Keeves, J.P. and McKenzie, P.A. Interdisciplinary Research in Education in Australia. Paper presented at the Regional Seminar on the Contribution of Interdisciplinary Research to the Development of Education in Asia and the Pacific, Tokyo, Japan, 11-20 July 1984.

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## Youth Employment and Career Guidance

A. Holbrook

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(This project was funded from the ACER Core Grant.)

This study examines issues arising from and relating to youth unemployment in Victoria, past and present. There has always been a certain amount of youth unemployment in this State. During the early 1930s, the problem became particularly acute, and then again in the late 1970s. A high level of youth unemployment in recent years has prompted all manner of public and governmental responses. Not least of these have been schemes to assist and guide the young and out-of-work. What seems to have been overlooked in the course of current events is that much of what is being done today to deal with the youth unemployment issue has historical precedents. This study aims to provide that historical perspective and, in so doing, provide a somewhat different input into current research on the issue.

Particular attention is paid in this work to those guidance programs that have been initiated over the years in Victoria, in an effort to minimize problems of structural unemployment among the young. In addition, consideration is given to those value systems underlying concerns for the employment welfare of youth. Schemes devised and put into operation during the 1930s to assist the young unemployed are investigated in detail, as are the conferences on youth-adult employment held in 1937 and 1939. Other themes being examined include the relative assistance, and nature of assistance, given to unemployed boys and girls, and the rationale behind the great push to get unemployed boys onto the land. Developments along these lines are traced up to the present day.

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## Professional Liaison Project

Sidney F. Bourke

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(This project was funded from the ACER's miscellaneous expenditure.)

This project was commenced in March 1984 as a result of the review of the ACER's program of research and development conducted towards the end of 1983. The overall aim of the project is to encourage, facilitate, and coordinate professional liaison activities throughout Australia by ACER staff. The Advisory Committee for the project comprises the Director, Dr R.G. Rowlands, Mr P.L. Jeffery, and Mr P.A. McKenzie.

The Research Branches in all State and Territory Education Departments, and the State Institute representatives on the ACER Council were invited to suggest liaison activities, and ACER staff were asked to initiate proposals for liaison project funding. Several activities have been undertaken to date, largely by means of 'adding on' liaison activities to visits planned primarily for other purposes.

Possible liaison activities have been listed below. The list is not intended to be exhaustive. Activities could include:

- 1 personal dissemination of results of the ACER's research and development program through visits by ACER staff (for example, for discussion of results with a view to possible implications for policy or practice);
- 2 making possible more general-purpose visits of ACER staff to other institutions for discussions with other researchers;
- 3 the circulation of program policy documents and project proposals at an early stage of development so that input from outside the ACER could have a greater impact on the ACER's research and development program;
- 4 working co-operatively with researchers in other institutions to develop projects of mutual interest and concern;
- 5 providing assistance to other researchers who wish to replicate an ACER research study or methodology;
- 6 arranging for ACER staff to work within other institutions (for example, an Education Department) on exchange, on loan, or on a special studies program;
- 7 facilitating arrangements for other researchers to work at the ACER on exchange, for training, or on study leave, as has happened in the past.

It is intended that the project will contribute to the sensitivity of the ACER to important issues in education, and to the dissemination of the ACER's research to interested groups, through increased contact. The effectiveness of the project will be reviewed in April 1985, after it has been in operation for one year.

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## PUBLISHING

Don Maguire (to January 1984), Jeffrey G. Williams,  
(from February 1984), Bronwyn Hay, Marcel Leman, Louise Coutts

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In the last year the publishing unit moved towards greater 'in-house' self-sufficiency by streamlining use of the ACER's phototypesetting facility. Almost all of the bromides for ACER's test materials and general publications were produced using this phototypesetter.

Four ACER Research Monographs and two numbers in the Australian Education Review Series were published. The ACER published *Explorations in Early Childhood Education* by John Braithwaite for the Bernard van Leer Foundation. A new edition of the popular *Understanding Classroom Behaviour* by Maurice Balson was printed and the *STEP Parents Handbook* was printed locally under an arrangement with American Guidance Service in the United States.

New testing materials were published. These included vocational materials such as the *Work Aspect Preference Scale* and the Australian version of the *Career Development Inventory*. A new edition of the *Sample Collection of Questions* of ASAT was produced for the ACT Schools Accrediting Agency. Further test answer sheets were converted to a machine-scorable form. The ACER's involvement in test item banking continued with the finalization of artwork for one volume of the *Biology Item Bank*. A revised edition of the *ACER Short Clerical Test, Form C, D, E: Manual* was produced as well as the Manual for a new test series, *Progressive Achievement Tests in Mathematics*.

Although there was a significant decrease in the number of reprints, there was a marked increase in the production of promotional materials. These included the extensive catalogue range, price lists, and brochures. The graphic designer attended a book production seminar organized by the Australian Book Publishers Association. The ACER is assisting this association to conduct a survey of the book buying habits of tertiary students and course supervisors.

### Books, Reports, and Periodicals Published

#### (a) Books, Reports, and Papers

*Recurrent Education: Economic and Equity Issues in Australia* by Phillip McKenzie (Australian Education Review No.20).

*Computing in Schools: An Australian Perspective* by Jonathan Anderson (Australian Education Review No.21).

*The Context of Teaching and Learning: Report on the First Phase of the IEA Classroom Environment Study* by Adrian M. Fordham (ACER Research Monograph No.21).

*Issues of the Eighties: Principals' Perspectives and School Practices* by Margaret Batten (ACER Research Monograph No.22).

- Staying at High School in Victoria* by John Ainley, Margaret Batten, and Hilary Miller (ACER Research Monograph No.23).
- Sex Bias in ASAT?* by Raymond J. Adams (ACER Research Monograph No.24).
- Explorations in Early Childhood Education: The Mount Druitt Early Childhood Project* by John Braithwaite.
- STEP Parents Handbook*. (Printed locally under an arrangement with American Guidance Service)

### **(b) Periodicals**

- Australian Education Index* compiled and edited by Margaret A. Findlay and Elspeth Miller. Vol.26 No.3 September 1983, Vol.26 Cumulation 1983, Vol.27 No.1 March 1984, Vol.27 No.2 June 1983.
- The Australian Journal of Education* edited by Kevin Marjoribanks. Vol.27 No.2 August 1983, Vol.27 No.3 November 1983, Vol.28 No.1 April 1984.
- ACER Newsletter* No.48 July 1983, No.49 November 1983, No.50 March 1984.
- Bibliography of Education Theses in Australia: A List of Theses in Education Accepted for Higher Degrees at Australian Universities and Colleges in 1981* compiled and edited by Margaret A. Findlay and Penny Martin.
- Bulletin for Psychologists* No.34 September 1983, No.35 May 1984.
- State Institute News* No.9 November 1983, No.10 April 1984.

### **(c) Sales Publications**

- ACER Occupational Therapy Price List* 1984
- ACER Personnel Catalogue Price List* 1984
- ACER Speech Pathology Price List* 1984
- ACER Educational Catalogue* 1984
- ACER Psychological Catalogue* 1984

## **Tests Published**

### **(a) Testing Services Publications**

- Australian Scholastic Aptitude Test: Series M*—Book I, Book II, and WA version. (Photographic masters forwarded to Queensland and Western Australia for printing)
- Australian Scholastic Aptitude Test: Sample Collection of Questions (ACT); Students Information Bulletin (ACT)*.
- Co-operative Scholarship Testing Program: Level 1, Tests 1-4; Level 2, Tests 1-4; Answer Booklets; Candidates Registration Form; Candidates Information Bulletin; List of Examination Centres.*
- Nauru Scholarship Testing Program: Tests 1-4, Lower Age and Upper Age; Instructions to Supervisors and Answer Keys.*
- South Australia Co-operative Entry Program: Booklets 1, 2, 3; Answer Booklet; Candidates Registration Form; Candidates Information Bulletin.*

## **(b) Diagnostic Tests, Achievement Tests, and Teaching Aids**

- ACER Advanced Test AL-AQ (2nd ed.) and BL-BQ*: Test Booklet; Manual; Score Key.
- ACER Higher Test Form WL-WQ*: Manual; Score Key.
- ACER Standard A60 OMR Answer Sheet*.
- Career Development Inventory—Australia (CDI-A)*: Question Booklet; Machine Scorable Answer Sheet; Manual, by J.J. Lokan.
- Childrens Depression Scale (Second Research Edition)* by M. Lang and M. Tisher.
- Progressive Achievement Tests in Mathematics*: Machine-scorable Answer Sheet.
- Differential Aptitude Test* Score Key for OMR Answer Sheet. (Transparent overlay)
- Vocational Preference Inventory* Australian Preliminary Edition.
- Work Aspect Preference Scale* by Robert Pryor. Question Booklet; Profile Sheet; Machine-scorable Answer Sheet; Manual; Score Key.

## **Reprints**

There were 198 separate reprints during the year.

## **Tests Published**

### **(a) Testing Services Publications**

- Australian Scholastic Aptitude Test: Series M*—Book I, Book II, and WA version. (Photographic masters forwarded to Queensland and Western Australia for printing)
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- ACER Standard A60 OMR Answer Sheet*.
- Career Development Inventory—Australia (CDI-A)*: Question Booklet; Machine Scorable Answer Sheet; Manual, by Jan Lokan.
- Childrens Depression Scale (Second Research Edition)* by M. Lang and M. Tisher.
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*Differential Aptitude Test* Score Key for OMR Answer Sheet.  
(Transparent overlay)

*Vocational Preference Inventory* Australian Preliminary Edition.

*Work Aspect Preference Scale* by Robert Pryor. Question Booklet; Profile Sheet; Machine-scorable Answer Sheet; Manual; Score Key.

## **Reprints**

There were 198 separate reprints during the year.

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## **DISTRIBUTION SERVICES**

Eugene V. Ivan, Alan Wilkins

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Income for the year reached approximately \$2.1 million. In essence, the distribution effort was an effective total one, although lower in comparison with budget because of reduced and delayed government orders, and a shipping delay. However, there were substantial economies achieved in freight costs and a marked increase in royalties received.

An appropriate level of stock was maintained throughout the year, which concluded with a stock valuation of approximately \$420 000, which was significantly lower than for the previous trading period.

The refinement of the sales computer system has continued and, in addition to performing the invoicing and stock control functions, has been of significant assistance in the areas of subscription and mailing list maintenance. As the system has also produced address labels, this has reduced costs and increased effectiveness of promotional and advertising activities.

A particularly important aspect of the reorganization of the Distribution Services Division has been the work of the Sales Working Party. The Working Party is attempting to address a number of critical policy questions. The resolution of such questions will, by virtue of establishing objectives and parameters for the Division, enable systematic and clearly directed goal setting, planning, and evaluation of performance to proceed.

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## **FINANCE**

Accountant—Miss P. Staurengi

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The policies of supplementation of the ACER's Core Grant for increases in salaries, which have resulted from decisions of the Academic Salaries Tribunal, have been maintained during 1983–84. This together with the fact that the increases in salaries awarded both by the Academic Salaries Tribunal and for staff on Commonwealth Public Service Awards have been relatively modest has assisted very considerably to ensure that the Council has operated with a small surplus for the year.

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## **CONCLUSION**

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The Review of the ACER's program of research, development and service during the past 12 months has led the staff and Council to examine very critically almost every aspect of our wide range of activities. There are many things we would like to do that we are currently not doing; there are some things that we are now doing that we might like to do differently; but there are very few things that we are currently doing that have been suggested as being unprofitable and not worth our doing. Under these circumstances, a reorientation and extension of our program of research development and service would appear to require additional resources. However, it is important to remember that the ACER in the long term will be judged by the quality of the research that it carries through to completion, as well as by the level of productivity of the relatively few members of staff it employs.



## Sources of Funding for the ACER

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The Australian Council for Educational Research receives its funding for its program of research, development, and service from four sources:

- 1 from the Core Grant received from the Commonwealth Government and the seven State Governments (projects funded from this source are undertaken within the ACER Core Program);
- 2 from specific grants (Funded Projects);
- 3 from income received from users (Service Projects);
- 4 from income received from sales (Maintained Projects).

In Table 1, the income received from the Core Grant, for Funded Projects, and for Service Projects, together with the total expenditure on the ACER's program of research, development, and service for the years 1972-73 to 1983-84 have been recorded.

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### CONTRIBUTIONS TO COUNCIL FUNDS

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The Council acknowledges, with thanks, the following contributions received during the financial year ending 30 June 1984.

#### Australian Governments: General Grants for Research

Commonwealth	\$442 960
New South Wales	\$157 749
Victoria	\$120 249
Queensland	\$ 67 783
South Australia	\$ 40 493
Western Australia	\$ 37 545
Tasmania	\$ 13 072
Northern Territory	\$ 3 257
Total	\$883 108

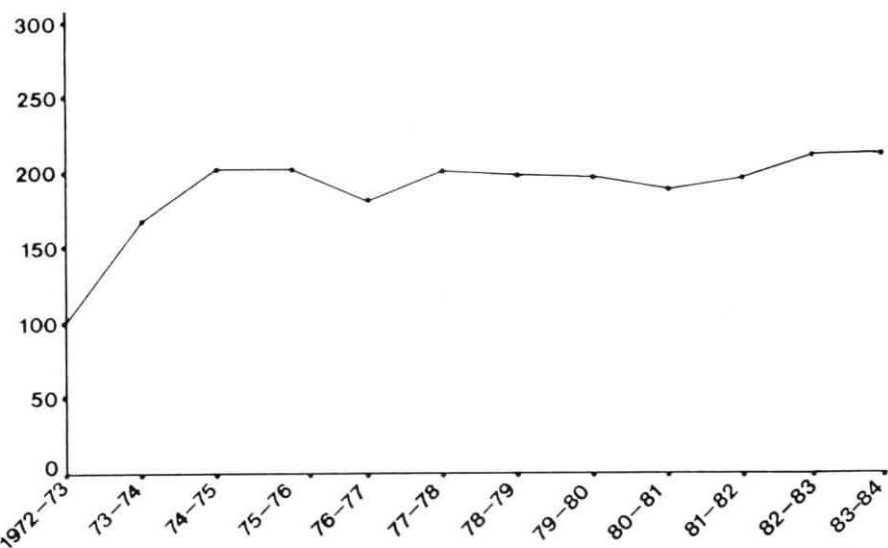
#### Special Grants

Grants to specific projects were made by:

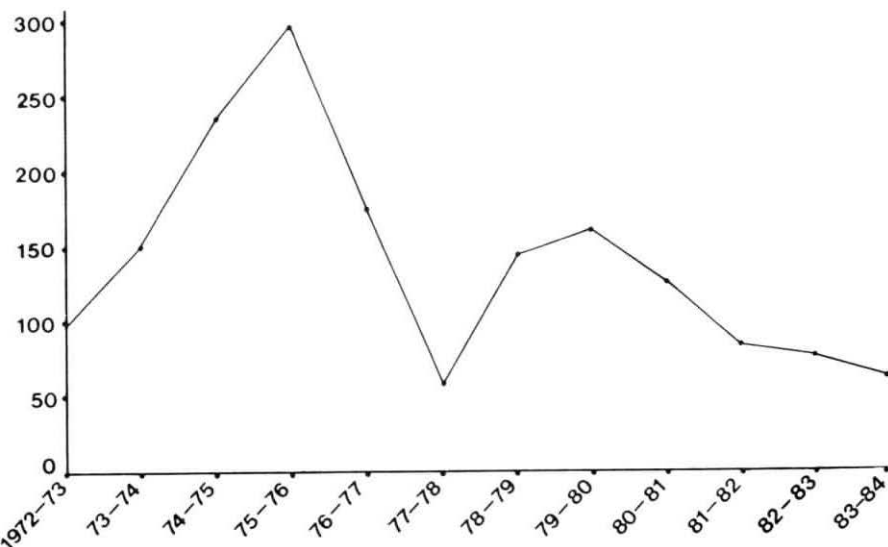
ACT Schools Authority	\$ 3 333
Australian Education Council	\$ 4 600
Bureau of Labour Market Research	\$ 14 000
Commonwealth Department of Education and Youth Affairs	\$100 000
Commonwealth Schools Commission	\$ 5 000
Commonwealth Tertiary Education Commission	\$ 20 000
Institution of Engineers: Australia	\$ 11 375
Japanese Ship Building Industry Foundation	\$ 34 406
Queensland, Board of Secondary School Studies	\$ 3 333
Victorian Education Department	\$ 28 263
Western Australia: Board of Secondary Education	\$ 3 333
Total	\$227 643

**Table 1** ACER—Income, Expenditure, and Trading, 1972–73 to 1983–84

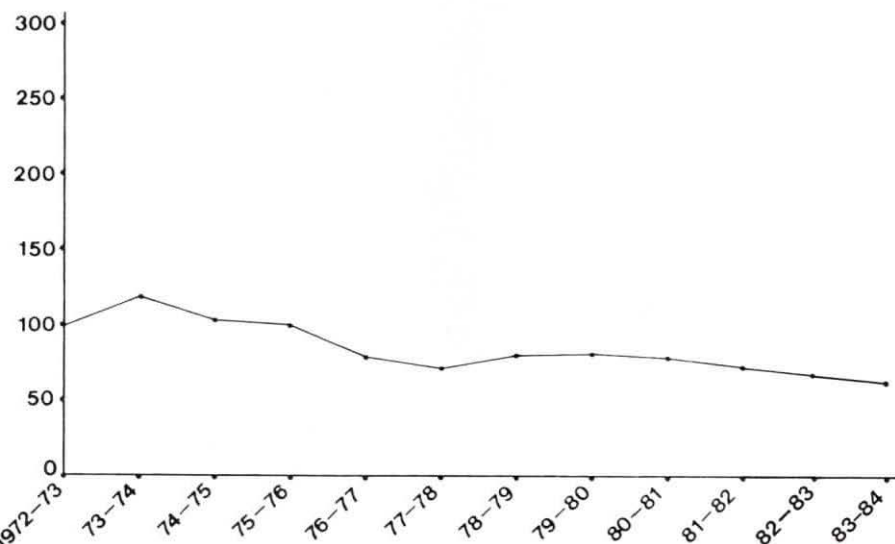
Year	Income			Research and development expenditure	Trading total turnover
	Core grant	Funded projects	Service projects		
	\$	\$	\$	\$	\$
1972–73	140 010	96 325	456 507	817 061	622 435
1973–74	267 018	165 253	587 590	1 097 030	722 525
1974–75	375 000	311 000	157 000	1 116 500	992 643
1975–76	422 979	426 008	199 245	1 221 558	1 101 050
1976–77	431 974	286 439	162 639	1 100 311	1 263 156
1977–78	520 000	104 071	184 114	1 059 150	1 441 131
1978–79	550 000	280 293	199 830	1 294 193	1 403 015
1979–80	590 000	345 474	218 581	1 451 825	1 577 876
1980–81	638 000	314 742	246 814	1 495 562	1 658 446
1981–82	732 392	209 913	295 717	1 583 540	1 987 098
1982–83	839 616	228 475	341 329	1 712 899	2 095 179
1983–84	881 319	212 277	340 413	1 796 113	2 064 172



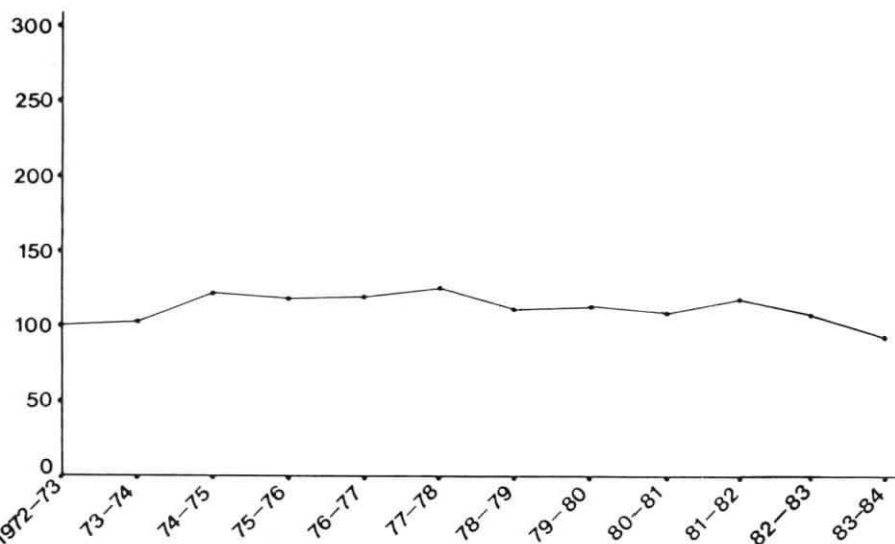
**Figure 1 Core Grant, 1972-73 to 1983-84**  
 (Expressed in 1972-73 Prices: 1972-73=100)



**Figure 2 Funded Projects, 1972-73 to 1983-84**  
 (Expressed in 1972-73 Prices: 1972-73=100)



**Figure 3 Research and Development Expenditure**  
**1972-73 to 1983-84** (Expressed in 1972-73  
 Prices: 1972-73=100)



**Figure 4 Trading Turnover 1972-73 to 1983-84**  
 (Expressed in 1972-73 Prices: 1972-73=100)

# **ACER Staff**

(as at 1 July 1984)

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## **DIRECTOR**

John P. Keeves, BSc, DipEd, PhD, fil dr, FACE, FASSA

## **ASSISTANT DIRECTORS**

John F. Izard, TPTC, BSc, BEd, MEd, PhD, MACE

Trevor H. Williams, BSc, DipEd, BA, MA, PhD, MACE

## **RESEARCH AND DEVELOPMENT**

John G. Ainley, BSc, MEd, PhD, MACE, ARACI

Margaret C. Batten, BA, BEd, MACE

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Jeffery J. Clancy, BA

Marion M. de Lemos, BSc(Hons), MSc, PhD, MAPsS

Allyson Holbrook, BEc, DipEd

Warren Jones, BSc(Hons), PhD, MAPsS

Janice J. Lokan, BA, DipEd, PhD, MAPsS, MIAAP

Noel McBean, BA, DipEd (part-time)

Phillip A. McKenzie, BEc(Hons), DipEd, MEd, MACE

Hilary Miller, BA, GradDipArts(AppSocPsych)

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Malcolm J. Rosier, BSc, MEd, PhD, fil dr

Helga A.H. Rowe, BA(Hons), PhD, MAPsS, MIAAP

Robin G. Rowlands, BA, MEd, PhD, FACE (honorary member of staff)

Jenny Slater, BA, GradDipSecStuds (part-time)

Andrew Sturman, BA(Hons), MEd

A. Graham Ward, MA, MEd

Evelyn Watson, BA

Graeme P. Withers, BA, ACTT

Mark R. Wilson, BSc(Hons), MEd, PhD

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Peter Jeffery, TPTC, BA, MEd (Head of Unit)

Pamela Burns (part-time)

Judith Eppinger, TPTC

Josephine C. Jenkinson, BA, DipEdPsych, MEd, MAPsS

Christine Martin, MA, DipEd, MAPsS (part-time)

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Margaret A. Findlay, BA, ALAA (Head of Unit)

Julie C. Badger, BA, DipEd, DipLib

Christopher J. Walker-Cook, BA(Hons), ALAA (part-time)

Elsbeth Miller, BA(Hons), GradDipLib  
Lula Psiliakos, ALAA (part-time)  
Betty J. Segar (part-time)

### **PUBLISHING UNIT**

Jeffrey G. Williams, BA, BLitt (Head of Unit)  
Louise Coutts, DipArt & Design (Graphic Design)  
Bronwyn Hay, BA(Hons) (part-time)  
Marcel Leman

### **ACCOUNTANCY**

Phyllis M. Staurengi, BA, BCom (Accountant)  
Ruth Ambrose  
Fay Harvey (part-time)  
May Young

### **SALES AND DISTRIBUTION**

Eugene V. Ivan, BSc (Manager)  
Alan Wilkins  
Peg Engellenner (part-time)  
Dilsie D. Evans  
Bruce Fulton  
Stan Gale  
Jan Gardiner  
Judy Gilder  
Peter Gilder  
Geoffrey Howard  
Patricia M. Low  
Joan K. O'Brien  
Steve O'Neill  
John Wilson

### **SECRETARIES TO THE DIRECTORS**

Marjorie Balloch  
Win Boyce  
Margaret Taylor  
Yvonne Allen (part-time)

### **GENERAL SECRETARIAL AND OFFICE SERVICES**

Carolyn Bretherton  
Judith Clark  
Gwenneth Dobell (part-time)  
Heather Hale  
Gloria Locock  
Margaret Miller  
Rhonda Redfern (part-time)  
Beatrice Sciberras  
Carol Shackleton (part-time)

## **CLERICAL AND TECHNICAL ASSISTANTS**

Ruth Jeffery, TPTC

Anne Lowry

Robyn Sperling

# State Institutes of Educational Research

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## Nature and Function

The State Institutes are autonomous bodies, each nominating one representative to the governing body of The Australian Council for Educational Research, and co-operating closely with it when occasion requires. In 1956, at a meeting held in Melbourne, these representatives formulated the following statement of the nature and functions of an Institute. In general, as the reports printed later will show, they carry out the functions in different ways and with different emphases.

The object of the Institute is to act as a learned body devoted to the promotion of study and research in education, emphasizing the scientific study of educational problems, by means of the following activities:

- A Disseminating
  - (i) research, either
    - (a) the results of specific pieces of research done by members; or
    - (b) reports on the collection of research information;
  - (ii) opinion and accounts of practices in education.
- B Participating in
  - (i) the discussion, planning, and criticism of research projects;
  - (ii) the active carrying out of research projects.
- C Establishing areas of contact with other educational groups.

## Membership on Council of ACER

The term of office of an Institute representative on the Council of the ACER is four years, and the dates of appointment are arranged to provide a continuity of membership of the Council.



## NEW SOUTH WALES

### Office Bearers

*Patron:* Sir Harold Wyndham

*President:* Associate Professor N. Baumgart

*Vice-Presidents:* Ms S. Groundwater-Smith, Dr J. Harvey, Mr A. Watson

*Secretary:* Mr I. Burnard

*Treasurer:* Dr Beth Southwell

*Librarian-Research Officer:* Ms G. Macleod

*Assistant Editor, Australian Journal of Education:* Dr J. Sheppard

*Delegate to ACER:* Associate Professor N. Baumgart

*Alternate:* Associate Professor R.L. Debus

*Editor, Bulletin of Proceedings:* Mr J. Shellard

*Members:* Dr J. Garrett, Dr D. Boud, Mr A. Craig

### Meetings

22 July 1983. A. Craig, G. Hayton, T. Anderson, Curriculum Services Division, TAFE. 'An overview of research in TAFE' 'Student evaluation of teaching in TAFE' 'Questioning the diffusion of the innovations paradigm in Australian agriculture'

23 September 1983. Ms P. O'Shane, Secretary, NSW Ministry of Aboriginal Affairs.

20 October 1983. Dr C. Field, Dr M. Khamis, Dr M. Gillett, School of Education, Nepean CAE, 'Research at Nepean CAE: Reports of work in progress'

2 November 1983. Public meeting at University of Sydney. Guest Speaker: Professor William Cooley, University of Pittsburgh.

2 December 1983. Research at the University of Sydney: 'Reports of work in progress'

15 March 1984. Dr M.G. Wilson, Education Commission of NSW, Dr W. Coppel, Macquarie University, 'Disadvantaged groups in education'

3 May 1984. Ms J. Kelly, Institute of Early Childhood Studies, Sydney College of Advanced Education, Dr J. Braithwaite, Macquarie University, Ms W. Schiller, Newcastle College of Advanced Education, 'Early childhood education'

19 June 1984. Dr R. King, University of Sydney, Ron Anderson, NSW Department of TAFE, David Barton, NSW Department of TAFE, Ms A. Bevon, NSW Department of Education, Mr R. Lee, NSW Department of Youth and Community Services, 'Adult lifelong education'

### Membership

In September 1984, there were 83 financial members, a small decline from the previous year (98).

### Financial Statement

This showed a surplus for the year ended 25 September 1984 of \$3396.29.

## NEWCASTLE BRANCH

### **Office Bearers**

*President:* Mr J. Watson

*Vice-President:* Dr R. Rowe

*Secretary:* Mr P.W. Day

*Treasurer:* Mr W. Howard

*Membership Committee:* Mr J. Watson, Associate Professor D.M. Keats

*Committee Members:* Dr E. Manning, Dr M. Jurd, Mr J. Foster

*Delegate to ACER:* Professor J.B. Biggs

*Alternate:* Professor J.A. Keats

### **Meetings**

10 April 1984. Newcastle Association for Educational Administration: Mr T. Swann, 'Teacher motivation in alternate promotion structures in NSW high schools'

17 April 1984. Australian Psychological Society (Newcastle): Ms Mary Watson and Mr N. Williams, 'Diagnosis and treatment of the hyperactive child'

20 June 1984. Dr P. Doherty and others, 'Research needed in special education'

### **Membership**

For 1984, there are 35 members.

### **Prizes**

The IER Prize awarded by the Newcastle Branch was this year presented to, jointly, Noelene J. Williamson and Owen L. Hughes.

## VICTORIA

### Office Bearers

*President:* Dr L.W. Shears

*Vice-Presidents:* Mr A.J.P. Natrass, Dr G.J. Whitehead

*Secretary:* Mr M.W. Boyce

*Assistant Secretary and Membership Officer:* Mr K. Hall

*Treasurer:* Mr F. Hindley

*Committee:* Mrs M. Ainley, Mr K. Frampton, Mrs C. Perry, Ms A. Ridsdale, Dr R. Rowlands, Ms M. Shears, Mr M. Williams

*Delegate to ACER:* Dr G.J. Whitehead

*Editor of Publications:* Mr M.W. Boyce

*PET Representative:* Mr J. Silva

*Research Group Representative:* Mr I.L. Ball

*Honorary Auditor:* Dr G.J. Allen

### Meetings

27 September 1983. Thirtieth Frank Tate Memorial Lecture: Professor W. Cooley, 'Good, better, worse? Evaluation and intervention in school systems'

11 November 1983. Dinner Club Meeting: Dr M. Norman, 'Life style, life chance'

23 March 1984. Annual Meeting: Mr S.F. Bourke, 'Insights into the teaching of mathematics in primary schools'

13 April 1984. Dinner Club: Mr G. Tickle, 'Community and curriculum'

21 June 1984. Thirty-First Frank Tate Memorial Lecture: Dr P.D. Tannock, 'Australia's education system: do we have one?'

### Membership

There were 208 financial members in 1983. As in previous years an analysis of membership indicated that school principals and vice-principals formed the largest group of members with tertiary lecturers and classroom teachers the next in order.

### Publications

Two issues of the VIER Bulletin, Numbers 51 and 52, were produced, containing texts of major VIER lectures, as well as other papers and book reviews. Because of the cost of printing the Institute has changed over to offset printing for the production of the VIER Bulletin.

### Research Group

Members of the Research Group have followed the pattern in recent years of working in their interest groups on particular themes.

### Primary Education Today Group

A number of talks were arranged during the year and a very successful Annual Dinner was held with Mr G. Maslen as speaker. The group has decided to go into recess for the time being.

### **G.S. Browne Prize**

In recent years this prize has been associated with the Teacher of the Year Award arranged by *The Age*. The award was made in 1983 to Mr A. Aulesbrook, Principal of St Anne's School, Sunbury. As the nature of *The Age* award has changed considerably the Institute is now looking at a new method for awarding the G.S. Browne Prize for Educational Practice.

### **Financial Statement**

The net funds held on 31 December 1983 were \$1583.71.

## QUEENSLAND

### Office Bearers:

*Patron:* Mr W.W. Wood

*President:* Dr J. Cotterell

*Vice-Presidents:* Dr E. Hobbs, Mr R. Worthington, Mrs D. Muir

*Secretary:* Mr N. Cranston

*Treasurer:* Mr P. Robinson

*Delegate to ACER:* Mr N. Alford

*Advisory Editor of the Australian Journal of Education:* Mr R. Warry

*Committee Members:* Ms J. Borthwick, Dr D. Chipley, Mr C. Dean, Mr P. Varley, Mr R. Warry

*Journal Editor:* Mr R. Worthington

### Meetings

2 August 1983. Professor Alan M. Hofmeister, Dean of the School of Graduate Studies and Associate Vice-President of Research, Utah State University, 'Application of microcomputers in special education'

20 October 1983. The 1983 Robinson Memorial Lecture. Dame Leonie Kramer, Professor of Australian Literature, University of Sydney, 'Literature in education'

28 February 1984. Annual General Meeting. Professor Sally Leivesley, Commonwealth Schools Commission—Save the Children Fund. 'Save the children fund—work training scheme: the project and its evaluation'

29 May 1984. Mr M. Byrne and Mr M. Glen, Research Services Branch, Department of Education, Queensland, 'Evaluation of the ADPU "My Choice" smoking education project'

18 June 1984. Professor G. Evans, Professor of Teacher Education, University of Queensland, 'Life skills of 15–18 year olds: concerns, needs and learning settings'

### Membership

QIER began 1984 with a membership of 63. Current fully financial membership is 54. A number of new members have joined the Institute during 1984, the most significant increase occurring from the Technical and Further Education sector. Interest from TAFE personnel was generated in a large part from the highly successful presentation by Professor G. Evans in June. Subscription for Institute membership remained at \$10 for 1984.

### Financial Statement

As of July 1984, total available funds of the Institute stood at \$1439.60.

### Publications

Some difficulties have been experienced during 1984 in the publication of the Institute's journal. Issue Number 24 has been distributed to members and it is hoped that numbers 25 and 26 will be with members by the end of September. An Occasional Paper from the presentation by Professor G. Evans on Life Skills of 15–18 Year Olds is currently being prepared.

## **SOUTH AUSTRALIA**

### **Office Bearers**

*President:* Dr D.K. Briggs

*Vice-Presidents:* Sr J. Redden, Professor K. Marjoribanks

*Secretary:* Dr E. Sandercock

*Treasurer:* Dr D. Dent

*Delegate to ACER:* Dr E. Sandercock

*Advisory Editor of the Australian Journal of Education:* Dr A. Shinkfield

*Committee Members:* Mr G. Billings, Mr J. Grosvenor, Mr B. Hannaford, Mr G. Hermann, Dr A.J. Shinkfield, Mr R. Slater

### **Meetings**

Since the Annual Report for 1983 was written six public functions have been held. During the second half of 1983 meetings were as follows:

11 July 1983. Dr A. Petersen, Lecturer, School of Education, University of Hong Kong. 'The functions of the classroom teacher: the school is more than subjects'

16 August 1983. Dr Julian Wells, Reader in Biochemistry, University of Adelaide, 'Gene Technology'

14 November 1983. Professor William Cooley, Past President, American Educational Research Association 'Recommendations for educational research'

23 February 1984. Annual General Meeting. Professor J. Anderson, Professor of Education at Flinders University, 'The day of the micro: research and policy issues'

1 May 1984. Dr J. Izard, Assistant Director, ACER. 'The use of the RAPT materials'

24 July 1984. Workshop on 'The evaluation of computer software'

### **Membership**

Current membership of the Institute is 36.

### **Financial Statement**

As at 2 August 1984 the financial situation is that the Institute holds Deposit Stock (S.A.S.B.) of \$397.48, A.G.C. Debenture Stock of \$500 and \$600 in Australian Savings Bonds. There is a General Fund balance of \$525.46.

## WESTERN AUSTRALIA

### Office Bearers:

*President:* Dr A.S. Ryan

*Vice-President:* Dr P. Deschamp

*Secretary/Treasurer:* Mr J. Williamson

*Delegate to ACER:* Dr A.S. Ryan

*Advisory Editor of the Australian Journal of Education:* Dr P. Deschamp

*Committee:* Dr D. Andrlich, Dr M. Clark, Dr B. Haynes, Dr L. King, Mr J. Oliver, Mr W. Vivian

### Meetings

The WAIER has moved to enlarge the range of meeting formats to appeal to a broader range of prospective participants. While retaining the traditional evening seminars based on presentations from invited speakers, WAIER now sponsors a panel series entitled 'Research and . . .' through which a variety of perspectives of significant topical issues are discussed. The panel series is promoted vigorously through metropolitan schools, tertiary institutions and system offices. The first three of these sessions (Discipline; Teacher Assessment; and the Literacy Bandwagon) have each attracted more than 50 participants to the 4.30–6.00 p.m. slot used. The majority of participants at each session were not members of the WAIER.

The following meetings have been held during the year:

6 December 1983. Mr K. Beazley, AO. 'The Western Australian inquiry into education'

1 May 1984. Panel Discussion. 'Research and . . . discipline'

10 July 1984. Panel Discussion. 'Research and . . . teacher assessment'

22 August 1984. Panel Discussion. 'Research and . . . the literacy bandwagon'

### Membership

There has been a substantial increase in membership from the 1983 figure of 65 to the present one of 85.

### Prizes

The WAIER prizes for graduating students who best represented an involvement in educational research were in 1983:

Miss B. Boyd, Murdoch University

Miss S. Colace, WA College of Advanced Education, Mt Lawley Campus

Miss K. Williams, WA College of Advanced Education, Claremont Campus

## TASMANIA

### Office Bearers

*President:* Mrs H. Hocking

*Vice-President:* Professor K. Collis

*Secretary:* Dr W. Ransley

*Treasurer:* Mr D. Phillips

*Committee:* Mr L. Blazely, Mr N. Behrens, Mrs H. Felton

*Delegate to ACER:* Professor P. Hughes

### Meetings

Term 3, 1983. A highly successful forum on 'Research and Development in Secondary Education' was held in October. The format was two extended dinner meetings, a fortnight apart. Several speakers gave a research and information background on the first evening, while practitioners responded on key issues in the second session. The forum generated active debate and about 120 persons attended one or both sessions. Proceedings of the forum are about to be published, through the joint sponsorship of the Education Department and the Centre for Education of the University of Tasmania.

Term 1, 1984. A research training workshop was jointly promoted by TIER and AARE. Several TIER members took the opportunity to attend and benefited from the workshop on 'Participant Observation' by Dr S. Ball of the University of Sussex.

Term 2, 1984. Two general meetings were held during this term. The first was addressed by Dr M. Jackson and entitled 'Why do children steal?' He reported his research over several years into the area of stealing and related issues.

The second session was addressed by Dr B. Caldwell and he reported his research on effectively managed schools. Both these meetings were attended by a number of non-members.

### Membership

Financial membership stood at 29.

### Northern 'Cell'

A small group of members of TIER in Launceston has held informal meetings. They have been instrumental in bringing Mr S. Bourke of ACER to Tasmania in October 1984 under ACER's Professional Liaison Project. Mr Bourke will address a joint forum in Launceston and a TIER meeting in Hobart.



## **NORTHERN TERRITORY**

### **Office Bearers**

*Patron:* Dr James Eedle,

*President:* Dr F.C. Durling

*Immediate Past-President:* Dr N.F. Bowman

*Vice-Presidents:* Dr E. Burke, Ms M. Moeckel

*Secretary:* Dr P. Buschenhofen

*Treasurer:* Mr D. Moeckel

*Delegate to ACER:* Dr N.F. Bowman

*Advisory Editor of the Australian Journal of Education:* Dr N.F. Bowman

*'set' Representative:* Dr N.F. Bowman

*Committee Members:* Dr J. Smith, Ms B. Hulme, Ms C. Pietrusziewicz, Mr H. Schaeffer

### **Meetings**

6 March 1984. Mr D. Thompson, Assistant Principal, Kormilda College, 'Aboriginal children's perceptions of film in an isolated community'

18 April 1984. Professor J. Anderson, School of Education, Flinders University, 'Research on the application of computers to reading problems'

31 May 1984. Dr J. Smith, PEO Evaluation & Research, N.T. Department of Education, 'Manpower planning and educational administration'

31 July 1984. Annual General Meeting, The Hon. T. Harris, Minister for Education, 'Educational research in the Northern Territory'

3 October 1984. Professor S. Kemmis, Associate Professor, School of Education, Deakin University, 'Action research and school improvement'

### **Membership**

Currently the NTIER has 25 individual financial members and 2 corporate members. At this stage, the numbers are well down on those of last year.

### **Publications**

Work is continuing on the Small Scale Research Techniques project report.

### **Special Activities**

The Minister for Education, the Hon. T. Harris, delivered an address at the Annual General Meeting and presented a plaque and a certificate to the recipient of the Small Scale Research Award. The Patron of the NTIER, Dr J. Eedle, N.T. University Planning Vice-Chancellor, moved a vote of thanks to the Minister. A small write-up in the local newspaper helped to publicize the Institute.

A workshop conducted by Sid Bourke was held over the weekend 8-9 September. Although numbers attending were fewer than expected, some worthwhile liaison was effected between the NT and ACER.

## **Prizes**

Two plaques, together with certificates, were awarded for Small Scale Research this year. It is proposed to make these awards an annual event.