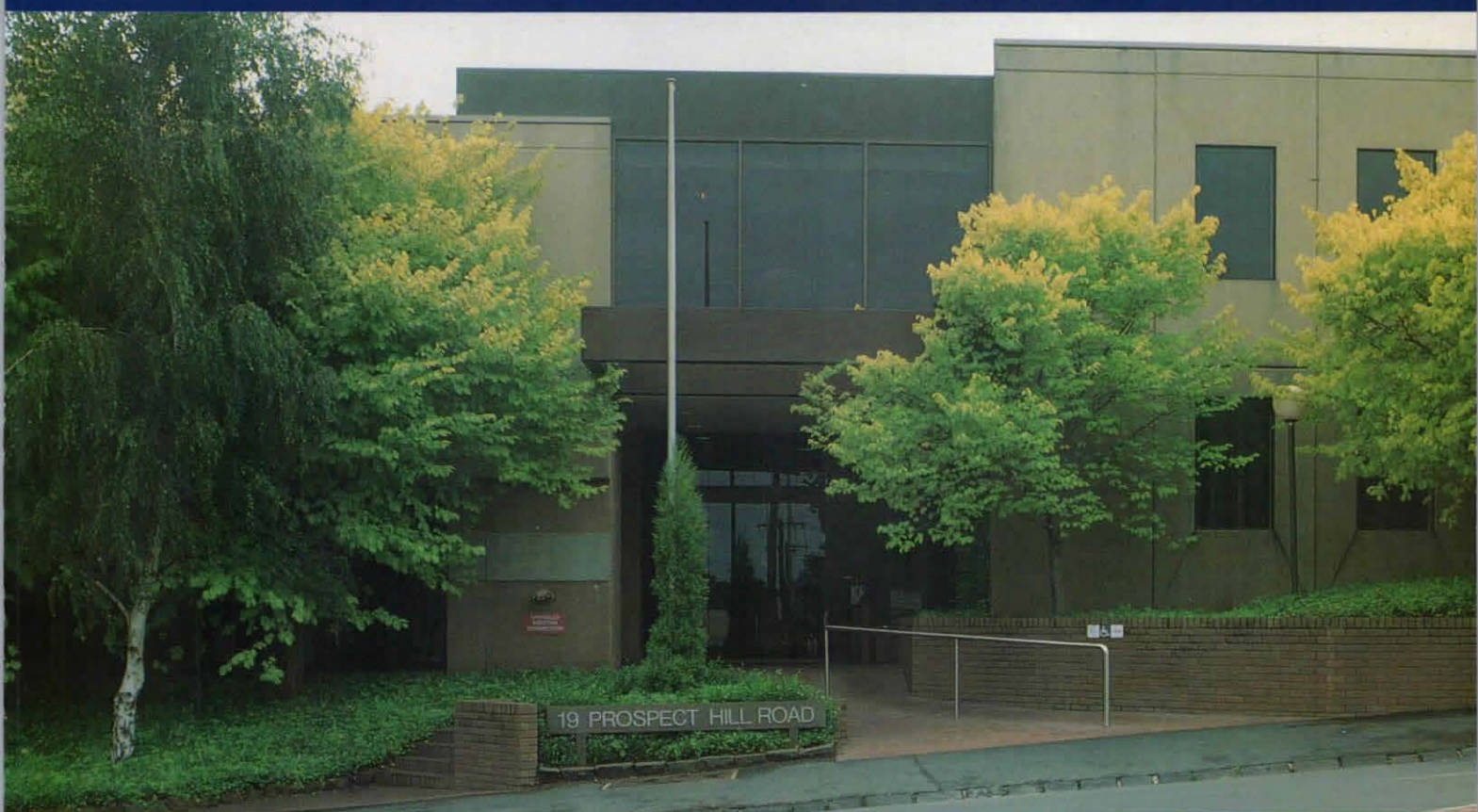


ACER

**AUSTRALIAN COUNCIL
FOR EDUCATIONAL RESEARCH**



65TH ANNUAL REPORT 1994-95

ACER

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Professor Barry McGaw
Director

International interest

There is considerable international interest in strengthening the links between educational research and policy development and practice.

The Centre for Educational Research and Innovation in the Organisation for Economic Co-operation and Development (OECD) recently concluded a major project reviewing developments in a number of member countries, Australia among them, with a publication *Educational Research and Development: Trends, Issues and Challenges* (OECD, 1995). The International Bureau of Education (IBE) of UNESCO recently published an analysis of ways of developing better links between research, information services and policy makers, *Confronting Future Challenges: Educational Information, Research and Decision-making* (Reimers, McGinn & Wild, 1995).

In a further reflection on the issues, the International Bureau of Education collaborated with the National Institute for Educational Research of Japan in conducting an *International Meeting on Educational Reform and Educational Research: New Challenges in Linking Research, Information and Decision-making* in which heads of national educational research agencies or senior policy makers from 21 countries, including Australia, participated.

Australian visions - part fulfilled

The following account of recent developments in Australia, intended to strengthen the links between educational research, policy development and practice, is adapted from the Australian case study prepared for the OECD review (McGaw, 1995).

Two national reviews of educational research and development were conducted in Australia in the period 1991-93. One was a general review of the whole educational research and development enterprise (McGaw et al., 1992), the other a more specific review of research and development in vocational education and training (McDonald et al., 1993).

Origins and sponsorship of two national reviews

The general review was initiated by the Australian Research Council, an agency of the federal government responsible for recommending funding for research in all disciplines other than medicine, primarily in higher education institutions. It was the third initiated in a series of discipline reviews, commencing after physics and earth sciences, but its origins lay partly in criticisms from within the educational research and development community about the adequacy of funding for its enterprise. There had been a separate federal funding agency for educational research and development during the 1970s, the Education Research and Development Committee but, with its abolition, funding levels had dropped. The Australian Research Council had become the sole agency through which competitive research grants could be sought and a view had developed that the disciplinary structure of its committees did not deal adequately with a field such as education.

Financial support from the Australian Research Council for this general review of educational research and development was conditional on the provision of additional support from other agencies. In the end, there were 17 financial sponsors, including nine professional associations, two national research and development agencies, four of the eight state and territory departments of education, a federal government agency and the Australian Research Council. Participants in a planning meeting convened by the Australian Research Council formed a Reference Group for the review which was conducted by a Panel, appointed at that planning meeting and consisting of the Director of ACER as head of a national educational research and development agency, an educational researcher who was a member of an Australian Research Council Review Panel, a researcher in vocational education and training and a senior official from a state department of education.

The more specific review of research and development in vocational education and training was commissioned by the

Vocational Education, Employment and Training Advisory Committee (VEETAC), a committee established by the national council of Ministers of Vocational Education and Training because of concern that there was an inadequate 'research and development base to guide the implementation of reforms and the best use of resources' (McDonald et al., 1993, p.i). To develop a national strategy for research and development in vocational education and training, VEETAC appointed a Research and Development Working Party which commissioned assistance from a group of vocational education researchers at the University of Technology, Sydney.

Conclusions of the reviews

There were several significant differences in the origins and sponsorship of the two reviews which, in the end, appear to have influenced the impact of their recommendations. The general review arose from the educational research community and, though it received some financial support from departments of education and received submissions from all but one of them, was predominantly sponsored and conducted by the research community. The more specific review of research and development in vocational education and training was established and supported by vocational education and training authorities while engaging the research community in its review process.

Both reviews reported on the status of educational research and development in Australia, one on the overall picture, the other specifically on research and development in vocational education and training.

The general review concluded that the educational research and development enterprise in Australia had many strengths and that there were signs of considerable strengthening in recent years. Funding for more basic educational research through the competitive program of the Australian Research Council had grown to the point where education was third after psychology and economics in funding in the social sciences. Further, 22 of the Australian

universities had nominated education as one of their areas of research strength. There were, however, continuing issues of serious concern including a general perception among education administrators and practitioners that research was generally irrelevant to their concerns, a feeling among researchers that they lacked support from government agencies and the higher education sector, low levels of funding (compared with that for other fields), lack of coordination and lack of planning for recruitment and training of new educational researchers.

Growth in the educational research and development enterprise, particularly since the 1960s, had created some of the lack of cohesion. There were 33 professional education associations in Australia that published research-based journals, 23 of them established in the last three decades. Since education is a research field rather than a discipline it is to some extent inevitable that researchers will communicate and meet around specific research interests within the field but the conclusion of the review was that the educational research community in Australia was too fragmented.

The dominant forms of research and development in education, according to the latest data available to the review from the Australian Bureau of Statistics' surveys of research and development which are shown in Table 1, were 'applied' (48 per cent of expenditure) and 'basic' (37 per cent of expenditure). The bulk of the work in these two categories was undertaken in higher education institutions, 86 per cent of work in the applied category and 84 per cent of the work in the basic category). 'Experimental development' accounted for 15 per cent of total research and development expenditure with 67 per cent of work in this category being undertaken in higher education institutions. More than a quarter of the experimental development work was undertaken in government agencies.

The 1990-91 data in Table 1 reveal some shifts in the pattern of allocation in period following the prior survey in 1988-89. Funding for basic research had risen from 25 to 37 per cent while that for experimental

**Table 1: Expenditure by type of education and training R&D:
Australia 1990-91 (\$m)**

Location	Basic research	Applied research	Experimental development	Total
Government				
Federal	4.0	4.9	3.5	3.4
State				8.9
Higher education	27.6	36.5	9.1	73.1
Private non-profit	1.3	1.2	1.0	3.5
Total	32.9	42.6	13.6	88.9

development had declined from 30 to 15 per cent. Whether this reflects a long-term shift or a fluctuation due to particular project funding in the survey years remains to be seen in the data from later surveys in the biennial series undertaken by the Australian Bureau of Statistics.

More specific analysis of the content of educational research and development from the entries in the *Australian Education Index* for 1980 and 1989 revealed relative growth in the areas of educational philosophy, policy and development; teaching materials and equipment; and higher education systems and institutions; and relative decline in the fields of educational psychology and sociology. Submissions to the review also nominated trends in educational research and development. In substantive terms, increased emphases were nominated in a range of fields including literacy and language education, mathematics and science education, special education, gender issues, teacher education and policy issues. In methodological terms, increased use of paradigms from philosophy, critical theory, feminism and economics, and decreased use of paradigms from psychology were reported. Increased use of qualitative methods and, in the case of quantitative work, increased use of multivariate methods were also reported.

Expenditure figures by source of funds and location of the research and development activities are shown in Table 2, again using the latest data available to the review. Almost all financial support for educational research in Australia is provided by government since there is little investment by business and little philanthropic contribution. The largest

contribution is from the federal government with the bulk of that contribution being through its funding of university staff, a proportion of whose time is committed to research. Total expenditure on educational research and development in Australia in 1988-89 represented 0.35 per cent of total education expenditure. By comparison, 1.40 per cent of health expenditure was allocated to research and development, and the federal government has since committed itself to increasing that rate to 2.00 per cent of total health expenditure.

Most of the research and development funded by the state governments was undertaken in state government agencies though, in recent years, there has been an increasing tendency to commission such work from external agencies. This reduces costs to government authorities in maintaining their own research capacities and can give them access to specialist expertise for speedy, flexible responses to changing circumstances. It also offers the benefits of credibility that independent agencies can provide. For the researchers there are the benefits of working on projects that are clearly relevant to the needs of education authorities but there are risks of constraints on the scope of work and rights of publication.

The more specific review of research and development in vocational education and training reported that, whereas 27.9 per cent of all recurrent expenditure on education was for vocational education and training, only 14.6 per cent of educational research and development expenditure was for vocational education and training. This means that research and development

Table 2: Location and source of education and training R&D expenditure: Australia 1990-91 (\$m)

Location	Source					Total
	Federal govt	State govt	Business	Private non-profit	Overseas	
Government						
Federal	2.7	0.7				3.4
State	1.3	7.5		0.1		8.9
Higher education	66.1	2.9	0.3	3.7	0.2	73.1
Private non-profit	1.2	2.0			0.2	3.5
Total	71.3	13.1	0.3	3.8	0.4	88.9

expenditure represents only 0.22 per cent of total expenditure in vocational education and training, whereas educational research and development expenditure as a whole is 0.35 per cent for total expenditure on education.

The review of research and development in vocational education, like the general review, concluded that the current research effort is fragmented and that links between research and policy and practice were weak, with little fundamental and general-issues-based research in vocational education and training and no strong critique of vocational education and training policies and programs.

Priorities for future research and development

Both reviews suggested priorities for future educational research and development in Australia. The general review proposed the following criteria for setting priorities for the national research agenda:

- criteria deriving from the application, use and benefits of research:
 - social and economic needs;
 - equity and social justice;
 - the needs of professional practice; and
- criteria deriving from the needs of educational research:
 - the need to preserve and capitalise on existing research strengths;
 - the need to contribute to and capitalise on advances in research;

- the need to remedy important gaps and weaknesses in research;

and then, in the light of these criteria, nominated the following research priorities for concentration of a substantial component of national funding for an initial period of at least three years:

- fundamental research on areas of continuing importance to education and the improvement of professional practice, in particular:
 - the teaching of thinking skills;
 - learning in the preschool and adult years;
 - assessment of student learning;
- research on the organisation and management of educational structures, programs and personnel, and the interrelationship between education and the wider society, in particular:
 - leadership and management in devolved education systems;
 - education, training and work;
 - teachers' work;
- research directed towards the revision and improvement of specific areas of the curriculum, in particular:
 - mathematics education;
 - science education;
 - language and literacy education.

The specific review of research and development in vocational education and training proposed the following criteria for setting priorities:

- the potential benefits to vocational education and training, particularly focusing on topics for which there is a

major research need and the extent to which the research can form a foundation for further research;

- the ability for the research to be used;
- feasibility of the work in terms of:
 - the gap between what is known and what it is possible to find out;
 - the capacity of available personnel to undertake the work;

and, in the light of these criteria and information collected from a search conference, interviews and submissions, proposed that the majority of government funding of research and development be focused on the following priority areas for an initial period of three years:

- economic benefits of vocational education and training at macro and micro levels;
- management in the technical and further education systems, particularly the assessment of various approaches to corporate management;
- links between training and productivity, including the interdependence of training, organisational development, business vision and productivity and the place of language, literacy and mathematics in workplace reform and training;
- community perceptions of vocational education and training and how these perceptions are formed;
- competencies of teachers in technical and further education and the potential role of practitioners as researchers;
- assumptions underlying and strategies for implementing competency-based training and competency-based assessment;
- approaches to the dissemination and use of research in vocational education and training.

These priorities are more specific than those recommended for general education research but they reflect the policy and program concerns of the vocational education and training sector in Australia. Both reviews of research sought ways of strengthening the links between the concerns of policy makers and practitioners and the work of the educational research community. They looked not only to a short-term research agenda that addressed current policy

concerns but also to strategies for establishing enduring links that would bring the two communities closer together and make them mutually reinforcing.

Organisation and funding of research and development

In addition to recommendations about research priorities, both reviews offered recommendations about the organisation and funding of research and development. Both recommended the development of stronger links between policy makers, practitioners and researchers to maximise chances of research and development fostering long-term improvements in Australian education. For basic research, both reviews suggested that the major source of funds continue to be the competitive research grant scheme of the Australian Research Council. The general review considered and rejected the proposition that this Council be asked to establish a separate Education Panel for the evaluation of research proposals in the field of education. It did recommend, however, that at least one education representative be a member of the Humanities and Social Sciences Panel. It also recommended that the Council broaden the scope of other competitive schemes from which grants are counted in establishing the base for the Council's allocation of research infrastructure funds and block funds for small projects.

The general review proposed the establishment of an Education and Training Research Board to bring together the perspectives of providers, practitioners and researchers in setting an agenda for a new national research and development effort in education and training and in distributing funds to support that effort. The review suggested the new Board have 12 members, an independent Chair plus three representing each of educational researchers, education providers, practitioners and the wider community. For education providers it was claimed that the benefits would be a stronger influence in setting a national research agenda, more comprehensive and powerful studies through pooling of resources, and

attention to a wider range of issues. For researchers, a major benefit claimed would be the opportunity to have a more tangible impact on policy and practice.

To fund the proposed Education and Training Research Board and its research and development program, the review proposed a small levy on education expenditure. The proposal of a levy was based on research and development schemes in a range of agricultural industries in Australia where the federal government matches industry contributions to a level of 0.5 per cent of the gross value of the agricultural product. For educational research and development, the review proposed that the total funding be increased over a 10 year period from the present 0.35 per cent of expenditure on education to 0.7 per cent and, more specifically, proposed that a quarter of this be raised by levy and managed by the Education and Training Research Board.

The specific review of research and development in vocational education and training examined a range of structures for coordination of general-issues-based research and development and client-oriented research and development, including a single national organisation, several independent centres, a single centre with several branches and a consortium of research and development partnerships.

This review recommended an increase in the funds for research and development in vocational education and training from 0.22 to 0.5 per cent of total expenditure on vocational education and training over three years followed by a gradual increase to 1.0 per cent. It was proposed that the federal government be the primary source of the increased funds for research and development in vocational education and training through allocation of a small component of its contribution to this sector of education.

The general review reported first but proposed that consideration of its recommendations be delayed until the review of research and development in vocational education and training was completed. The general review's inclusion of

training in its proposed research priorities and its recommendation of an Education and Training Research Board, however, were deliberately intended to ensure that a broad view of education and training be taken within the compass of a single national research and development agenda under the auspices of a single new national organisation. Inevitably, given its terms of reference and its sponsorship, the review of research and development for vocational education and training proposed a research and development program and a structure specific to vocational education and training.

Outcomes of reviews

The outcomes of the two reviews are now clear, at least in the short term. One recommendation of the general review was adopted immediately. It was the negative recommendation that a separate Education Panel not be established within the Australian Research Council. Another, broadening of the category of funding agencies whose competitive grants are counted by the Australian Research Council for allocation of block funds for infrastructure and small projects, was accepted by the Council in its response to the review. A third, modest impact has been use of the review's research priorities to set local agendas. At least one major university used the priorities in a restructuring of its staffing and program.

The other recommendations of the general review have had virtually no impact since the key recommendation of funding for the proposed Education and Training Research Board and its research and development program through an 'industry levy' was strongly opposed by agencies from whose funds the levy would be drawn. The Australian Vice-Chancellors' Committee, for example, immediately and publicly opposed the idea of any levy for research on education and training being taken from the funds for higher education. The state and territory education authorities similarly opposed any levy on their funds for a national research and development effort. A briefing paper on the report prepared by one State for the Council of Federal, State and Territory Ministers and the decision of the

Council endorsing the proposals for a stronger national research and development agenda and a stronger role for education authorities in setting the agenda, made no mention of the proposed Education and Training Research Board or of the proposed levy, and resolved in relation to funding only to recommend that the Federal Minister consolidate a range of federal research programs.

By contrast, the recommendations for an increased research and development program in vocational education and training have been acted on because increased funding has been provided. In this case, there was essentially a single source of funds to be persuaded, not a plethora of governmental and other education providers. Although the federal system involves the Federal, State and Territory governments in vocational education and training just as it does in schooling, the Federal government has a stronger role and, furthermore, responsibility for oversight of vocational education and training has been given to a new Australian National Training Authority for which the funding comes from the federal government. This Authority established a National Research Advisory Council and allocated \$1.2m for a new competitive research grants scheme in 1994, and \$2m in 1995 with an expectation of further increased allocation in subsequent years.

In December 1993, the National Research Advisory Council agreed on five priorities for its research and development program. It held a national conference on these priorities in April 1994 and revised them to some extent to the following:

- needs of small business, including, for example:
 - women in small business;
 - managing small business;
 - the extent to which skill demand differs in organisations of different size;
 - effective training for people in small enterprises;
- needs of special groups, focusing on, for example:
 - in the first instance, Aboriginal people and youth;

- modes of delivery, especially to Aboriginal people in remote and rural communities;
- skill levels of the lowest school achievers and the contexts in which these might be improved;
- assurance of quality, including, for example:
 - evaluating the appropriateness of training in relation to client needs;
 - developing and monitoring standards for teaching or training and learning;
 - developing and monitoring procedures for measuring such standards;
 - translating quality assurance experience into the vocational education and training context;
- the economic impact of vocational education and training, including, for example:
 - the economic outcomes of participation in vocational education and training with particular reference to labour market and income consequences;
 - the economic costs and benefits of major models of initial vocational education and training;
 - the role of vocational education and training in national economic development;
 - the role of vocational education and training in bringing about changes in the workplace;
 - market mechanisms and vocational education and training;
- learning in the workplace, including, for example:
 - differences between the workplace and the classroom;
 - teaching skills in the workplace;
 - workplace assessment.

There are two general lessons that might be learned from the outcomes of the two Australian educational research and development reviews. One is that serious consideration of recommendations is enhanced when education providers are seriously engaged as sponsors of the review, as they were in the review of research and development in vocational education and training. Their engagement indicates, as a

starting point, a likely belief among senior administrators in the potential value of research and development. These providers are the major potential beneficiaries of enhanced research and development and the major potential sources of funds for any enhanced effort. Where the review is undertaken primarily by the research community, as was the general review, the key group of providers is likely to be insufficiently engaged to have strong ownership of the recommendations or the outcome.

A second lesson is that adoption of recommendations which are fundamentally dependent on increased funding is more likely where responsibility for considering the recommendations is not diffused over a large number of agencies but can be undertaken in a single agency with power to respond. In federal systems, such as that of Australia, this can be difficult to achieve unless there is a clearly authorised national agency which can take action.

It could also be added that there can be a certain serendipity in the outcomes. The review of research and development in vocational education and training was undertaken in Australia at a time when funding for all aspects of vocational education and training was being reviewed and increased. The case for research and development still needed to be made, of course, and there was still a competition for funds but the allocation for increased research and development came from increased funds, not from reallocation of existing funds.

References

- McDonald, R., Hayton, G., Gonczi, A. & Hager, P. (1993). *No small change: Proposals for a research and development strategy for vocational education and training in Australia*. Vocational Education, Employment and Training Advisory Committee, Canberra.
- McGaw, B. (1995). Case studies of innovation in educational R&D: Australia. In OECD, *Educational research and development: Trends, issues and challenges*. Paris: OECD, pp.108-116.
- McGaw, B., Boud, D., Poole, M., Warry, R. & McKenzie, P. (1992). *Educational research in Australia: Report of the Review Panel, Strategic Review of Research in Education*. Australian Government Publishing Service, Canberra.
- Organisation for Economic Cooperation and Development (OECD). (1995). *Educational research and development: Trends, issues and challenges*. Paris: OECD.
- Reimers, F., McGinn, N. & Wild, K. (1995). *Confronting future challenges: Educational information, research and decision-making*. Paris: UNESCO International Bureau of Education.

Further financial strengthening

ACER's overall level of activity reached another all-time high in 1994-95. Total income rose by 28 per cent from \$9.8m to \$12.6m while expenditure rose by only 22 per cent to \$11.8m, yielding an operating surplus of \$0.8m. More than \$0.5m of this surplus was produced by the sale of educational and psychological tests, books and other materials. This is a remarkable development, given the annual deficits produced by this area of ACER's activities for many years, and is attributable to carefully focused and strategically planned publishing and marketing and effective customer services.

Achieving an annual surplus is important for the financial health of the organisation. It provides the capacity to reduce the debt on the new premises and the cash reserves with which to fund growth in trading, through increased inventory and debtors, and in contract and service activities, by covering expenditure in advance of receipts.

Asia-Pacific Regional Seminar on Educational Research

The Asia-Pacific Centre of Educational Innovation for Development (ACEID) of UNESCO, Bangkok and ACER co-sponsored a regional seminar on educational research. The seminar was held in Melbourne on 1 - 5 May 1995 and involved directors of

national institutes of educational research and development in fourteen countries: Australia, Bangladesh, China, India, Indonesia, Japan, Lao PDR, Malaysia, New Zealand, Philippines, Republic of Korea, Sri Lanka, Thailand and Viet Nam.

The seminar was the first such meeting of heads of national agencies in the region and was convened to strengthen relationships and foster collaboration. Possibilities for collaborative projects and staff exchanges were discussed and plans formulated for a further meeting, with a focus on educational assessment, subsequently scheduled to be held in Malaysia in May 1996. In preparation for this meeting, participants will prepare detailed 'state-of-the-art' reviews of the approaches used in the assessment of primary and secondary school students in their countries. The purpose of the country reviews will be to provide a systematic basis for the identification and design of possible collaborative research activities.

Amalgamation of longitudinal studies

ACER has conducted its longitudinal *Youth in Transition* study for more than 15 years, with substantial support from the Commonwealth government. The Commonwealth has also sponsored its own longitudinal study, the *Australian Youth Survey*, with a different sample structure and a different survey schedule. The Commonwealth has consolidated these activities and commissioned ACER to manage the ongoing surveys in which new, national samples of Year 9 students will be added every three years.

The surveys provide important information for policy makers about the education, training and work experiences of successive cohorts of young people through the final years of schooling, post-school education and training and into the early years of employment or the search for employment.



Asia-Pacific Regional Seminar on Educational Research

Developing focus on Aboriginal education

A member of ACER's governing Council, Ms Isabelle Adams, has played a key role in helping ACER develop a focus on Aboriginal education. She has recruited nine other people involved in Aboriginal education around Australia to join her on an Advisory Committee to guide ACER's development of work in this area. ACER undertook background research for the National Review of Education for Aboriginal and Torres Strait Islander People and, under the Advisory Committee's guidance, has prepared a proposal for longitudinal studies through which the education and work experiences of Aboriginal and Torres Strait Islander people might be more effectively investigated.

New emphasis on information for educational management

The Policy Research Division is developing a new program of research designed to provide information for educational managers and policy makers. Important studies were undertaken for the Victorian Directorate of School Education on the preparation and use of school annual reports and on projections of student enrolments at the individual school level in Victoria.

Monash-ACER Centre for the Economics of Education and Training

The Centre for the Economics of Education - which Monash University had established with support from ACER - obtained full centre funding from the Australian National Training Authority Research Advisory Council. As a consequence, Monash University and ACER have entered into a formal agreement establishing the centre as a joint activity under the title, the *Monash University-ACER Centre for the Economics of Education and Training*.

With its expanded resources, this new centre has the capacity to make a substantial contribution to the investigation of macro- and micro-economic issues associated with both education and training.

English assessment for Western Australia

ACER has developed highly innovative assessment procedures for the speaking and listening component of the *Western Australian Monitoring Standards in Education* program. The listening test is a pencil and paper test using video and audio stimuli and is designed to be marked centrally. The speaking component is designed to be administered and assessed by classroom teachers with the aid of a marking guide and training video. This test includes small group activities based on the stimuli provided in the listening component, followed by one individual student presentation from each group. Although the tests are administered to entire classes, only some randomly selected students are assessed for the State-wide monitoring program.

All assessment tasks are based on *Student Outcome Statements*, the WA interpretation of the national profiles. Some of the tests will become available to teachers for use in the classroom.

LAP Reporter software

As part of the *Victorian Learning Assessment Project (LAP)*, ACER has developed special software with which schools can undertake additional analyses of their own data and prepare group and individual diagnostic reports. This software makes accessible to teachers the benefits of the sophisticated psychometric analyses that ACER undertakes in all of its test development and reporting work.

21st year service awards

There were four staff for whom 1994 was the 21st year of service to ACER:

Ms Judy Clark

Judy Clark joined ACER in 1974 as a technical typist in the Test Development group. When ACER obtained its first word processing facility, she managed the group of specialist secretarial staff who used this system to produce final manuscripts. When routine word processing capacity was distributed more widely within ACER, Judy became a desktop publishing specialist, using high-end software to design and layout complex test materials for ACER's testing services and test publications.

Dr John Izard

John Izard was seconded from the Victorian Department of Education in 1965-67 to work on the *Individual Mathematics Program (IMP)* and in 1969-70 to develop mathematics tests for the New South Wales Basic Skills Testing Program. He returned in 1978 as Assistant Director (Measurement and Evaluation) and directed the updating or replacement of many of ACER's older tests. In 1988, he became ACER's first Assistant Director (Development and Training) to build further ACER's international consulting and training role.

Dr Helga Rowe

Helga Rowe worked initially in test development, completing among many other things the development of the *Checklists for School Beginners*, the *ACER Early School Series* and the *Non-Verbal Ability Tests (NAT)*. Her more recent work focuses on the process underlying cognition and on human problem solving. In 1988 she organised an international

Seminar on Intelligence as ACER's contribution to the International Congress of Psychology. In 1990, Helga Rowe became the first staff member promoted to the newly established level of Principal Research Fellow.

Ms Betty Segar

Betty Segar was appointed to ACER in July 1974 and retired during her 21st year at the end of 1994. As Clerical Officer in Library and Information Services, she ordered, accessioned and processed all new material up to the stage of cataloguing. Her initial tools of manual typewriter and wax stencils were ultimately replaced by computer facilities and her work became more integrated into the flow of material into the computerised catalogue as she created the initial entries for all material purchased for ACER's library.

The President of the ACER Council, Professor Peter Karmel, presented each recipient with a 21st-year Service Certificate at the July 1994 Council meeting. At a special staff meeting, the Director reviewed their contributions to ACER and the President presented each with a gift to the value of \$500 that each had selected personally.

Director's award for exceptional service

Ms Carole Buckley was the 1994-95 recipient of the Director's Award for Exceptional Service to ACER. This award, which is restricted to staff who work exclusively at ACER's premises and who do not travel as part of their employment, provides \$500 and return air travel for two between Melbourne and any one of Sydney, Adelaide and Hobart. At the time, Carole was Manager of ACER's Project Support Services which provides data entry and administrative support for projects, particularly large-scale ones. She continues with these responsibilities in a reorganised and enlarged Project Services group. Carole recruits, trains and manages casual staff for the supply of these services.

As a condition of its contract with its travel agent, ACER annually receives the two complimentary air tickets. The cash grant is provided by ACER.



Ms Carole Buckley
Recipient of the Director's award



21st Year Award Recipients.
Clockwise from top left:
Dr John Izard, Ms Judy Clark,
Dr Helga Rowe and Ms Betty Segar.

RESEARCH AND DEVELOPMENT ACTIVITIES

MEASUREMENT

Overview

During 1994-95 ACER Measurement staff assembled the largest volume of assessment materials developed in recent years. These materials included innovative assessment tasks in speaking and listening, activities in technology and enterprise, and teacher-organised performance assessments in mathematics.

Significant developmental work was completed for the *Graduate Australian Medical School Admissions Test (GAMSAT)* which was administered for the first time in February 1995, and for the *Victorian General Achievement Test (GAT)* taken by Year 12 students in Victoria. Other commissioned developmental work was completed for the *New South Wales Selective High Schools Test* and the *Australian Scaling Test*. The *Australian Language Certificates* were again offered in seven languages in schools throughout Australia and New Zealand.

Work was completed on the *Developmental Assessment Resource for Teachers (DART)* (upper primary English) and *Activities and Assessment in Mathematics (AAIM)*, both of which were released for sale.

Consultancy work performed within the Division has increased. Nationally this involved the *Assessment and Reporting of Key Competencies* study commissioned by the Commonwealth Department of Employment, Education and Training. Internationally the Division was involved in the AusAID program, assisting in the development of the Cambodian Year 11 Examination in 1995, and the Division continued its involvement in the provision of psychometric advice and training services to the *Third International Mathematics and Science Study*.

ACER's Testing Services continued to represent a major area of work for the Division, particularly through ACER's *Cooperative Scholarship Test*, *Special Tertiary Admissions Test*, *Australian Cooperative*

Entry Program, and the *Test of English as a Foreign Language (TOEFL) Agency*.

During 1994-95 work has continued under the two measurement themes: *Improving Educational Testing* and *Investigating Assessment Alternatives* being coordinated by Dr Jan Lokan and Dr Ray Adams respectively. The themes were conceptualised as priorities for the Division as a whole and, wherever possible, were addressed through aspects of the Division's work. Work was pursued through core-funded projects, commissioned work, ACER's Testing Services and trading.

The purpose of the *Improving Educational Testing* theme is to promote research aimed at understanding and improving ACER's testing practices. A goal of the theme is to provide a stronger research base for ACER tests and to provide users with better information about the tests they use, especially on validity and equity issues.

The *Investigating Assessment Alternatives* theme aims to promote the development and investigation of alternatives to more traditional assessment methods. Examples of innovative assessment methods that may be developed and investigated include computer administered tests, the assessment of conceptual understanding and "competency-based" assessment methods.

The theme also supported work of a more fundamental nature on psychometric methods for alternative assessments, providing ACER and other development and research projects with access to state of the art psychometric techniques for use with alternative assessments. This work has attracted substantial external support from the Spencer Foundation (US) and the National Science Foundation (US).

Test development activities

ACER has a strong test writing and test development culture. Unlike other organisations, ACER retains specialist test writers rather than bringing together test items written by outworkers. This commitment to professional test writing means that rigorous procedures are followed,



Dr Geoff Masters
Associate Director

ensuring that high test standards are maintained.

Test writing is generally undertaken by research staff working in one of the test development teams. In the past there have been two teams - maths/science and humanities/social science. An expansion of work in the humanities area has led to the addition of a team whose work focuses on profile-related test development.

Test development involves working with clients to establish a test specification and to clarify the client's expectations. Test developers write items to meet the specifications, then a group of colleagues read and review test items to ensure that these can withstand detailed scrutiny.

The next stage of the process involves the trialling of the items with a sample of students. The results of the trial are analysed to provide data about the psychometric properties of the items and the eventual whole test. Questions are selected for the published test on the basis of the data from the trialling, and on their fidelity to the test specifications.

Through its depth of experience and expertise, ACER can offer guidance to clients on a range of testing issues.

Achievement surveys

The Division has continued to diversify its range of test development activities as an integral part of its involvement in large-scale projects. Major projects in 1994-95 included the continuation and expansion of the now well-established *Australian Language Certificates (ALC)*; and the statewide assessment projects in Queensland, Victoria and Western Australia. In keeping with recent curriculum innovations throughout Australia, a common thread in most of these projects is the alignment of their assessment materials with the skills and understandings expected of students at various levels of schooling, as identified in the Australian curriculum profiles.

The number of students registering for the *ALC* program, which is intended for

secondary school students who are learning a language other than English, grew substantially to 57 000 in 1995. This year, certificates were available in Chinese and Indonesian at Beginners' Level; Modern Greek at Intermediate Level; and French, German, Italian, and Japanese at both Beginners' and Intermediate Level. As well as providing students with individually printed certificates containing a description of skill levels achieved, a detailed report is sent to each school.

A wide range of assessment materials was developed for the three statewide assessment programs in which ACER was involved during 1994-95. For Western Australia materials were developed at Years 3, 7 and 10 in Technology and Enterprise and English (speaking and listening). Tests for the *Victorian Learning Assessment Project* and the *Queensland Year 6 Test* were developed, processed and reported to parents, teachers and schools by ACER. Literacy and numeracy were the areas of focus in both programs, which included tests of number, space and measurement, reading and writing. The Queensland tests also assessed viewing and the *LAP* included a test of listening and exemplary assessment materials in speaking and science.

In the *LAP*, over 48 000 students at each of Years 3 and 5 from over 1650 government, Catholic and independent schools completed the assessments, while in Queensland 47 000 Year 6 students from all sectors took part. In both projects, reports for parents, teachers and schools were prepared, with individual and group results reported against the *Curriculum and Standards Framework* in Victoria and the *Student Performance Standards* in Queensland. The reports are highly informative and continue to be at the forefront of world-wide developments in this area. In the case of the *LAP*, there were difficulties in achieving the timeline for delivery of results and errors were made in the computer program that calculated the results for students on the measurement strand in numeracy. As a result, a large number of individual student and school reports had to be replaced.



*Dr Jan Lokan
Principal Research Fellow
Improving Educational
Testing
Theme Coordinator*

Psychometric support

The Measurement Division's Psychometric Support Unit is a small team of seven staff headed by Dr Ray Adams. The unit is responsible for the provision of psychometric and statistical advice, programming support and data management services to the directors of testing and research projects within the Measurement Division. The unit also undertakes a substantial program of psychometric research and development that is largely externally funded.

The rapid growth in the Measurement Division throughout 1994-95 is reflected in the level and range of activity that was undertaken by the unit throughout the year. In addition to data analysis for on-going programs such as the *Special Tertiary Admissions Test (STAT)*, *Australian Language Certificates*, and *Australian Scaling Test (AST)*, the unit was required to provide data management and analysis support for a number of new projects, most notably the *Victorian Learning Assessment Project* and the *Graduate Australian Medical School Admissions Test*.

During the year, team members successfully demonstrated the ACER-developed *Quest* and *Mats* software packages at the Annual Meeting of the American Educational Research Association in San Francisco, and at the International Objective Measurement Workshop in Berkeley.

Another highlight of 1994-95 was the development of the *LAP Reporter* software. The *LAP Reporter* is a computer program that was distributed to all schools that participated in *LAP*. The software can be used by schools to analyse the performances of students in their school. It can be used to produce diagnostic displays of individual students' performances and it can be used to compare the performance of students in that school with the performance of all students in the state. This facility is available both at the scale level and at the item level.

Testing Services

Testing Services has experienced a period of consolidation over the past 12 months with existing programs being subject to review and evaluation, and more investment in test development.

The *Special Tertiary Admissions Test (STAT)* continues to gain wider acceptance and usage as a reliable and valid measure of general academic ability for non-standard entrance to tertiary institutions. The *STAT* now exists in seven forms according to the proportion of verbal and quantitative stimulus material. *STAT A, B, C* and *D* are used by the state Tertiary Admission Centres, and *STAT F* and *G*, the parallel forms of *STAT D* and *C* respectively, are used by individual institutions dealing directly with ACER. The University of Sydney successfully trialled *STAT F* for special entrance to its Veterinary Science Faculty, and further interest has been shown in the use of this form by its Faculty of Dentistry. *STAT E*, the one hour test of written communication, has also achieved greater usage and acceptance. Publication of a regular *STAT Newsletter*, and wider advertising of the *STAT* should see further expansion of this testing program locally and overseas.

The *Graduate Australian Medical School Admissions Test (GAMSAT)* is now entering its second year of operation. In its first year more than 1000 candidates applied to sit the test and in excess of 800 sat at test centres established in all capital cities and Townsville on 20 February 1995. Analyses of the results of the *GAMSAT* indicated that many candidates found Section III (Reasoning in the Biological and Physical Sciences) too long and difficult. As a result this section has been reviewed and modified for the second test which will be held in January 1996.

In the first year of operation both *GAMSAT* test development and administration experienced financial problems due to candidate numbers being lower than anticipated. However, when the Universities of Queensland and Sydney enter the program as full participants from 1996 it is expected that increased registrations will result in a much healthier financial situation.



Dr Ray Adams
Principal Research Fellow
Investigating Assessment
Alternatives
Theme Coordinator



Mr Mike Sorrell
Testing Services Manager

From 1996 candidates will be able to sit *GAMSAT* at centres around the world.

The ETS/TOEFL Agency has continued to register candidates and administer the *Test of English as a Foreign Language (TOEFL)* at centres throughout Australia, New Zealand and Papua New Guinea. More than 4000 applications were processed, with solid growth in numbers from New Zealand.

Both the *Australian Cooperative Entry Program (ACEP)* and the *Cooperative Scholarship Testing Program (CSTP)* continue to be used by an increasing number of independent schools for the award of their scholarships.

Projects

Achievement Surveys

Australian Language Certificates (ALC)
ACER Staff: Susan Zammit, Patricia Firth, Peter Congdon

Australian Mathematics Certificate
ACER Staff: Brian Doig, David Roberts

Learning Assessment Project (LAP) - 1995
ACER Staff: Jan Lokan, Tracey Frigo, Danyelle Cawood, Nikolai Volodin, Jill Cheeseman, John Lindsey, Brian Doig, Eve Recht, Joy McQueen, Jenny Wajsenberg

Queensland Year 6 Test of Literacy & Numeracy
ACER Staff: Susan Zammit, Nikolai Volodin, David Roberts, Jill Cheeseman, Brian Simpson, Joy McQueen, Danyelle Cawood, Patricia Firth, Jackie Perkins

Western Australian Monitoring Standards in Education (WAMSE) - Test Development

ACER Staff: Ray Adams, Juliette Mendelovits, Brian Doig, Lynne Darkin
Western Australian Monitoring Standards in Education (WAMSE) - Reporting
ACER Staff: Margaret Wu, Ray Adams

Selection and Tertiary Entrance Training

Australian Cooperative Entry Program (ACEP)
ACER Staff: Mike Sorrell, Heather Skinner, Greg Wightman, Karen Gibson, Christine Boyer

Australian Law Schools Entrance Test (ALSET)
ACER Staff: Mike Sorrell, Karen Gibson, Emma Tonkin

Australian Scaling Test (AST)
ACER Staff: Sam Hambur, Malcolm Hunt, Glenn Jarrett, Brian Simpson, Doug McCurry, Deanna de Zilwa, Greg Wightman, Val Creese, Jenny Bryce

Cooperative Scholarship Test Program (CSTP)
ACER Staff: Mike Sorrell, Peter Congdon, Imelda Carthy, Brian Simpson, Heather Skinner, Val Creese, Jenny Bryce, Christine Boyer, Deanna de Zilwa, Greg Wightman

Graduate Australian Medical School Admissions Test (GAMSAT) - Test Development
ACER Staff: George Morgan, Malcolm Hunt, Glenn Jarrett, Brian Simpson, Sam Hambur, Doug McCurry, Val Creese, Deanna de Zilwa, Greg Wightman, Jenny Bryce

Graduate Australian Medical School Admissions Test (GAMSAT) - Administration
ACER Staff: Cecily Aldous, Mike Sorrell, Heather Skinner, Emma Tonkin

NSW Selective High School Test
ACER Staff: John Lindsey, Brian Simpson, Brian Doig, Greg Wightman, Jenny Bryce, Val Creese, Deanna de Zilwa, Phoebe Ford, Doug McCurry

Queensland Core Skills Test
ACER Staff: Doug McCurry, Val Creese, Deanna de Zilwa, Greg Wightman, Jenny Bryce, John Lindsey, Glenn Jarrett, Malcolm Hunt, Brian Simpson, Sam Hambur

Special Tertiary Admissions Test (STAT)
ACER Staff: Mike Sorrell, Christine Boyer, Sam Hambur, Glenn Jarrett, Deanna de Zilwa, Karen Gibson, Malcolm Hunt, Greg Wightman, Jenny Bryce, Val Creese

Victorian General Achievement Test (GAT) - 1995
ACER Staff: Doug McCurry, Greg Wightman, Deanna de Zilwa, Val Creese, Jenny Bryce, Brian Simpson, Sam Hambur, Malcolm Hunt, Glenn Jarrett

Assessment Methods

Assessing Conceptual Understanding
ACER Staff: Brian Doig

Assessment of Speaking & Listening
ACER Staff: Margaret Forster

Assessment Resource Kit
ACER Staff: Geoff Masters, Margaret Forster

Investigation of Test Response Formats
ACER Staff: Doug McCurry, Sam Hambur



Key Competencies Assessment & Reporting:

Consultancy

ACER Staff: Doug McCurry

Nationally Comparable Achievement Measures

ACER Staff: Geoff Masters

Royal Australian College of General

Practitioners Training Program

ACER Staff: George Morgan, Brian Simpson

Science/Mathematics Performance Tasks

ACER Staff: Brian Doig

Third International Mathematics & Science

Study (TIMSS): Performance Assessment

ACER Staff: Jan Lokan, Brian Doig, Phoebe Ford

Work Readiness Profile

ACER Staff: Helga Rowe

Psychometric Studies

Classifying & Banking Test Items

ACER Staff: Sam Hambur, Peter Congdon

Equity in ACER's Selection Tests

ACER Staff: Susan Zammit, Peter Congdon

Evolving and Validating a Test Construct

ACER Staff: Doug McCurry, Sam Hambur

Predictive Validity of the STAT

ACER Staff: Juliette Mendelovits

Psychometric Models

ACER Staff: Ray Adams, Margaret Wu,
David Roberts

Third International Mathematics & Science

Study (TIMSS): Consultancy

ACER Staff: Ray Adams, Margaret Wu,
Nikolai Volodin, David Roberts

External Services

Cambodian Educational Measures Consultancy

ACER Staff: Doug McCurry, George Morgan

National Graduate Medical Admissions Centre
(GMAC)

ACER Staff: Cecily Aldous, Mike Sorrell

Test of English as a Foreign Language (TOEFL)

ACER Staff: Cecily Aldous, Heather Skinner,
Mike Sorrell

Test Scoring Services

ACER Staff: Mike Sorrell

US Committee for the Development of Test
Standards

ACER Staff: Helga Rowe

Western Australian Outcome Calibrations

ACER Staff: Margaret Wu



Dr John Ainley
Associate Director

POLICY RESEARCH

Overview

The Policy Research Division engages in a wide variety of commissioned and ACER-initiated projects. These projects share the common goal of improving our understanding about how students learn, how educational institutions operate, and how education contributes to Australian society. The type of research undertaken by the Division is essentially *strategic* in nature. It is designed to inform the development of better educational policies and practices in Australia in the medium term. The projects conducted within the Division are generally team based and draw on a variety of staff disciplinary backgrounds.

Thematic Structure

Following extensive consultation, the Division's program in the 1993-96 triennium was structured around two broad themes.

- *Pathways Between Education, Training and Work*
In recent years governments have emphasised the importance of providing young people with a diverse set of coherent pathways between education, training and productive employment. The renewed emphasis on vocational education and training and its increasing convergence with general education have generated a substantial number of issues that require research attention. Prominent among these are the conceptualisation and assessment of the key employment-related competencies; the development of effective and equitable credit provisions and pathways between upper secondary school, TAFE and higher education; the professional development needs of teachers; and the planning implications of the participation targets advocated for 18-20 year-olds. Research studies in this theme area build on ACER's extensive experience with research on postcompulsory education and transitions between education and work.

- *Making Schools More Effective*
In Australia, and many other Western countries, the past decade has seen a reappraisal of the effectiveness of educational programs, schools and school systems in relation to student outcomes. Educational research and educational practice share a common interest in identifying factors associated with effectiveness in programs and schools. Research in this theme contributes to an enhanced knowledge base about school effectiveness through the systematic investigation of school influences on student outcomes. It does this through investigations of the characteristics of schools and programs related to effectiveness, management information needs in devolved education systems, and the work of teachers and the processes of student learning.

During 1994-95 there were significant further developments in the joint Centre for the Economics of Education and Training with Monash University and a consolidation of two programs of longitudinal surveys of youth (one of which was ACER's *Youth in Transition* study). These developments will provide a continuing basis for productive research in the Pathways theme.

In the theme area concerned with making schools more effective, highlights have included a large study of achievement in mathematics and science, the commencement of a commissioned national project on gender and school education, and the completion of a study of socioeconomic status and school education.

The Division has continued to give attention to the wider dissemination of research results through seminars for teachers (including a series of one day seminars on ACER research, organised through National Curriculum Services) and through increasing the release of information to the news media.

Pathways between education, training and work

This theme builds upon work in the previous theme, *Beyond Compulsory Schooling* by making the linkages between education, training and work a more explicit focus of ACER's research program. The projects conducted during 1994-95 were organised around three broad strands: economic, political and demographic context; education and training programs; and transitions between education, training and work.

Economic, Political and Demographic Context

A major development during 1994-95 was the award of a substantial Vocational Education and Training (VET) Research Centre Grant by the National Research Advisory Council of the Australian National Training Authority (ANTA) to the Monash University-ACER Centre for the Economics of Education and Training. The grant will enable it to conduct a program of research, research training and dissemination on the economic impact of VET. The grant is a recognition of the importance of economic factors in the development of VET, and the expertise that has been accumulated by the Centre since its foundation in 1992. In December 1994 the Centre was awarded a further grant to coordinate a study of the data needs of researchers working in the VET field.

On the international scene ACER was commissioned by the United Nations Educational, Scientific, and Cultural Organisation (UNESCO) to assist with a major study (funded by the Asian Development Bank) on the development of secondary education in Asia between 1960 and 1990. The ACER consultancy was particularly concerned with the costs of secondary education, the internal efficiency of the sector, and the extent to which secondary education is meeting labour market needs. In addition to a general report, detailed studies of the development of secondary education in seven countries were produced.

Education and Training Programs

During 1994-95 reports of four projects from this strand have been published or completed for publication. *Subject Choice in Years 11 and 12* provides up-to-date information about subject enrolment, factors associated with the choice of subjects in Years 11 and 12, and recent trends. The *Potential Impact of Competency-Based Approaches on Literacy Curricula and Assessment in Schools* presents an analysis of the perspectives of a range of staff members in secondary schools about the influence of competency-based approaches on these aspects of curriculum and assessment. *A Study of the Academic Results of On-Campus and Off-Campus Students* presents the results of an investigation of whether there was any evidence of lower academic achievement by students studying off-campus. The *Course Experience Survey for 1992 Graduates* reports the views of university graduates about their courses and notes differences related to field of study, the institution attended and characteristics of the graduate (age, gender, and employment status after graduation). During the year ACER undertook analyses of the 1993 *Course Experience Survey* of graduates of Australian universities and the *Postgraduate Destinations Survey*.

Transitions between Education, Training and Work

Research in this strand focuses on identifying pathways young people follow in moving between education, training and work, examining the equity of access to those pathways, and longer-term outcomes.

The major project in this strand is *Youth in Transition* which is funded jointly by the Department of Employment, Education and Training (DEET) and the ACER Core Grant. This is a program of longitudinal studies that commenced in 1978. It now contains substantial data on the educational and labour force experiences of four national cohorts of persons aged 19, 24, 29 and 33 respectively. Participants in the study have been contacted annually since about the age of 16. This year some additional data were gathered. Information was obtained about participation in training programs associated



*Dr Phillip McKenzie
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Theme Coordinator*

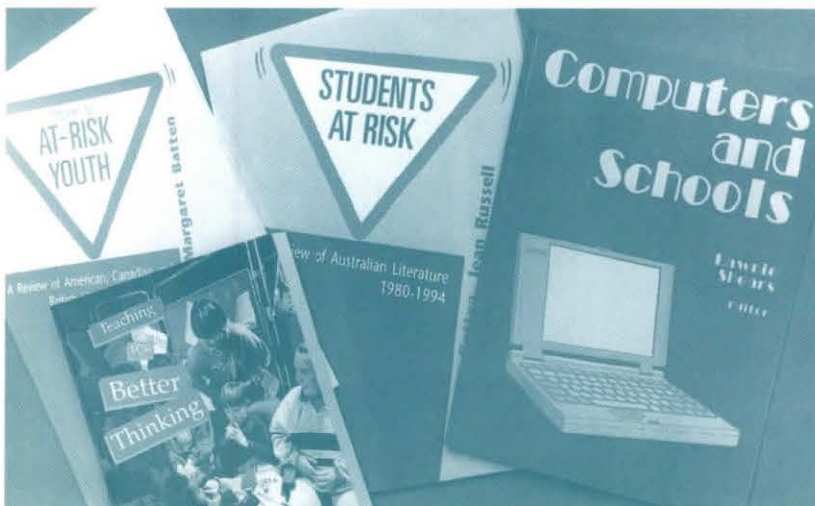
with work and further study from all of the cohorts, which can be linked to earlier school experiences. A report on graduation rates from higher education was completed and was the third in the series of reports using *Youth in Transition* data commissioned by the Higher Education Division of DEET. In addition the project has produced papers on the political knowledge of young people and the course experience of students in the final years of school. Discussions about the direction of this project in relation to other longitudinal surveys conducted by DEET have resulted in a plan to bring the two programs together with a substantial expansion of the role of ACER.

Information from the *Youth in Transition* study is also being used to examine the effects of participation in TAFE and completion of TAFE qualifications on income and labour market experiences in a project commissioned by ANTA's National Research Advisory Council. It also provides information for a national project on the impact of gender on the post-school pathways of males and females of similar background and schooling experience.

Projects

- Academic Results of On and Off Campus Students
ACER Staff: Michael Long, Graeme Withers
- Course Experience Survey Analysis
ACER Staff: John Ainley, Michael Long, Linda Perry
- Development of Occupational Interests
ACER Staff: Jan Lokan, Marianne Fleming

- Gender Differences in Post-School Pathways
ACER Staff: Margaret Batten, Lyn Robinson, Michael Long
Colleagues: Gilah Leder, Lyn Yates (LaTrobe University)
- Labour Market Outcomes from TAFE
ACER Staff: Michael Long, Phillip McKenzie
Colleagues: Andrew Sturman (University of Southern Queensland)
- Literacy Curricula and Key Competencies
ACER Staff: Jan Lokan, Margaret Batten, Imelda Carthy, Joy McQueen, Suzanne Mellor, Graeme Withers
- Monash-ACER Centre on the Economics of Education and Training
ACER Staff: Phillip McKenzie, Michael Long
Colleagues: Gerald Burke, Fran Ferrier, Aija Grauze, Leo Maglen, Chandra Shah and Chris Selby Smith (Monash University)
- Post-Graduate Destinations Survey
ACER Staff: Linda Perry, Michael Long, Corinne Getty
- Secondary Education in Asia
ACER Staff: Phillip McKenzie
Colleagues: Rupert McLean, Michael Lally (UNESCO)
- Youth in Transition
ACER Staff: Michael Long, Christine Boyer, Lyn Robinson
Colleagues: Peter Carpenter (Australian Catholic University), Martin Hayden (Southern Cross University)



Making schools more effective

The *Making Schools More Effective* theme focuses on studies which contribute to an Australian knowledge base on factors associated with the effectiveness of schools and programs in enhancing student outcomes. As an extension of this work there have been a number of projects concerned with school management information which aim to link theory with practice. Reflecting recent developments in school effectiveness that emphasise the importance of what happens within classrooms, several projects aim to develop an understanding of school effectiveness in terms of curriculum, teacher and classroom influences. Research on the theme was organised around three inter-related strands: school and program effectiveness; school management information; and curriculum and student learning.

School and Program Effectiveness

Through the evaluation of educational programs, and by investigating the naturally occurring variation among schools, projects in this strand seek to relate characteristics of schools and programs to student outcomes.

The largest project in the theme was the *Third International Mathematics and Science Study*, in which data were gathered from students, teachers and schools at the later primary and early secondary levels. Internationally developed instruments were used for the collection of data in the latter part of 1994. Although the project is specifically concerned with achievement in mathematics and science, the data about school and classroom practice are so extensive that they could provide more general information about school effectiveness.

Research on the early years of school, which had begun with an evaluation of the *Western Australian First Steps* project, focused on an evaluation of a Victorian pilot project on multi-age grouping in the first three years of school. This year saw the first stages of data collection and analysis with

the expectation that the investigation will continue as students move through the early school years.

During the year the report *Schooling for Students with Disabilities* was published. It is based on research conducted over the year and provides a comprehensive picture of educational provision. It contains a literature review, a survey of government and non-government education authorities, and national sample surveys of schools, teachers and parents.

An important premise of ACER research on school effectiveness is that schools need to be effective for the full range of young people. During the year ACER commenced a national sample study on *Gender and School Education* which will systematically examine the provision of education for girls. Several studies were concerned with the effectiveness of schools and programs for disadvantaged groups. There were two related reviews of programs provided for young people considered to be at risk of not completing or benefiting from school education: one focused on Australian programs and literature and the other was concerned with American, British and Canadian programs. Another study investigated the educational provision for socioeconomically disadvantaged students. Aspects of disadvantage associated with location were investigated in a study of curriculum provision in rural secondary schools. An advisory committee of people with experience in Aboriginal education has been established, and met through the year to provide advice about new projects in this field in which ACER would be able to make a contribution and to identify other groups with whom ACER could usefully collaborate.

School Management Information

The provision of information to facilitate school management and reviews of programs and schools emerged as an important component of the research program in this theme. Information for management and review is even more important in devolved education systems than in centralised systems. During the year ACER conducted several studies of

Dr John Ainley
Associate Director
Theme Coordinator

management information and its application in school systems and schools.

One project was an evaluation of the guidelines for school annual reports developed by the Victorian Directorate of School Education. These guidelines were closely tied to the goals and priorities in school charters, and were oriented to the collection, analysis and interpretation of data. The evaluation identified types of data which were the most useful for school management and review. Another project, commissioned by the same authority, investigated the practical application of models for the projection of student enrolments: an issue centrally important to the planning of education systems as well as school level planning. The report *Infrastructure Resourcing in Schools Serving Disadvantaged Communities* arose from a study commissioned by the Schools Council and provides information intended to assist schools and authorities in identifying curriculum-related infrastructure needs.

During the year ACER completed a revision of information gathering procedures for the Melbourne Catholic Education Office. It also completed a report entitled *The Availability of Baseline Data on Equity in Australian Schools*. This report examined the availability of information from national, state and school system sources, and from both research studies and management information systems, to monitor equity in Australian education. In terms of enhancing practitioners' expertise in program evaluation a set of *Program Evaluation Training Modules* were prepared for the New South Wales Department of Education.

Curriculum and Learning

Recent research has suggested that the keys to school effectiveness reside in what happens at classroom levels. For this reason a number of studies pursue more detailed aspects of educational practice which serve to make schools effective. These include studies of teachers and teaching, thinking and learning processes, and curriculum issues. A publication on teacher evaluation was published in an international journal and work has been prepared for inclusion in a

publication on teacher evaluation from the Western Michigan University.

Several projects were concerned with aspects of student learning. One study related to several of the key competencies identified in the Finn and Mayer reports, but with major foci on students' problem solving and learning. A project on the use of laptop computers included a survey of computer use in schools as well as a series of school-based projects designed and executed by a group of ten teachers. Other projects concerned with student learning relate to the *Centre of Philosophy for Children*, which provides a national focus for theoretical and applied research on concepts and strategies underlying the teaching of thinking. A book entitled *Teaching for Better Thinking: The Classroom Community of Inquiry* was published.

Curriculum issues are the focus of two projects being conducted as part of the research program at ACER. One builds upon work concerned with standard setting in education and strategies for linking assessment procedures with specified learning outcomes in Australia and other countries. The other involves an historical analysis of syllabuses and edicts, of classroom books and materials, or of prescribed curricular routines and classroom practices. It seeks to illuminate current reconstruction of the school curriculum through the National Statements and Profiles by analysing the curriculum in the past.

Projects

Aboriginal Education:

ACER Staff: Margaret Batten

Attitudes to Languages

ACER Staff: Susan Zammit

Catholic Education Office Information Systems

ACER Staff: John Ainley, Corinne Getty, Linda Perry

Comparative Studies of Teachers

ACER Staff: Graeme Withers

Curriculum Redefined

ACER Staff: Barry McGaw

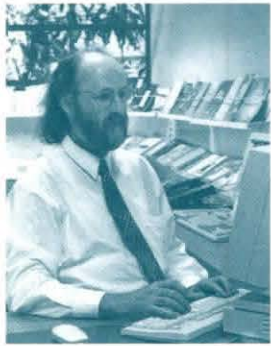
Gender and School Education

ACER Staff: Cherry Collins, Margaret Batten, Corinne Getty

Early Years of School

ACER Staff: Marion deLemos

- Colleagues:* Elizabeth Mellor (Monash University), Christine Ure (University of Melbourne)
- Educational Computing
ACER Staff: Helga Rowe
- Educational Provision for Students from Socioeconomically Disadvantaged Backgrounds
ACER Staff: John Ainley, Margaret Batten, Michael Long
Colleagues: Brian Graetz (LaTrobe University)
- Evaluation of Guidelines for School Annual Reports
ACER Staff: John Ainley, Corinne Getty, Marianne Fleming
- Factors Associated with the Development of Literacy
ACER Staff: Marion deLemos, Adrian Harvey Beavis, Margaret Forster
- Laptop Computers in Schools
ACER Staff: John Ainley, Suzanne Mellor
Colleague: Lawrie Shears (Consultant)
- Philosophical Inquiry and the Teaching of Thinking
ACER Staff: Laurance Splitter
- Problem Solving and Learning
ACER Staff: Helga Rowe
- Program Evaluation Training Module
ACER Staff: John Ainley
Colleagues: John Owen (Melbourne University), Kevin Piper (Consultant)
- Programs for At Risk Students (Australia)
ACER Staff: Margaret Batten
Colleague: Jean Russell (Consultant)
- Programs for At Risk Students (Overseas)
ACER Staff: Graeme Withers, Margaret Batten
- Review of Baseline Data on Equity
ACER Staff: Lyn Robinson, John Ainley
- School Curriculum: Past to Present
ACER Staff: Cherry Collins
- Spatial Abilities
ACER Staff: John Izard
Colleagues: Leone Burton (Professor, Mathematics and Science Education, University of Birmingham, UK), Christopher Haines (Pro-Vice-Chancellor, City University, UK)
- Student Enrolment Projection Models
ACER Staff: Phillip McKenzie, David Roberts
Colleagues: Chandra Shah, Gerald Burke (Monash University)
- Studies in School Effectiveness
ACER Staff: John Ainley, Lyn Robinson
- Teachers' Work
ACER Staff: Margaret Batten, Graeme Withers
- Teaching of Thinking: Teacher Perspectives
ACER Staff: Laurance Splitter, Suzanne Mellor, Christine Boyer, Adrian Harvey-Beavis
- Third International Mathematics and Science Study (Australia)
- ACER Staff:* Jan Lokan, Phoebe Ford, Imelda Carthy, David Roberts



Mr Peter Matheus
Library and Information
Services Manager

LIBRARY AND INFORMATION SERVICES

In many ways 1994-95 has been a time of consolidation for Library and Information Services. For the first time, royalties earned from sales of the *Australian Education Index* (AEI) on CD-ROM exceeded the non-core cost of the project.

Steady progress has been made in each of our projects, despite some developments being deferred until completion of the review of Library and Information Services. It is anticipated that this review will be conducted soon after the appointment of the Information Services and Technology Manager.

The Cunningham Library

The *Australian Education Index* database now includes almost 80 000 bibliographic records. The majority of the library's monographic holdings are recorded, including their shelf locations.

A major initiative during the year was the automation of the serials catalogue. A database of over 1200 records was developed and represents the majority of ACER's journal, government publications, and statistical holdings. As well as full cataloguing of the titles, holding and recently received issue data is recorded. These data will be especially useful in the implementation of computer-based circulation.

Australian Education Index

Royalties from the International ERIC and AUSTROM CD-ROMs have increased to a point where they exceed expenditure for the non-core funded part of the AEI project. A further improvement is anticipated, with a more concerted marketing effort for International ERIC in Australia, and the upgrading of the AUSTROM software to provide (amongst other benefits) access for Macintosh users to the AUSTROM databases. This strong financial outcome will enable us to invest more in indexing and other developments for AEI during the next financial year.

Australian Thesaurus of Education Descriptors

A new edition of the Thesaurus is almost complete. A large number of new terms have been added to the vocabulary, the cross reference structure improved, scope notes for individual terms clarified, and unused and irrelevant terms brought across from the ERIC Thesaurus deleted.

Australian Education Directory

The *Australian Education Directory* gives contact details for key personnel in education agencies. A significant development this year has been a reduction in the production costs by improving the data management for the Directory. Many requests for access to the Directory in electronic form will see us consider electronic distribution during the next financial year.

Directory of Education Researchers

A survey of Australian education researchers has been completed, with responses received from over 200 organisations and 200 individuals. After the data is collated and edited it will be launched through ACER's developing World Wide Web site.

ACER Test Collection

A significant step towards the redevelopment of the Test Collection has been taken during the last few months of the financial year. Working from the original catalogue for the collection, a database of 4300 items has been developed. The next step in the redevelopment is to stocktake the database against actual holdings. This will identify material missing from the collection and material not included in the original catalogue, and assist in the development of loans and other collection management procedures.

DEVELOPMENT & TRAINING

Conferences

The sixth National Conference on Behaviour Problems in Schools was held at the Quality Adelaide Hotel in North Adelaide, South Australia in September 1994. The South Australian Behaviour Problems Network group established the local conference committee under the leadership of Mr Mark Tainsh to work with ACER in arranging the conference. The papers selected for the conference proceedings had been edited prior to the conference and the published book was included in the conference folders at the conference. In arranging the National Conference on Behaviour Problems in Schools ACER collaborated with the National Conference of the Australian Association for Special Education Inc. in an effort to reduce interstate delegate travelling costs. The last day of the Behaviour Problems conference was the first day of the AASE conference, with speakers from both conferences presenting papers.

The seventh National Conference on Behaviour Problems in Schools will be held in Newcastle, New South Wales from 25 - 28 September 1995. This conference has been arranged by ACER in conjunction with the Hunter Association of Behaviour Intervention Teachers, and the Special Education Centre, The University of Newcastle. The papers selected for the conference proceedings have again been edited prior to the conference.

Overseas development programs

Malaysia

In the last report, reference was made to training programs on selection, test analysis and item banking conducted by Dr John Izard at ACER for officers from the Malaysian Ministry of Education through contracts with IDP Education Australia. This year two further four-week courses (assessment of thinking abilities and computer adaptive testing) were conducted

for officers from the Malaysian Teacher Education Branch at ACER.

Oman

At the invitation of the World Bank, Dr Izard travelled in October 1994 to Muscat, Sultanate of Oman, as part of a joint Sultanate of Oman/World Bank Technical Co-operation Project. He worked with senior staff in the Ministry of Civil Service's Directorate for Recruitment and, with an interpreter (funded by World Bank), on the development of selection tests in Arabic for the Ministry. This phase of the project concluded in December 1994. While in Oman, Dr Izard conducted an assessment seminar for the Language Centre and the Faculty of Education at the Sultan Qaboos University. Further Development and Training work in the Sultanate of Oman is expected.

Vietnam

In association with Professor Patrick Griffin of RMIT, Dr Izard returned to Vietnam for negotiations on the improvement of assessment and examination strategies at tertiary level for academic staff of all higher education institutions in Vietnam. This invitation was a consequence of the workshops held in Ho Chi Minh City, Hue, and Hanoi in February-March 1994. While in Vietnam, Professor Griffin and Dr Izard proposed a model for educational quality assurance and research development for the Vietnam National University in Hanoi, recommended a training program for the improvement of assessment practices at Vietnam National University, and provided policy advice on the improvement of assessment practices at tertiary level to the



*Dr John Izard
Assistant Director
(Development & Training)*



*Educationalists from
the Indonesian
Ministry of Education
saw assessment in
action at Beechworth
Primary School.*

Director of Higher Education in the Ministry of Education and Training. Dr Izard also presented a seminar on item banking to senior staff of the Department of Higher Education in the Ministry of Education and Training. Professor Griffin and Dr Izard made a further visit to Hanoi in May 1995 as keynote speakers on the improvement of tertiary assessment practices at a planning conference on quality assurance in higher education for Vietnam National University. Further work with World Bank funding has been proposed.

Cambodia

The Australian Agency for International Development (AusAID) approached ACER to undertake an initial feasibility study for a consultancy to support the development of the Cambodian Year II Examination in 1995. This examination is the summative assessment of the secondary school system in Cambodia. It has been the subject of some controversy in recent years, and the Cambodian Government and various aid agencies have identified review and development of it as an important priority in future aid work.

An ACER consultant team headed by Mr Doug McCurry is undertaking a number of test development workshops in Phnom Penh during 1995 and 1996 to support the development of the Grade II Examination. The consultants will also establish in the Ministry a test development system for publishing tests, and for reporting and analysing test results. This will involve the provision and training of staff to handle the desktop publishing of tests and the printing of exam papers. A network of computers will be provided to record, analyse and report exam results.

AusAID has also requested that the ACER consultancy team consider and draft Terms of Reference for a five-year project to begin in 1996 for the possible development of an Assessment Board to oversee assessments in a broad range of educational activities in Cambodia.

Projects

National Conferences on Behaviour Problems
ACER Staff: John Izard, Yvonne Allen, John King, Judy Bonning, Gloria Locoock
Colleagues: Mark Tainsh (Adelaide South Behaviour Support Unit, Education Department of South Australia), Robert Conway (University of Newcastle, NSW)

Malaysia

ACER Staff: John Izard, Helga Rowe, Laurance Splitter, Daiva Verbyla, John King, Brian Doig, Graeme Withers, Doug McCurry, Glen Jarrett, Peter Mathews, Peter McCrossin, Jenny Bryce, Margaret Wu
Colleagues: Patrick Griffin (RMIT), Trevor Cairney and Susanna Richardson (University of Western Sydney Nepean), John Watkins and Peter Hanley (Wonthaggi Secondary College), Ken Linton (Newhaven Primary School), Malcolm Kays, Andrew Smith, Ruth Roberts (Tasmania Ministry of Education and the Arts)

Vietnam

ACER Staff: John Izard
Colleagues: Patrick Griffin (Assessment Research Centre, RMIT)

Cambodia

ACER Staff: Doug McCurry, George Morgan

PRODUCT DEVELOPMENT

ACER Mechanical Reasoning Test

Project Director: Adrian Harvey-Beavis

Forms A and B of ACER's longstanding *Mechanical Reasoning Test (MRT)* have been revised and improved. Now data have been collected on these parallel test forms so as to create new norms and a new manual. The *MRT* was first published by ACER in 1979 and assesses aptitude for solving problems requiring the understanding of mechanical ideas. It has a strong following among human resource and personnel managers.

DART English - Phase 2

Project Director: Margaret Forster

This sequel to ACER's first *Developmental Assessment Resource for Teachers (DART) English* kit is in its developmental phase. This kit, for lower primary classes, aims to help teachers make reliable judgments of student performance at levels 1 - 4 of the English National Profiles - once again in reading, viewing, speaking, listening, and writing. Trialling is expected to take place in March 1996, with the aim of publishing for the start of the 1997 school year. Meanwhile the first *DART Maths* kit has been put on hold until the financial success of the first English kit, published in late 1994, is clear.

Life Roles Inventory

Project Director: Jan Lokan

These Values and Roles Questionnaires, first published for the international Work Importance Study in 1983, are intended for use by career counsellors, educators, counselling and vocational psychologists, and researchers. Supplementary data have been gathered from 390 students in 14 Victorian schools. There are also useful data from testing fourth year occupational therapy students at La Trobe University. It is intended to publish these materials in 1996.

Personal Study Coach

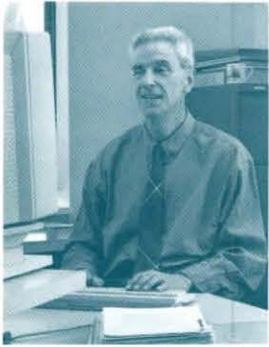
Project Director: Helga Rowe

This software cognitive tool, designed for use at Years 11 and 12, updates information for students about their characteristics as learners. It records time-on-task versus time required, personal study strategies in different subjects, and the demands of different subjects. The aim is to prepare students for lifelong learning and to help them improve their academic achievements.

Quest

Project Director: Ray Adams

This software package offers a comprehensive test and questionnaire analysis environment. It scores and analyses such instruments as multiple-choice tests, Likert-type rating scales, short answer and partial credit items. Australian customer enquiries are assisted through Quest's e-mail help desk. Ongoing maintenance to the program takes place with a view to publishing new editions every 12 - 18 months.



Mr Ian Fraser
Publishing Manager

PUBLISHING

ACER enjoyed another active publishing year and, once again, this contributed significantly to sales growth, gross profit, and of course to the all important bottom line. ACER is a significant publisher of tests, kits, books, periodicals, software, video and audiotapes. About two thirds of ACER's trading surplus arises from our own publishing activity. This includes our own authors, outside authors, ACER editions printed under regional rights agreements, and periodical publishing.

The new titles, new editions and reprints that follow demonstrate that vigour. Output for a small team continues to be substantial, including a large volume of publishing and printing - often under the fiercest of deadlines - undertaken for ACER research, measurement and testing projects.

Assessment packages

There is no doubt that the publication of *DART (Developmental Assessment Resource for Teachers) - English* was the biggest ACER publishing event of the year. It represents a large investment in product development and financial resources, at about \$300 000. It is a significant contribution to the assessment of English in a kit which addresses the skills and understandings identified in the English curriculum profiles for Australian schools. Trial tested (and shortly to be normed) in Year 5 and 6 classrooms, and improved after feedback during the trials. *DART English* is a resource we would like to see play a key part in teachers' class assessments of English achievements. The kit can be used as an integral part of the school's assessment and reporting, or at the discretion of teachers in developing English skills in their students.

DART estimates and reports on a student's level of achievement on each of five strands: viewing, reading, listening, speaking and writing. Two reports are provided for each strand. The first records a student's actual level of performance in the strand, providing a description of performance levels in words (Descriptive Report). The second report allows teachers to explore in detail how a

student has performed in particular assessment activities (Assessment Report).

The *Booker Profiles in Mathematics* broke new ground for ACER as a publisher, and is the first of a series of kits that we envisage publishing by author and mathematician George Booker. The second will be in problem solving (1996) and the third in fractions (1997). The profiles, published in easel format for one-to-one testing, have diagnosis at the centre of their function. They help to pinpoint where the student's errors originate - in computation and numeration in the case of the first kit - and then provide the teacher with directions for remediation and programming. Students who are struggling in maths can be aided by showing, through use of the profiles, what they understand and then providing focused help where it is really needed. The profiles are best used when a detailed analysis of strengths and weaknesses is required and a follow-up program planned, rather than as a weekly test.

The *Work Readiness Profile* was published in April 1995. This assessment kit grew out of a close working relationship between ACER's Helga Rowe and the Commonwealth Department of Health, Housing, Local Government and Community Services. It led to the development of an assessment tool for use in Commonwealth agencies and then to a much wider range of users. It is a criterion-referenced instrument to assist in the initial assessment of individuals with disabilities. It collects information in areas of support needs, strengths and weaknesses for employment, occupational and vocational planning, and the person's developmental and training needs. It is designed for use with older adolescents and adults, and is suitable for the assessment of all major disability groups, including people with multiple disabilities.

Books

Bill Rogers is now one of ACER's best-selling authors. His first book *'You Know the Fair Rule'* has been reprinted four times with sales over 10 000 in Australia, plus good sales of the Longman edition which ACER licensed in the UK. His latest book and masters set - *Behaviour Recovery* - was immediately popular. This reflects not just his writing ability, but the demand from schools for quality materials about behaviour modification and change. *Behaviour Recovery* offers teachers a program with a whole-school approach.

Happy Children is a different kind of venture for ACER. ACER acquired the world rights - except for the USA and Canada where the book has sold over half a million copies and continues to be in consistent demand - to what some regard as the seminal book in its field. The attractive ACER edition has 'Anglicised spelling and idiom'. The author Rudolf Dreikurs, who followed in the footsteps of Alfred Adler, was an outspoken pioneer in promoting parent education and urging parents to learn democratic methods in raising their children.

Foreign rights

This year saw the overseas publishing rights to several ACER titles sold. This reflects a recognition of the quality of Australian publishing and design. For example, *Behaviour Recovery* (Bill Rogers) and *The Early Years* (Gillian Boulton-Lewis and Di Catherwood) appeared in UK editions with hardly a change to their content or design. It was also a breakthrough to have one of ACER's software packages, *Quest*, taken up by Assessment Systems Corporation, who will work closely with big US educational publisher Sage in the marketing and sales development of *Quest* in the USA and Canada.

Foreign rights were sold to these titles:

Adolescent Coping Scale
(Spain, TEA Ediciones)

Behaviour Recovery
(UK/EEC, Longman)

Parenting Teenagers in the 1990s
(UK/EEC, Kingsley)

Quest
(US/Canada, Assessment Systems Corporation)

Relaxation for Children
(Hong Kong/Macau, Eleven)

Teaching for Better Thinking
(Argentina/Mexico/Spain, Manantial)

The Early Years
(UK/EEC, Pitman)

Income to ACER from the sale of rights continues to be an important part of our business - adding \$119 000 to our annual income, and just as importantly, spreading our name nationally and internationally as a publisher of quality materials. Royalties received in the last twelve months have risen 300 percent on just three years ago.

Subscriptions

Mr Ian Fraser negotiated with Underwood Publications for ACER to become the publisher of *Issues*, an existing educational magazine. The previous editor, Gary Underwood, continues to have a key editorial role with *Issues*. This quality subscription magazine for schools focuses on social education and environmental topics. The opening edition - 'Why Does the World Need Antarctica?' - proved very popular and was specially reprinted for the Commonwealth Department of Environment, Sport and Territories, who included it in a competition to encourage secondary schools to use the Internet.

ACER's other journals remained viable in what continues to be a difficult area for periodical publishers. Photocopying of journal articles continues to be rife in tertiary institutions as budgets are 'rationalised' and electronic movement of text accelerates.

Books, Kits and Videos

Adams, Raymond J. & Khoo, Siek-Toon (1994). *Quest*. Melbourne: Australian Council for Educational Research. This is Version 2.0 of ACER's interactive test analysis system for Macintosh and PC. *Quest*

provides data analysts with access to the most recent developments in Rasch measurement theory.

Balson, Maurice/Splinter Productions (1994). *Making Parenting Easier* (audiotape). Melbourne: Australian Council for Educational Research.

Dr Balson looks at ways of making the life of parents easier by offering strategies for dealing with the everyday behavioural problems faced by all parents. What should you do if your child won't get up in the morning, has a tantrum in a public place, or is always fighting with brothers and sisters? The issues are presented in instantly recognisable form, along with explanations as to why children misbehave - and, more important, suggestions for dealing with the problems.

Dreikurs, Rudolf & Soltz, Vicki (reissued 1995). *Happy Children*. Melbourne: Australian Council for Educational Research. 0 86431 160 5

Republished by ACER in a special edition, here is Rudolf Dreikurs' classic work in improving parent-child relations. It is intelligent, humane and practical. Over half a million copies have been sold world-wide. Dr Dreikurs was one of America's foremost child psychiatrists. His book is based on a lifetime of experience working with children: their problems, their delights, their challenges.

Linke, Pam (Ed.) (1994). *Practical Parenting 6-12 Years*, and *Practical Parenting 6-12 Years, Leader's Guide*. Melbourne: Australian Council for Educational Research. 0 86431 158 3; 0 86431 157 5 (leader's guide).

A two-book package covering an exciting and important period of children's development often neglected in parent education - six to twelve years. The well illustrated Leader's Guide contains everything program leaders need to run the course. The companion book for parents is suitable for those doing the course, and is also popular with parents in its own right. Overall, a rich resource for professionals and parents.

Morris, June (1995). *Sextalk for Parents and Teenagers*. Melbourne: Australian Council for Educational Research. 0 86431 151 6
Sextalk is a book for parents who want help in giving accurate sex information to their teenagers. It helps to develop better communication in families.

Morse, Oliver (Producer) (1994). *Bullying* (video). Melbourne: Australian Council for Educational Research.

Bill Rogers, ACER author and educational consultant, says of *Bullying*: "Excellent for staff and student viewing - especially to encourage a peer-mediation model in addressing the problem of bullying." This video presents a "student's eye view" of the victim, the bully and the non-bullying sectors of the school population. Children are rarely given real power, but this program proves that if you are really prepared to trust them, they can produce extraordinary results.

Pearson, Mark & Nolan, Patricia (1995). *Emotional Release for Children*.

Melbourne: Australian Council for Educational Research. 0 86431 162 1
Here are lots of innovative techniques to relieve emotional stress in children, develop emotional balance, and encourage expression of children's full potential. The strategies can be used with individuals or groups.

Richards, Llyn (Ed.) (1994). *Best of set: Families and School*. Melbourne: Australian Council for Educational Research. 0725 4873 (ISSN)

This *Best of set* is arranged in four themes: families; parents and schools cooperate; children's wellbeing; and learning at home. It is a collection of features on what educational research has contributed to our understanding of the relationships between schools and families and between families and learning.

Rogers, Bill (1994). *Behaviour Recovery*. Melbourne: Australian Council for Educational Research. 0 86431 154 0 (book) 0 86431 155 9 (masters)

This is a whole-school program for mainstream schools. It takes teachers step-by-step through the challenge of managing children with behaviour disorders in regular classrooms. The author draws from his rich experiences in providing strategies, class activities, support structures, and student profiles.

Tainsh, Mark & Izard, John (Eds) (1994). *Widening Horizons: New Challenges, Directions and Achievements*. Melbourne: Australian Council for Educational Research. 0 86431 165 6

Another in ACER's successful Student Behaviour Problems series, this title addresses the main themes of the 1994 conference: the national and regional contexts in which disruptive behaviour

occurs, and some actual approaches used to tackle behaviour problems in Australian schools. Contributor Ken Rigby says: "There are three ways of responding to victimisation. One can summon up one's courage and fight back; one can give up; or one can try to get help." This book is committed to the cause of getting help to the bullied.

Tests and Research Projects

Activities and Assessment in Mathematics

(Brian Doig)

In blackline master format, *AAM* is a package of over 200 classroom activities which cover five maths strands of the national Curriculum Profile for Australian Schools (Levels 3 and 4) - number, space, measurement, chance and data, and problem solving. The masters allow teachers to choose the activities they wish to use and how many children will use them. There is no need to follow a set of activities in a particular way, or to have all children do the same activity. Each activity has a guide to scoring. The guide gives a suggested score for each level of performance, a description of what a response would be for each score, and the correct answers. The kit includes an excellent teacher's manual.

Australian Cooperative Entry Program - Series A

Test Booklets (4 kinds), Answer Book, OMR Answer Sheets, Candidate's Information Bulletin, Candidate's Registration Form.

Australian Language Certificates (ALC)

Test Booklets (11 kinds), OMR Answer Sheets (2), Teacher's Handbook, Certificates, School Reports.

Australian Law School Entrance Test - Series C (ALSET)

Test Booklet, Sample Test Questions, OMR Answer Sheet.

Australian Scaling Test

Tests 1 & 2, Answer Book.

Booker Profiles in Mathematics

(George Booker)

The Booker Profiles in Mathematics - in smart easel and box format with a manual - cover early primary students to adults. They provide an excellent diagnostic analysis of strengths and weaknesses in numeration and computation. With its 104 items, Numeration covers whole numbers up to seven digits. Computation has 184 test items covering three concepts. The

profiles have been developed by the author over fifteen years of research in the Mathematics Assistance Clinic at Griffith University. Besides use with school students, the author has trialled the profiles widely with adults taking numeracy and literacy courses with Skillshare, and with applicants for apprenticeships and traineeships.

Cooperative Scholarship Testing Program (CSTP)

Level 1: Tests 1-4, Level 2: Tests 1-4, Level 3: Tests 1-4, Answer Books Levels 1,2 & 3, Candidate's Information Bulletin, Sample Collection of Questions, Supervisor's Directions, Candidate's Registration Form, Administration Notes, Exam Centre Manuals.

Critical Reasoning Tests (CRT)

(Pauline Smith, Chris Whetton)

The Numerical and Verbal Tests that comprise the *CRT* battery have been adapted by ACER for Australian conditions, and republished by arrangement with NFER-Nelson in the UK. The tests assess skills needed for success in any managerial level post. They are suitable for use with school leavers, or with employees currently holding non-managerial positions.

Developmental Assessment Resource for Teachers (DART) English

(Margaret Forster, Juliette Mendelovits, Geoff Masters)

This large-scale English assessment package is designed for use by teachers of upper primary and lower secondary classes as they assess viewing, reading, listening, speaking and writing skills. As a classroom resource, *DART* is intended to play a key part in teachers' assessment of children's achievement in English. The classroom activities have been developed around the award-winning film for children - *Danny's Egg*. The assessment tasks are integrated and thematic, and are accompanied by guidelines for rating student performance. Extensive school trials have been conducted in Year 5 and Year 6 classrooms, and the materials improved as a result. National norming takes place in the second half of 1995, and the data will be published in a technical supplement supplied to all who have bought the kits. All the activities in *DART* address the skills and understandings identified in the English Profile for Australian Schools.

Graduate Australian Medical School Admissions Test (GAMSAT)

Test Booklets (3 kinds), Information Booklet,

Applications Form, Admission Guide, Sample Questions

Learning Assessment Project (LAP)

Stimulus Booklets (2 kinds), Teacher's Handbooks (2 kinds), Marking Guide, Information for Teachers, Orientation Response Material (2 kinds), Practice Material, Student Materials (4 kinds), Teacher's Instructions (2 kinds).

Myers-Briggs Type Indicator® Items

Form G, Form G Self-Scorable, Answer Sheet, Report Form, Introduction to Type (Isabel Briggs Myers), Introduction to Type in Organizations (Sandra Hirsh, Jean Kummerow) - (first published by Consulting Psychologists Press, USA).

Selective High School Tests (SHS)

English/Maths Test, General Ability Test, OMR Answer Sheet.

Special Tertiary Admission Test (STAT)

Test Forms A, B, C, D, E, F and G, OMR Answer Sheet, Candidate's Information Bulletin, Newsletter, Manual for Supervisors, Sample Collection of Questions.

Third International Mathematics and Science Study (TIMSS)

Population One (14 kinds), Population Two (8 kinds), Support Material (7 kinds), Newsletter.

Work Readiness Profile

(Helga Rowe)

The *Work Readiness Profile (WRP)* is published in an attractive professional set and comprises an Answer Book, Manual, Individual Record Form, and Group Record Form. The *WRP*:

- is suitable for assessing major disability groups, including those with multiple disabilities
- is for use with older adolescents and adults
- provides a first picture of the client's characteristics and adaptive functioning
- assesses the person's immediate needs with respect to support, training, placement in open employment, or further assessment
- is useful in planning action to meet workplace and training needs.

Following the successful model used in the *WRP* a second profile - for the assessment of the long-term unemployed or others who are difficult to place in employment - will be published in 1996.

Youth in Transition

Questionnaires (4 kinds), Calendar, Christmas Card.

Periodicals

ACER Newsletter (Editor: Julia Robinson)

No. 81 (October 1994), No. 82 (March 1995), No. 83 (June 1995)

Australian Education Directory 1995

(Editors: Peter Mathews, Anne McKechnie)

Australian Education Index

(Editor: Elspeth Miller)

Vol. 37 No. 2 (June 1994), Vol. 37 No. 3 (September 1994), Vol. 37 Cumulative 1994, Vol. 38 No. 1 (March 1995)

Australian Journal of Career Development

(Editor: Meredith Shears)

Vol. 3 No. 2 (Winter 1994), Vol. 3 No. 3 (Spring 1994), Vol. 4 No. 1 (Autumn 1995)

Australian Journal of Education

(Editor: Richard Smith)

Vol. 38 No. 2 (August 1994), Vol. 38 No. 3 (November 1994), Vol. 39 No. 1 (April 1995)

Bibliography of Education Theses in Australia

(Editor: Judith Armstrong)

No. 16 (1995)

Issues

(Editor: Gary Underwood)

No. 30 (March 1995), No. 31 (May 1995)

set: research information for teachers

(Editors: NZ: Llyn Richards, then Judith Wright from 1995; Australia: Peter Jeffery)
No. 2 (1994), No. 1 (1995)

Reprints

Besides numerous reprints of test components required for projects, fifteen books were reprinted during the year for stock, as were 156 test and kit parts, e.g. manuals, technical supplements, test booklets, answer sheets, record forms, and score keys. The high reprint level of recent years has been maintained: a signal of demand from customers for our products, and also the confirmation of printing on demand as a better means of managing stock and funds tied up in stock.

MARKETING

For the ACER Marketing Department, 1994-95 was a year of growth.

Both staff and customers became acquainted with the advantages and opportunities of our new surroundings, and a healthy net profit of \$528 000 was posted to conclude a successful year.

A special focus this year was the increase in ACER workshops featuring ACER authors and products. Workshops have generally been held at the national office in Melbourne, with plans to extend them to other states in 1995-96. These workshops and training days provide an excellent support service to customers. The current high interest and attendance levels are indicators that there is a need for practical, skill-centred workshops for practitioners in each market area.

To prepare for an electronic version of ACER's product catalogues on the Internet, this year also saw the use of a new database to ensure easy updating and searching for product items. The release dates of the Psychology and Human Resources catalogues have moved to mid year, while the Education and Parent Education catalogues will continue to be released in January or February of each year.

Sales and Marketing Manager, Ms Patricia Genat, was able to visit a number of overseas agencies during March 1995 to negotiate continuing contracts and preview new products. The visit also included two days at the London Book Fair, and ACER now holds the right to distribute the excellent Tavistock series of child development books from Rosendale Press in London.

During the Marketing Planning Retreat this past year consultants, administrative staff, the customer service manager and financial manager spent time planning toward the year 2000. Current business is conducted keeping the customer and products of the future firmly in mind. Each member of the marketing staff has contributed to the development in skills and productivity of the team as a whole. The ACER customer - both

internal and external - is kept clearly in focus for daily decision making and processes by each marketing staff member.

Regular mailings to our customers include :

- PsychNews* (2)
- ACER New Releases* (3)
(mailed with the *ACER Newsletter*)
- Personnel News* (1)
- Book Catalogue (2)
- Annual Catalogues: Educational Resources; Personnel Selection and Human Resource Development; Psychological Tests; and Parent Education.

Conference and trade exhibitions attended this year include:

Education

- ARA Conference Perth
- Behaviour Problems Annual Conference
- Queensland Guidance Counsellors Conference
- Darling Downs Regional Teachers Conference
- AASE Annual Showcase - Melbourne
- AASE National Conference - Adelaide
- MAV Annual Conference
- Gifted and Talented National Conference

Parent Education

- IYF National Conference - Adelaide
- Family Life Counsellors Conference
- Australian Infant Mental Health Association Conference

Psychology

- APS Annual Conference
- Down's Syndrome Conference
- Australian Society of Study of Brain Impairment Annual Conference
- Australian Guidance and Counselling Association
- ANZAPPL Annual Conference

Personnel and Human Resources

- APS Annual Conference
- Australian Association for Psychological Type Biannual Conference
- AHRI Annual Conference
- Australian Association of Careers Counsellors Annual Conference



*Ms Patricia Genat
Sales and Marketing
Manager*

ACER workshops organised this year:

Education

Stop Think Do
Bullying and Improving Peer Relationships
Developmental Assessment Resource for
Teachers (DART) English - Qld, WA, VIC,
NSW
General Classroom Assessment Procedures
Booker Profiles in Mathematics
Cued Articulation and Phonemic
Awareness workshops

Parent Education

Leadership Training Workshops in the
following areas:
Working With Vulnerable Families
Group Facilitation Skills
Parenting Adolescents
Effective Discipline for Early Childhood
Parenting Today
Emotional Release for Children

Psychology

Assessment for Psychopathology
Child Behaviour Checklist
Battelle Development Inventory
AACC Workshop

Personnel and Human Resources

MBTI Accreditation Courses
16PF 5th Edition Workshops
Occupational Testing for Careers
STRONG and MBTI
Psychologists in Human Resources
Management



CORPORATE SERVICES

Reorganisation of ACER's structure

Two considerations led in 1994-95 to a decision to alter the organisational structure of ACER. One was that growth in staff numbers had created a need for more systematic, organisation-wide treatment of personnel issues. The other was that developments in information technology made it worthwhile to bring considerations about information services and information technology together.

A new approach to personnel and human resource issues

The success of an organisation like ACER depends entirely on the skills of its staff. The intellectual property of the organisation is created by its staff so it is essential, therefore, to nurture and develop those skills.

When ACER was smaller, all personnel matters except routine ones to do with appointments and leave were handled within the operational units. As the organisation grew, some personnel functions were taken over by the Business Division to ensure that they were handled in a timely and consistent fashion, but that did not address sufficiently well questions of staff development and training.

The name of the Business Division has been changed to Corporate Services to signal a new approach to personnel matters. The title of Business Manager has been changed to Corporate Services Manager and the title and role of Administrative Officer (Business Division) has been changed to Personnel Officer. While the Corporate Services Manager will continue to have other responsibilities as well, he and the Personnel Officer are now responsible for the

operation of ACER's new staff review for development procedure and the staff training that will flow from it, including management training for staff with supervisory responsibilities, and for dealing with any staff grievances.

Integration of information services and technology

ACER has developed an excellent computer network in recent years, particularly since the move to new premises in 1994. As a research and development organisation, ACER is a major user and producer of information, and so needs to ensure it uses and produces information in the most effective way.

ACER's existing operation and structure and future possibilities were reviewed by a group of internal staff and two external members, Mr Peter Annal, Director of the Monash University Computer Centre, and Dr Don Schauder, RMIT University Librarian. On the basis of this group's recommendations, ACER is now seeking to achieve better integration of information services and technology by creating a new Information Services and Technology group which will bring together Computer Services, Library and Information Services and Records Services. This group will also take responsibility for establishing ACER's presence on the World Wide Web, and will work closely with Publishing in the development of electronic publishing by ACER and with Marketing and Customer Service in exploring possibilities of using the Internet and other networks for marketing and selling ACER products.

Formation of the group will be effected upon the appointment of an Information Services and Technology Manager.

New management structure

With these changes, ACER's administrative structure is:



*Mr Robert Moore
Corporate Services
Manager*



*Ms Kerin Maher
Personnel Officer*



*Ms Hilary Miller
Computer Services
Manager*



*Dr Margaret Batten
Senior Research Fellow
and Equal Opportunity
Officer*

Computer Services

The past year has seen the ongoing development of the ACER computer network in response to significant growth in project activity and staff numbers. Provision of appropriate desktop hardware and software to meet the increased demand across the organisation has been a top priority for Computer Services. In addition a Help Desk has been introduced to provide a centralised system of support for users of ACER's computer facilities.

Reconfiguration of the network occurred with the retirement of two older systems from the central Vax cluster. These were replaced with state of the art hardware - processors using Digital's Alpha chip technology which, combined with fast disk drives, deliver substantially enhanced performance. The new systems are being used primarily to cater for the large scale data analysis generated by new research projects.

Other developments to network infrastructure included the commissioning of additional communication hubs and associated cabling to provide network services to staff who relocated to Level 1 of the ACER building. An additional PC local area network (LAN) was designed and installed in a nearby offsite location for one of ACER's large scale research projects. Support for the LAN was provided by Computer Services staff for the duration of the project. The same LAN will be used in the latter part of 1995 for other contract project work.

A program of ongoing replacement of older desktop hardware was initiated during the year. This will continue throughout 1995-96 (as funds permit), providing staff with suitably configured systems which better meet current work demands. Reallocation of existing equipment between staff has formed another part of the general process of review of computer resources.

Equal Opportunity and Affirmative Action Committees

Much of the year was spent on the development of an Affirmative Action Plan and the preparation of ACER's first report as required by the *Affirmative Action (Equal Opportunity for Women) Act 1986*.

One of the key elements of the operation of an Affirmative Action program is communication and consultation with employees, particularly women employees. A series of discussion groups was held with staff to talk about the principles of Affirmative Action and how they might apply at ACER, and to consider priorities for an Action Plan.

Approximately 70 per cent of staff responded to a survey in February to gather staff views. Staff indicated their use of and satisfaction with current work practices at ACER which related to Affirmative Action issues, and rated the importance of 14 issues connected with the formulation of an Affirmative Action Plan. Quite a high degree of satisfaction was expressed with most of the current work practices. The responses to the other two items on the questionnaire indicated that the three most important areas for consideration in the development of an Affirmative Action Plan were: career development assistance and investigation of career paths available to general staff; supervisor and management training in how to address equal opportunity issues; and the development of a work and family policy. As a result of further discussion with staff, it was decided to focus in 1995-96 primarily on the first two of the three areas, career development and management training. Discussions have taken place with a consultant who has expertise in these areas, and who is willing to provide advice and training for management and staff.

Books and Reports

- Ainley, J. & Long, M. (1994). *Course Experience Survey 1992 Graduates*. Canberra: Australian Government Publishing Service, 90p.
- Ainley, J., Robinson, L., Harvey-Beavis, A., Elsworth, G. & Fleming, M. (1994). *Subject Choice in Years 11 and 12*. Canberra: Australian Government Publishing Service, 208p.
- Ainley, J., Graetz, B., Long, M. & Batten, M. (1995). *Socioeconomic Status and School Education*. Canberra, ACT: Australian Government Publishing Service, 139p.
- Batten M. & Russell, J. (1995). *Students at Risk: A Review of Australian Literature 1980 - 1994*. Camberwell: ACER, 132p.
- de Lemos, M. (1994). *Schooling for Students with Disabilities*. Canberra: Australian Government Publishing Service, 243p.
- Ferrier, F., Burke, G., McKenzie, P., Selby Smith, C., Selby Smith, J. & Anderson, D. (1994). *Past Imperfect: Future Imperative. A guide to recent Australian literature on the economics of vocational education and training*. Brisbane: Australian National Training Authority, 44p.
- Getty, C., Long, M. & Perry, L. (1994). *Postgrad: The Postgraduate Destinations Survey*. Melbourne: Graduate Careers Council of Australia.
- Izard, J.F. (1995). *Children and youth with emotional or behaviour problems: Guidelines for conference publications and presentations*. (Revised Ed.). Camberwell, Vic: ACER.
- Lokan, J., Withers, G., Mellor, S., Batten, M., McQueen, J. & Carthy, I. (1995). *Literacy & the Competencies: Potential Impact of Competency-based Approaches on Literacy Curricula and Assessment in Schools*. Final Report of project submitted to Targeted Programs Branch of Department of Employment, Education and Training, Canberra, 212p.
- Long, M. (1994). *A Study of the Academic Results of On-Campus and Off-Campus Students*. Commissioned Report No. 34. National Board of Employment, Education and Training. Canberra: Australian Government Publishing Service, 78p.
- Long, M., Carpenter, P. & Hayden, M. (1995). *Graduating from Higher Education*. Department of Employment, Education and Training, Australian Government Publishing Service, 117p.
- Maclean, R., Siriwardena, L., Lally, M. & McKenzie, P. (1994). *Secondary Education in the Asia-Pacific Region, 1960 to 1990: Strategic Issues and Policy Analysis*. Draft report to the Asian Development Bank. Bangkok: ACEID, UNESCO.
- McKenzie, P. & Burns, P. (1994). *Developing Indicators of Infrastructure Needs in Secondary Schools*. Commissioned Report No 31. National Board of Employment, Education and Training, Canberra: Australian Government Publishing Service, 52p.
- Mellor, S., Withers, G., Batten, M., Lokan, J., McQueen, J. & Carthy, I. (1995). *Literacy and the Competencies: Teachers' Perspectives*. Companion Volume to Final Report submitted to Targeted Programs Branch of Department of Employment, Education and Training, Canberra, 259p.
- Owen, J., Piper, K. & Ainley, J. (1995). *Program Evaluation Training Modules*. Camberwell: ACER, 92p.
- Robinson, L. & Ainley, J. (1995). *The Availability of Baseline Data on Equity in Australian Schools*. Canberra, ACT: Australian Government Publishing Service, 79p.
- Rowe, H.A.H. (1994). *Employment Attribute Scale*. Canberra, ACT: Australian Government Publishing Service.
- Rowe, H.A.H. (1995). *Work Readiness Profile*. Camberwell, Vic: ACER.
- Splitter, L. & Sharp, A. (1995). *Teaching for Better Thinking: The Classroom Community of Inquiry*. Camberwell: ACER, 268p.
- Tainsh, M. & Izard, J.F. (Eds) (1994). *Student Behaviour Problems: Positive Initiatives and New Frontiers*. Camberwell: ACER, 224p.
- Vernon, P.E., Miller, K.M. & Izard, J.F. (1995). *Mathematics Competency Test*. London: Hodder & Stoughton.
- Withers G. & Batten M. (1995). *Programs for At-risk Students: A Review of the American, British and Canadian Literature Since 1984*. Camberwell: ACER, 126p.

Book Chapters

- Forster, M. (1994). DART: 'Assisting Teachers to Use the English Profile' in Warhurst, J. *Assessing and Reporting in Teaching and Learning: Implementing the National Profiles*. (ACSA Workshop Report No. 8) Canberra: Australian Curriculum Studies Association Inc.
- Izard, J.F. (1994). Strategies for assessing projects and investigations: Experience in Australia and United Kingdom. In Mauritius Examinations Syndicate (Eds), *School-based and External Assessments*. (pp.214-222). Mauritius: Mauritius Examinations Syndicate.
- Lokan, J. & Shears, M. (1995). Studies of Work Importance in Australia. In Super, D. & Sverko, B. (eds) *Life Roles, Values, and Careers: International Findings of the Work Importance Study*. Jossey-Bass Publishers, San Francisco, pp.77-99.
- Lokan, J. (1995). Role Commitment and Values Among Adolescents from Four Countries. In Super, D. & Sverko, B. (eds) *Life Roles, Values, and Careers: International Findings of the Work Importance Study*. Jossey-Bass Publishers, San Francisco, pp.278-290.
- Masters, G.N. (1995). Setting and measuring performance standards for student achievement. In Schools Council and the ANU Centre for Economic Policy Research (eds) *Public Investment in Schools Education: Costs and Outcomes*, Canberra.
- Masters, G.N. (1994). The partial credit model. In Hambleton, R. K. & van der Linden, W.J. (Eds) *Handbook of Modern Item Response Theory*. Springer-Verlag, New York.
- McGaw, B. (1994). Meta-analysis. In Husen, T. & Postlethwaite, T.N. (Eds) *International Encyclopedia of Education (2nd ed.)*. Oxford: Pergamon, pp.3775-3784.
- McGaw, B. (1995). Commentary on Andrich "The current competency approach: How relevant for the assessment of general and vocational studies? In Crittenden, B. (Ed.) *Confusion Worse Confounded: Australian Education in the 1990s*. Occasional Paper Series 1/1995. Canberra: Academy of the Social Sciences in Australia.

- Mellor, S. (1994). School to Work: Student memories of their post-compulsory years of schooling. In *Readings, Social Foundations of Education Booklet*, Deakin University.
- Rowe, H.A.H. (1994). Personal computing: A source of powerful cognitive tools. Chapter 1 in Wild, M. & Kirkpatrick, D. (Eds) *Computer Education: New Perspectives*. Perth: MASTEC, Edith Cowan University, pp.19-29.

Journal Articles

- Ainley, J. (1995). Parents and schools: Changing relationships. *Journal of Christian Education*, 38 (2).
- Ainley, J. (1995). Effective schools: Where to from here? *Leading and Managing* 1 (1), pp.28-43.
- Batten, M. (1994). What makes a good teacher? *Education Alternatives*, 3 (10), p.12.
- Bryce, J. (1994). Looking beyond the hills: thoughts about work education in an isolated rural community. *Australian Journal of Career Development*, Winter 1994.
- Bryce, J. and Wu, M. (1994). The Advantages and Disadvantages of Using a Computer-Interactive Format for Music Assessment. *Research Studies in Music Education*, No. 3, December 1994.
- de Lemos, M. (1994). Not so straightforward: Interpreting the scores. In Special Issue on the Uses and Misuses of Evaluation. *Evaluation and Research in Education*, 8 (1&2), pp.69-83.
- Haines, C.R. & Izard, J.F. (1994). Assessing mathematical communications about projects and investigations. *Educational Studies in Mathematics*, 27, pp.373-386
- Izard, J.F. & Haines, C. (1994). Validating the assessment of projects and investigations. *Acta Didactica Universitatis Comenianae (ADUC) - Mathematics*, Issue 3, pp.83-96.
- Lokan, J. (1994). Effective or not? Research evidence. *Australian Journal of Career Development*, 3 (3) (Special edition on computer-assisted career guidance), pp.28-31.
- Lokan, J. (1994). Equity in ACER selection tests. *ACER Newsletter*, October.

- Lokan, J. (1994). Quality of student choices. *Prospects*, 3, pp.27-32.
- Masters, G.N. (1994). Assessing student achievement. *Education News*, 8(2), 11.
- Masters, G.N. (1994). Profiles and assessment. *Curriculum Perspectives*, 14(1), pp.48 - 52
- Masters, G.N., Adams, R.J. & Lokan, J. (1994). Mapping Student Achievement. *International Journal of Educational Research*, London, Pergamon Press, 21(6), pp.595-609.
- McGaw, B. (1995). Benchmarking for accountability or improvement? *Unicorn: Journal of the Australian College of Education*, 21(2), pp.7-12.
- McKenzie, P. (1994). Credit transfer and skill recognition. *ACE News* (Newsletter of the Australian College of Education), 13 (3), September, pp.5,8.
- McKenzie, P. (1995). Cooperation in educational research. *Education Alternatives*, 4 (4) p.11.
- McKenzie, P. (1995). Scale economies in Australian secondary schools. *Australian Journal of Education*, 39 (2) pp.109-125.
- Mellor, S. (1994). Former student opinion on the relevance of schooling to work. *Australian Journal of Career Development*, 3 (3), November.
- Rowe, H.A.H. (1995). Computer-assisted knowledge acquisition: Let's have theory-based instruction. *Australian Educational Computing* 10 (1) pp.29-32.
- Splitter, L. (1995). Teaching Thinking through Philosophy for Children. *Unicorn*, 21 (1), pp.14-26.
- Splitter, L. (1995). Children, philosophy and citizenship. *Educational Alternatives* 4(5) June p.2.
- Splitter, L. (1995). Philosophy and community: Thinking and meaning. *The Cappuccino Papers*. Occasional Papers from *Imagine the Future*, No 1, pp.45-48.
- Splitter, L. (1995). On the theme "Teaching for Higher Order Thinking Skills". *Inquiry: Critical Thinking across the Disciplines*, 14 (4) pp.52-65.
- Zammit, S.A. (1994). Learning a Language: hard or soft option, *Educational Quarterly*, Spring pp.13-14.

Tests

- Doig, B. (1995). *Activities and Assessment in Mathematics (AAIM)*. Camberwell: ACER.
- Forster, M., Mendelovits, J. & Masters, G. (1994). *Developmental Assessment Resource for Teachers (DART) English*. Camberwell: ACER.
- Zammit, S.A. (1995). The Australian Language Certificates: *11 test booklets* (seven Languages: Chinese, Indonesian, Modern Greek, French, German, Italian and Japanese with the last 4 at both Beginners and Intermediate level), *2 OMR sheets* and *Teachers' Handbook*.

Book Reviews

- McKenzie, P. (1994). Australia's young people: A statistical profile, by the Australian Bureau of Statistics. Reviewed in *Australian Journal of Career Development*, 3 (2), p.43.

Conference Papers

- Ainley, J. (1994, July). *Evaluation as Research: the Process, the Questions and the Methodology*. Paper presented at the Adult Literacy Research Network seminar, Evaluation as Research, Towards an Evaluation of the Certificates of General Education for Adults, Footscray.
- Ainley, J. (1994, September). *Monitoring the Quality of Education Systems*. Keynote Address to the Annual Conference of the Association of Councils of Post-Primary Institutions in Victoria, Shepparton.
- Ainley, J. (1994, November). *Changes in Mathematics Achievement over the High School Years*. Paper presented to the annual conference of the Australian Association for Research in Education, The University of Newcastle.
- Ainley, J. (1995, January). *Parents and Schools: Changing Relationships*. Paper presented to the Annual Conference of the Australian Teachers Christian Fellowship, Melbourne.
- Ainley, J. (1995). *Subject Choice in Senior Secondary School*. Address to the ACER-NCS Seminar Subject Choice in Senior Secondary School, Melbourne, March; Sydney, May.

- Bride, M. & Lokan, J. (1994). *Evaluation of Career Education Programs*. Paper presented at International Association of Applied Psychology Congress, Madrid.
- Bryce, J. (1994, September). How I managed to undertake a qualitative research study without having to dress as a bikie: the issue of persona. Association of Music Education Lecturers 16th Annual Conference, Melbourne.
- Collins, C. (1995, May). *Gendered Knowledge: The Knowledge Issue in the Debate on Gender and the Curriculum*. Paper presented at Gender and Curriculum Workshop, Directorate of School Education, Victoria.
- Collins, C. (1995, June). *Competencies and the Debate on Outcomes-focussed Curriculum Reform*. Keynote paper presented at Competencies Workshop, Tasmanian Education Consortium, Hobart.
- de Lemos, M. (1994, September-October). *Intellectual Disability: Definition and Identification*. Paper presented at the 29th Annual Conference of the Australian Psychological Society, Wollongong.
- de Lemos, M. (1994, September-October). *Education Provision for Students with Disabilities in Australia: An overview of the 1992 AEC sample study*. Paper presented at the 18th National Conference of the Australian Association of Special Education, Adelaide.
- Doig, B.A. (1994, July). *Prospective Teachers: Significant Events in their Mathematical Lives*. Paper presented at the Eighteenth International Psychology of Mathematics Education Conference, Lisbon, Portugal.
- Doig, B.A. (1994, November). *Politics in the Playground: the Political Understanding of Victorian Children*. Paper presented at the annual conference of the Australian Association for Research in Education, Newcastle.
- Doig, B.A. (1994, November). *They Call Us Wogs: the Cultural Understanding of Victorian Children*. Paper presented at the annual conference of the Australian Association for Research in Education, Newcastle.
- Doig, B. A. (1994). *Clinical Interviewing in Mathematics*. Paper presented at the Deakin University Seminar on Research Methodology.
- Doig, B.A., Cheeseman, J. & Lindsey, J. (1995). *The Medium is the Message: Measuring Area with Different Media*. Proceedings of the Eighteenth Annual Conference of the Mathematics Education Research Group of Australasia, Darwin, Australia, pp. 229-234.
- Doig, B.A., & Lindsey, J. (1995). *Assessment Alternatives in Mathematics*. Proceedings of the Regional Collaboration in Mathematics Education Conference, Melbourne, Australia, pp. 231-240.
- Hunting, R.P., Doig, B.A., & Gibson, S.J. (1994, December). *The Practical Necessity of Mathematics Assessment Tasks Based Upon Research Rationales*. In Beesey, C. and Rasmussen, D. (eds). *Mathematics without limits*. Proceedings of the thirty-first annual conference of the Mathematical Association of Victoria.
- Izard, J.F. (1995, March). Valid assessments of achievement. Invited address to Computer Managed Learning Users Group of Australia, Swinburne University of Technology.
- Izard, J.F. (1995, June). Assessment strategies in monitoring education. Paper presented at the Twenty-first Conference of the International Association for Educational Assessment (IAEA), Montreal, Canada.
- Izard, J.F. & Griffin, P.E. (1994, October). Examination practices in Vietnam: Future directions. Paper presented at the Twentieth Conference of the International Association for Educational Assessment (IAEA), Wellington, New Zealand.
- Lokan, J. (1994, September). *Quality of Student Choices*. Paper presented at Careers Advisers Association Annual Conference, Sydney (invited speaker).
- Lokan, J. (1995, April). Donald Super: A tribute. Keynote address to Australian Association of Careers Counsellors Annual Conference, Melbourne.
- Lokan, J. (1995, April). Valuing life roles. Presented at Australian Association of Careers Counsellors Annual Conference, Melbourne (workshop session).
- Lokan, J. & Esdaile, S. (1994). *Values, Commitments and Preferences of Senior Occupational Therapy Students*. Paper

- presented at International Association of Applied Psychology Congress, Madrid.
- Long, M. & Boyer, C. (1994, November). *Political Knowledge and Political Attitudes: A Study of Australian 14-year-olds*. Paper presented at the Annual Conference of the Australian Association for Research in Education, The University of Newcastle.
- Long, M. & Robinson, L. (1994, November). *The Course Experience of Year 12 Students: Results from Youth in Transition*. Paper presented at the Annual Conference of the Australian Association for Research in Education, The University of Newcastle.
- Masters, G.N. (1995, May). *Assessing and Reporting Student's Education Progress*. Seminar presentation on Assessing and Reporting Students' Education Progress (N516ASS) sponsored by IARTV/NCS, Sydney.
- Masters, G.N. (1995, May). *From Process to Outcome: the Learning Assessment Project, the G.A.T. and Developments in Statewide Standardised Assessment*. Invited presentation to English Teachers' Conference sponsored by the Victorian Association for the Teaching of English, Melbourne.
- Masters, G.N. (1995, May). *Using Profiles to Assess Students' Educational Progress*. Seminar presentation on Educational Research for joint ACEID/ACER Asia-Pacific Regional Seminar, ACER, Melbourne.
- Masters, G.N. (1995, March). *Assessment Resource Kit for Teachers*. Presentation on Assessment Resource Kit for Teachers for Association of Independent Schools of Victoria.
- Masters, G.N. (1995, March). *Benchmarking Education Systems: Technical possibilities*. Seminar presentation on Benchmarking School Education at the Australian College of Education Conference, Sydney.
- Masters, G.N. (1995, March). *Benchmarking - the case for and against*. Seminar presentation on Performance indicators in schools education - benchmarking for Australian College of Education, National Industry Education Forum, at ACER, Melbourne.
- Masters, G.N. (1995, March). *Using Profiles for Assessing and Reporting Students' Educational Progress - an Overview of Current ACER Research and Development*. Presentation on Assessing and Reporting Students' Educational Progress, at National Curriculum Services, Melbourne.
- Masters, G.N. (1994, October). *Assessment Issues Today: an overview*. Invited presentation on Assessment at Principals' Centre: Centre for Continuing Education, The University of Auckland.
- Masters, G.N. (1994, October). *Assessment Strategies for LAP*. Seminar presentation on Learning Assessment Project (LAP) at Association of Independent Schools of Victoria (AISV), Melbourne.
- Masters, G.N. (1994, September). *Ethics*. Presentation to Australian Bankers Association, organised by National Industry Education Forum.
- Masters, G.N. (1994, July). *Assessment and Rasch Measurement*. Seminar presentation at the Western Cape Education Department, Cape Town, South Africa.
- Masters, G.N. (1994, July). *Educational Measurement and Standards*. Seminar presentation at the Department of Education and Culture, Pretoria, South Africa.
- Masters, G.N. (1994, July). *Measuring Conceptual Understanding/Competency-Based Education*. Seminar presentation at the KwaZulu/Natal Education Department, Durban, South Africa.
- Masters, G.N. (1994, July). *Psychometric Aspects of Individual Assessment*. Seminar presentation at the Human Sciences Research Council, Pretoria, South Africa.
- Masters, G.N. (1994, July). *Review of National and Victorian Developments*. Opening Address, Staff Development Conference: Quality Assurance and Student Profiles, St Kevin's College, Toorak.
- Masters, G.N. (1994, July). *The Rasch Model of Objective Measurement*. Workshop conducted at the Second International Conference on Educational Evaluation and Assessment, University of South Africa, Pretoria.
- Masters, G.N. (1994, July). *Towards Effective Assessment of Educational Attainment in the Classroom and Schools*, Keynote

- Address to the Second International Conference on Educational Evaluation and Assessment, University of South Africa, Pretoria.
- McGaw, B. (1994, August). *Measuring Learning*. Keynote address to "Building a nation", the 7th Annual Staff Conference, United Arab Emirates Higher Colleges of Technology, Abu Dhabi.
- McGaw, B. (1994, September). *A Career in Education*. Comments made on the occasion of the award of the Australian College of Education Medal, Annual Conference of the Australian College of Education, Launceston.
- McGaw, B. (1995, January). *Improving the Efficiency of Education*. Presidential address presented to the Annual Conference of the Australian Teachers' Christian Fellowship, Melbourne.
- McGaw, B. (1995, March). *Outcomes-based Education: Teaching and Assessment*. Keynote address presented at the North Coast Regional Principals' Conference, "Designing the future", Lismore.
- McGaw, B. (1995, May). *Benchmarking Implications for Schools in the 1990s*. Keynote address presented at the conference "Benchmarking school education", organised by the Tasmanian Chapter of the Australian College of Education, Launceston.
- McKenzie, P. (1995, April). *Personnel and Financial Resources Allocated to Educational R&D in Nine OECD Countries*. Paper presented at the International Academy of Education Symposium, American Educational Research Association, San Francisco.
- McKenzie, P. & Long, M. (1995, March). *Transitions Between Education, Training and Work*. Address to the ACER-NCS Seminar Subject Choice in Senior Secondary School, Melbourne.
- Mellor, S. & Doig, B.A. (1995, March). *Conceptions and Misconceptions Kids Have About their Society: The Victorian Institute of Educational Research*. Paper presented at the Annual General Meeting of the Victorian Institute of Educational Research.
- Roberts, D.M. & Adams, R.J. (1995, April). Bias in Weighted Likelihood Estimation when using the Rasch Model. Paper presented at the International Objective Measurement Workshop, University of California, Berkeley, California.
- Splitter, L. (1994). *The Place of Philosophy in the Primary School Curriculum*. Keynote address at the Victorian Association of Primary Principals Annual Conference, Melbourne.
- Splitter, L. (1994, September). *Philosophy for Children and Values Education*. Address on Philosophy for Children at a Conference on Values, University of Kent, Canterbury, England.
- Splitter, L. (1994, October). *Teaching Ethics in Schools*. Address at the Hutchins School, Hobart.
- Splitter, L. (1995, June). *Language, Community and the Construction of Difference*. Invited address at the North American Association for the Community of Inquiry, North Carolina.
- Splitter, L. (1995, July). *Philosophy, Citizenship and Personal Development*. Seminar presentation at the Seventh International Conference on Philosophy for Children, University of Melbourne.
- Splitter, L. (1995, July). *Evaluation, Assessment and Accountability*. Seminar presentation at the Seventh International Conference on Philosophy for Children, University of Melbourne.
- Splitter, L. (1995, July). *Simon: A Story of Sexuality*. Seminar presentation at the Seventh International Conference on Philosophy for Children, University of Melbourne.
- Splitter, L. (1995, July). *Children, Philosophy and Global Citizenship*. Public forum presentation at the Seventh International Conference on Philosophy for Children, University of Melbourne.
- Withers, G. & Batten, M. (1995, April). *The Changing Nature of the Professional Work of Teachers*. AERA Annual Conference, San Francisco.
- Zammit, S.A. (1994, August). Considerations in Test Design Workshop. Presented at School of Graduate Studies, Monash University.
- Zammit, S.A. (1994, July). The Challenge: Choosing to study a Language Other Than

English through high school. Paper presented at Applied Linguistics Association of Australia.

Zammit, S.A. (1994, July). Why do male and female secondary students continue or discontinue learning a LOTE? What can teachers do about it? Paper presented at Modern Language Teachers' Association of Victoria.

Zammit, S.A., Brown, A. & McQueen, J. (1994, July). Designing and Constructing Listening and Reading Comprehension Tests. Paper presented at the Annual Conference of the Applied Linguistics Association of Australia, Melbourne.

Unpublished Papers and Papers of Limited Circulation

de Lemos M., Doig, B.A. & Harvey-Beavis, A. (1994). *The Use of Student Performance Standards in English and Mathematics as a Basis for Establishing a Year 2 Net to Identify Students at Risk in the Development of Literacy and Numeracy*. Advice to the Queensland Department of Education on Recommendations arising from the 1994 Report of the Review of the Queensland School Curriculum. Camberwell: ACER (mimeo).

de Lemos, M. & Harvey-Beavis, A. (1995). *Factors Related to the Development of Literacy*. Camberwell: ACER (mimeo).

de Lemos, M., Ure, C. & Mellor, E. (1994). *Evaluation of the Victorian Pilot Project for the First Three Years of Schooling: Report to Schools, December 1994*. Camberwell: ACER (mimeo).

Forster, M. (1995). *An Analysis of Existing Instruments to Assess Literacy*. Background paper for the National School Literacy Survey paper commissioned by the Quality Schooling Branch of the Department of Employment, Education and Training. Camberwell: ACER (mimeo).

Izard, J.F. (1994, December). *Reference Manual: Development of Selection Tests*. (Staff reference manual prepared for the Sultanate of Oman Ministry of Civil Service as part of the Sultanate of Oman/World Bank Technical Co-operation Project.) (Arabic version

translated from English by Sattina El Shafie, 1994.)

Izard, J.F. (1994, December). *Reference Manual: Essential Computer Keys and Instructions*. (Staff reference manual prepared for the Sultanate of Oman Ministry of Civil Service as part of the Sultanate of Oman/World Bank Technical Co-operation Project.) (Arabic version translated from English by Sattina El Shafie, 1994.)

Izard, J.F. (1994, December). *Reference Manual: First Steps in Using QUEST*. (Staff reference manual prepared for the Sultanate of Oman Ministry of Civil Service as part of the Sultanate of Oman/World Bank Technical Co-operation Project.) (Arabic version translated from English by Sattina El Shafie, 1994.)

Masters, G.N. (1994, November). *Nationally Comparable Achievement Measures: Principles and Options*. Paper prepared for the *Schools Working Group* as part of the Industry Commission's Review of Commonwealth and State Service Provision.

Masters, G.N. & Forster, M. (1995, April). *Data Collection for the 1996 Literacy Survey - Portfolios*. Paper prepared for the National School Literacy Survey Steering Committee meeting.

McKenzie, P. (1994). *Research and Development Data for Education at a Glance 3*. Report to the INES Secretariat, OECD/CERI. Camberwell: ACER (mimeo).

McKenzie, P., Harrold, R. & Sturman, A. (1994). *Curriculum Provision in Rural Secondary Schools*. Draft report to the Country Areas Program, Department of Employment, Education and Training. Camberwell: ACER (mimeo).

Zammit, S.A. (1994). *Report on The Australian Language Certificates to The Australian Multicultural Foundation 1994*. Camberwell, Vic: ACER (mimeo).



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Manager

Overview

ACER achieved further substantial growth in 1994-95 to reach \$12.6m in total income, up 27.6 per cent on the 1993-94 level. More significantly, in terms of the organisation's financial well-being, a substantial surplus of \$777 947 was achieved before an allocation of \$99 540 for building depreciation. The results for 1994-95 and 1993-94 are set out in Table 1. The 1994-95 operating surplus of \$777 947 represents a 6.2 per cent return on total income and a 7.1 per cent return if the core grant is excluded on the grounds that it is fully expended each year. ACER is a not-for-profit company so the surplus generated is reinvested in the company's activities and infrastructure or held in reserves to meet the cash flow demands of the business.

Achieving an annual operating surplus is important for the financial stability of the organisation. Funds need to be applied to reduction of the debt on the new premises. Cash reserves are also needed to meet the cash flow requirements of growth to cover expenditure on contract work in advance of receipts and trading inventory and debtors. The accumulation of cash reserves also permits the organisation to fund some research and development and other activities of its own choosing in fulfilment of its objectives. One example of such expenditure in 1994-95 was ACER's contribution to the Asia-Pacific Regional

Seminar on Educational Research sponsored jointly with UNESCO's Asia-Pacific Centre of Educational Innovation for Development.

Core grant

ACER receives an annual core grant from government, half from the Commonwealth and the other half from the States and Territories in proportion to their populations. This grant enables ACER to undertake a research and development program for which contract funds are not normally available. The grant currently funds basic research, in areas such as learning and problem solving and psychometric theory, and the development of ACER's institutional capacity in new areas, such as Aboriginal education.

The core grant is linked by formula to academic and Australian Public Service salary scales and so rose by 1.1 per cent in 1994-95 to \$1 553 500. The core grant provided 12.4 per cent of ACER's total income in 1994-95 compared with 15.6 per cent in 1993-94 and 24.9 per cent in 1984-85. (If only gross profit from trading rather than total turnover is included in the total, the relative contribution of the core grant would be 14.5 per cent in 1994-95, 19.0 per cent in 1993-94 and 33.7 per cent in 1984-85.)

Table 1: Profit and loss summaries for years ending 30 June 1995 and 30 June 1994

Source	1994-95	1993-94
Income		
Core research and development program	1 553 500	1 536 000
Professional services	6 674 855	4 511 543
Trading	4 193 577	3 666 413
Rent	119 753	94 173
Interest	10 242	28 377
Total	12 551 927	9 836 506
Expenditure		
Core research and development program	1 553 500	1 536 000
Professional services	6 570 603	4 433 615
Trading	3 649 877	3 709 572
Total	11 773 980	9 679 187
Operating surplus	777 947	157 319
Building depreciation	99 540	34 233
Surplus	678 407	123 086

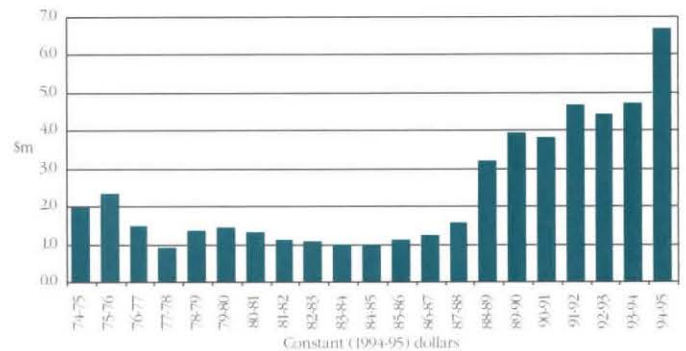
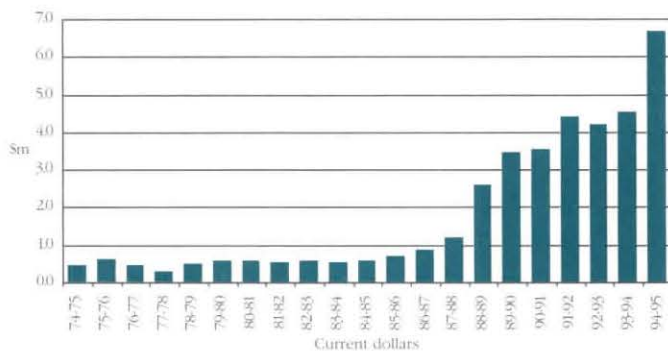


Figure 1: Trend in income for professional services from 1974-75 to 1994-95



■ Cost of goods ■ Trading gross profit

Figure 2: Trend in income from trading from 1974-75 to 1994-95

Professional services

The activities included under professional services in Table 1 are contract research and development work and services funded by fees. Fee-for-service activities include both testing programs and conferences and workshops.

The level of activity in professional services grew dramatically in 1994-95. Income increased by 48 per cent to \$6.67m. Expenditure in 1994-95 was \$6.57m, yielding a surplus of \$104 252, though this position was achieved after transferring some charges for overspent projects of national significance to the core grant.

The long-term trend in the level of ACER's professional service activities is shown in Figure 1. The level of activity achieved in 1994-95 was clearly the highest ever achieved, as the right-hand panel showing the trend in constant dollars makes clear. The level reached in 1975-76 had been the highest

in the life of ACER since its establishment in 1930 and that level has been exceeded since 1988-89.

Trading

ACER's trading activities involve the sale of educational and psychological books, tests and other materials. Around 55 per cent of total sales income is derived from materials that ACER publishes and around 45 per cent from materials that ACER distributes on behalf of other publishers.

Trading income grew in 1994-95 by 14.4 per cent to \$4.19m while costs actually fell by 1.6 per cent from the level of 1993-94. Trading activities thus yielded a net surplus of more than \$500 000 in 1994-95, which was a remarkable outcome reflecting the effort and the efficiency of staff in Publishing, Marketing, Customer Service and Distribution Services. For a considerable period, trading operated in net deficit, being subsidised by other activities. It has been turned around in

recent years and now contributes to the rest of the organisation.

The long-term trend in the level of ACER's trading income is shown in Figure 2. Total income is represented by the full height of each column and gross profit, after removal of the cost of goods sold, by the unshaded portion. The highest level of trading income achieved, measured in constant dollars, was reached in 1977-78. The general trend from that year was downward, with some year-to-year variations, to 1988-89 after which there was a substantial drop. This was because ACER lost a large agency to the Australian subsidiary of an overseas company that had purchased the company for which ACER had been agent. Since 1991-92, trading income has been growing dramatically due to changes in the focus and operation of ACER's marketing and sales staff. The level of income achieved in 1994-95 was second only to 1977-78 in real terms as the right-hand panel in Figure 2 shows.

Long-term trend in total income

Total income exceeded \$10m in 1994-95 with growth in one year from \$9.8m to \$12.6m. A peak had been reached, in real terms, in 1975-76 with total income then generally falling away to a low point in 1983-84, as the right-hand panel in Figure 3 shows. The small component of other income in Figure 3 is derived from interest earned on deposits and, in the last two years, from rent of part of ACER's new premises.

The growth in the decade from the mid-1980s to the present has been remarkable. Staff numbers have grown also, but less than in proportion with the growth in income. It is this increase in efficiency that has permitted the generation of the surplus funds with which the new premises and substantially improved computing facilities have been acquired. For the long-term health of the organisation maintenance of a healthy 'bottom line' surplus is more important than the magnitude of the 'top line' of income. In the short-term, efforts will be made to reduce the debt on the new premises while taking care to ensure sufficient cash reserves are maintained to fund the cash-flow requirements of further growth in level of activity.

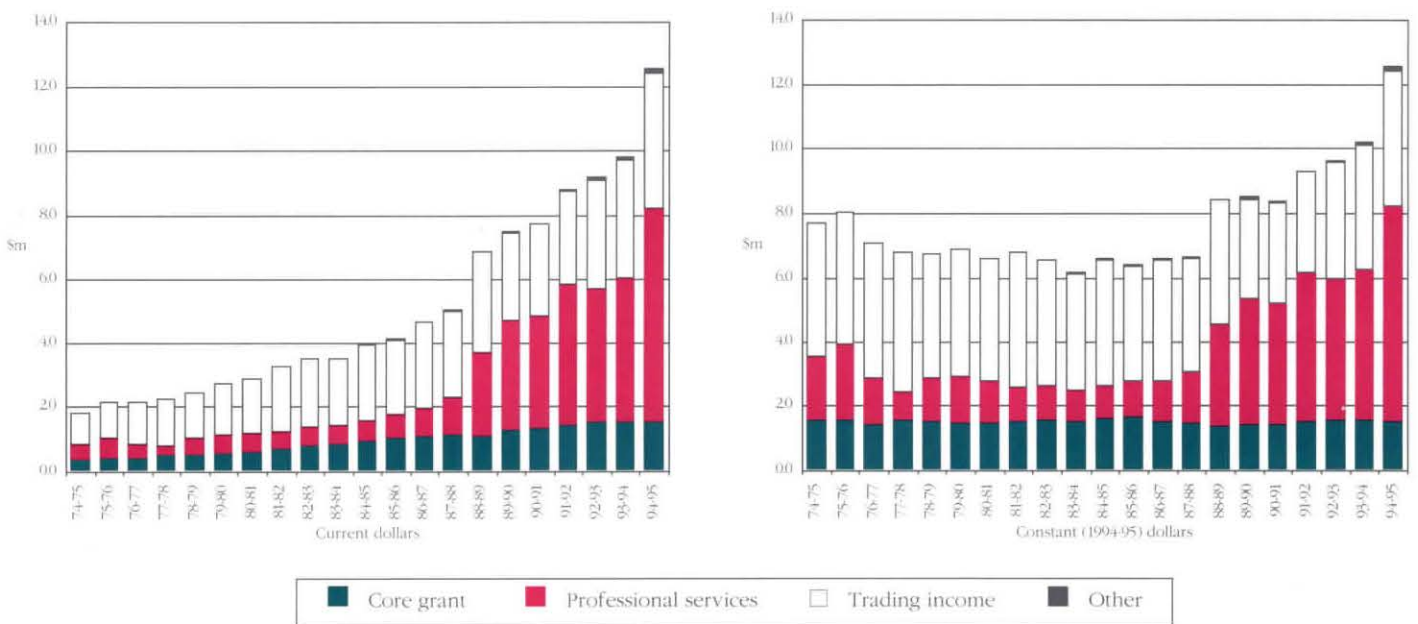


Figure 3: Trend in total income from 1974-75 to 1994-95

The Directors of the Australian Council for Educational Research (ACER) submit the following report together with the balance sheet at 30 June 1995 and the profit and loss account for the financial year then ended.

Directors

Directors in office at the date of this report and meetings attended during year:

Ken Boston
MA PhD FRGS FACE FAIM
2 of 6 meetings attended

Sid Bourke
BSc BA MLitt MEd PhD MACE
3 of 3 meetings attended

Peter H Karmel
AC CBE BA PhD FACE FASSA
6 of 6 meetings attended

Jillian M Maling
AM BA DipEd BEd PhD FACE
5 of 6 meetings attended

Barry McGaw
BSc MEd PhD FACE FAPsS FASSA
5 of 6 meetings attended

Susan Zammit
BA(Hons) MEdSt PhD MACE
2 of 2 meetings attended

The total number of meetings held was six but two of the current Directors were appointed during the financial year and were eligible to attend fewer than all of the meetings.

Principal activities of the company

The principal activities of the company in the course of the financial year were educational research and development and the publication and sale of educational and psychological tests and other materials. During the year there was no significant change in the nature of those activities.

Result for the year

The operating surplus for the year was \$768 496 before an allocation of \$99 540 for building depreciation and \$668 956 after that allocation.

Dividends

ACER is a non-profit company and so, in accordance with the restrictions of the Memorandum and Articles of Association, neither pays nor declares dividends.

Review of operations

ACER's total turnover increased by 28 per cent from \$9 836 508 in 1993-94 to \$12 551 927 in 1994-95 due to growth in contract work and trading.

The Commonwealth, State and Territory governments provide ACER with an important annual grant that enables ACER to undertake a range of research and development projects for which contract funds are not normally available or are inadequate. Some of the projects anticipate developments for which further work can be undertaken later on contract. Others are concerned with more basic and long-term questions than those for which contract funding is typically available. Both types of projects strengthen the intellectual base on which all of ACER's work is built. The 1994-95 government grant was \$1 553 500 compared with \$1 536 000 in 1993-94, an increase of 1.2 per cent. The core grant provided 12.4 per cent of ACER's total income in 1994-95 compared with 15.7 per cent in 1993-94.

Income from professional services in 1994-95 was \$6 674 855, an increase of 48 per cent from the \$4 511 544 achieved in 1993-94. These professional services yielded a surplus in 1994-95 of only \$12 359, after subvention for some projects from the core grant. This is a considerably worse surplus than the \$402 719 achieved in 1993-95 which, from a smaller base, was a rate of return of 8.9 per cent on income. The higher level of activity in 1994-95, however, did mean that professional services contributed an additional \$510 535 to overheads and thus to institutional support and infrastructure. That increased contribution was greater than the drop in surplus.

One component of professional services is contract work and this is the area in which

growth occurred in 1994-95. Contract income was up by 71 per cent from \$3 066 973 in 1993-94 to \$5 238 389 but yielded an overall deficit of \$144 923, despite some supplementary support from the core grant for contract projects of importance to the government agencies that provide that grant. In addition to direct expenditure contract work contributed \$1 122 849 to overheads but the tendency for projects to run into deficit remains a serious management problem.

The other component of professional services is fee-for-service activities, predominantly testing services. The other activities in this category are conferences and workshops. This has been an area of considerable growth in recent years yielding strong surpluses. In 1994-95, however, income declined by 0.6 per cent from \$1 444 571 in 1993-94 to \$1 436 466 in 1994-95 and the surplus declined from \$462 218 in 1993-94 (a 32 per cent return on income) to \$157 282 in 1994-95 (an 11 per cent return on income). The drop in performance in 1994-95 was due to a considerable increase in costs despite a small decline in income. Part of this reduction was due to the introduction of a new testing program which made a considerable loss in its first year but which has a potential for growth in subsequent years.

ACER's trading activities in 1994-95 produced an outstanding result. Trading income rose by 14 per cent from \$3 666 413 in 1993-94 to \$4 193 577 in 1994-95. The gross profit rate improved from 51 per cent to 56 per cent, producing an improvement of 25 per cent in gross profit from \$1 876 656 in 1993-94 to \$2 348 385 in 1994-95. Despite these substantial increases in income and gross profit, expenditure actually declined by 0.2 per cent from \$1 823 277 in 1993-94 to \$1 819 959 in 1994-95. The final result for 1994-95 was a net surplus of \$528 426 compared with the surplus of \$55 379 in 1993-94. The 1994-95 net surplus represents a return of 27 per cent on assets employed in inventory and trading debtors, considerably better than the 3.5 per cent achieved in 1993-94.

Changes in state of affairs and likely developments

During the financial year there were no significant changes in the state of affairs of the company other than those referred to in the accounts or notes thereto.

Events subsequent to balance date

Since the end of the financial year, there has been some change in the state of affairs of the company with the failure to secure renewal of the largest contract project undertaken in 1994-95 and failure to secure for 1995-96 renewal of another contract that ACER has held for several years. Other new work has been obtained but it is likely that the total level of activity in 1995-96 will be below that in 1994-95.

Directors' interest in contracts

Since the end of the previous financial year, no Director has received or become entitled to receive a benefit, other than the fixed salary and benefits of the two employees of the company as disclosed in the accounts, by reason of a contract made by the company with the director or with a firm of which he or she is a member, or with a company in which he or she has a substantial financial interest.

Signed in accordance with a resolution of the Directors,

For and on behalf of the Directors



Director: P H Karmel



Director: B McGaw

To the Members of
Australian Council for Educational Research Ltd
ACN 004 398 145

Audit Scope

We have audited the accompanying financial statements of Australian Council for Educational Research Ltd for the financial year ended 30th June 1995 comprising the Balance Sheet, Income & Expenditure Account, Cash Flow Statement, Notes to the Accounts and the Statement by Directors. The company's directors are responsible for the preparation and presentation of the financial statements and the information they contain. We have conducted an independent audit of these financial statements in order to express an opinion on them to the members of the company.

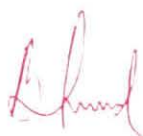
Our audit has been conducted in accordance with Australian Auditing Standards to provide reasonable assurance as to whether the financial statements are free of material misstatement. Our procedures included examination, on a test basis, of evidence supporting the amounts and other disclosures in the financial statements, and the evaluation of accounting policies. These procedures have been undertaken to form an opinion as to whether, in all material respects, the financial statements are presented fairly in accordance with Australian standards and statutory requirements.

Audit Opinion

In our opinion the financial statements of Australian Council for Educational Research Ltd are properly drawn up in accordance with the provisions of the Corporations Law and in accordance with applicable Accounting Standards, so as to give a true and fair view of:

- (i) the state of affairs of the company at 30th June 1995 and of the results of the company for the year ended on that date;
- (ii) the other matters required by Division 4, 4A and 4B of Part 3.6 of the Corporations Law to be dealt with in the financial statements.

SAWARD DAWSON WRIGHT
Chartered Accountants



Partner: Bruce Saward

21st September 1995
Box Hill, Victoria

Australian Council for Educational Research Ltd

ACN 004 398 145

(a company limited by guarantee)

Balance Sheet at 30th June 1995

	Note	1995 \$	1994 \$
<i>Current assets</i>			
Cash	5	664 663	478 219
Receivables	6	2 384 480	1 328 706
Inventories	7	1 551 467	1 066 483
Other	8	137 525	91 701
Total current assets		<u>4 738 135</u>	<u>2 965 109</u>
<i>Non-current assets</i>			
Property, plant and equipment	9	6 939 725	6 896 175
Intangibles	10	30 000	-
Total non-current assets		<u>6 969 725</u>	<u>6 896 175</u>
Total assets		<u><u>11 707 860</u></u>	<u><u>9 861 284</u></u>
<i>Current liabilities</i>			
Creditors and borrowings	11	3 040 032	2 007 387
Provisions	12	781 267	708 657
Total current liabilities		<u>3 821 299</u>	<u>2 716 044</u>
<i>Non-current liabilities</i>			
Creditors and Borrowings	11	3 968 515	3 908 630
Provisions	12	44 311	41 283
Total non-current liabilities		<u>4 012 826</u>	<u>3 949 913</u>
Total liabilities		<u><u>7 834 125</u></u>	<u><u>6 665 957</u></u>
Net assets		<u><u>\$3 873 735</u></u>	<u><u>\$3 195 327</u></u>
<i>Members' funds</i>			
Reserves	13	50 206	40 752
Retained Profits		3 823 529	3 154 575
Total members' funds		<u><u>\$3 873 735</u></u>	<u><u>\$3 195 327</u></u>
Capital and Leasing Commitments	14		

The accompanying notes form part of these financial statements.

Income & Expenditure Account for the Year Ended 30th June 1995

	Note	1995 \$	1994 \$
Surplus from Operations	2	678 407	123 086
Accumulated Funds at the Beginning of the Financial Year		<u>3 154 575</u>	<u>1 236 982</u>
Total Available for Appropriation		3 832 982	1 360 068
Aggregate of Amounts Transferred from Reserves	3	<u>(9453)</u>	<u>1 794 507</u>
Accumulated Funds at the End of the Financial Year		<u>\$3 823 529</u>	<u>\$3 154 575</u>

The accompanying notes form part of these financial statements.

Notes to and forming part of the Accounts for the year ended 30th June 1995

1 Statement of Accounting Policies

The accounts have been prepared in accordance with applicable Accounting Standards and the Corporations Law, including the disclosure requirements of Schedule 5. The accounts have been prepared on the basis of historical costs and do not take into account changing money values or, except where stated, current valuations of non-current assets. The accounting policies have been consistently applied, unless otherwise stated.

The following is a summary of the significant accounting policies adopted by the company in the preparation of the accounts.

Income Tax

The company is exempt from paying income tax in accordance with the provisions of the Income Tax Assessment Act.

Inventories

Inventories are measured at the lower of cost and net realisable value.

Property, Plant & Equipment

Plant & equipment are recorded at cost. All fixed assets, including buildings but excluding freehold land, are depreciated at applicable rates so as to allocate their cost over their estimated useful lives commencing from the time the asset is held ready for use.

Employee Benefits

Annual leave and long service leave entitlements have been provided for in the accounts by way of provisions based on wage rates and accrued leave entitlements current at year end. Long service leave is only provided in respect of employees who have completed more than 8 years' service. This provision is recorded as a non-current liability until the employee has completed 10 years' service after which time it is reflected as a current liability.

Foreign Exchange Transactions

Overseas purchases are recorded at the rate applicable at the date of payment. At balance date, amounts payable are converted at the rate applicable at that date.

Library Additions

The company adopts the policy of charging all additions to the library directly to the profit & loss account in the year in which the expenditure is incurred.

Debtors

These are valued net of any known bad debts as these are written off in the period in which they become known by a charge against the provision for doubtful debts. A provision is then raised for any doubtful debts at year end.

Accounts Disclosure

Schedule 5 of the Corporations Law requires that specific headings in the Profit and Loss account and Balance Sheet be used. The directors are of the opinion that headings such as 'profit & loss', 'operating profit', 'retained profits' and 'shareholders' equity' are not appropriate in the circumstances. Accordingly, the terms 'income & expenditure', 'surplus', 'accumulated funds' and 'members' funds' have been substituted.

	1995	1994
	\$	\$
2 Operating Surplus		
<i>(a) Operating Surplus has been determined after:</i>		
<i>Crediting as Income:</i>		
Interest Received		
Commonwealth Bank	10 242	28 377
Profit on disposal of non-current assets	-	23 605
<i>Charging as Expenses:</i>		
Auditor's remuneration:		
Auditing Services	14 102	13 580
Other Services	250	280
Depreciation of property, plant and equipment	514 085	298 410
Interest paid or payable:		
Commonwealth Bank	312 844	250 804
Provisions:		
Holiday pay	37 612	35 473
Long service leave	38 025	19 793
<i>(b) Operating Revenue</i>		
Included in operating surplus are the following items of operating revenue:		
Trading Sales	4 073 974	3 560 333
Other Income	119 753	94 173
Core R & D Income	1 553 500	1 536 000
R & D Contract Income	5 238 389	3 066 972
Testing Services Income	1 436 466	1 444 571
Royalties	119 603	106 080
Interest Received	10 242	28 377
	<u>12 551 927</u>	<u>9 836 506</u>
3 Movement in Reserves		
Transfer from Asset Revaluation Reserve	-	(186 030)
Transfer to Scientific Research Fund Reserve	9453	216
Transfer from Building Fund Reserve	-	(1 608 693)
	<u>9453</u>	<u>(1 794 507)</u>

	1995	1994
	\$	\$
<i>4 Remuneration of Directors</i>		
<i>Directors' Remuneration:</i>		
Income received or due and receivable by all directors from the company and any related corporations	189 100	188 846
Number of directors whose income from the company or any related corporation was within the following bands:		
\$10 000 - \$19 999	1	-
\$60 000 - \$69 999	1	-
\$70 000 - \$79 999	-	1
\$100 000 - \$109 999	-	1
\$110 000 - \$119 999	1	-
The names of directors who have held office during the financial year are:		
Professor Peter Karmel		Professor Jillian Maling
Dr John Ainley		Professor Barry McGaw
Ms Heather Felton		Dr Ken Boston
Professor Sid Bourke		Dr Suzan Zammit
Retirement and Superannuation Payments:		
Amounts paid to senior executives to prescribed superannuation funds for the provision of retirement benefits	32 008	29 195
<i>5 Cash</i>		
Cash on Hand	500	500
Cash at Bank	664 163	477 719
	<u>664 663</u>	<u>478 219</u>
<i>6 Receivables</i>		
<i>Current</i>		
Trade Debtors	1 611 936	859 607
Less: Provision for Doubtful Debts	(10 000)	(10 000)
	<u>1 601 936</u>	<u>849 607</u>
Sundry Debtors	782 544	479 099
	<u>2 384 480</u>	<u>1 328 706</u>
<i>7 Inventories</i>		
<i>Current</i>		
Stock on Hand	1 439 772	834 541
Product Development in Progress	111 695	231 942
	<u>1 551 467</u>	<u>1 066 483</u>

	1995	1994
	\$	\$
8 Other Assets		
<i>Current</i>		
Other Prepayments	<u>137 525</u>	<u>91 701</u>
9 Property, Plant & Equipment		
Freehold Land - at Valuation (1994)	<u>1 750 000</u>	<u>1 750 000</u>
	<u>1 750 000</u>	<u>1 750 000</u>
Buildings - at Cost	3 998 451	3 947 588
Less: Accumulated Depreciation	<u>132 436</u>	<u>32 896</u>
	<u>3 866 015</u>	<u>3 914 692</u>
Motor Vehicles - at Cost	348 882	298 328
Less: Accumulated Depreciation	<u>50 327</u>	<u>38 949</u>
	<u>298 555</u>	<u>259 379</u>
Furniture & Equipment - at Cost	898 828	682 002
Less: Accumulated Depreciation	<u>377 739</u>	<u>244 767</u>
	<u>521 089</u>	<u>437 235</u>
Computer Equipment	1 015 799	817 277
Less: Accumulated Depreciation	<u>511 733</u>	<u>282 408</u>
	<u>504 066</u>	<u>534 869</u>
Total Property, Plant & Equipment	<u>6 939 725</u>	<u>6 896 175</u>
10 Intangibles		
Copyright, <i>Issues Magazine</i>	<u>30 000</u>	<u>-</u>
11 Creditors & Borrowings		
<i>Current</i>		
Hire Purchase Liability	98 076	72 049
Sundry Creditors	1 679 543	1 046 961
Amounts Received In Advance	<u>1 262 413</u>	<u>888 377</u>
	<u>3 040 032</u>	<u>2 007 387</u>
<i>Non-Current</i>		
Hire Purchase Liability	418 515	358 630
Bank Bills Payable	<u>3 550 000</u>	<u>3 550 000</u>
	<u>3 968 515</u>	<u>3 908 630</u>

Bank borrowings are secured by mortgage over 19 Prospect Hill Road, Camberwell.

	1995	1994
	\$	\$
<i>12 Provisions</i>		
<i>Current</i>		
Provision for Holiday Pay	439 299	401 687
Provision for Long Service Leave	331 968	296 970
Provision for Supplementary Superannuation	10 000	10 000
	<u>781 267</u>	<u>708 657</u>
<i>Non-Current</i>		
Provision for Long Service Leave	<u>44 311</u>	<u>41 283</u>
<i>13 Reserves</i>		
Scientific Research Fund Reserve	50 023	40 569
Other Funds Reserve	183	183
	<u>50 206</u>	<u>40 752</u>
<i>14 Capital & Leasing Commitments</i>		
Hire Purchase Commitments		
Not later than one year	143 226	113 073
Later than one year and not later than two years	145 456	96 992
Later than two years and not later than five years	318 530	317 744
	<u>607 212</u>	<u>527 809</u>
Less: Future Finance Charges	90 621	97 130
Total Lease Liability	<u>516 591</u>	<u>430 679</u>
Capital Expenditure Commitments Contracted For		
Capital Expenditure projects	-	20 680
Copyright, <i>Issues Magazine</i>	20 000	-
	<u>20 000</u>	<u>20 680</u>

15 Segment Information

The company operates predominantly in one geographical location being throughout Australia. The principal activities of the company, which is a company limited by guarantee, are research and development in the field of education.

16 Member's Guarantee

Each member of the company guarantees to contribute to the assets of the company in the event of its being wound up to the extent of twenty dollars.

Statement by Directors

In the opinion of the directors of the company:

1. (a) The accompanying Income & Expenditure Account is drawn up so as to give a true and fair view of the surplus of the company for the financial year ended 30th June 1995.

(b) The accompanying Balance Sheet is drawn up so as to give a true and fair view of the state of affairs of the company as at 30th June 1995.

(c) At the date of this statement, there are reasonable grounds to believe that the company will be able to pay its debts as and when they fall due.
2. The accompanying accounts have been made out in accordance with Statements of Accounting Concepts and applicable Accounting Standards.

This statement is made in accordance with the resolution of the Board of Directors and is signed for and on behalf of the directors by:



P.H. Karmel
Director



B. McGaw
Director

21st September 1995

President

Karmel, Peter

Vice-President

Maling, Jillian

Coopted Members

Adams, Isabelle, Dip *KTC*, BA, BEd, MEd

Murdoch

District Superintendent, Education
Department of Western Australia, Perth
South District, Western Australia

Karmel, Peter, AC, CBE, BA *Melb*, PhD *Camb*,

PhD *ad eundem gradum Adel*, Hon LLD
PNG, Melb, Qld, Hon DLitt *Flin*,
Macquarie, Murdoch, DUniv *Newcastle*,
NSW, FACE, FASSA

Formerly Vice-Chancellor, Australian
National University, Canberra, Australian
Capital Territory

Maling, Jillian, AM, BA, DipEd, BEd *Melb*,

PhD *Stanford*, FACE

Deputy Vice-Chancellor and Chief
Executive Officer, University of Western
Sydney, Nepean, New South Wales

Poole, Millicent, CE, BA, BEd *Qld*, MA *UNE*,

PhD *LaT*, FACE, FASSA, MAPsS

Deputy Vice-Chancellor, Australian
National University

Sweet, Richard, BA *Syd*

Research Coordinator, Dusseldorp Skills
Forum

Members Appointed by the State Institutes of Educational Research

Bourke, Sid, BSc *UNSW*, BA, MLitt *NE*, MEd

Monash, PhD *LaT*, MACE

Department of Education, University of
Newcastle

Cranston, Neil, BSc, BEdSt, MEd *Qld*, MACE

Senior Review Officer, Department of
Education, Queensland (to October 1994)

Slater, Robert, BA *Adel*, DipEdAdmin *UNE*,

DipT *SA Ed Dept*, MEd(Hons) *UNE*, TC *SA
Ed Dept*, FACE, MACEA

Taggart, Andrew, HDipTeach *Rusden*, BEd

WAust, MA PhD *Ohio State*

Head, School of Arts and Humanities
Education, Faculty of Education, Edith
Cowan University (from April 1995)

Official Representatives

*Conference of Directors-General of
Education*

Boston, Ken, MA, PhD *Melb*, FRGS, FACE,
FAIM

Director-General, Department of School
Education, Sydney, New South Wales

Davis, Bruce, BArch *Melb*

Secretary, Department of Education and
the Arts, Hobart, Tasmania

*Commonwealth Department of Employment,
Education and Training*

Johnston, Neil, BEc, *ANU*, PhD *Pennsylvania*

Formerly Deputy Secretary, Department
of Employment, Education and Training,
Canberra, Australian Capital Territory (to
July 1994)

Ruby, Alan, BA DipEd *Syd*, AIE *Lond*

Deputy Secretary, Department of
Employment, Education and Training,
Canberra, Australian Capital Territory
(from October 1994)

*National Board of Employment, Education
and Training*

Brennan, Max, AO, BSc, PhD, *Syd*, HonDSc

Flin, FAA, FAIP

Chair, Australian Research Council,
Canberra, Australian Capital Territory

Staff Representative

Ainley, John, BSc, MEd, PhD *Melb*, FACE (to
October 1994)

Zammit, Susan, BA(Hons) *Lond*, MEdSt, PhD

Monash, MACE (from April 1995)

Director

McGaw, Barry, BSc, BEd(Hons) *Qld*, MEd,

PhD *Illinois*, FACE, FAPsS, FASSA

Directorate

Director

McGaw, Barry, BSc, BEd(Hons) *Qld*, MEd,
PhD *Illinois*, FACE, FAPsS, FASSA

Associate Directors

Ainley, John, BSc, MEd, PhD *Melb*, FACE
(from November 1994)

Masters, Geoff, BSc, MEd *UWA*, PhD *Chicago*

Assistant Director

Izard, John, BSc, BEd *Melb*, MEd *Monash*, PhD
LaT, FACE

Executive Officer

Ramsay, Glynis, BBus *Monash* (to May 95)
Skarbek, Bozena, BA *Monash* GradDipSecSt
CCAEE (from May 95)

Administrative Assistant

Knight, Tammy (to February 95)
Nichols, Trudi (from March 95)

Senior Administrative Officer

Littlejohn, Catriona BEd *Melb*, MBA *Monash*,
AIMM (from May 95)

Administrative Officers

Bates, Susan
Falkingham, Amanda, BA *Monash*,
GradDipOfficeAdmin *Chisholm*
(to February 95)
Zubrinich, Julie, BA *UWA*, BEd *Deakin*
(from April 95)

Secretaries

Allen, Yvonne
Locock, Gloria

Research and Development

Principal Research Fellows

Adams, Raymond, BSc(Hons), DipEd, MEd
Melb, PhD *Chicago* (from January 95)
Ainley, John, BSc MEd, PhD *Melb*, FACE
(to November 94)
Lokan, Janice, BA, DipEd *Adel*, PhD *Ottawa*,
FACE, MAPsS, MIAAP
McKenzie, Phillip, BEc(Hons), DipEd, MEd,
PhD *Monash*, MACE
Rowe, Helga, BA(Hons) *Qld*, PhD *Melb*,
MACE, FAPsS, MIAAP

Senior Research Fellows

Adams, Raymond, BSc(Hons), DipEd, MEd
Melb, PhD *Chicago* (to December 94)
Batten, Margaret, BA, BEd *Melb*, PhD
Monash, FACE
Collins, Cherry, BA(Hons) *Adel*, EdD
Harvard, FACE
de Lemos, Marion, BSc(Hons), MSc *Natal*,
PhD *ANU*, MAPsS
Doig Brian, BAppSci, AssocDipMath *RMIT*,
BEd *Monash*, GradDipCompEdn, MEd
MCAE
McCurry, Douglas, BA(Hons), DipEd *LaT*
Morgan, George, BSc(Hons) *UNSW*, DipEd
SCV, MSc *LaT*, MEd *Melb*.
Splitter, Laurance, BA(Hons) *Monash*, BPhil,
DPhil *Oxf*, MACE
Withers, Graeme, BA *Melb*.
Zammit, Susan, BA(Hons) *Lond*, MEdSt, PhD
Monash, MACE

Research Fellows

Bodey, Wendy, DipT *VicColl*,
GradDipCompEdn *Riverina Murray*
(from June 95)
Bryce, Jennifer, BA, BEd *Melb*, DipArts
VicColl of Arts, MSocSci *RMIT*
Cheeseman, Jill, DipT *ATTI*, Adv. DipT *ATTI*,
BEd *VicColl*
Creese, Valda, MA(Hons), DipEd *Oxf*.
Darkin, Lynne, BA(Hons) *James Cook*, DipEd
LaT. (from January 95)
de Zilwa, Deanna, BEd *Rusden*, BA(Hons),
MA(Hons) *Melb*. (from October 94)
Ford, Phoebe, BA(Hons), BEd *Melb*, MA, PhD
Camb. (to May 95)
Forster, Margaret, BA(Hons), DipEd *LaT*,
MEdSt *Monash*
Gerba, Sendaba, BSc(Chem), MSc *Addis*
Ababa, PhD *ANU* (to February 95)
Hambur, Sam, BSc(Hons) *Monash*, DipEd *HIE*
Harvey-Beavis, Adrian, BA *Chisholm*
Hunt, Malcolm, BSc(Hons), DipEd, PhD *Melb*,
MACE
Jarrett, Glenn, BSc(Hons), DipEd *Wales*,
MACE
Lindsey, John, BSc(Hons), PhD *Monash*,
DipEd *Melb*.
Long, Michael, BA(Hons) *ANU*
McQueen, Joy, BA, DipEd *Melb*, BEd *Monash*,
GradDip TESL *VicColl*, MA *Melb*.
Mendelovits, Juliette, BA(Hons) *LaT*,
MA(Eng) *Melb*.
Olle, Deborah, DipTeach(Primary), BA
(from June 95)

Recht, Eve, BA(Hons), DipEd *LaT*. (from August 94)
Simpson, Brian, BSc, DipEd *Melb*.
Volodin, Nikolai, MSc(Stats), PhD *Tashkent* (from January 95)
Wajsenberg, Jenny, BA DipEd(Hons) TESOL MA(Prelim) *Melb*, BSW LLB (from May 95)
Wightman, Greg, BA(Hons), PhD, DipMuseum Studies, *Syd*.
Wu, Margaret, BSc(Hons), DipEd *Melb*, GradDipComStudies *RMIT* (from January 95)

Research Officers

Bobevski, Irene, BA *Swinburne* (to December 94)
Carthy, Imelda, BA *Waikato*, DipEd *Melb*. (to May 95)
Congdon, Peter, DipAppSci *VCAH*
Fleming, Marianne, BSc *Melb*, BA *Swinburne*
Frigo, Tracey, BBSc *LaT*, DipEd *Bendigo*, GradDipAdol&Child Psych *Melb*.
Getty, Corinne, BA, GradDipUrbResrch& Policy *Swinburne*
Mellor, Suzanne, BA *Melb*, BEd *LaT*, DipEd *Melb*.
Perry, Linda, BSc(Hons) *Monash*, GradDipComp *Deakin* (to June 95)
Roberts, David, BA *Monash*
Robinson, Lyn, BA, DipEd *Monash*, GradDipUrbResrch & Policy, *Swinburne*
Stephanou, Andrew, Laurea in Fisica (Cum Laude) *Rome*, DipEd *Melb*.
Volodin, Nikolai, MSc(Stats), PhD *Tashkent* (to December 94)
Wu, Margaret, BSc(Hons), DipEd *Melb*, GradDipComStudies *RMIT* (to December 94)

Administrative Staff

Cawood, Danyelle, BEd Science *Melb*, GradDipEdPsych *Monash*
Firth, Patricia
Perkins, Gladys

Consultant

Shears, Lawrie, BA, BCom, BEd *Melb*, PhD *Lond*, FACE, FAIM, FSSE, FCNA(Hon), ABPsS, MAPsS

Testing Services

Manager

Sorrell, Mike, BSc, BA *Melb*, BEd *Monash*

Administrative Staff

Aldous, Cecily, BA *Melb*, DipEd(TESL) *LaT*.
Boyer, Christine, BA, DipEd *LaT*.
Gibson, Karen, BEng *Qld*, MSc *Strathclyde* (to December 94)
Skinner, Heather

The Cunningham Library

Library and Information Services Manager

Mathews, Peter, BSc(Hons), GradDipLib *RMIT*, AALIA

Librarians

Armstrong, Judith, BA(Hons) *Birmingham UK*
Balint, Denise, BSocSci *RMIT*, GradDipBus *VicColl*.
Findlay, Margaret, BA *VicColl*, AALIA
Miller, Elspeth, BA(Hons) *LaT*, GradDipLib *RMIT*

Library Technician

Brinson, Laura, AssocDipAppSocSci(Lib&InfSt) *Swinburne* (from January 95)

Library Officer

Psiliakos, Lula, BBus *RMIT*, AALIA

Clerical Assistant

Segar, Betty (to December 94)

Secretary

McKechnie, Anne

Corporate Services Division

Corporate Services Manager

Moore, Robert, BCom *Melb*.

Personnel Officer

Maher, Kerin

Administrative Assistant

Goudey, Tallaine (to October 94)
Lynch, Kylie (from March 95)

Receptionist

Richter, Bea
Coyne, Meg (from October 94)

ACCOUNTING AND FINANCE

Accounting and Finance Manager

Dawes, Wayne, BBus *Chisholm*, CPA

Car, Lyn

Evans, Dilsie

Harvey, Faye

Hodder, Gwen

MARKETING

Sales and Marketing Manager

Genat, Patricia, DipEd *Deakin*, GradDipLib,
BEd *Melb.*

Administrative Officer

Lowry, Anne (to January 95)

Kruse, Julie (from February 95)

Taylor, Margaret

Marketing Officer

Hore, Michelle, BA(Journ.) *RMIT*
(to September 94)

Robinson, Julia, BA(Journ.) *RMIT*
(from September 94)

Education

King, John, DipPE *Melb.*, BEd *LaT.*

Parenting

Goldsworthy, Joanna, BA(Hons) *Oxf.*

Personnel and Human Resources Management

McCrossin, Peter, BEc *Monash*, BA *Chisholm*,
DipEdPsych *Monash*, MAPsS, CMAHRI

Psychology

Verbyla, Daiva, BEd *Melb State Coll.*,

GradDipAdol&Child Psych, MEdPsych
Melb.

Customer Service

Manager

Higgins, Christine

Birrell, Wendy

Henderson, Val (to March 95)

Manuel, June

Porter, Wendy (from April 95)

Store and Despatch

Manager

O'Neill, Steven

Gilder, Peter

Manuel, Stephen

Smith, Ian

PUBLISHING

Publishing Manager

Fraser, Ian, MA *Aberdeen*

Senior Editor

Burton, Barbara, BA(Hons) *Melb.* (to April 95)

Production Manager

Seddon, Roger

Publishing Assistant

Griffin, Amanda (to December 94)

Sawchyn, Lyndel (from January 95)

PROJECT SERVICES

Manager

Withers, Graeme, BA *Melb.* (from March 95)

Buckley, Carole

Cowhey, Pauline

Record Services

Manager

Fraser, Simon

Bonning, Judy

Gardiner, Jan

Photocopying Services

Koglin, Dianne

Desktop Publishing

Clark, Judith

Greatbatch, Fiona (from June 95)

Wood, Trina (to May 95)

COMPUTER SERVICES

Miller, Hilary, BA *Monash*,

GradDipAppSocPsych *Swinburne*

Fry, Ian, BSc, DipEd *Melb.* (to September 94)

Consultants

Lis, Jeff

Malonda, Maria

CLEANING SERVICES

Skiadopoulos, Maria

Overview of Activities

The Institutes of Educational Research (IERs) are based in each State and in the Northern Territory, with New South Wales having a second Institute located in Newcastle. The IERs have the overall purpose of contributing to the quality of education through promoting and fostering educational research. This purpose is accomplished through local activities including lectures, seminars, forums, workshops, and research and news publications. The special relationship of the Institutes with ACER, by which the Institutes are represented on the Council and Executive Committee, also enables the Institutes to influence educational research policy and practice at a national level.

Membership of the Institutes

The composition of membership differs considerably between Institutes but, in the main, members are teachers, educational administrators, university staff and others interested in educational research and practice. Membership in 1995 is summarised below.

New South Wales	191
Western Australia	128
Queensland	83
Newcastle	76
South Australia	60 (in 1994)
Victoria	55
Northern Territory	46
Tasmania	35

Institutes' Activities, 1994-95

Although each Institute has an independent life in which it attempts to meet the particular needs and interests of its members, there is a similarity about the types of activities undertaken by them - in particular public lectures, research forums and seminars, student awards and social/professional dinners. The consistency of activities is partly a result of the State

Institutes' Standing Committee meeting held each year where ideas and practices are exchanged. Many of the activities are held in cooperation with other bodies, such as Departments of School Education, universities, and other professional associations, which has the effect of raising the profile of the IERs in the educational community.

A brief report summarising each Institute's program for 1994/95 is provided below.

New South Wales

Ten meetings were held by the Institute over the year. Themes included student assessment, teacher education and resignation, literacy and schooling standards, science education, and cross-cultural perspectives on parent partnerships in education. A highlight was the address delivered by Professor Paige Porter of the University of Western Australia on the subject "Women and Management: The Construction of Gender in the Workplace".

In 1994 the NSWIER instituted a new scheme of student research grants with the purpose of facilitating quality educational research by students at NSW universities. Six seeding grants, ranging from \$750 to \$1000, were awarded to students who were IER members enrolled in honours, bachelors and masters programs.

Some 600 participants attended a two-day conference "Accepting the Literacy Challenge" in April 1995. Guest speakers were Professor Marie Clay, Associate Professor Trevor Cairney, Ms Alison Dewsbury and Professor Linnea Ehri.

Western Australia

WAIER has been able to build on previous initiatives with a vibrant series of "Research and ..." seminars, and the Annual Research Forum demonstrating the health of research in Western Australia. Through these programs the Institute has been able to provide opportunities for members and the wider community to be involved in topics related to educational research in the State.

The presentations of the WAIER Institutional Research Awards and the Early Career Award continue to be an important part of our Institute's work and are very highly regarded by the recipients and their sponsors.

With two successful editions of our journal, *Issues in Educational Research*, we have been able to ensure the continuation of this alternative publication route, particularly for new researchers. In 1995 NSWIER, SAIER and the NTIER will all be involved with the WAIER in joint publication of the journal.

Queensland

The QIER has followed up its very successful format from earlier years by holding another well attended Annual Research Forum, a panel discussion involving input by noted educators on an issue of wide educational significance, and a dinner presentation. The Research Forum was addressed by Professor Stephen Kemmis with some 40 presentations on display and 100 people in attendance. The panel discussion, focusing on the "Shaping the Future" curriculum initiatives in Queensland, provided the opportunity for debate about its impact on the primary and secondary sectors of schooling as well as on the independent and Catholic systems. The J.A. Robinson Memorial Lecture, held in conjunction with a dinner, was addressed by Professor Brian Hansford of Queensland University of Technology.

Institute membership stood at a record 83 at the end of 1994. While mid-year membership is below that number, it is expected that the 1994 figure will again be reached by the end of 1995. The Institute's journal, *Queensland Researcher*, continues as a successful publication with the abstracts from the Annual Research Forum published in the second issue for the year.

Newcastle

A number of seminars were held by the Institute throughout the year. These seminars reported on overseas and local research projects in a range of educational fields including language factors in mathematics

education, current perceptions of Piagetian theory, social anxiety in schools, values intervention in primary schools, the relationship between study strategies and performance in educational psychology, and challenges in the teaching of reading. In addition, efforts have been made to create better communication links between schools and other professional organisations through exploring the possibilities of the World Wide Web to expand our network.

The Institute awarded the 1994 annual prize for the best doctoral thesis in education or psychology to Dr John Ashton for his thesis "A new epistemology for health and environmental education". A successful Annual Dinner for doctoral students and their supervisors was held again in 1994.

It was pleasing that most of the increased membership since the previous year comprised teachers.

South Australia

1994 proved to be another very challenging year for the SAIER. With major changes continuing in the education sector, and more envisaged, it is difficult to attract new members to replace those retiring or leaving the field. However, the Institute had a successful year, holding four well attended meetings which contributed to the educational debate. The meetings focused on assessment, early literacy, effective schools and the professional development of teachers.

The Institute supported national conferences and acted as a lobby group to encourage the advancement of education as a practice and a field of study. To this end the Institute has welcomed the initiative of the Western Australian Institute to move towards a national research journal encouraging beginning researchers. The SAIER is establishing a small prize to encourage contributors to the journal. The Institute is also looking to strengthen its links with ACER, and making greater use of standard data forms in the collection of research information.

Victoria

The guest speaker at the Annual General Meeting of the VIER was Ms Margaret Forster from ACER who spoke on the topic "Assessment profiles in primary English", describing the new *Developmental Assessment Resource for Teachers (DART)*. Other major events were the Frank Tate lecture "Preparing for a lifetime of learning" by Professor Phil Candy, drawing on his recent work on the development of lifelong learning through undergraduate education, and the John Smythe Lecture, "Are we leading students up a post-compulsory garden path?" by Dr Jean Russell. The Primary Interest Group held its annual workshop which shared practical activities that teachers can use to help learners make the most of their learning potential. All activities were well attended.

The Institute sponsors IER Research Awards jointly with the Directorate of School Education. This year there was an exceptionally strong pool of applicants, and the number of awards made was increased to four - two teachers each from metropolitan and country schools, with a further two applications currently under consideration. Successful applicants receive up to \$500 towards research expenses, and provide a report to the VIER which may include written reports, seminar presentations, Bulletin articles, etc. The Institute sees these awards as a way of encouraging and stimulating research and increasing the visibility of the VIER among teacher-researchers.

The Institute participated in a successful proposal for a "School-based Curriculum Renewal through Partnerships" project with the National Professional Development Program. The project focuses on the Curriculum and Standards Framework and associated Course Advice. The consortium consists of schools, a teacher association, a university, VIER as a research body, and the Association of Independent Schools of Victoria.

Northern Territory

The NTIER has the aims of promoting research in education through undertaking and promoting research and discussion, disseminating information, and cooperating with ACER. Discussion is promoted by meetings, lectures, panels, debates, forums and workshops, and these include IER members and non members as appropriate. The Institute sponsored a regular series of events throughout the year, including participation by local and overseas speakers.

Each year the Institute sponsors a prize for small-scale research. The Open Award was won by Noreen Trouw for her dissertation evaluating the effectiveness of an English as a Second Language reading program for Aboriginal and Non English Speaking Background early childhood students at a Darwin primary school. The Small-scale Award was won by Margaret Palmer for her study on learning to teach English in the Northern Territory.

During the last year the NTIER has focused on recruiting student members and encouraging their participation in research seminars.

Tasmania

During 1994, TIER conducted a number of functions. Following its previous success, the Institute continued a series of dinner meetings which combine an evening meal with an address by a distinguished guest on a theme or topic of contemporary interest. These meetings are designed to attract a wide audience and present an ideal opportunity for educators - practising teachers, university staff, administrators and others - to meet.

Highlights of the 1994 series included an address by Professor John Smyth from Flinders University focusing on new research paradigms and discussing radical approaches to research involving teachers and schools. Professor John Williamson from the School of Education at the University of Tasmania also presented a paper on his current work

examining teaching and learning strategies on behalf of the OECD.

TIER also made awards to the best education honours thesis students in the School of Education at the University of Tasmania.

Activities of the Institutes' Standing Committee

The Institutes' Standing Committee, which meets annually at ACER, is made up of one representative from each Institute. In 1995 membership is:

- Professor Sid Bourke (Newcastle IER) - Chair
- Professor Mick Dunkin (NSWIER)
- Dr Brian Devlin (NTIER)
- Mr Neil Cranston (QIER)
- Mr Rob Slater (SAIER)
- Dr Richard Watkins (TIER)
- Associate Professor Glenn Rowley (VIER)
- Dr Andrew Taggart (WAIER)

The Institutes are also represented on ACER's Council and Executive by three members. Members of the Institutes' Standing Committee on the Council and their terms of office are shown below:

- Mr Neil Cranston (until October 1994)
- Mr Rob Slater (until October 1995)
- Professor Sid Bourke (until October 1996)
- Dr Andrew Taggart (from December 1994 until October 1997)

Professor Sid Bourke represents the Institutes on the Executive of the Council.

The major issues discussed by the Standing Committee were the ACER research program and the expansion of the Western Australian Institute's journal, *Issues in Educational Research*, initially to include three other Institutes. Although all eight Institutes were enthusiastic about the journal, some have their own journal and did not see that they could sustain a second one, and others were concerned about needing to increase membership fees substantially to cover the cost of providing the journal to members.

Ways of disseminating information about ACER's research program, using the Institutes

as local contact points were also discussed, both at the Standing Committee and Council meetings.

Conclusion

Once again the individual Institutes' reports indicate the wide range of activities engaged in by the Institutes across Australia. The support of students through awards, publication, and providing a forum for seminar presentations is a common thread in the work of Institutes which should bear fruit for the future of the Institutes and educational research generally.

Although total Institute membership remains substantial at approximately 640, there has been a continued decline in overall membership throughout the 1990s. This challenge has been addressed by some of the Institutes but warrants further attention. The growth of subject-specific associations and other bodies, together with financial constraints on education, have put pressure on the IERs and other generalist research bodies in retaining membership.

Sid Bourke

Chair
Institutes of Educational Research Standing Committee