

69th Annual Report

98-99



Contents

| | |
|---------------------------------------------|---|
| Australian Council for Educational Research | 1 |
| Director's Comment | 3 |

Research highlights

| | |
|----------------------------------------------------|----|
| Skills for society | 6 |
| Learning with laptops | 8 |
| Learning through philosophy | 10 |
| A thematic approach to numeracy and literacy | 12 |
| Surveying youth study and employment | 14 |
| Making a start on the road to learning | 16 |
| Making tertiary study more accessible | 18 |
| The economics of vocational education and training | 20 |
| Language in maths - towards equity in assessment | 22 |
| Further information | 24 |

1998-99 on record

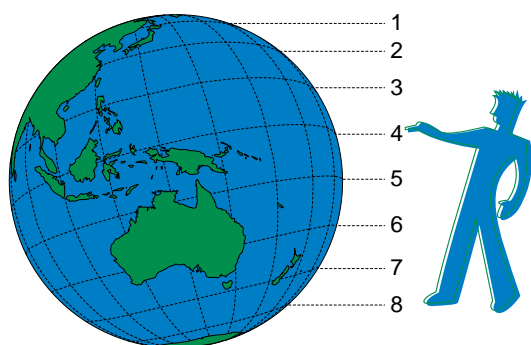
| | |
|------------------------------------------------|----|
| Staff publications and professional activities | 26 |
| Financial Report | 37 |
| Directors' Report | 40 |
| Independent Audit Report | 42 |
| Members of ACER Council | 54 |
| Members of ACER Staff | 55 |

Australian Council for Educational Research
19 Prospect Hill Road (Private Bag 55) Camberwell VIC 3124
Telephone: (03) 9277 5555 Fax: (03) 9277 5500
Internet: www.acer.edu.au
ACN 004 398 145

From late March 2000, ACER Press and product displays will be located at:
347 Camberwell Road, Camberwell.
Postal address, telephone and fax numbers will remain the same.

Photographs courtesy of McKinnon Secondary College (p. 7), Peter Harvey (p. 13), Melbourne College of Hair and Beauty (p. 15), Caulfield Grammar School (p. 17), Box Hill Institute (Simon Fox) (p. 21), Huntingdale Primary School (p. 23).

Australian Council for Educational Research



ACER's mission is to create and disseminate knowledge and tools that can be used to improve learning.

Underlying this mission is our belief in the importance of ongoing, lifelong learning both for the fulfilment of individuals and for the well-being of society, and our commitment to the use of systematic investigation, evaluation and critical reflection in the search for ways to improve learning.

As an independent, not-for-profit organisation, we are able to bring a high level of expertise and objectivity to our work.

Research

Our research projects investigate topics of importance to education and training and play a significant role in shaping education policy and direction for parents, teachers, schools and governments.

ACER staff have developed a special strength in the area of large scale survey research. We are uniquely placed within Australia to mount longitudinal studies of student progress through school and into the world beyond school. Our staff also have high levels of expertise in the study of classroom teaching and learning, in the economics of education, and in educational measurement and statistical analysis.

As a national organisation, we are well placed to undertake Australia-wide studies to address research questions of importance in all States and Territories.

These research projects are funded either through annual research grants provided by State, Territory and Commonwealth government education authorities, or by individual commissioning agencies.

Increasingly ACER's research is having an international impact.

Services

Other ACER projects are based on services we provide to the education community, such as selection and scholarship tests for schools and universities. Most of these tests are developed and administered annually by ACER. The Special Tertiary Admissions Test and the Cooperative Scholarship Testing Program are two of the larger assessment services delivered throughout Australia. The Graduate Australian Medical School Admissions Test is another significant assessment service offered by ACER.

International training workshops also are an important element of our educational services. These workshops are provided in overseas locations as well as being available to persons wishing to be trained in Australia.

Materials

ACER develops and distributes educational materials such as tests, kits, books and software. Some of our materials development occurs as part of externally commissioned projects. Other work leads to products that are distributed through ACER Press.

Our 140 staff are engaged in a range of projects, including commissioned research studies, the provision of educational services, and the development and dissemination of educational materials for sale. Some of these projects are highlighted on the following pages.

Recent Developments

As a dynamic research organisation, ACER is involved in many projects and is continually reviewing, developing and reporting on its various projects and services. Following are some significant ACER activities during 1998-99:

Schools Conference

ACER's third national research conference Schools in Australia: 1973 - 1998, was held in Sydney in October 1998.

This conference was organised to honour Professor Peter Karmel in his concluding year as Chair of the ACER Council and Board of Directors. Professor Karmel was Chair of the Interim Committee for the Australian Schools Commission which presented its influential report *Schools in Australia* in 1973. The conference examined developments in Australian schooling since that time.

Longitudinal Literacy and Numeracy Study

During the year, ACER began data collection for the seven year Longitudinal Literacy and Numeracy Study (LLANS).

LLANS is an ACER initiative designed to learn more about how children develop the important skills of literacy and numeracy, and to build a picture of the different ways children learn. ACER will follow 1000 students who started school in 1999 through their primary schooling. Progress reports will be available at the end of each year of the study.

Professional Development

ACER has expanded its program of professional development workshops for teachers, psychologists, parent educators, and human resources professionals. Workshops have been held in several states on a range of topics. The workshops have been presented by ACER staff and other presenters, usually authors of ACER products.

A Learning Community

Geoff N Masters

If student learning is to be significantly improved, education organisations will have to be actively and constantly in the business of finding answers.¹

As we embark on the 21st Century, there are few certainties about the future. However, on current trends, there are some relatively safe predictions. Among these predictions is the expectation of continuing rapid change, with a consequent need for all of us to adapt and learn simply to keep pace with the changes occurring around us.

We can expect *learning* to be a major feature of this future. Indeed, some writers have described the world of the future as the 'learning' or 'knowledge-based' society—a society in which 'economic growth will be fuelled by knowledge (ideas, innovations and inventions) more than by natural resources'.²

Current trends also provide a guide to the ways in which learning itself is likely to change in the new century. In particular,

- because of the rate of change, there will be an increased need for ongoing learning throughout the lifespan;
- there will be a growing expectation that everybody in society will engage in learning experiences leading to formally recognised post-school education or training qualifications;
- learning will occur through a variety of modes, with a greater percentage of learning being facilitated by advances in information and communication technologies;
- there will be an increased emphasis on 'learner-centred' approaches that give learners flexibility over what, when and how they learn;
- the generic skills of learning (eg, finding, sifting, evaluating and presenting information; problem solving; critical thinking; oral and written communication; interpersonal skills; and skills in using information and communication technologies) will become increasingly important;
- learning is likely to become more cooperative as learners work together on meaningful real-world problems and projects, including problems encountered in workplaces; and



- the capacity to continually upgrade knowledge and skills will be crucial to successful career changes and career development, meaning that individuals will have to recognise their learning path as a critical life determinant, and pursue it with purpose and determination.³

As educators, we are well aware of these trends. We had better be: we are in the *learning* business. Helping people to learn is what we do. But to what extent have we internalised the implications of these changes for our own learning?

A profession learning

As educators, we too will have to engage in ongoing, career-long learning. We will have to continually update our knowledge and skills and perhaps regularly upgrade our formal qualifications as well. In doing this, we will use a wide variety of learning resources, including published literature, professional development courses, mentoring arrangements, peer support networks, and the extensive use of information and communication technologies. And the generic learning skills we use will be those required by the rest of society: skills in navigating and making sense of the enormous amounts of information available to us, skills in communicating with others, analysing and presenting information, and learning cooperatively in teams.

Beyond our individual professional development, we also will have to become an impressive learning *community*. If supporting learning is our shared business, then as a community we will have to be continually learning how to do this and how to do it better. We will need to develop a better

understanding of how learning can be supported, what works and what doesn't, for whom and under what conditions.

In education, we have a patchy record in creating and using systematic knowledge of this kind. Much decision making is driven by fads and fashions, political and ideological agenda, and hunches about what should work. In the words of Benjamin Bloom,

*the libraries and basements of our schools still store the forgotten relics of fads and nostrums which were purchased because they promised to solve our educational problems. In education, we continue to be seduced by the equivalent of snake-oil remedies, fake cancer cures, perpetual-motion contraptions, and old wives' tales. Myth and reality are not clearly differentiated, and we frequently prefer the former to the latter.*⁴

In the century ahead, we will have to be a learning community that experiments with new approaches, keeps what works, discards what doesn't, and systematically accumulates new knowledge in the process. In tomorrow's learning society, decision making in support of learning will have to be based on the best of our accumulated and shared wisdom.

A role for research

Research has an essential contribution to make in this process. Whether undertaken by university academics or teachers in classrooms, educational research relies heavily on the skills of locating, gathering, sifting and evaluating observations and experiences, and of then synthesising this information into new knowledge and tools. As Professor Peter Sheldrake of RMIT University observes, our future learning as a profession will occur not so much through the accumulation of information as through our ability to construct from this information knowledge that can be translated into effective *action*:

there is an important difference between information and knowledge. Information is simply data; knowledge is the translation of that data into capability for action... We have extraordinary amounts of

*information available to us. However, there is an uncomfortable sense that, in many areas, there is no new knowledge appearing.*⁵

In general, effective action in education depends on: (1) a sound understanding of the presenting situation; (2) some knowledge of courses of action likely to lead to improved learning outcomes; and (3) the required resources, opportunity and willingness to apply this knowledge (see Figure 1). This is true whether the action taker is a parent, classroom teacher, school principal, or system manager.

Research has roles to play at many points in this process. Its roles include developing a better understanding of the current situation, creating and summarising knowledge about effective ways to improve learning, developing research-based tools, evaluating the effectiveness of particular initiatives, and determining whether improved learning outcomes are associated with enduring life benefits for individuals and societies. In each of these contexts, research is likely to be most effective if it is explicitly designed to support better action.

Our understanding of the current situation of Australian education and training has improved considerably in recent years. For example, education system managers, school principals, parents and the public are now much better informed about what Australian school students are achieving than at any other time in our history. This knowledge has resulted in part from assessments of learning at key points in children's schooling: during the beginning years of school, towards the end of Year 3 and Year 5, and during the final years of compulsory schooling. We also are better informed about how students are performing nationally and in comparison with students in other countries through projects such as the Third International Mathematics and Science Study.⁶ And through State assessment programs and the National School English Literacy Survey, we have a better appreciation of the enormous task we

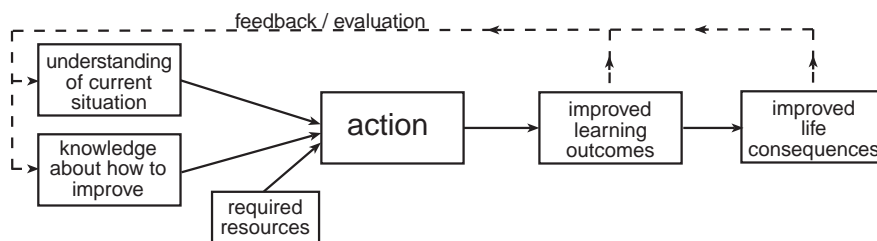


Figure 1. a learning loop

face in raising literacy levels among Indigenous students, particularly in rural and remote communities, and of students—particularly boys—from low socioeconomic backgrounds.⁷

But this deluge of information has not been matched by a growth in our knowledge about the best ways to improve learning. As one system manager put it:

I need no more data to convince me that we have a serious problem with the literacy skills of Indigenous students. What I now need are proven strategies for addressing this problem.

As educators of the 21st Century we will require better knowledge about ways of improving learning for all learners; we will have to be constantly in the business of finding answers and strategies that work.

A national research agenda

This conclusion was one of several conclusions reached in ACER's consultations with State and Territory Departments of Education and the Commonwealth during 1998-99. In those consultations, there was overwhelming agreement that the main focus of ACER's research in the next few years should be on reviewing, consolidating and creating new knowledge about the best ways to *improve student learning*. It was recognised that 'improvements' in learning could occur in a variety of ways, including improved learning outcomes, a shift in emphasis to forms of learning that are more relevant to the emerging context, and increased levels of efficiency and cost effectiveness in educational provision.

Agreement to give priority to knowledge about ways of improving learning was a first step in the development of ACER's core research agenda for 1999-2002. The second step was to discuss areas of educational practice in which the review and creation of new knowledge is urgently required.

(As an aside, it is interesting that, at the present time, there is no nationally agreed research agenda for school education. Perhaps during the 21st Century we can expect to see education providers more actively identifying questions to which they require answers, and researchers more often adopting the role and mindset of research service providers.)

Five priority areas for research were identified through our consultations. These areas together provide the beginnings of a national research agenda for school education:

- improving literacy and numeracy learning
- teaching practices to improve learning
- vocational outcomes and lifelong learning
- improving outcomes for Indigenous students
- assessment and reporting to improve learning

Although these five areas were seen as areas of pressing research need, it was recognised that useful research in these areas is likely to depend on careful planning, a long-term perspective (perhaps based on longitudinal studies of learning), and time to evaluate the impact of current initiatives.

A third outcome of the consultations was a request by education systems for closer involvement in, and better information about, research while it is in progress—a request repeated in Dr Jane Figgis's report on ways of improving ACER's research dissemination.⁸ This call for closer partnerships is consistent with the notion that educational research is not the sole preserve of 'researchers'. As a learning community, we all have a responsibility for drawing together professional knowledge, for sharing that knowledge, and for supporting each other in our professional learning.

As professionals in the business of learning in the 21st Century we have the challenge and the opportunity to model excellence in learning, both as individuals and as a learning community.

1 National Research Council (1999). *Improving Student Learning: A Strategic Plan for Education Research and its Utilization*. Washington: National Academy Press.

2 Cogan, JJ (1997). *Multidimensional Citizenship: Educational Policy for the 21st Century*. Tokyo: Sasakawa Peace Foundation.

3 Wallace, JG (1999). The rocky way to lifelong learning. *Business/Higher Education Round Table News*, 6, 6-7.

4 Bloom, BS (1981). *All Our Children Learning*. New York: McGraw-Hill, p15.

5 Sheldrake, P (1999). Knowing what we know! *Drake Business Review*, 13(3), 16-18.

6 Lokan, J, Ford, P & Greenwood, L. (1996). *Maths and Science on the Line: Australian Junior Secondary Students' Performance in the Third International Mathematics and Science Study*. Melbourne: ACER. and Lokan, J, Ford, P & Greenwood, L. (1997). *Maths and Science on the Line: Australian Middle Primary Students' Performance in the Third International Mathematics and Science Study*. Melbourne: ACER.

7 Masters, GN & Forster, M (1997). *Mapping Literacy Achievement: Results of the 1996 National School English Literacy Survey*. Canberra: DETYA.

8 Figgis, J (1999). *Relevance, Partnerships, Boldness: Aspirations for ACER in the 21st Century*. Melbourne: ACER.

Skills for society

In 2000, more than thirty countries will collaborate to assess the reading, mathematical and scientific literacy of 15-year-olds.

"It's important to find out how prepared young people are to meet the challenges of the future," ACER's Dr Ray Adams, international director for PISA said.

ACER is leading a consortium appointed by the Organisation for Economic Co-operation and Development (OECD) to develop the Programme for International Student Assessment (PISA).

PISA will survey 15-year-old students in reading, mathematics and science every three years. Reading will be the primary focus in 2000, mathematics in 2003 and science in 2006.

"Governments need to know if schools are preparing children for full participation in society, what educational structures and practices maximise opportunities for students from disadvantaged backgrounds, and how much influence the quality of school resources has on student outcomes," Dr Adams said.

"The results will enable countries to evaluate and potentially improve their approaches to education."

From March 2000, more than 100 000 students across 32 countries will be surveyed. In Australia, approximately 7700 students will take part, selected from about 220 schools nationally.

The test development challenge

With accountability for overall management, ACER also has prime responsibility for developing the assessment tasks together with Dutch consortium partners, Netherlands National Institute for Educational Measurement (Cito). Developing assessment tasks for so many languages and cultures has presented an enormous challenge, which ACER and Cito have met through an inclusive and democratic approach.

All countries taking part were invited to submit material that could be used as the basis for assessment questions. "This invitation drew a particularly strong response, with 25 of the 32 countries sending often very good material to be considered for use in the main study," says Ms Joy McQueen, one of the ACER researchers developing assessment tasks for reading.



Another ACER researcher, Ms Juliette Mendelovits, says “The assessment needs to be interesting to 15-year-olds, as well as appropriate to all the cultures taking part. The aim is cultural diversity rather than cultural neutrality. To paraphrase the PISA translation manual, how literate could we claim the youth of 2000 to be if their competence did not allow them insight into cultures other than their own?”

“Familiarity with aspects of the materials will inevitably vary among cultures, but by having a great variety of content, these differences will balance out,” Ms McQueen says.

A further challenge was the translation of materials into many languages. “To ensure that the assessment was equivalent across languages, we had to avoid using material with highly idiomatic language,” says Ms Mendelovits. “Questions needed to be at a more global level rather than focusing on the nuances of language.”

In the lead-up to the main study, the assessment tasks have undergone extensive trials, as well as reviews both by participating countries and by international panels of experts.

Outcomes

PISA results will show:

- how student achievement relates to school setting, taking into account such features as how school programmes are organised, the staffing and material resources of schools, and how decisions about these are made;
- patterns of achievement within countries, including the extent of differences in achievement across schools; and
- how schools affect the average relationship between student background and student achievement.

International reports will provide a variety of data that will inform national policy decisions on education. Reports may include international profiles of reading, mathematical and scientific literacy, along with reports on the relationship between social background and student achievement, under-achievement, gender and the effects of schools on learning.

“PISA is setting and achieving a standard for quality in international comparisons that has never before been attained,” says Dr Adams.

Learning with laptops

How do students feel about using laptop computers to learn? How do they perceive computers and how is learning changed through their use?

A study conducted by ACER in conjunction with Balwyn High School and the University of Melbourne sought to answer these and other questions by asking Year 7 students to record important classroom, homework and out-of-school activities in diaries. The researchers then analysed diary entries that described how students used laptop computers.

“There has been widespread encouragement for the use of technology in the classroom, but we need to know more about the complex ways computers are linked to learning,” says Dr John Ainley, ACER Associate Director.

The study commenced in 1997 with a class of Year 7 students. Students had their own laptops and the computers were used across all subjects. The main aim was to look at student perspectives on learning with laptop computers.

In 1998 when these students moved to Year 8, they continued to use laptops across all their classes. Another three Year 7 classes entered the study in 1998, including one whose students were taking part in an accelerated learning program.

Tools for learning

Computers are often described as a “tool for learning”. It was important to find out whether students’ perspectives matched this vision. The challenge was to interpret what students were saying about their use of computers. Diary responses from the students were used to identify five basic perspectives on the computer as a learning tool.

These perspectives included perceiving the computer as a tool for getting work done, as a machine with its own special procedures to be learnt, as a means of accessing knowledge and information, as a tool for presentation of work, and for playing games.

Findings

Interestingly, there were more similarities than differences between the responses of boys and girls. Both sexes perceived the computer as a means of getting work done, and as a machine with its own special procedures to be learnt. There was a small difference in that, out of school, boys commonly mentioned playing games on their computers, while girls often referred to presentation uses.



A key finding was that for both boys and girls, few of the diary responses focused attention on the computer as a means of accessing knowledge and information – a perspective educators have most closely associated with the expansion of students' learning horizons.

Another important finding was the high proportion of student comments about learning how to operate computers – learning the tool was part of their learning. In Year 8 these students, now accustomed to using computers, focused more on the content of what they were doing with their laptops.

The study also found that students were generally very positive about using laptops. Although the level of positive response in Year 8 was lower than in Year 7, it was still positive. Schoolwork and homework activities, as shown in other research, were not as enjoyable as leisure activities. Anxieties and frustrations about hardware and software were also evident as students learned to master the technology and its limitations.

“We need to follow up these findings with research that will tell us if higher levels of mastery of the tool will free students to get more work done. Will it focus more attention on the potential of computers to access and manipulate knowledge?” asks Dr Mary Ainley, a researcher from the University of Melbourne who collaborated on the research.

The use of laptops in the classroom affected not only student perceptions of their learning, but also the way classes were run. In the laptop classes, students were more likely to make presentations, they were more likely to be working on individual research projects, and teachers came to expect laptops to be used by students in classroom tasks.

“The findings indicate that there are a variety of ways in which the computer becomes part of and influences how students learn,” says Dr John Ainley.

The final report will be available in 2000.

Learning through philosophy

How can philosophy improve children's learning in the classroom?

Director of ACER's Centre for Philosophy with Children and Adolescents, Dr Laurance Splitter, is exploring the benefits of using the philosophical model of a community of inquiry in the classroom. It is an approach in which, he says, "students and teachers collaboratively engage in and construct the disciplines".

Within a community of inquiry, the teacher becomes a co-inquirer with students, remaining in authority, but no longer *the* authority.

The focus is on dialogue, where the teacher encourages students to express and discuss their ideas openly, but in ways which are structured by standards of reasonableness. In this way they develop the disposition that the conclusions they reach remain open to rational challenge. As Dr Splitter notes "In such an environment – of trust, mutual respect and care – children experience empowerment and a strengthening of self-esteem."

ACER began its work on philosophy with children in 1988. Since then, more than fifty workshops have been held for teachers of students up to Year 10. The most recent workshops focused on the impact of philosophy on learning mathematics, the role of philosophy in values education, and the potential for applying philosophical concepts and procedures across the curriculum. The

centre has also played a key role in setting up state and regional philosophy networks among teachers and researchers, as well as conducting workshops in many countries.

"Dialogue provides a much-needed key that enables many students to unlock doors to learning that have been closed to them. In some cases teachers have had to think again about who their bright students are," Dr Splitter says. The community of inquiry model encourages children to think not only about a subject's content, but about thinking itself. Students who are good at giving answers aren't necessarily good at the reflective thinking characteristic of the community of inquiry.

Mathematics and the community of inquiry

Because primary teachers teach across the curriculum, the community of inquiry has tended to migrate to other subject areas from its initial focus on philosophy. Dr Splitter is now looking at how the community of inquiry model can be used in mathematics at primary and early secondary levels.

"To what extent can you still have an inquiry environment in maths, where there are determinate answers?" Dr Splitter asks, proposing that such an approach may encourage students to look at mathematical tasks in a different way.



As part of his exploration of the community of inquiry in mathematics, Dr Splitter is currently creating a narrative treatment of algebra.

“This topic naturally leads to the more general question of whether the special features of philosophical curriculum materials can be used to improve teaching in other areas,” says Dr Splitter. “Results from an earlier research study into teacher perspectives in philosophy suggest that they can.”

Resources for teachers and students

ACER Press publishes and sells philosophy novels, short stories and a range of teacher support materials that help teachers and students pull together the philosophical “threads” from the texts used as a stimulus to inquiry.

For example, the newly-published *Places for Thinking* is a series of four children’s titles in which cows “ruminate and ponder”, snails “imagine and wonder”, a duck “realises and reasons”, and a giraffe “feels bored and tries to see the world from an ant’s point of view”.

In *The Doll Hospital*, soon to be published by ACER, a child of indeterminate gender considers issues of personhood, relating to

others, growth and change, good and bad behaviour, and sameness and difference, all through a relationship with a doll. What happens when the doll’s head needs to be replaced? Is it the same doll?

A key feature of such materials is the use of narrative to engage children. “Not just any narrative,” says Dr Splitter, “it’s narrative that portrays characters asking questions and discussing ideas – that is, children modelling dialogue and inquiry.”

The future

The mathematics project is one step in a potential broadening of philosophical approaches across the curriculum.

The strengthening of philosophy with children across Australia has created a receptive environment for this work. As Dr Splitter notes, “There has been a raising of consciousness concerning the very idea of philosophy with children. Teachers are beginning to see it as normal.”

A thematic approach to numeracy & literacy

Schools can assess the literacy and numeracy skills of their students and use the results to improve teaching and increase support for students who need it most.

In 1999 students at government schools in the Australian Capital Territory were assessed using literacy and numeracy questions centred around a common theme for each year level. The themes aimed to engage students in the assessment.

Year 3 students answered questions based on a video about a Swedish family on holiday in Spain. Maps, travel times and patterns on beach towels were some of the features that made the assessment interesting to children.

Tobacco and smoking was the theme for Years 7 and 9 students. While the questions did not adopt a specifically anti-smoking stance, the assessment package was designed to complement students' wider learning in such areas as health education, economics and land use.

"From 2000, each year level will feature a theme for both literacy and numeracy," says Ms Wendy Dick, ACER project director for the ACT Assessment Project.

The project began in 1997 by assessing aspects of literacy achievement of all Years 3 and 5 students at ACT government schools. From that initial assessment, the project expanded to include both literacy and numeracy at Years 3, 5, 7 and 9 in 1999.

"Over this time there has been a progressive development of expertise in the use of these assessment and reporting systems within the ACT," says Ms Dick. "ACT schools had experience with a similar developmental assessment approach through their participation in the trial and implementation of the National School English Literacy Survey in 1995 and 1996, and had confidence in the materials produced by ACER," she says.

Materials for the National School English Literacy Survey and for the ACT Assessment Project are derived from DART, the *Developmental Assessment Resource for Teachers*, which ACER developed.



Partnership with teachers

The assessment program is designed to be integrated within the broader curriculum. “We see the project as a partnership with schools and classroom teachers in assessing key aspects of literacy and numeracy,” Ms Dick says.

“We recognise that the project is part of the assessment that schools carry out, and that it must complement their assessment program as far as possible.”

In the most recent assessments, well over 10 000 students took part. The students completed a wide range of mainly open-ended questions that provided a richer range of assessment tasks than the use of multiple-choice alone.

The questions allowed students to be credited according to their level of response. “It’s not just a question of right and wrong,” says Ms Dick.

“Students whose response shows an understanding of the figurative as well as literal aspects of a question, or who support or justify their response, receive greater credit.”

Using the results

ACER provides reports to parents and schools through the ACT Department of Education and Community Services. Reports to schools show results by question and by individual student, and allow schools to compare their results with results across the ACT.

“This information helps schools to improve their ongoing curriculum development and to direct special efforts to students with specific weaknesses in their learning,” Ms Dick said.

Similarly, comprehensive reports to the Department of Education and Community Services allow targeted support and additional funding for students with problems in numeracy or literacy.

As the project continues, data collected from 1997 onwards will provide evidence to inform ongoing research into student learning and curricula in the ACT. “Such research possibilities further emphasise the value of this collaborative program,” Ms Dick says.

Surveying youth study and employment

What factors influence students to leave school early? What happens to those who do?

The Longitudinal Surveys of Australian Youth (LSAY) program studies different groups of young people as they make the transition from school to work. Australia is one of the few countries with a longitudinal research program that follows young people as they move through school into further education and work.

Leaving school early

In a recent study as part of this program, ACER investigated students who were in Year 9 in 1995, but who had left school before Year 11. The researchers were interested in how such factors as school achievement, gender, ethnicity, school type, and parents' social status influenced early school leaving. Employment outcomes for these students were also analysed.

A key finding was that low school achievement in literacy and numeracy substantially increased the likelihood that students would leave school early, regardless of other factors.

Overall, the study found that 9 per cent of students left school before Year 11, with boys more likely than girls to leave early (10 per cent and 7 per cent, respectively).

Interestingly, this difference between boys and girls could not be explained by school or student characteristics such as achievement. This gender effect is stronger than many of the other factors influencing early school leaving.

The most common reason given by students for leaving school early was to get a job. Perhaps surprisingly, the study found that in many cases this desire was fulfilled, with 70 per cent of the study participants in full-time work after leaving school, 8 per cent in part-time work and 11 per cent looking for a job. However, the employment market for early school leavers was shown to be more positive for boys than for girls.

Dr Gary Marks, the main author of the study, says, "Many boys who leave school early obtain apprenticeships, which often provide a future career path."

Girls, however, were less likely than boys to be in full-time work and more likely to be in part-time work or looking for work.

Despite the generally high level of job satisfaction of those who left school early to work, the study also identified concerns about the type of work in which early school leavers found themselves.



“Girls and boys who found work tended to be clustered around occupational groups – trades for boys, sales and personal service work for girls – that often have limited opportunities for advancement,” says Dr Marks.

The proportions of early school leavers were higher among regional and rural students than among metropolitan students. However, it was among indigenous young people that the highest rates of early school leaving were found. Of the students with an indigenous background who took part in the study, 21 per cent had left school before Year 11, a rate over twice that of other students.

“This shows that we should be making more of an effort to increase the school retention rates of Aboriginal and Torres Strait Islander students. It’s an important issue because leaving school early increases the chances of becoming unemployed and affects earning capacity,” Dr Marks said.

The next phase in the research is looking at a comparable group of students who were in

Year 9 in 1998. Dr Marks says important insights may be found by studying the results not only within groups but between groups over time. Like the students in the 1995 group, students in the 1998 study will be surveyed annually.

Drawing on the most recent and extensive national data, such studies provide a valuable basis for policy decisions on school retention and on training provision for students who, without qualifications, might otherwise “fall through the cracks”.

Early School Leaving In Australia is the eleventh report of the LSAY program, which originated from two earlier longitudinal studies – the Youth in Transition program conducted by ACER and the Australian Youth Survey conducted by the Department of Education, Training and Youth Affairs (DETYA). The present program is jointly funded by DETYA and ACER, and conducted with the cooperation of school authorities and schools throughout Australia.

Making a start on the road to learning

A new assessment activity will help teachers choose a starting point for learning.

Who am I? asks children to copy geometrical shapes, to write letters, numbers, words and sentences, and to draw a picture of themselves. The results of these engaging activities show the stage of development a child has reached, allowing teaching to be adapted to the child's individual learning needs.

The *Who am I?* assessment activities stem from recent research involving more than 4000 Australian children from pre-school age up to Year 2.

The research project, conducted by Dr Molly de Lemos, was designed to investigate how age of school entry and a range of other school factors affect children's progress. She found that the nature of pre-school programs, the curriculum and teachers' expectations of children were all strong factors.

Research tool needed

However, to reach these findings, a research tool was needed to measure the early development both of pre-school children and of those already in the early years of schooling. With few teacher-administered tools available to assess these groups in a classroom context, the alternative was to

develop an assessment instrument to meet the specific needs of this study.

The result is *Who am I?*, a research by-product that is now providing teachers with assessment activities that can be given to children with little or no experience of school. Because they are easy to use, the activities are likely to find wide use in looking at children's progress either immediately before or as they begin their school lives.

Dr de Lemos, who developed *Who am I?* in collaboration with Mr Brian Doig, said the assessment was not designed to be used in deciding whether a child should start school, but to decide on what sort of program would be of most benefit.

"It is also important to note that *Who am I?* does not measure intelligence," says Dr de Lemos, "It measures the level of development a child has reached at the time of the assessment. This level is indicative of broad underlying processes that determine a child's readiness for particular types of learning experiences. All children pass through a series of well-recognised stages; it's just a question of when, and of how we can nurture their progress based on where they are at present."



The activities are not drawn from the school curriculum, but assess key underlying skills that are the building blocks of later achievement in literacy and numeracy.

In particular, the activities flow from previous research showing that the ability to recognise and copy geometrical shapes is strongly linked to identifiable developmental stages. Children's results from the assessment can therefore give teachers important clues about which types of learning activities would have most benefit in individual cases.

Now available to teachers

Based on the extensive research data collected on *Who am I?*, teachers can match their children's results to typical developmental progress for specific age groups and school levels. Teachers can also identify the stages of development typically reached by children in terms of particular state or territory programs.

Initial feedback on the use of *Who am I?* has been very encouraging. In contrast with the formality of traditional tests, *Who am I?* is presented as a fun activity.

"It's been so popular with children that some have been unwilling to part with their completed work," Dr de Lemos says.

Teachers have also been positive, seeing the profile derived from *Who am I?* as useful in discussing progress with parents.

A growing potential within Australia is being matched by international interest, with *Who am I?* being selected for use in a major Canadian longitudinal study of children and youth. It has also been used with small groups of children in Hong Kong and India.

This interest derives in part from the clear presentation of the assessment activities, making *Who am I?* suitable for children from a wide range of backgrounds.

"The international interest in *Who am I?* is very encouraging and reflects its great potential for use across a range of cultures and languages. We may well find that its wider use reveals further evidence that these broad stages of development are indeed common to all children," says Dr de Lemos.

Who am I? is now available through ACER Press.

Making tertiary study more accessible

STAT is giving more students access to tertiary study, while helping institutions around the country to select applicants with confidence.

The Special Tertiary Admissions Test (STAT) is designed for applicants to tertiary study who do not have recent or standard Year 12 results.

Many of these applicants are older than average school leavers. They may already have entered the workforce and be looking to further their careers through study.

Academic Services Manager in the Faculty of Science, Technology and Engineering at La Trobe University, Mr Anthony Manahan, says the Faculty aims to attract some applicants who have been in the workforce.

“You can’t quantify something like work experience, but STAT helps us to quantify candidates’ academic potential,” he said. “A primary consideration for us when selecting students for our courses is a student’s potential for success in the course.”

STAT assesses both verbal and quantitative skills. Different tertiary courses weight these two components differently. For example, the behavioural science course at La Trobe University has more writing requirements than other science courses, so more weight is given to results in the verbal section of the test.

Mr Manahan said the sorts of skills tested in STAT are similar to the skills students will need in their courses. He has found STAT to be a good indicator of successful tertiary study.

“Anecdotally, it would appear that people who do well in STAT tend to do well in the course. It’s an involved process going through the application, so they’re generally pretty motivated,” he said.

Another advantage of the special entry program facilitated by STAT is the learning environment it creates.

“It is useful to have a mix of school leavers and mature age students in classes because it helps the classroom dynamic,” he said.

Selecting the right students

The aim of the test is to provide information to help institutions select applicants likely to succeed in the various disciplines of tertiary study. Since its beginnings, STAT has been refined for this purpose to the current set of four tests.



These tests assess language, mathematical and scientific abilities through questions that give all the information students need to choose the best answer. Candidates might be asked to interpret a cartoon, to reason about geometric figures, or to select a correct inference about a graph or a chart. The STAT Written English test asks candidates to write an essay based on a quote by an eminent person.

“STAT doesn't aim to assess knowledge of specific academic subjects, but to assess the ability to understand and analyse material, to think critically about issues, or to organise and express thoughts logically,” explains Ms Susan Nankervis, the STAT project director.

Candidates from around Australia sit the test, and some sit STAT in locations as diverse as Alaska, Bahrain, and Chile.

“They're a fairly mobile group,” says Ms Nankervis. “There's quite a large group that takes STAT in New Zealand. Within Australia, people sitting in one state often apply for courses in another. Because STAT is used in all states, there are no problems with making comparisons,” she says.

Approximately 18 000 people complete STAT each year. Usually more than half the candidates are female. While the largest group is aged 21 to 25 years, a wide range of age groups is represented and more than 150 candidates each year are aged 51 or over.

Extra insight

Ms Nankervis says that while the primary use of the test is for selection through Tertiary Admissions Centres, STAT is also a valuable adjunct to other selection methods. Medical faculties in Western Australia use STAT as part of their selection procedures for international students. The University of Sydney uses STAT as part of its selection for pharmacy. At the Macarthur campus of the University of Western Sydney, local students may be selected either through their Year 12 results or on the basis of their STAT results.

“Institutions find that STAT gives them valuable extra insight into candidates,” says Ms Nankervis.

The economics of vocational education & training

How can an effective TAFE workforce be sustained?

Why is it important to measure the capabilities and knowledge of workers?

These are two important questions now being researched by the Centre for the Economics of Education and Training (CEET).

Trends in the TAFE workforce

Research on the TAFE workforce in Victoria focused on the age, qualifications, gender and specialisations of current TAFE teachers, asking whether in ten years' time the staff at these institutions would still have the skills to address emerging demands for vocational education and training.

In carrying out the research, CEET was aiming to provide the Office of Training and Further Education (OTFE) in Victoria with ideas to improve staff development activities at statewide and TAFE institute levels.

The study found that the TAFE teacher workforce is being increasingly casualised, with an ageing and diminishing proportion of permanent staff. In particular, the need for greater industry experience among teachers has led to an increased number of part-time and sessional teachers. However, the effective management and professional

development of these teachers poses considerable challenges.

A key finding was the wide variation between TAFE institutions in terms of their staffing profiles and in the way they recruit staff. This variation confirmed that a single, broad strategy is unlikely to meet the TAFE system's needs in planning for workforce training and recruitment.

However, the study found that the TAFE system has an important role in monitoring trends and ensuring that institutes' policies are consistent with system-wide goals when they plan for succession, recruitment and staff development.

Dr Phillip McKenzie, Director of Programs for CEET says "While the research was carried out in Victoria, it is potentially of national significance. TAFE systems elsewhere in Australia are likely to be facing similar staffing challenges and outlooks as Victoria. There is a need to ensure that the TAFE workforce has the skills and knowledge to meet future demands from an economy and society undergoing rapid change".



Photograph by Simon Fox, Box Hill Institute

Human capital

Another CEET study looked at how Australian enterprises in the private and public sectors are measuring and reporting on human capital, a key resource that comprises what workers know and are able to do.

“Changes in the economy, and within enterprises themselves, are increasing the importance of human capital as opposed to physical capital – things such as land, buildings and equipment – in determining economic success,” Dr McKenzie said.

The work was conducted with colleagues from Macquarie University.

The seven organisations studied used information about human capital in two main ways – to project an image of competence to attract new employees, clients and investment, and to provide information for making human resource decisions.

In some cases, this led to increased support for training, improved efficiency and productivity, discovery of untapped skills, and improved client and staff satisfaction.

However, the study found that identifying and measuring human capital in Australian enterprises is still in its beginning stages, largely due to a lack of knowledge about the approaches now available.

“CEET is presently working to develop an information and resource kit to assist enterprises wishing to learn more about this increasingly important area,” Dr McKenzie says.

CEET

The value of CEET’s research has been further recognised through support as a key research centre by the Australian National Training Authority.

A joint research body of Monash University and ACER, CEET is addressing some vital issues for Australia’s vocational education and training system in a time of rapid economic change.

Language in maths – towards equity in assessment

What role does language play in understanding maths questions? How can we give all students the best opportunity to show what they have learned?

ACER is responding to growing Australian and international interest in equitable assessment. ACER is concerned with building equity into each stage of assessment – in the writing of questions, the marking of answers, and in the analysis and reporting of results.

Paying attention to language

A maths test that makes heavy demands on reading and language ability will be harder for students who are slow or poor readers, or for students whose first language is not English.

For example, the question: “If Chris delivers 100 papers every day and if it takes two hours to do it, how many are delivered in one hour?” should be simplified, said project director Dr Susan Zammit. It is more accessible to students if it simply says: “Chris delivers 100 papers in two hours. How many papers does he deliver in one hour?”

“Many words used in mathematics, such as ‘difference’ or ‘product’ have special meanings quite different from their everyday meanings. A maths task like finding the

difference between two numbers can be confusing for students learning English as a second language,” says Mr Martin Murphy, who researched this aspect of the program.

“It usually takes many years of experience with English before students gain control over some of the finer points of English grammar,” Mr Murphy says.

The researchers were keen to find out how better use of language can make mathematics assessment more equitable for students whose first language is not English.

In the first stage of the research, data from more than 45 000 students from the 1996 Queensland statewide numeracy test were analysed to see if and how language had affected student performance.

Performances on groups of questions with particular language characteristics were then compared for groups of students with varying English language experience. For example, responses to short questions were compared to those for long questions; responses to questions read aloud by the teacher were compared to responses to questions read by students.



The results showed that language had little effect on the performance of English as a second language (ESL) students who had been in Australia more than two years when compared with the performance of those for whom English was their first language. Among other ESL students, those from an indigenous background, and students who had been in Australia less than two years, performed relatively better on questions read out by the teacher.

ESL students did relatively better on questions involving only numbers, as well as on shorter text items. "However, maths is taught in a language context, and students will use it in a language context, so assessment in mathematics needs to reflect this," says Dr Zammit.

Striving for equity

Having confirmed a language effect across a large sample of students, the next step was to look at how simplified language could lead to better assessment.

The second stage tested more than 800 students across four states, including ESL students and students for whom English was their first language.

The test was in two parts. All students did the first part. Half the students then did the second part written in simplified language, and half did the second part with its language unchanged.

"To simplify the questions, we asked literacy test writers to rewrite the questions with ESL students in mind. Numeracy test writers were then asked if this changed the mathematics purpose and content that was being assessed. We accepted only the questions where the purpose and content remained the same," Dr Zammit said.

The results confirmed a language effect, with students who spoke English at home either "sometimes" or "never" showing the greatest improvement on questions asked in simplified language. However, all students who took the test with simplified language showed improvement compared with those who did the test in language that remained unchanged.

"The results indicate that language plays a role in how well ESL students answer questions in mathematics assessment. It's important that these findings now feed into policy, and that they be considered by the writers of tests both at ACER and elsewhere," Dr Zammit says.

Further information

Further information about ACER's activities can be found on the ACER web site (www.acer.edu.au) and in the following publications:

Centre for Economics of Education and Training (CEET)

www.education.monash.edu.au/centres/ceet

Human Resources Reporting: Exploring Case Studies in Australian Enterprises

CEET Working Paper No. 23

Fran Ferrier and Rob Wells

www.education.monash.edu.au/centres/ceet

Trends in the TAFE Workforce and Their Implications for Staff Training and Development 1998-2008

J. Malley, R. Hill, C. Putland, C. Shah, & P. McKenzie. (1999).

Developmental Assessment Resource for Teachers (DART)

English – Middle Primary

Wendy Bodey, Lynne Darkin, Margaret Forster, Geoff Masters

ACER Press 1997

English – Upper Primary/Junior Secondary

Margaret Forster, Juliette Mendelovits, Geoff Masters

ACER 1994

Mathematics – Upper Primary

Eve Recht, Margaret Forster, Geoff Masters

ACER Press 1998

Longitudinal Surveys of Australian Youth

Participation in Education and Training

1980–1994

LSAY Research Report No. 13

Michael Long, Peter Carpenter, & Martin Hayden

ACER 1999

Curriculum and Careers

The Education and Labour Market Consequences of Year 12 Subject Choice

LSAY Research Report No. 11

Stephen Lamb & Katrina Ball

ACER 1999

Early School Leaving in Australia

Findings from the 1995 Year 9 LSAY Cohort

LSAY Research Report No. 11

Gary N. Marks & Nicole Fleming

ACER 1999

Work Experience and Work Placements in

Secondary School Education

LSAY Research Report No. 10

Sue Fullarton

ACER 1999

The Effects of Part-time Work on School Students,

LSAY Research Report No. 9

Lyn Robinson

ACER 1999

Youth Earnings in Australia 1980-1994

A Comparison of Three Youth Cohorts

LSAY Research Report No. 8

Gary Marks & Nicole Fleming

ACER 1998

Factors Influencing Youth Unemployment in Australia: 1980-1994

LSAY Research Report No. 7

Gary Marks & Nicole Fleming

ACER 1998

Well-being Among Young Australians

Effects of Work and Home Life for Four Youth in Transition Cohorts

LSAY Research Report No. 6

Nicole Fleming & Gary Marks

ACER 1998

Attitudes to School Life

Their Influences and their Effects on Achievement and Leaving School

LSAY Research Report No. 5

Gary Marks & Nicole Fleming

ACER 1998

Philosophy for Children

Places for Thinking

(On a plain, In a field, On a path, In a tree, Teacher's Manual)

Francesca Partridge, Franck Dubuc, Laurance

Splitter, Tim Sprod

ACER Press 1998

The Doll Hospital

Ann Sharp

ACER Press April 2000

Other Information

Computers, Laptops and Tools

Mary Ainley, Valerie Bourke, Robert Chatfield, Kylie Hillman, Ian Watkins

ACER Press 2000

Programme for International Student Assessment (PISA)

www.pisa.oecd.org

Who Am I?

Developmental Assessment

Marion de Lemos & Brian Doig

ACER Press 1999

1998-99 on Record

Staff Publications & Professional Activities

Books and reports

Congdon, P.J. (1999). *VicRoads Hazard Perception Test, Can it Predict Accidents?* Report CR99-1. Kew: VicRoads, Road Safety Department.

Cunningham Library (1999). *Australian Education Index, 41*. Melbourne: ACER.

Cunningham Library (1999). *Australian Education Directory 1999*. Melbourne: ACER.

Cunningham Library (1999). *Bibliography of Education Theses in Australia (20)*. Melbourne: ACER.

Davies, A., Brown, A., Elder, C., Hill, K., Lumley, T. & McNamara, T.F. (1999). *Dictionary of Language Testing*. Cambridge: CUP.

Forster, M. & Masters, G. (1999). *ARK Paper and Pen*. Melbourne: ACER.

Fullarton, S. (1999). *Work Experience and Work Placements in Secondary School Education*. LSAY Research Report No. 10. Melbourne: ACER.

Johnson, T. (1999). *CEQ 98: The 1998 Course Experience Questionnaire*. Melbourne: Graduate Careers Council of Australia.

Malley, J., Frigo, T. and Robinson, L. (1999). *Case Studies of Australian School-Industry Programs*. Volume 1 (Summary Report), Volume 2 (Case Studies). Report to the Australian Student Traineeship Foundation.

Mellor, S. (1999). Contributor to *Civics and Citizenship Education: Exploring the Possibilities*, Professional Development video tape produced by Department of Education, Training and Youth Affairs/Victorian Department of Education, directed by R. Jones.

Robinson, L. *The Effects of Part-time Work on School Students*. LSAY Research Report No. 9. Melbourne: ACER.

Seddon, T. & Malley, J. (1998). *A Staff Development Strategy for Supporting Research Priorities in the State Training Service*. Parts 1 and 2. Melbourne: Department of Education, Office of Training and Further Education.

Splitter, L.J. & Sharp, A.M. (1999). *Uma Nova Educacao*. Brazilian edition of *Teaching for Better Thinking*. Sao Paulo: Nova Alexandria.

Splitter, L.J. (1998). *Thinking, Inquiry and Community: Teacher Perspectives on Philosophy for Children*. Melbourne: ACER.

Splitter, L.J. (1999). *Ethics and Values. 8 Volumes. A series of essays for secondary students*. Jointly with a number of contributors. London: Brown Packaging Partworks.

Splitter, L.J. (1999). *Places for Thinking: Instructional Manual to accompany four children's picture books (In a Field, On a Path, On a Plain, In a Tree)* (with Tim Sprod). Melbourne: ACER Press.

Withers, G.P. & Barnard, J.J. (1999). *Tackling that Test*. Second edition, with added chapters on computer-based testing. Melbourne: ACER Press.

Chapters in books

Ainley, J. & McKenzie, P. (1999). The Influence of School Factors. In Dusseldorp Skills Forum, *Australia's Young Adults: The Deepening Divide*. Sydney: Dusseldorp Skills Forum.

Barnard, J.J. (1998). Setting, marking and scoring mathematics tests. In *Mathematics: Exploring all Angles*, Mathematics Association of Victoria Conference proceedings, 1998, 5–8.

Barnard, J.J. (1999). Curriculum development and instructional design in Adult Education. In M.P. van Rooy (ed.), *Advanced Programme for Trainers*. Pretoria: University of South Africa.

- Barnard, J.J. (1999). Data collection and analysis of training results. In M.P. van Rooy (ed.), *Advanced Programme for Trainers*. Pretoria: University of South Africa.
- Burke, G., Long, M., Malley, J. & McKenzie, P. (1999). Individual and enterprise investment in learning in a rapidly changing economy. In C. Robinson and K. Arthy (eds), *Lifelong learning, developing a training culture* (pp. 81-94). Adelaide: NVCER.
- Cripps Clark, J. & Doig, B. (1998). Getting more from video-taped data. In S. Groves, B. Jane, I. Robottom, & R. Tytler (eds), *Contemporary approaches to research in mathematics, science, health and environmental education*. Geelong: Centre for Studies in Mathematics, Science and Environmental Education, Deakin University.
- Forster, M. (1999). DART – Developmental Resource for Teachers: linking literacy instruction to assessment. In A. Watson & L. Giorcelli, *Accepting the Literacy Challenge*. Sydney: Scholastic.
- Groves, S. & Doig, B. (1998). The nature and role of discussion in mathematics: Three elementary teachers' beliefs and practice. In A. Olivier & K. Newstead (eds), *Proceedings of the Twenty-second Conference of the International Group for the Psychology of Mathematics Education*. (Vol. III, pp. 17–24). Stellenbosch, South Africa: University of Stellenbosch.
- Hill, K. (1998). The role of questionnaire feedback in the validation of the Oral Interaction Test. In G. Brindley & G. Wigglesworth (eds), *Access: Issues in English language test design and delivery*. Macquarie: NCELTR.
- Hill, K. (1998). The Use of Questionnaire Feedback in the Development and Validation of an Oral Interaction Test in Two Formats. In A. Kunnan (ed.), *Issues in Language Testing Research: From Conventional Validation to Fairness*. Mahwah, NJ: Lawrence.
- Masters, G. (1999). Research into Educational Measurement. In J. Keeves & K. Marjoribanks (eds) *Australian Education: Review of Research 1965 – 1998*. Melbourne: ACER Press.
- Meiers, M. (1999). English Teaching in Australia. In Bernard Spolsky, (ed.) *Concise Encyclopedia of Educational Linguistics*, Oxford: Elsevier Science Ltd.
- Meiers, M. (1999). Presenting a Point of View: Approaches to Written Argument. In Brenton Doecke (ed.), *Responding to Students' Writing, Continuing Conversations*, Adelaide: Australian Association for the Teaching of English.
- Routitsky, A. & Tobin, P. (1998). A Survey of Graphics Calculator Use in Victorian Secondary Schools. In C. Kanes, M. Goos & E. Warren (eds), *Teaching Mathematics in New Times: Proceedings of MERGA 1998*. Brisbane, pp. 484–91.
- Routitsky, A., Tobin, P. & Stephens, M. (1998). Access to and Use of Graphics Calculators in Victorian Secondary Schools. In J. Gough & J. Mousley (ed.), *Exploring all Angles*. Mathematics Association of Victoria pp. 383–9.
- Ryan, J.T., Williams, J.S. & Doig, B.A. (1998). National tests: Educating teachers about their children's mathematical thinking. In A. Olivier & K. Newstead (eds). *Proceedings of the Twenty-second Conference of the International Group for the Psychology of Mathematics Education*. (Vol. IV, pp. 81–8). Stellenbosch, South Africa: University of Stellenbosch.
- Splitter, L.J. (1998). Ecologia y Educacion Moral. In F. Garcia Moriyon (ed.), *Crecimiento moral y Filosofia para ninios*, Desclee de Brouwer, Bilbao, Spain.
- Splitter, L.J. (1999). How Philosophy and Schools can Contribute to Moral Education. In P. Cam, I-S Cha & R. Reyes (eds), *Philosophy, Culture and Education: Asian Societies in Transition*, Seoul: Korean National Commission for UNESCO.
- Splitter, L.J. (1999). Some Reflections on Continuity and Evolution. In W.O. Kohan & Bernadina Leal (eds), *Filosofia para Crianças Em Debate*, Editora Vozes, Petropolis, Brazil.
- Tobin, P., Routitsky, A. & Jones, P. (1999). Graphics Calculators In Victorian Secondary Schools: Teacher Perceptions Of Use. In J. Truran & K. Truran (eds), *Making the Difference. Proceedings of the 22nd Annual Conference of the Mathematical Education Research Group of Australasia* 502–6, MERGA Adelaide.

Journal articles

- Barnard, J.J. & van Staden, P.S. (1999). Proof in school mathematics. *Spectrum* (in press).
- Barnard, J.J. (1998). An application of the Rasch model: monitoring achievement over time. *Journal of Educational Evaluation*. (in press).
- Barnard, J.J. (1999). A technique for comparing a student's achievement in mathematics over a prolonged period of time. *South African Journal of Education*, 19(1), 28–31.
- Brown, A. & Hill, K. (1998). Interviewer style and candidate performance in the IELTS oral interview. Woods, S. (ed.), *IELTS Research Reports 1997*, Vol. 1. Sydney: ELICOS.
- Congdon, P., Lumley, T. & Linacre, J.M. (1999). Rater Variability. *Rasch Measurement Transactions*, 12(4).
- Davies, A., Brown, A., Elder, C., Hill, K., Lumley, T. & McNamara, T. (1999). *Studies in Language Testing – Volume 7. Dictionary of Language Testing*. UCLES/CUP: Cambridge.
- Durand-Drouhin, M., McKenzie, P. & Sweet, R. (1998). Opening Pathways from Education to Work. *The OECD Observer*, No. 214.
- Hill, K. (1998). From job analysis to task design: different approaches to simulating teacher language behaviour. *Melbourne Papers in Language Testing*, 6(1).
- Hill, K. (1998). The Use of Questionnaire Feedback in the Development and Validation of an Oral Interaction Test in Two Formats. In A. Kunnan (ed.), *Issues in Language Testing Research: From Conventional Validation to Fairness*. Mahwah, NJ: Lawrence.
- Hill, K., Storch, N. & Lynch, B.K. (1999). A comparison of IELTS and TOEFL as predictors of academic success. *IELTS Research Reports 1999*, Vol. 2. Sydney: ELICOS. pp. 52–63
- Lokan, J. & Ainley, J. (1998). *The Third International Mathematics and Science Study: Implications for the development of numeracy benchmarks*. Unicorn, 24, 97–109.
- Lokan, J. (1999). Equity Issues in Testing: The Case of TIMSS Performance Assessment. *Studies in Educational Evaluation*, 25(3), 297–314.
- Lokan, J., Adams, R., & Doig, B. (1999). Broadening Assessment, Improving Fairness? Some Examples from School Science. *Assessment in Education*, 6(1), 83–99.
- Marks, G.N. & Fleming, N. (1999). The Influences and Consequences of Well-being among Australian Young People. *Social Indicators Research* (Amsterdam) 46(3), 301–23.
- Masters, G. (1999). What works? Researching language and literacy learning. *English in Australia*, 124, 76-9.
- Masters, G. (1999). Measuring Performance: the challenge of assessment. *Independent Education*, 29(1), 18-21
- Meiers, M. (1998). A New Australian Longitudinal Literacy and Numeracy Study. *Australian Language Matters*, 6(4).
- Meiers, M. (1999). The successful interventions research project. *Idiom, Journal of the Victorian Association for the Teaching of English*, XXXV (1).
- Mellor, S. (1998). Politics, Civics Curricula, and Decision-making in Schools – Can schools change student cynicism? in *Set (2)* New Zealand: NZCER.
- Mellor, S. (1998). Student Cynicism about Civics, in *Curriculum Perspectives*, June, Australian Curriculum Studies Association.
- Mellor, S. (1998). What's the Point? – Student Cynicism about Political Participation: What Can Schools do? in *Connect: supporting student participation*, (111) June.
- Volodin, N.A. (1999). Multinomial coefficients modulo a prime. *Proc. Amer. Math. Soc.*, 127, 349–53.
- Zammit, S.A. (1999). School staff and parents have their say on bilingual and ESL programs. *Australian Language Matters*, 7(1), 7–10.

Conference papers and other presentations

- Ainley, J. & Ainley, M. (1999, April). *School Environments and Student Social Development*. Paper presented to the Annual Meeting of the American Educational Research Association, Montreal.

- Ainley, J. & McKenzie, P. (1998, December). *The Influence of School Factors on Young Adult Life*. Paper presented to the Learning and Work Circumstances of Australia's Young Adults: Those Aged 20–24 years, Canberra.
- Ainley, J. (1999, February). *Mapping Social Objectives and Patterns in Social Outcomes*. Presentations on Social Objectives of Schooling to the South Australian Principals' Association, Adelaide.
- Ainley, J. (1999, March). *School Review and Methods of Gathering Data from School Community*. Presentation to the Catholic Education Office, Warragul.
- Barnard, J.J. (1998, November). *New approaches to determining cutting/pass scores*. Paper presented at the Australian Medical Council Board of Examiners retreat, Kilmore, Victoria.
- Barnard, J.J. (1998, November). *The AMC examination: The Technical Context*. Paper presented at the Australian Medical Council Board of Examiner's Retreat, Kilmore, Victoria.
- Barnard, J.J. (1998, December). *Setting, marking and scoring mathematics tests*. Paper presented at the Mathematical Association of Victoria's 35th annual conference, Monash University, Melbourne.
- Barnard, J.J. (1999, May). *Improving literacy and numeracy learning*. Paper presented to the combined meeting of ACER Council, Institutes of Educational Research Standing Committee and ACER staff, Melbourne.
- Bryce, J. & McCurry, D. (1998, November). *Conceptions of Generic Skills and a Workable Method for Assessing them at the Post-Compulsory Level of Schooling*. Paper presented at AARE Annual Conference, Adelaide.
- Chatfield, R. & Harvey-Beavis, A. (1999, January). Training workshops for School Quality Monitors for OECD in Wellington and Washington.
- de Lemos, M. & Doig, B. (1998, December). *Out of the mouths of babes: Young children's views of school and its mathematics*. Paper presented at The Mathematical Association of Victoria Annual Conference 1998: Exploring all Angles.
- de Lemos, M. & Doig, B. (1999, April). *From Research to Practice: Who Am I? – a tool for school entry assessment*. Paper presented at the Third Warwick International Early Years Conference, University of Warwick, Coventry, UK.
- de Lemos, M. (1998, November). *What Can the Children Tell Us? An Alternative to Teacher Observation*. Paper presented at the Symposium on Rites of Passage: Assessment in the Early Years at the AARE Annual Conference, Adelaide.
- Doig, B. (1998, September). *Developmental assessment for schools: Making progress meaningful*. Workshop conducted for the National Assessment Institute, University of Melbourne.
- Ferrier, F. & McKenzie, P. (1999, June). *Measuring and reporting intellectual capital, looking ahead: an enterprise information and self-evaluation kit*. Paper presented to the OECD international symposium 'Measuring and reporting intellectual capital, experience, issues and prospects', Amsterdam.
- Forster, M. (1998, July). *Developmental Assessment Materials*. Paper presented at the International Developmental Assessment Seminar, Melbourne
- Forster, M. (1998, July). *Effective Literacy Assessment and Reporting*. Paper presented at the International Reading Association 17th World Congress on Reading. Ocho Rios, Jamaica.
- Forster, M. (1998, August). *Implementing Developmental Assessment*. Workshop for Catholic Education Office Sydney Eastern Region.
- Forster, M. (1998, August). *Principles of Developmental Assessment*. Keynote address delivered to the Association for Independent Schools Primary English Conference, Sydney.
- Forster, M. (1998, August). *Principles of Developmental Assessment in Practice*. DART Workshop: DART AIS primary English conference, Sydney.
- Forster, M. (1998, September). Interim benchmarking exercise for Western Australia's Year 3 Literacy Test, Perth.
- Forster, M. (1998, October). *Developmental Assessment – A framework for describing, monitoring and reporting growth*. Workshop presented at the Third National Round Table on Assessment and Reporting, Brisbane.
- Forster, M. (1998, October). *Developmental Assessment – A Framework for Conceptualising and Monitoring Growth*. Workshop delivered at the Third National Round Table on Assessment and Reporting, Brisbane.

- Forster, M. (1998, October). Interim benchmarking exercise for Western Australia's Year 3 Literacy Test, Sydney.
- Forster, M. (1998, November). *DART Supporting Teacher Judgement – System Assessment and Reporting*. Address delivered to the Catholic Education Office, South Australia.
- Forster, M. (1998, November). National Benchmark Equating meeting Year 3 and Year 5 Writing and Spelling Workshop for paired comparison of writing and spelling samples, Education Testing Centre, University of New South Wales.
- Forster, M. (1998, November). Using DART for System Assessment and Reporting. Assessment Information Seminar, Targeted Programs for Schools Authority Incorporated, Fullerton Park Community Centre.
- Forster, M. (1999, February). Professional Development Workshop for the Queensland Board of Secondary School Studies. Brisbane.
- Forster, M. (1999, June). Workshop with staff from John XXIII College, Results of the Student Profile Survey. Perth.
- Frigo, T. & Hughes, P. (1998, November). *Indigenous Primary School Students Developing English Literacy Skills*. Paper Presented at the AARE Annual Conference, Adelaide, South Australia.
- Fullarton, S. (1999, February). *Boys at Risk? Girls at Risk? Which Boys? Which Girls?* Presentation to the South Australian Institute of Educational Research, Adelaide.
- Hill, K. & P. Gruba (1998, July). *Technologically speaking: Delivery alternatives for the assessment of speaking*. Paper presented at the World Call Conference, University of Melbourne.
- Hill, K. (1999, June). *Testing equivalence across languages – equal but different?* Paper presented at the 12th World Congress of Applied Linguistics, AILA '99, Waseda University, Tokyo.
- Jackson, D., Aldous, C., Hambur, S., Masters, G. & McCurry, D. (1999, June). Presentations to University Representatives for GSA, Adelaide, Brisbane, Canberra, Melbourne, Perth, Sydney.
- Lamb, S. & Ainley, J. (1999, April). *Curriculum Differentiation in School and its Effects on Education, Training and Labour Market Outcomes: Results from Longitudinal Surveys of Australian Youth*. Paper presented to the Annual Meeting of the American Educational Research Association, Montreal.
- Lokan, J.J. (1998, September). *PISA: Definition and Development of Assessment Frameworks*. Presented at Conference on International Comparisons of Pupil Performance: Issues and Policy. Leeds, UK.
- Lokan, J.J. (1999, January). TIMSS Scale Anchoring Panel Meeting. Boston, USA.
- Lokan, J.J. (1999, April). *Some Influences of TIMSS in Australia*. Presented at the Annual Conference of the American Educational Research Association, Montreal.
- Long, M. & Frigo, T. (1998, September). *Changes in School Retention and Participation for Indigenous Youth*. Paper presented at the Australian Population Association National Conference, Brisbane, Queensland.
- Malley J. (1998, November). *VET and the Art of Infrastructure Maintenance*. Address given as the Lampe Oration, Northern Territory Branch of the Australian Council for Educational Administration, Darwin.
- Malley J. (1999, October). *School Learning Needs for Establishing Partnerships*. Hypotheticals workshop for the Future Learning Partnerships Conference of the Catholic Education Office, Archdiocese of Melbourne.
- Marks, G. & Ainley, J. (1999, April). *School Achievement and Labour Market Outcomes: A Long Term Perspective*. Paper presented to the Annual Meeting of the American Educational Research Association, Montreal.
- Masters, G. (1998, July). *What makes a good portfolio?* Papers presented at the Regional Development through School Industry Links Project Portfolio Seminar, National Industry Education Forum, Education Victoria and South Australian Department of Education and Children's Services, Adelaide.
- Masters, G. (1998, July). *Mapping progress through the compulsory years of schooling*. Paper presented at Australian Curriculum, Assessment and Certification Authorities Conference, Darwin.

- Masters, G. (1998, August). *Assessment of school learning: What has been learned?* Presentation at Staff Research Colloquium, Department of Psychology, Victoria University, Melbourne.
- Masters, G. (1998, August). *Improving literacy achievements*. Paper presented at Victorian Primary Principals Association/Victorian Association of Secondary Schools Principals Annual Forum, Melbourne.
- Masters, G. and Forster, M. (1998, September). *Classroom contexts for developmental assessment*. Discussion at the Australian Literacy Educators' Association Forum on Literacy in Secondary Schools, Melbourne.
- Masters, G. (1998, October). Question session at Primary Curriculum Leadership Group Leading the Literacy Seminar, South Australian Independent Schools Board, Adelaide.
- Masters, G. (1999, June). *The Standards Debate in Australia*. Paper presented at the International One-Day Symposium: Setting Standards for Our Students, Melbourne.
- McColough, M. & Challis, H. (1999, June). *Making Common Mistakes Uncommon in Pyschometric Usage*. Presented at the 3rd Australian Industrial & Organisational Conference, Brisbane.
- McKay, M. & Barnard, J.J. (1998, October). *The Neale Revised*. Paper presented at the Australian Catholic University, Melbourne.
- McKenzie, P. (1998, July). *Vocational education in schools: lessons from international experience*. Invited address to the VET in Schools Conference, Department of School Education, Melbourne.
- McKenzie, P. (1998, August). *Individual demand for learning*. Presentation to the ANTA National Conference, Creating a Training Culture, Brisbane.
- McKenzie, P. (1998, August). *Lifelong learning as a policy response*. Paper presented to the Monash University-ACER CEET conference on Rapid Economic Change and Lifelong Learning, Melbourne.
- McKenzie, P. (1998, November). *International Developments in Vocational Pathways: Lessons for Australia*. Presentation to the Conference of the South Australian Secondary Principals' Association, Adelaide.
- McKenzie, P. (1998, December). *The Transition from Education to Work in Australia compared to Selected OECD Countries*. Presentation to the Sixth International Conference on Post-compulsory Education and Training, Griffith University, Gold Coast.
- McKenzie, P. (1999, February). *Research on the Economics of VET: The CEET Research Program*. Paper presented to the 1999 Conference of the Australian Vocational Education and Training Research Association, Melbourne.
- McKenzie, P. (1999, March). *International comparisons of school-to-work transition*. Invited presentation to the Strategic Planning Division, Victorian Department of Education, Melbourne.
- McKenzie, P. (1999, May). *How to stimulate investment by individuals and enterprises in lifelong learning*. Paper presented to the Annual Conference of the Victorian Institute of Senior TAFE Administrators, Lorne.
- McQueen, J. & Mendelovits, J. (1999, February). OECD PISA Field Trial Marker training workshops for PISA Reading. Brussels, Belgium.
- Meiers, M. (1998, July). *Writers at year 12*. Paper presented to the Joint National Conference of the Australian Association for the Teaching of English and the Australian Literacy Educators' Association, Canberra.
- Meiers, M. (1998, October). *The New VCE English Language Study*. Paper presented to the Victorian Association of TESOL and Multicultural Education Conference, Melbourne.
- Meiers, M. (1998, November). *Literacy in Australian Schools: Some National Achievements and Strategic Approaches*. Paper presented to the Australian Association of Mathematics Teachers National Numeracy Assistance and Assessment Forum, South Australia.
- Meiers, M. (1999, March). *CSF 2000 and Oracy*. Presentation to the Victorian Association for the Teaching of English Coordinators' Conference, Melbourne.
- Meiers, M. (1999, March). National Middle Years of Schooling Conference. Melbourne.

- Mellor, S. & Kennedy, K. (1999, April). *Reviving Civics for a New Agenda in Australia and the Implications for the IEA Civics Study*. Paper presented at American Educational Research Association Conference, Montreal.
- Mellor, S. (1998, September). *Literacy and the Competencies*. Paper presented at the CLLP Researchers' Conference, Brisbane.
- Mellor, S. (1998, November). *Discovering Democracy: A Report on Political Attitudes and the Curriculum Corporation's project*. Paper presented to Multi Campus Heads' Network, Wesley College.
- O'Connor, G. & Lokan, J. (1998, August). Presentation to ACER Council: on Comparison of Year 3 and Year 5 Numeracy Benchmarks with Benchmarks in Other Countries. ACER.
- Routitsky, A. & Tobin, P. (1998, July). A Survey of Graphics Calculator Use in Victorian Secondary Schools. In C. Kanes, M. Goos & E. Warren (eds), *Teaching Mathematics in New Times: Proceedings of MERGA 1998*, 484–91 Brisbane.
- Routitsky, A., Tobin, P. & Stephens, M. (1999, January). Access to and Use of Graphics Calculators in Victorian Secondary Schools. In J. Gough & J Mousley (ed.), *Exploring all Angles*. Mathematics Association of Victoria 383–9. Melbourne.
- Splitter, L.J. (1998, July). *The Classroom Community of Inquiry: Thinking and thinking about thinking*. Presentation at Annual Jewish Principals' Conference, Melbourne.
- Splitter, L.J. (1998, August). Philosophy for Children International Residential Workshop, New Jersey, USA.
- Splitter, L.J. (1998, August). Second Workshop on Philosophy for Children, presented at Nanzhan Railway Primary School, Kunming, China.
- Splitter, L.J. (1998, October). Presentation on philosophy for children, at Conference of Catholic Primary School Principals, North Central District, Melbourne.
- Splitter, L.J. (1998, October). *Standing up for the child: The child and ethics*. Keynote address present at a conference entitled Representing the Child, Monash University.
- Splitter, L.J. (1998, October). Teacher workshop on philosophy for children, La Trobe University and ACER.
- Splitter, L.J. (1999, January). Teacher Education in Philosophy for Children. Training Workshop. Federation of Australasian Philosophy for Children Associations, Melbourne.
- Splitter, L.J. (1999, February). *Passmore on critical thinking*. Presentation and discussion at faculty seminar on critical thinking, Montclair State University.
- Splitter, L.J. (1999, March). *Philosophy for children: A cross-cultural perspective*. Presentation at Global Education Center, Montclair State University.
- Splitter, L.J. (1999, May). *Concept Formation; Making sense of the logic in p4c; Alternative approaches to philosophy in the classroom; Can philosophy really contribute to violence-reduction?* Presentations at international workshop, Mendham, NJ.
- Splitter, L.J. (1999, May). *Philosophy for children: Dialogue, community and prospects for a healthier world*. Presentation at New Jersey Regional Association Annual Conference, Monmouth University.
- Splitter, L.J. (1999, June). *Thought development for children and teenagers: Working toward a better and more peaceful life*. Presentation at I Congreso Internacional – Educación para el desarrollo del pensamiento y formación ciudadana para la paz (First International Congress – Thought development education and citizen formation for peace). Cali, Colombia.
- Zammit, S.A. (1998, July). *Facts, figures questions*. Workshop presented at the Biennial Conference of the New Zealand Association of Language Teachers. Dunedin, New Zealand.
- Zammit, S.A. (1998, July). *What's fair in classroom tests?* Plenary session presented at the Biennial Conference of the New Zealand Association of Language Teachers. Dunedin, New Zealand.
- Zammit, S.A. & Meiers, M. (1999, February). Focus Group Meetings Benchmarking Students with Specific Needs Project. Adelaide, Brisbane, Darwin, Perth, Sydney.
- Zammit, S.A. (1999, June). *Fair Assessment in the LOTE classroom*. Paper presented as part of sessions held on Assessment and Evaluation. La Trobe University, Bundoora.

Unpublished papers and reports of limited circulation

- Ainley, J. (1999). *Outcomes and Funding in the Commonwealth Literacy and Numeracy Programme*. Report to Department of Education, Training and Youth Affairs.
- Barnard, J.J. & Robbins, F. (1999). *Monitoring standards in Education*. State report for the Education Department of Western Australia. ACER.
- Barnard, J.J. (1999). *The South Australian Students with High Intellectual Potential (SHIP) Secondary Assessment Program*. Melbourne: ACER.
- Barnard, J.J., Aldous, C. & Robbins, F. (1999). *Places in medical schools for overseas trained doctors*. ACER.
- Barnard, J.J., Chamberlain, J.C. & Robbins, F. (1998). *The Australian Capital Territory Assessment Program*. Melbourne: ACER.
- Burke, G., McKenzie, P. & Shah, C. (1999). *Key issues and findings relating to the costs of extending VET in Schools*. Report to the MCEETYA Task Force on VET in Schools. Melbourne: CEET, Monash University.
- Business Skills Victoria (1998). *A Destination Study and Skills Formation Improvement Program*. Report to the Office of Technical and Further Education, Victorian Department of Education. Contributing authors M. Long & L. Robinson.
- de Lemos, M. (1999). *A Research-based Evaluation of the Victorian First Steps Pilot Project for the First Three Years of Schooling*. Report to the Victorian Department of Education. Melbourne: ACER.
- Fleming, M. & Harvey-Beavis, A. (1998). *Final Report on the Evaluation of the "RAW in the Classroom" Program*. Report to the Transport Accident Commission.
- Forster, M. & Meiers, M. (1999). *Examining the Literacy Benchmarks: A comparison of the draft Year 7 literacy benchmarks with standards from other countries and student performance*. Paper commissioned by the Department of Education, Training and Youth Affairs.
- Forster, M. (1999). *Examining the Literacy Benchmarks: A comparison of the Year 3 and Year 5 literacy benchmarks with international standards from other countries and student performance*. Commissioned by Department of Education, Training and Youth Affairs.
- Frigo, T. (1999). *Resources and Teaching Strategies to Support Aboriginal Children's Numeracy Learning*. Research into K-6 Aboriginal Numeracy in NSW. Report to the NSW Board of Studies.
- Hambur, S. & Mendelovits, J. (1999). *Report on AST-G: Australian Scaling Test, 1998*. Report to the ACT Board of Senior Secondary School Studies.
- Hill, K. (1998). *A Comparison Of Beginning And Continuing Students Of French In Years 7, 8 & 9*. Report prepared for Presbyterian Ladies' College, Victoria and for the Association for Independent Schools Victoria.
- Hill, K. (1999). *Report on test analyses and draft descriptors*. National Asian Languages and Studies in Australian Schools (NALSAS) Student Proficiency Descriptions Project: Chinese, Korean & Indonesian.
- Johnson, T. (1998). *Commencing Undergraduate Application and Enrolment Trends 1993-1997 (with reference to 1998 data where possible)*. A preliminary report for the Australian Vice-Chancellors' Committee.
- Johnson, T. (1998). *Comments on Course Experiences of Targetted Equity Groups*. Melbourne: ACER. Report to Quality and Equity Section, Higher Education Division, Department of Education, Training and Youth Affairs.
- Lindsey, J., Pearn, C., Lokan, J. & Doig, B. (1999). *Comparisons of Australia's Revised Draft Year 7 Numeracy Benchmarks and International Standards*. Report commissioned by the Department of Education, Training and Youth Affairs (confidential).
- Lokan, J., Doig, B. & Underwood, C. (1999). *Numeracy Assessment and Associated Issues*. Source paper commissioned by the Australian Association of Mathematics Teachers on behalf of the Department of Education, Training and Youth Affairs.
- Malley, J., Hill, R., Putland, C., Shah, C. & McKenzie, P. (1999). *Trends in the TAFE Workforce and Their Implications for Staff Training and Development 1998-2008*. Report to the Office of Training and Further Education, Victoria. Melbourne: CEET, Monash University.
- Meiers, M. (1998). *VCE Report for Teachers, English CAT 1, Presentation of an Issue*. Report prepared for the Victorian Board of Studies.

Meiers, M. (1999). *VCE Report for Teachers, English CAT 2, Writing Folio*. Report prepared for the Victorian Board of Studies.

Mellor, S. (1998). *Report on the IEA Civics Education Study Meeting*, Berlin, November.

Mellor, S. (1999). Technical Reports written for the IEA Civics Education Study. *Technical Report 2: Data Entry & Coding Changes, IEA Civic Education Study, ACER. Technical Report 3: Test Administration for the 1998 Pilot, IEA Civic Education Study, ACER. Technical Report 4: Anecdotal Student Responses from the Pilot Study, IEA Civic Education Study, ACER. Technical Report 5: Australian Student Responses to the Functionally Equivalent Items Administered as part of the 1998 Pilot Study, IEA Civic Education Study, ACER.*

Mendelovits, J. & Hambur, S. (1999). *Report on the General Achievement Test – 1998*. Report to the Victorian Board of Studies.

O'Connor, G., Doig, B., Lindsey, J., Pearn, C. & Lokan, J. (1999). *Comparisons: Australia's Revised Draft Year 3 and Year 5 Numeracy Benchmarks and International Standards*. Report commissioned by the Department of Education, Training and Youth Affairs (confidential).

Routitsky, A., Tobin, P. & Jones, P. (1998). *Graphics Calculator Use in VCE Mathematics: Level of Student Use 1997–98*. Report to the Board of Studies.

Stephanou, A. (1998). *Report on the 1998 Undergraduate Medicine and Health Sciences Admission Test*. (Confidential).

Stephanou, A. (1999). *UMAT98 Report on the 1998 Undergraduate Medicine and Health Sciences Admissions Test*. Report for the University of Newcastle.

Symmonds, H., Burke, G., Harvey-Beavis, A. & Malley, J. (1998). *Costs of Accredited Training: A comparative analysis*. Report to the Australian National Training Authority.

Withers, G.P. (1999). *Supporting the Implementation of Statements and Profiles in South Australian Schools*. Report to the Curriculum Services Branch of the Department of Education, South Australia.

Tests, manuals and software

Hill, K. (1999). Indonesian tests. National Asian Languages and Studies in Australian Schools (NALSAS) Student Proficiency Descriptions Project: Chinese, Korean & Indonesian, Department of Education, Training and Youth Affairs.

McCurry, D., Macaskill, G. & Bryce, J. (1999). *The School Assessment Framework (SAF) Program for Whole School Assessment and Reporting*. National Industry Education Forum's Key Competencies Portfolio Project funded by Department of Education, Training and Youth Affairs. (Software CD).

McCurry, D., Macaskill, G. & Bryce, J. (1999). *The School Assessment Framework (SAF) Program for Whole School Assessment of Cross Curricular Competencies: The SAF Program Manager's Handbook*. National Industry Education Forum's Key Competencies Portfolio Project funded by Department of Education, Training and Youth Affairs. (Manual).

Neale, M.D., McKay, M. & Barnard, J.J. (1999). *Neale analysis of reading ability (revised)*. Melbourne: ACER.

Book reviews

Hill, K. (1999). Review of *News Ways of Classroom Assessment*. J.D. Brown (ed.), *News Ways in TESOL Series: Innovative Classroom Techniques*. J.C. Richards series editor TESOL Inc. (1998) in *TESOL in Context: Teaching English to Speakers of other Languages*. Journal of ACTA Australian Council of TESOL Associations, 9(1), p. 30.

Splitter, L.J. (1999). Several reviews of *The Philosopher's Child*, edited by Gareth Matthews et al.

ACER workshops for teachers and practitioners

An Application of Psychodynamic Theory in Organisational Consulting
Melbourne (March 1999)
College of Organisational Psychologists

Care for Caring Parents: Support for parents of children with special needs
Melbourne (May 1999)
Facilitator: Cynthia Schultz

Children's Behaviour, Attention and Reading Problems
Melbourne (August 1998)
Presenter: Dr Jessica Grainger, University of Wollongong

Choosing Appropriate Test Batteries for Managerial, Clerical & Trade Occupations
Melbourne (March, May 1999)
Presenter: Marian Power, Melissa McColough

Developmental Assessment
An international seminar
Melbourne (July 1998)

Emotional Healing and Self-esteem for Children
Melbourne (July 1998, June 1999)
Facilitator: Mark Pearson

Emotional Release for Children
Melbourne (August 1998)
Facilitator: Mark Pearson

Group Facilitation Skills
Melbourne (September 1998)
Facilitator: Sandra Cutts

GST and professional practice
Melbourne (June 1999)
College of Organisational Psychologists

Intelligence Selection Tests
Melbourne (May 1999)
Presenter: Daiva Verbyla

MBTI (Myers-Briggs Type Indicator) Qualifying Program
Adelaide (August 1998, May 1999); Albury (September 1998), Melbourne (July, September, October, November 1998, February, April, June 1999), Warrnambool (May 1999)

MBTI Step II (Form K) Programs
Adelaide (August 1998, May 1999), Melbourne (November 1998, April 1999)

MBTI Summer School of Type
Melbourne (December 1998, February 1999)

MBTI workshop – Do What You Are
Melbourne (June 1999)
Facilitator: Jo Fleischer

Organising Culture Change: Moving decision making from the top to the bottom of the organisation
Melbourne (April, May 1999)
College of Organisational Psychologists

Quick, Simple, Inexpensive and Effective Career Decision-Making Instruments
Melbourne (August 1998)
Facilitator: Richard Knowdell

Safe Anger Release for Children and Adolescents
Melbourne (October 1998, June 1999)
Facilitator: Mark Pearson

Sandplay and Symbol Work to Resolve Conflicts
Melbourne (March 1999)
Facilitator: Mark Pearson

Schools in Australia: 1973 – 1998: The 25 years since the Karmel Report
ACER National Conference
Sydney (October 1998)

Social Skills Training Workshop
Melbourne (October 1998)
Presenter: Lindy Petersen

Stop, Think, Do: A multipurpose tool for motivating children's social learning skills
Melbourne (October 1998, May 1999)
Presenter: Lindy Petersen

Thinking Mathematically: Numeration understanding & problem solving
Bairnsdale (June 1999), Melbourne (June 1999), Sydney (May 1999)
Presenter: George Booker

Working with Vulnerable Families
Melbourne (August 1998, May 1999)
Facilitator: Constance Jenkin

Staff professional activities outside ACER

Aldous, C. Accreditation panellist for Victoria, National ELICOS Accreditation Scheme (NEAS).

Aldous, C. Examiner, Occupational English Test.

Allan, A. (1998–) Co-opted member of the Professional Development Committee of the College of Educational and Developmental Psychologists (Victoria).

Barnard, J.J. External Examiner for a Masters' course in computer based testing for the University of South Africa.

Barnard, J.J. Member of the College Council of Luther College.

Barnard, J.J. 1998. Thesis supervision: *Computer-based assessment in Higher Education* by I. le Roux – MEd University of Pretoria.

Barnard, J.J. 1998. Thesis supervision: *Formal proof in mathematics teaching* by P.S. Van Staden – PhD University of South Africa.

- Barnard, J.J. 1999. Thesis supervision: *Using computers in the teaching of auditing skills – a literature*, empirical study by H. Theron – DCom University of South Africa.
- de Lemos, M. (1998, September). Invited to attend Workshop on Measurement Instruments for Readiness to Learn organised by the Applied Research Branch, Human Resources Development, Canada and Statistics Canada as part of an expert panel to consider possible instruments for use in the Canadian *National Longitudinal Study of Children and Youth*, Ottawa, Canada.
- Dick, W. Member of Killester College Stewardship Council.
- Fullarton, S. Chair, Education Committee; Vice-President; Emerald Secondary College School Council.
- Fullarton, S. Member of the Research and Graduate Studies Committee, Faculty of Education, University of Melbourne.
- Lokan, J. Assessor, Australian Research Council (ARC)
- Lokan, J. Chair, Early Years of School Reference Group.
- Lokan, J. Member of Executive Editorial Board, Australian Journal of Career Development, 1992–.
- Lokan, J. Reviewer of papers submitted to Division E of the American Educational Research Association, 1994–.
- Long, M. Member of Reference Group of the *National Survey of Course Experience* – a committee to advise the Minister for Education, Training and Youth Affairs on the implementation of a national survey on the course experience of higher education students.
- Malley, J. Board member, Mindshop Excellence Foundation.
- Malley, J. Deputy Chair, Moorabbin, Oakleigh, Springvale Employment Development Group (MOSEDG).
- McColough, M. Committee member of the Sydney branch of the Australian Psychological Society College of Organisational Psychologists.
- Meiers, M. Associate of the Department of Linguistics and Applied Linguistics, University of Melbourne.
- Meiers, M. Chair, National Selection Panel, National Literacy Week Non-Government School Awards, DETYA, Canberra.
- Meiers, M. Editor, *Literacy Learning: Secondary Thoughts*, journal of the Australian Literacy Educators' Association.
- Meiers, M. Editorial Board, *Australian Language Matters*.
- Meiers, M. Lecturer, Secondary English Method, Bachelor of Education course, RMIT University.
- Meiers, M. Member, Accreditation Panel, VCE English Language; Accreditation Panel, VCE Foundation English; English CSF Committee, Victorian Board of Studies.
- Meiers, M. National Advisory Committee, *Primary Students with Learning Difficulties: Literacy and Numeracy*, DETYA Literacy Research Project.
- Meiers, M. National Literacy Benchmarks Expert Group.
- Meiers, M. State Reviewer, VCE English, Victorian Board of Studies.
- Splitter, L.J. Chief investigator for ARC project on mathematics classrooms as communities of inquiry (1999).
- Splitter, L.J. Membership of Selection Committee, Association of Rhodes Scholars in Australia Scholarship.
- Splitter, L.J. Treasurer, International Council for Philosophical Inquiry with Children.
- Splitter, L.J. Visiting Professor in the Department of Educational Foundations, Montclair State University, New Jersey, USA, January–June 1999.
- Stephanou, A. Chair, VCE Physics Setting Panel.
- Zammit, S.A. Member of Assessment Panel for Course Accreditation of the Graduate Certificate in communicative teaching for Languages Other than English (LOTE).
- Zammit, S.A. Member of the Joint Education Systems and Tertiary Institutions LOTE Committee.

Financial Report

Overview

For the financial year ended 30 June 1999 the operating surplus was \$747 854. The surplus is after providing for building depreciation of \$107 578. The results for 1998-99 and 1997-98 are set out in Table 1. The 1998-99 operating surplus represents a 3.8 per cent return on total income.

Total income for the year of \$19.8m was \$4.6m or 30.5 per cent higher than 1997-98 mainly due to growth in our contract activities. Operating surplus was \$76 080 higher than that achieved in 1997-98. ACER is a not-for-profit company. Achieving an

annual operating surplus is important for the financial stability of the organisation. Surplus funds are needed for debt reduction and to allow investment into future opportunities. Cash reserves are required to meet the cash flow demands of growth and to cover expenditure on contract work in advance of receipts.

In 1995-96 the directors established a Strategic Initiatives Reserve and in 1998-99 an amount of \$456 658 was transferred to the reserve. The purpose of the reserve is to apply some of the previous year's surplus to new strategic initiatives.

Table 1: Profit and loss summaries for years ended 30 June 1999 and 30 June 1998

| Source | 1998-99 | 1997-98 |
|-----------------------------------------|-------------------|-------------------|
| Income | | |
| Core research and development program | 1 632 000 | 1 696 500 |
| Professional services | 11 924 433 | 7 628 931 |
| ACER Press | 6 021 019 | 5 696 880 |
| Rent and sale of equipment | 82 375 | 117 995 |
| Export Market Development Grant | 63 879 | 0 |
| Interest | 64 037 | 23 245 |
| Total | 19 787 743 | 15 163 551 |
| Expenditure | | |
| Core research and development program | 1 632 000 | 1 696 500 |
| Professional services | 11 429 095 | 7 326 528 |
| ACER Press | 5 871 216 | 5 362 097 |
| Total | 18 932 311 | 14 385 125 |
| Operating surplus before Building Dep'n | 855 432 | 778 426 |
| Building depreciation | 107 578 | 106 652 |
| Operating Surplus | 747 854 | 671 774 |
| Abnormal item | 479 085 | 0 |
| Surplus | 1 226 939 | 671 774 |

Core grant

ACER receives an annual core grant from Australian government sources, 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 research focused on improving learning outcomes in each of five priority areas: teaching practices to improve learning, improving literacy and numeracy learning, vocational outcomes and lifelong learning, improving outcomes for Indigenous students, and assessment and reporting to improve learning.

The core grant is linked by formula to academic and general staff salary scales. In 1998-99 the core grant decreased by 3.8 per cent due to a reduction in the cost of salaries, as a consequence of ACER in 1997-98 obtaining exemptions from payroll tax. The core grant provided 8.3 per cent of ACER's total income in 1998-99 compared with 11.2 per cent in 1997-98.

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 testing programs, conferences and workshops.

The level of activity in professional services increased \$4 295 502 or 56.3 per cent to \$11.9m compared to \$7.6m in 1997-98. Professional services expenditure in 1998-99 was \$11.4m.

The long-term trend in the level of ACER's professional service activities is shown in Figure 1. The level of activity reached in 1998-99 was highest in the life of ACER since its establishment in 1930. It exceeds the already high level of activity evident over the previous four years as the right-hand panel showing the trend in constant dollars makes clear.

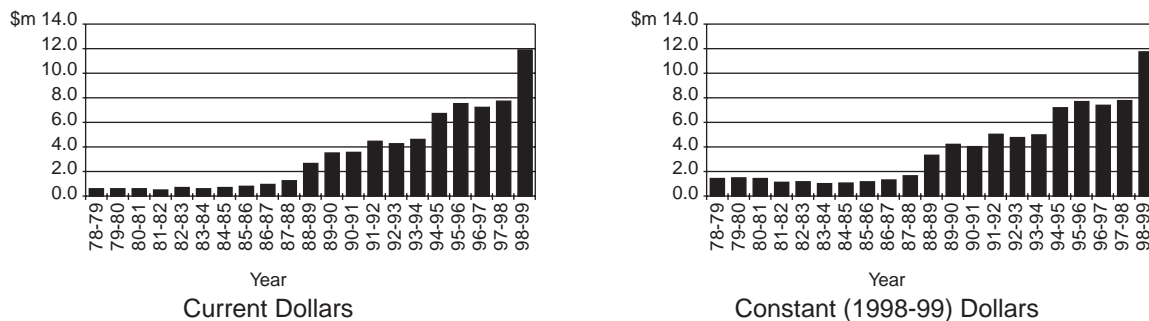


Figure 1: Trend in income for professional services from 1978-79 to 1998-99

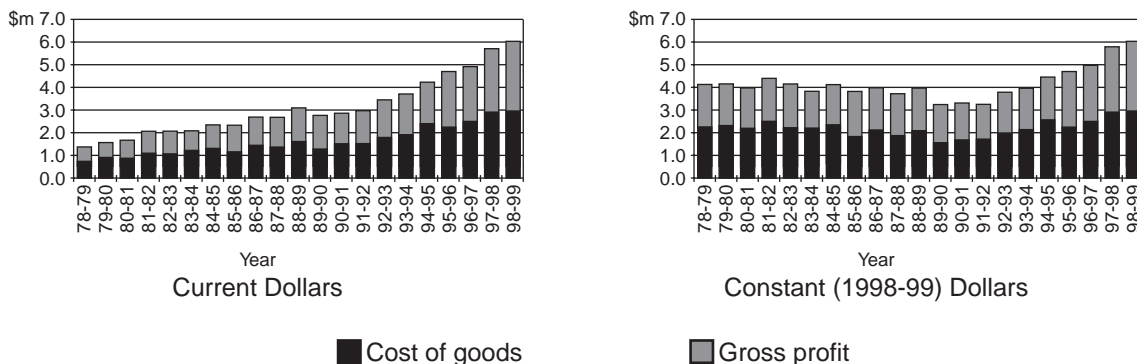


Figure 2: Trend in income from ACER Press from 1978-79 to 1998-99

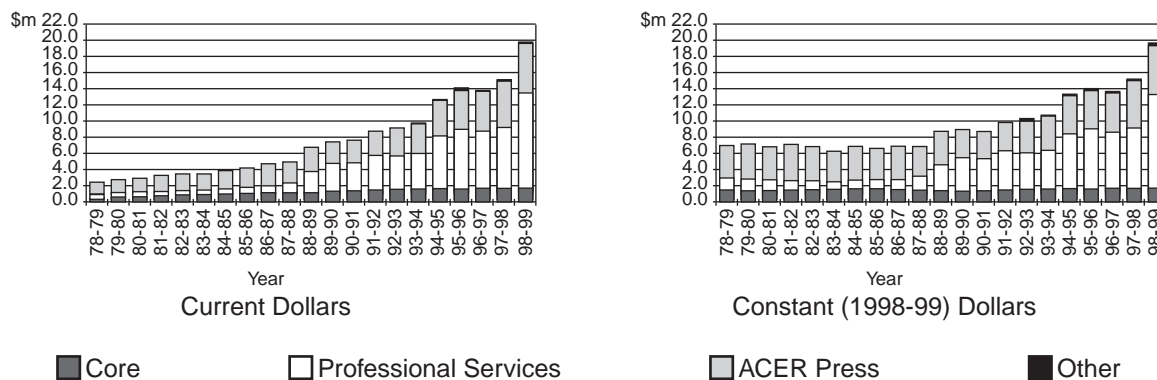


Figure 3: Trend in total income from 1978-79 to 1998-99

ACER Press

ACER Press publishes and sells educational and psychological books, tests and other materials. Around 40 per cent of total sales income is derived from materials that ACER publishes and around 60 per cent from materials that ACER distributes on behalf of other publishers.

In 1998-99 total income for ACER Press increased by 5.7 per cent to \$6 021 019. ACER Press yielded a net surplus of \$149 803 in 1998-99.

The long-term trend in the level of ACER Press 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 lightly shaded portion. The general trend between 1977-78 and 1988-89 was downward, with some year-to-year variations. Since 1989-90, ACER Press income has been growing dramatically due to changes in the focus, operation and management of the business. The level of income achieved in 1998-99 was the best ever achieved in real terms, as the right-hand panel in Figure 2 shows.

Long-term trends in total income

The long-term trend in ACER's total income is shown in Figure 3. As the right hand panel shows total income in real terms had generally fallen away in the late 1970's and early 1980's reaching a low point in 1983-84. The growth from the mid-1980s to the present has been remarkable. As both graphs in Figure 3 show, ACER achieved the highest income level ever in 1998-99. The small component of other income shown is derived from interest earned on deposits and, in the last six years, from rent of part of ACER's premises.

Directors' Report

The Directors of the Australian Council for Educational Research Limited (ACER) submit the following report together with the financial statements for the year ended 30 June 1999.

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

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

Robert Horne BA
2 of 2 meetings attended

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

John Lindsey BSc(Hons) PhD DipEd
1 of 1 meetings attended

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

Geofferey N Masters BSc MEd PhD FACE
6 of 6 meetings attended

Glenn Rowley BSc BEd MA PhD
5 of 6 meetings attended

Directors who have held office and meetings attended during the financial year

Brian Devlin BA(Hons) DipEd MEd EdD
FACE JP
4 of 4 meetings attended

Barry McGaw BSc BEd(Hons) MEd PhD
FACE FAPsS FASSA
1 of 1 meetings attended

Susan Zammit BA(Hons) MEdSt PhD MACE
5 of 5 meetings attended

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, before expenditure from reserves, was \$1 226 939.

Dividends

ACER is a not for profit company and neither declares nor pays dividends.

Review of operations

ACER's total operating revenue increased from \$15 163 551 in 1997-98 to \$19 787 743 in 1998-99.

The Commonwealth, State and Territory governments provide ACER with an annual grant that enables ACER to undertake a range of research and development projects for which contract funds are not normally available. 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 the more immediate ones 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 1998-99 government grant was \$1 632 000 compared with \$1 696 500 in 1997-98. The core grant provided 8.2 per cent of ACER's total operating revenue in 1998-99 compared with 11.2 per cent in 1997-98.

Operating revenue from professional services in 1998-99 was \$13 615 808, an increase of 43 per cent from the \$9 520 117 achieved in 1997-98. These professional services yielded a surplus in 1998-99 of \$674 131.

ACER Press revenue, including royalties, in 1998-99 was \$6 021 019, up 8.0 per cent on \$5 575 902 achieved in 1997-98. ACER Press reported a surplus of \$149 803 in 1998-99.

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

There have been no significant changes in the state of affairs of the company since the end of the financial year.

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.

Directors' indemnification

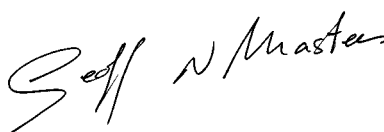
During the financial year the company paid a premium to insure each of the directors against liabilities for costs and expenses incurred by them in defending any legal proceedings arising out of their conduct while acting in the capacity of director of the company, other than conduct involving a wilful breach of duty in relation to the company. The total amount of the premium was \$2 090.

Signed in accordance with a resolution of the Directors.

For and on behalf of the Directors



Director: P H Karmel



Executive Director: G N Masters

Date: 15 September 1999

Independent Audit Report

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

Audit Scope

We have audited the attached financial report of Australian Council for Educational Research Ltd comprising the Income and Expenditure Account, the Balance Sheet, Cashflow Statement, Directors Declaration and the Notes to and forming part of the accounts for the year ended 30 June 1999. The company's directors are responsible for the financial report. We have conducted an independent audit of this financial report 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 whether the financial report is free of material misstatement. Our procedures included examination, on a test basis, of evidence supporting the amounts and other disclosures in the financial report, and the evaluation of accounting policies and significant accounting estimates. These procedures have been undertaken to form an opinion whether, in all material respects, the financial report is presented fairly in accordance with the Accounting and other mandatory professional reporting requirements and other statutory requirements so as to present a view which is consistent with our understanding of the company's financial position, and performance as represented by their operations and their cashflows.

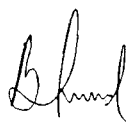
The audit opinion expressed in this report has been formed on the above basis.

Audit Opinion

In our opinion the financial report of Australian Council for Educational Research Ltd is in accordance with:

- (a) the Corporations Law, including:
 - (i) giving a true and fair view of the company's financial position as at 30 June 1999 and of their performance for the financial year ended on that date; and
 - (ii) complying with Accounting Standards and the Corporations Regulations; and
- (b) other mandatory professional reporting requirements.

SAWARD DAWSON
Chartered Accountants



Bruce Saward
Partner

Date: 16 September 1999

Australian Council for Educational Research Ltd
ACN 004 398 145
(a company limited by guarantee)

Balance Sheet at 30th June 1999

| | Note | 1999 \$ | 1998 \$ |
|--------------------------------------|------|---------------------|---------------------|
| CURRENT ASSETS | | | |
| Cash | 6 | 2,347,698 | 1,610,411 |
| Receivables | 7 | 3,655,870 | 2,994,584 |
| Inventories | 8 | 2,565,584 | 2,503,307 |
| Other | 9 | 152,599 | 141,478 |
| TOTAL CURRENT ASSETS | | 8,721,751 | 7,249,780 |
| NON-CURRENT ASSETS | | | |
| Property, plant and equipment | 10 | 6,375,324 | 6,261,838 |
| Intangibles | 11 | 35,000 | 40,000 |
| TOTAL NON-CURRENT ASSETS | | 6,410,324 | 6,301,838 |
| TOTAL ASSETS | | 15,132,075 | 13,551,618 |
| CURRENT LIABILITIES | | | |
| Accounts Payable | 12 | 3,884,384 | 3,499,904 |
| Borrowings | 13 | 332,035 | 106,450 |
| Provisions | 14 | 1,367,817 | 1,088,654 |
| TOTAL CURRENT LIABILITIES | | 5,584,236 | 4,695,008 |
| NON-CURRENT LIABILITIES | | | |
| Borrowings | 13 | 2,197,417 | 2,708,696 |
| Provisions | 14 | 274,347 | 245,311 |
| TOTAL NON-CURRENT LIABILITIES | | 2,471,764 | 2,954,007 |
| TOTAL LIABILITIES | | 8,056,000 | 7,649,015 |
| NET ASSETS | | \$ 7,076,075 | \$ 5,902,603 |
| MEMBERS' FUNDS | | | |
| Reserves | 15 | 1,921,983 | 1,518,792 |
| Accumulated Funds | | 5,154,092 | 4,383,811 |
| TOTAL MEMBERS' FUNDS | | \$ 7,076,075 | \$ 5,902,603 |
| Capital and Leasing Commitments | 16 | | |

The accompanying notes form part of these financial statements.

Income & Expenditure Account For the Year Ended 30th June 1999

| | Note | 1999 \$ | 1998 \$ |
|---------------------------------------------------------------------|------|---------------------|---------------------|
| Surplus from Operations Before | | | |
| Reserve Items | 2 | 1,226,939 | 671,774 |
| Amounts Relating to Reserve Funds: | | | |
| Scientific Research Fund Surplus (Deficit) | | (1,305) | 913 |
| Strategic Initiatives Fund Expenditure | | (52,162) | (57,716) |
| Surplus from Operations | | 1,173,472 | 614,971 |
| Profit on Extraordinary Item | 3 | - | 1,029,746 |
| Operating Profit and Extraordinary Item | | 1,173,472 | 1,644,717 |
| Accumulated Surpluses at the Beginning of the Financial Year | | 4,383,811 | 4,045,037 |
| Total Available for Appropriation | | 5,557,283 | 5,689,754 |
| Aggregate of Amounts Transferred to Reserves | 4 | 403,191 | 1,305,943 |
| Accumulated Surpluses at the End of the Financial Year | | \$ 5,154,092 | \$ 4,383,811 |

The accompanying notes form part of these financial statements.

Statement of Cash Flows For The Year Ended 30th June 1999

| | Note | 1999 \$ | 1998 \$ |
|------------------------------------------------|-------|---------------------------|---------------------------|
| Cash Flows From Operating Activities | | | |
| Receipts from customers & clients | | 18,506,758 | 15,504,663 |
| Payments to suppliers and employees | | (16,761,703) | (13,637,202) |
| Interest & other finance costs paid | | (187,216) | (212,581) |
| Interest & bill discounts received | | 64,037 | 23,245 |
| Net Cash from Operating Activities | 19(b) | <u>1,621,876</u> | <u>1,678,125</u> |
| Cash Flows From Investing Activities | | | |
| Payments for property, plant and equipment | | (621,895) | (254,758) |
| Proceeds from sale of plant and equipment | | 23,000 | 44,287 |
| Net Cash used in Investing Activities | | <u>(598,895)</u> | <u>(210,471)</u> |
| Cash Flows From Financing Activities | | | |
| Repayment of Bank Bills | | (300,000) | (350,000) |
| Increase (Decrease) in Hire Purchase Liability | | 14,305 | (104,782) |
| Net Cash used in Financing Activities | | <u>(285,695)</u> | <u>(454,782)</u> |
| Net Increase (Decrease) In Cash Held | | <u>737,286</u> | <u>1,012,872</u> |
| Cash at the Beginning of the Year | | <u>1,610,412</u> | <u>597,540</u> |
| Cash at the End of the Financial Year | 19(a) | <u><u>\$2,347,698</u></u> | <u><u>\$1,610,412</u></u> |

The accompanying notes form part of these financial statements.

Notes to and forming part of the accounts for the year ended 30th June 1999

1 STATEMENT OF ACCOUNTING POLICIES

The accounts are a general purpose financial report that have been prepared in accordance with applicable Accounting Standards and other mandatory professional reporting requirements (Urgent Issues Group Consensus Views) and the Corporations Law. 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. Cost is based on the fair values of the consideration given in exchange for 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

Property, plant & equipment are recorded at cost or at independent valuation, less where applicable, any accumulated depreciation or amortisation. The carrying value of property, plant & equipment is reviewed regularly by the directors to ensure that it is not in excess of the recoverable amount of these assets. The recoverable amount is assessed on the basis of the expected net cash flows, which will be received from the assets employment and subsequent disposal. The expected cash flows have not been discounted to their present values in determining recoverable amounts.

Depreciation is charged on all fixed assets including buildings and capitalised lease assets, but excluding land on a straight line basis over the estimated useful life of the asset to the entity, commencing from the time the asset is held ready for use.

The relevant depreciation rates used are as follows:

| | |
|------------------------|------|
| Buildings | 2.5% |
| Computer Equipment | 25% |
| Furniture and Fittings | 25% |
| Motor Vehicles | 25% |

Leases

Leases of fixed assets where the risks and benefits incidental to ownership of the leased item are effectively transferred to the lessee are classified as finance leases. Such leases are brought to account by capitalising, at the beginning of the lease term, an initial asset equal to the present value of the minimum lease payments. Assets subject to finance leases are amortised over the periods which are expected to benefit from the use of those assets.

Employee Benefits

Employee benefits in the form of annual leave entitlements have been provided for in the accounts by way of provisions based on leave entitlements at year end and current wage rates. Long service leave is accrued in respect of employees who have completed more than 6 years' service as this is estimated to represent the present value of future cash outflows in respect of long service leave entitlements.

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.

| | 1999 | 1998 |
|------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|
| | \$ | \$ |
| 2 OPERATING SURPLUS | | |
| (a) Operating Surplus has been determined after: | | |
| <i>Crediting as Income:</i> | | |
| Interest Received | | |
| Commonwealth Bank | 64,037 | 23,245 |
| Net Gain on disposal of property, plant & equipment | 1,269 | 5,552 |
| <i>Charging as Expenses:</i> | | |
| Auditors remuneration: | | |
| Auditing Services | 15,900 | 15,505 |
| Interest paid or payable to: | | |
| Commonwealth Bank | 187,216 | 212,581 |
| Movement in Provisions: | | |
| Depreciation of property, plant and equipment | 486,676 | 507,580 |
| Employee Benefits | 308,199 | 62,967 |
| Net expense resulting from movement in provisions | 794,875 | 570,547 |
| (b) Operating Revenue | | |
| Included in operating surplus are the following items of operating revenue: | | |
| Trading Sales | 6,021,019 | 5,575,902 |
| Export Development Grant | 63,879 | - |
| Professional Services | 13,615,808 | 9,520,117 |
| Interest Received | 64,037 | 23,245 |
| Proceeds on sale of Non-Current Assets | 23,000 | 44,287 |
| | 19,787,743 | 15,163,551 |
| 3 EXTRAORDINARY ITEM | | |
| Net refund of Payroll Tax, Financial Institutions Duty and Government Debts Tax arising from application for exemption | - | 1,029,746 |
| 4 MOVEMENT IN RESERVES | | |
| Transfer to Scientific Research Fund Reserve | - | 913 |
| Transfer to Strategic Initiatives Fund Reserve | 456,658 | 1,362,746 |
| Transfer from Scientific Research Fund Reserve | (1,305) | - |
| Transfer from Strategic Initiatives Fund Reserve | (52,162) | (57,716) |
| | 403,191 | 1,305,943 |

For further details on reserve movements see Note 15

| | 1999 | 1998 |
|--|------|------|
| | \$ | \$ |

5 REMUNERATION OF DIRECTORS

Directors' Remuneration:

| | | |
|--------------------------------------------------------------------------------------------------------|---------|---------|
| Income paid or payable to all directors of the company by the company or any related parties | 243,706 | 221,966 |
| Number of directors whose income from the company or any related party was within the following bands: | | |
| 0 - \$9999 | 1 | - |
| \$10,000 - \$19,999 | 1 | - |
| \$70,000 - \$79,999 | 1 | 1 |
| \$140,000 - \$149,999 | 1 | 1 |

The names of directors who have held office during the financial year are:

Ken Boston
 Brian Devlin
 Robert Horne
 Peter Karmel
 John Lindsey
 Jillian Maling
 Geofferey Masters
 Barry McGaw
 Glenn Rowley
 Susan Zammit

6 CASH

| | | |
|--------------|-------------------------|-------------------------|
| Cash on Hand | 1,000 | 1,000 |
| Cash at Bank | 2,346,698 | 1,609,411 |
| | <u>2,347,698</u> | <u>1,610,411</u> |

7 RECEIVABLES

| | | |
|------------------------------------|-------------------------|-------------------------|
| <i>Current</i> | | |
| Trade Debtors | 2,123,336 | 1,159,753 |
| Less: Provision for Doubtful Debts | (10,000) | (10,000) |
| | <u>2,113,336</u> | <u>1,149,753</u> |
| Sundry Debtors | 28,531 | 1,067,490 |
| Contract Debtors | 1,514,003 | 777,341 |
| | <u>3,655,870</u> | <u>2,994,584</u> |

8 INVENTORIES

| | | |
|---------------------------------|-------------------------|-------------------------|
| <i>Current</i> | | |
| Stock on Hand | 2,150,835 | 2,308,339 |
| Product Development in Progress | 414,749 | 194,968 |
| | <u>2,565,584</u> | <u>2,503,307</u> |

| | 1999 \$ | 1998 \$ |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|
| 9 OTHER ASSETS | | |
| <i>Current</i> | | |
| Other Prepayments | 152,599 | 141,478 |
| 10 PROPERTY, PLANT & EQUIPMENT | | |
| Freehold Land - at Cost | 1,750,000 | 1,750,000 |
| | 1,750,000 | 1,750,000 |
| Buildings - at Cost | 4,375,907 | 4,287,505 |
| Less: Accumulated Depreciation | 554,038 | 446,460 |
| | 3,821,869 | 3,841,045 |
| Motor Vehicles - at Cost | - | 25,337 |
| Less: Accumulated Depreciation | - | 2,485 |
| | - | 22,852 |
| Furniture & Equipment - at Cost | 815,198 | 908,779 |
| Less: Accumulated Depreciation | 529,456 | 642,971 |
| | 285,742 | 265,808 |
| Computer Equipment | 1,209,214 | 1,104,940 |
| Less: Accumulated Depreciation | 691,501 | 722,807 |
| | 517,713 | 382,133 |
| Total Property, Plant & Equipment | 6,375,324 | 6,261,838 |
| An independent valuation of land and buildings was undertaken by Mr M Tidman (IMBA) of CB Richards Ellis Pty Ltd on 8 December 1998. The valuation was undertaken in accordance with the requirements of Accounting Standard AASB 1034 to value land and buildings every three years. The valuation revealed a current market value of \$5,930,927. | | |
| 11 INTANGIBLES | | |
| Copyright, Issues Magazine | 50,000 | 50,000 |
| Less: Accumulated Amortisation | (15,000) | (10,000) |
| | 35,000 | 40,000 |
| 12 ACCOUNTS PAYABLE | | |
| <i>Current</i> | | |
| Trade and Sundry Creditors | 2,093,928 | 1,602,337 |
| Amounts Received In Advance | 1,790,456 | 1,897,567 |
| | 3,884,384 | 3,499,904 |

| | 1999 \$ | 1998 \$ |
|---------------------------------------------------------------------------------|-------------------------|-------------------------|
| 13 BORROWINGS | | |
| <i>Current</i> | | |
| Bank Bills Payable | 300,000 | - |
| Hire Purchase Liability | 32,035 | 106,450 |
| | <u>332,035</u> | <u>106,450</u> |
| <i>Non-Current</i> | | |
| Hire Purchase Liability | 97,417 | 8,696 |
| Bank Bills Payable | 2,100,000 | 2,700,000 |
| | <u>2,197,417</u> | <u>2,708,696</u> |
| Bank borrowings are secured by mortgage over 19 Prospect Hill Road, Camberwell. | | |
| 14 PROVISIONS | | |
| <i>Current</i> | | |
| Provision for Holiday Pay | 725,756 | 606,440 |
| Provision for Long Service Leave | 632,061 | 472,214 |
| Provision for Supplementary Superannuation | 10,000 | 10,000 |
| | <u>1,367,817</u> | <u>1,088,654</u> |
| <i>Non-Current</i> | | |
| Provision for Long Service Leave | 274,347 | 245,311 |
| Aggregate employee entitlements liability | <u>1,642,164</u> | <u>1,333,965</u> |
| 15 RESERVES | | |
| Strategic Initiatives Fund Reserve | 1,863,796 | 1,459,300 |
| Scientific Research Fund Reserve | 58,187 | 59,492 |
| | <u>1,921,983</u> | <u>1,518,792</u> |
| <i>Movements in Reserves</i> | | |
| <i>Strategic Initiatives Fund Reserve</i> | | |
| Opening Balance for the year | 1,459,300 | 154,270 |
| Transfer to Accumulated Funds | (52,162) | (57,716) |
| Transfer from Accumulated Funds | 456,658 | 1,362,746 |
| | <u>1,863,796</u> | <u>1,459,300</u> |
| <i>Scientific Research Fund Reserve</i> | | |
| Opening Balance for the year | 59,492 | 58,579 |
| Transfer to Accumulated Funds | (1,305) | - |
| Transfer from Accumulated Funds | - | 913 |
| | <u>58,187</u> | <u>59,492</u> |

| | 1999 | 1998 |
|--|------|------|
| | \$ | \$ |

16 CAPITAL & LEASING COMMITMENTS

Hire Purchase Commitments

| | | |
|----------------------------------------------------|-----------------------|-----------------------|
| Not later than one year | 39,903 | 109,944 |
| Later than one year and not later than two years | 39,903 | 2,851 |
| Later than two years and not later than five years | 66,506 | 6,245 |
| | <u>146,312</u> | <u>119,040</u> |
| Less: Future Finance Charges | 16,860 | 3,894 |
| Total Hire Purchase Liability | <u>129,452</u> | <u>115,146</u> |

Capital Expenditure Commitments Contracted For:

| | | |
|-----------------------------------------|-----------------------|-----------------|
| Capital Expenditure projects | 307,580 | - |
| Payable: Not later than one year | <u>307,580</u> | <u>-</u> |

17 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.

18 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.

19 CASHFLOW INFORMATION

a) Reconciliation of Cash

For the purposes of the statement of cash flows, cash includes cash on hand and in banks and investments in money market instruments, net of outstanding bank overdrafts. Cash at the end of the financial year as shown in the statements of cash flows is reconciled to the related items in the balance sheet as follows:

| | | |
|--------------|---------------------------|---------------------------|
| Cash on hand | 1,000 | 1,000 |
| Cash at bank | 2,346,698 | 1,609,412 |
| | <u>\$2,347,698</u> | <u>\$1,610,412</u> |

b) Reconciliation of Net Cash provided by Operating Activities to Operating Surplus

| | | |
|-----------------------------------------------|-----------|-----------|
| Operating Surplus | 1,173,472 | 1,644,717 |
| Adjusted By: | | |
| Amortisation | 5,000 | 5,000 |
| Depreciation | 486,676 | 507,580 |
| Profit on sale of property, plant & equipment | (1,269) | (5,552) |

| | 1999 \$ | 1998 \$ |
|--------------------------------------------------|--------------------|--------------------|
| Change in operating related assets & liabilities | | |
| (Increase) Decrease in trade & sundry debtors | (672,408) | (1,372,943) |
| (Increase) Decrease in inventories | (62,275) | (68,742) |
| Increase (Decrease) in creditors & accruals | 491,591 | 153,255 |
| Increase (Decrease) in provisions | 308,200 | 62,967 |
| Increase (Decrease) in income in advance | (107,111) | 751,843 |
| Net cash provided by operating activities | <u>\$1,621,876</u> | <u>\$1,678,125</u> |

c) Credit Standby-by Arrangement and Loan Facilities

Firmly committed long term financing facilities of \$4,256,500 (1998: \$4,486,400) were available to the company at the end of the financial year. As at that date, \$2,979,779 (1998: \$3,167,899) of these facilities were in use.

Loan facilities available to the company at year end were:

| | Limit \$ | Amount Unused \$ |
|--------------------------------|--------------------|------------------------|
| a) Payroll encashment facility | 150,000 | 150,000 |
| b) Overdraft facility | 177,000 | 177,000 |
| c) CBFC Finance facility | 600,000 | 23,274 |
| d) Business Mastercard | 14,500 | 11,477 |
| e) Bills Discount Facility | 3,315,000 | 915,000 |
| | <u>\$4,256,500</u> | <u>\$1,276,751</u> |

20 FINANCIAL INSTRUMENTS

(a) Interest Rate Risk

The company's exposure to interest rate risk, which is the risk that a financial instrument's value will fluctuate as a result of changes in market interest rates and the effective weighted average interest rates on those financial assets and financial liabilities is as follows:

| | Weighted Average Effective Interest Rate % | Floating Interest Rate \$ | Fixed Interest Within 1 Year \$ | Rate Maturing 1 to 5 Years \$ |
|-----------------------------|-----------------------------------------------------|---------------------------------|---------------------------------------|-------------------------------------|
| Cash at bank | 3.66 | 2,346,698 | 0 | 0 |
| Total Financial Assets | | <u>2,346,698</u> | <u>0</u> | <u>0</u> |
| Hire Purchase Liability | 7.03 | 129,450 | 32,035 | 97,415 |
| Bank Bills Payable | 6.84 | 2,400,000 | 300,000 | 2,100,000 |
| Total Financial Liabilities | | <u>2,529,450</u> | <u>332,035</u> | <u>2,100,000</u> |

(b) Credit Risk

The company does not have any material credit risk exposure to any single debtor or group of debtors under financial instruments entered into by the company.

Directors' Declaration

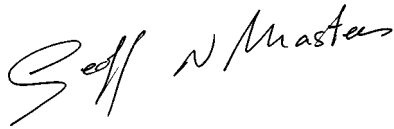
The directors of the company declare that:

1. the financial statements and notes:
 - (a) comply with Accounting Standards and the Corporations Law; and
 - (b) give a true and fair view of the financial position of the company as at 30th June 1999 and performance for the year ended on that date;
2. in the director's opinion there are reasonable grounds to believe that the company will be able to pay its debts as and when they become due and payable.

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



Director



Director

15th September 1999

Members of ACER Council

Chair

Karmel, Peter

Deputy Chair

Maling, Jillian

Coopted Members

Adams, Isabelle, DipTeach, BA, BEd, MEd *Murdoch*. Educational Consultant, Western Australia (to November 1998)

Cairney, Trevor, BA, MLitt *UNE*, PhD *Newcastle*. Pro Vice-Chancellor (Research), University of Western Sydney (from November 1998)

Hughes, Paul, AM, DipT(Prim) *TCAE*, AdvDipT *ACAE*, MEd *Harvard*, HonDLitt *Flin.*, FACE. Professor and Director, Yunggoendi First Nations Centre for Higher Education and Research, Flinders University of South Australia (from November 1998)

Knight, Susan, DipT *Frankston*, BEd *Chisholm*, GradDipDrama *MSC*, MEdStudies. Principal, St Kilda Park Primary School (from November 1998)

Karmel, Peter, AC, CBE, BA *Melb.*, PhD *Camb.*, PhD *ad eundem gradum Adel.*, Hon LLD *PNG, Melb., Qld, ANU*, Hon DLitt *Flin., Macquarie, Murdoch, DUniv Newcastle, NSW*, FACE, FASSA Former Vice-Chancellor, Australian National University, Canberra

Maling, Jillian, AM, BA, DipEd, BEd *Melb.*, PhD *Stanford*, FACE. Educational Consultant, South Australia

Poole, Millicent, CE, BA, BEd *Qld*, MA *UNE*, PhD *LaT.*, FACE, FASSA, MAPsS. Vice-Chancellor, Edith Cowan University (to November 1998)

Sweet, Richard, BA *Syd*. Former Research Coordinator, Dusseldorp Skills Forum (to October 1998)

Members Appointed by Institutes of Educational Research Standing Committee

Cumming, J Joy, BA, BEdSt, MEd, PhD *Qld*. Head, School of Cognition, Language and Special Education, and Associate Professor in Education, Griffith University (from November 1998)

Devlin, Brian, BA(Hons) *Melb.*, DipEd *CCA*E, MEd, EdD *Columbia*, FACE, JP. Associate Professor, Faculty of Science, Information Technology and Education, Northern Territory University (to November 1998)

Rowley, Glenn, BSc, BEd *Melb.*, MA, PhD *Toronto*. Associate Professor in Education, Monash University

Watson, Alan, BA *UNE*, MA *Syd.*, DipRE *MCD*, PhD *Syd*. Associate Professor in Teacher Education, University of New South Wales

Members Appointed by Conference of Education System Chief Executive Officers

Allen, Peter, BA *Syd*. Secretary, Department of Education, Melbourne (from April 1999)

Boston, Ken, MA, PhD *Melb.*, FRGS, FACE, FAIM. Director-General, Department of Education and Training, Sydney

Ralph, Denis, BA *Adel.*, DipT, MEdAdmin *Alberta*, FACE. Chief Executive, Department of Education, Training and Employment, Adelaide (to February 1999)

Members Appointed by Secretary of Commonwealth Department of Education, Training and Youth Affairs

Horne, Robert, MA *Oxon*. First Assistant Secretary, International, Analysis and Evaluation Division, Department of Education, Training and Youth Affairs, Canberra (from November 1998)

Sara, Vicki, BA, PhD *Syd.*, DOC, *Stockholm*. Chair, Australian Research Council, Canberra

Member appointed by the National Council of Independent Schools' Associations and the National Catholic Education Commission

de Carvalho, David, BA(Hons), DipEd *Melb.*, BTheol *MCD*. Chief Executive Officer, National Catholic Education Commission (from March 1999)

Staff Member

Lindsey, John, BSc(Hons), PhD *Monash*, DipEd, *Melb.* (from April 1999)

Zammit, Susan, BA(Hons) *Lond.*, MEdSt, PhD *Monash*, MACE (to April 1999)

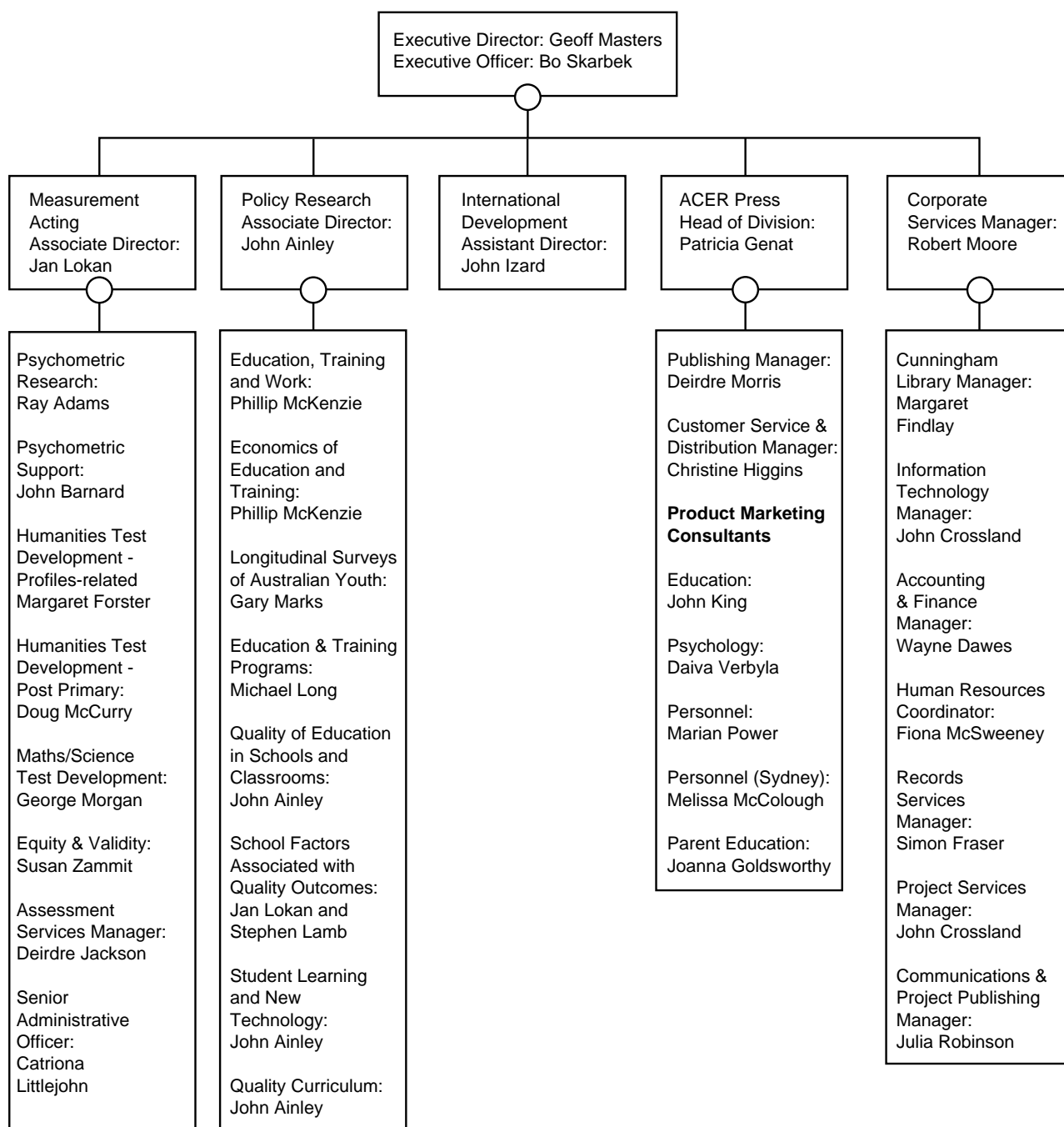
Executive Director

McGaw, Barry, BSc, BEd(Hons) *Qld*, MEd, PhD *Illinois*, FACE, FAPsS, FASSA (to August 1998)

Masters, Geofferey, BSc, MEd *WA*, PhD *Chicago*, FACE (from November 1998)

Members of ACER Staff

Organisational structure at 30 June 1999



Director's Award for Exceptional Service

Mr John Hare was the 1998-99 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. Mr Hare is an IT Officer in the Information Technology department.

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.

Directorate

Executive Director

McGaw, Barry, BSc, BEd(Hons) *Qld*, MEd, PhD *Illinois*, FACE, FAPsS, FASSA (to August 1998)

Masters, Geoff, BSc, MEd *UWA*, PhD *Chicago*, FACE (from July 1998)

Executive Officer

Skarbek, Bozena, BA *Monash*, GradDipSecSt *CCA*E, GradCertEventsMgt *VUT*

Executive Assistant

Marshall, Lexie

Measurement Division

Associate Director

Masters, Geoff, BSc, MEd *UWA*, PhD *Chicago* (to June 1998)

Lokan, Janice, BA, DipEd *Adel.*, PhD *Ottawa*, FACE, MAPsS, MIAAP (acting from July 1998)

Senior Administrative Officer

Littlejohn, Catriona, BEd *Melb.*, MBA *Monash*, AIMM

Administrative Officer

Bates, Susan

Principal Research Fellows

Adams, Raymond, BSc(Hons), DipEd, MEd, *Melb.*, PhD *Chicago*

Lokan, Janice, BA, DipEd *Adel.*, PhD *Ottawa*, FACE, MAPsS, MIAAP (to July 1998)

Senior Research Fellows

Barnard, John, BSc(Ed), BSc(Hons), BEd, MEd, DEd *RAU*, MSc *UNISA*, PhD *UP*, EdD *Newport*

Doig, Brian, BAppSci, AssocDipMath *RMIT*, BEd *Monash*, GradDipCompEdn *MCAE*, MEd *Melb.*

Forster, Margaret, BA(Hons) DipEd *LaT.*, MEdSt *Monash*

McCurry, Douglas, BA(Hons) DipEd *LaT.*

Morgan, George, BSc(Hons) *UNSW*, DipEd *SCV*, MSc *LaT.*, MEd *Melb.*

Withers, Graeme, BA *Melb.*

Zammit, Susan, BA(Hons) *Lond.* MEdSt, PhD *Monash*, MACE

Research Fellows

Anderson, Prue, BA, DipEd, MEd Studies (from December 1998)

Bodey, Wendy, DipT *VicColl.*, GradDipCompEdn *Riverina Murray*

Bryce, Jennifer, BA, BEd *Melb.*, DipArts *VicColl. of Arts*, MSocSci *RMIT*

Chamberlain, Jeff, DipEd *UOFS*, BA(Hons), *UP*, BEd, MEd, DEd *UNISA*

Congdon, Peter, DipAppSci *VCAH*

Crawford, Colin, BEd, GradDipEdAdmin, TPTC TTLIBC (from January 1999)

Darkin, Lynne, BA(Hons) *James Cook*, DipEd *LaT.*

Farkota, Rhonda, DipTeach, BEd *Melb.*, MEdSt *Monash* (from December 1998)

Hambur, Sam, BSc(Hons) *Monash*, DipEd *HIE*

Hill, Kathryn, BA, DipEd TESL, MA *Melb.*

Hunt, Malcolm, BSc(Hons), DipEd, PhD *Melb.*

Lindsey, John, BSc(Hons), PhD *Monash*, DipEd *Melb.*

Lonsdale, Michele, BA(Hons) DipEd *Melb* GradDip Student Welfare *Hawthorn*, MEd *LaT.*, PhD *LaT.*

Lowe, Lois, BSc *Melb.*, TPTC *Melb State Coll.* (from December 1998)

McGregor, Margaret, BEd (Prim), MEd, TPTC (from December 1998)

McQueen, Joy, BA, DipEd *Melb.*, BEd *Monash*, GradDip TESL *VicColl.*, MA *Melb.*, MACE

Meiers, Marion, BA, DipEd *Melb.*, BEd, MEd *Monash* (from March 1998)

Mendelovits, Juliette, BA(Hons), DipEd *LaT.*, MA (Eng) *Melb.*

Nolan, Kathy, BEd, Dip Teaching *ACU*, GradCertEdStudies (TESOL) (from December 1998)

O'Connor, Gayl, BSc(Hons) *LaT.*, DipEd *Monash*, GradDipAppSc *Vic College*

Pearn, Cath, GradDipMathEd *Hawthorn*, DipTeach *Phillip*, MEd *LaT.*, TPTC *Burwood* (from January 1999)

Raivars, Andrew, BA(Hons), DipEd, BLitt(Hons) *Monash*, GradDipMathSc *MCAE* (from January 1999)

Recht, Eve, BA(Hons), DipEd *LaT.*

Simpson, Brian, BSc, DipEd *Melb.*

Stephanou, Andrew, *Laurea* in Physics *Rome*, DipEd *Melb.* (from August 1998)

Volodin, Nikolai, MSc(Stats), PhD *Tashkent*

Wu, Margaret, BSc(Hons), DipEd, MEd *Melb.*, GradDipComStudies *RMIT*

Research Officers

Chatfield, Robert, BEd, GradDipAdol&Child Psych, MA *Melb.*
Gibbins, Marisa, BAppSc *RMIT*, DipEd *Melb.* (from January 1999)
Greenwood, Lisa, BAppSci *Deakin*, GradDipCounsPsych *RMIT* (maternity leave from December 1998)
Macaskill, Greg, BSc(Hons) *Adel.* GradDipComStudies *RMIT*
McCormack, Silvia, BA *UWA*, GradDipEd, MA *Deakin* (from October 1998)
Murphy, Martin, BA, DipEd, MEdStds *Monash*, GradDipSocialStatistics *Swinburne* (from October 1998)
Robbins, Frank, BSc(Hons), PhD *Melb.*
Routitsky, Alla, BEd, PhD *Voronezh*, DipEd *Melb.* (from September 1998)

Administrative Staff

Firth, Patricia, (maternity leave to November 1998)
Peake, Ben (from May 1999)

Assessment Services

Manager

Jackson, Deirdre, BA, TPTC, TTLC *Monash*, Certificate Project Consulting *RMIT*

Project Management Staff

Aldous, Cecily, BA *Melb.*, DipEd(TESL) *LaT.*
Dick, Wendy, BA, MA *Melb.*, TPTC *Frankston/Monash*
Dodds, Robyn, BA *RMIT*, GradDipSoc *LaT.*
MacGregor, Margie, BA *Monash*, CertManDev *Glasgow Caledonian U.*, CertTEFL, GradDipAdvProfDev, GradCertAdvProf Dev *Strathclyde*
Martin, Catherine, BA(Hons), DipEd *Melb.* (to August 1998)
Wright, Alayne, BA(Hons) *Otago*, DipT *Dunedin CollEd*

Administrative Staff

Harvey, Georgia
Skinner, Heather
Trang, Lynda, BBA, GradDipInfoMgt, MB(IT) *RMIT* (from September 1998)

Policy Research Division

Associate Director

Ainley, John, BSc, MEd, PhD *Melb.*, FACE

Administrative Officer

Zubrinich, Julie, BA *UWA*, BEd *Deakin*

Principal Research Fellows

McKenzie, Phillip, BEd(Hons), DipEd, MEd, PhD *Monash*, FACE
Splitter, Laurance, BA(Hons) *Monash*, BPhil, DPhil *Oxf.*, FACE

Senior Research Fellows

Collins, Cherry, BA(Hons) *Adel.*, EdD *Harvard*, FACE (to January 1999)
de Lemos, Marion, BSc(Hons), MSc *Natal*, PhD *ANU*, MAPsS
Harvey-Beavis, Adrian, BA *Chisholm*, MEd *Melb.* (from January 1999)
Lamb, Stephen, BEd(Hons) *Tas.*, MEd, PhD, *Melb.*
Malley, Jeff, BEd, MEd *Monash*
Marks, Gary, BSc(Hons), MSc. *Melb.*, PhD *Qld*

Research Fellows

Allan, Amanda, BEd, DipTeaching, BA, GradDip (Psych), MA (from March 1999)
Frigo, Tracey, BBSoc *LaT.*, DipEd *Bendigo*, GradDipAdol&Child Psych *Melb.* (from January 1999)
Fullarton, Sue, BAppSci *RMIT*, DipEd *Monash*, GradDipMathsEd *Deakin*, MEdSt, PhD *Monash* (from October 1998)
Harvey-Beavis, Adrian, BA *Chisholm*, MEd *Melb.* (to December 1998)
Hollingsworth, Hilary, BEd (Primary), DipT (Primary), PhD *Deakin* (from March 1999)
Johnson, Trevor, BSc, AUA, DipT *Adel.*, MA, MEdSt, PhD *Flinders*
Long, Michael, BA(Hons) *ANU*
Mellor, Suzanne, BA, DipEd *Melb.*, BEd *LaT.*, MEdSt *Monash*, MACE
Robinson, Lyn, BA, DipEd *Monash*, GradDipUrbResrch&Policy *Swinburne* (from January 1999)

Research Officers

Fleming, Marianne, BSc *Melb.*, BA *Swinburne*
Robinson, Lyn, BA, DipEd *Monash*, GradDipUrbResrch&Policy *Swinburne* (to December 1998)

Administrative Staff

Fleming, Nicole, BBSoc *LaT.*, PGradDipPsych *Melb.*

International Development Division

Assistant Director

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

Administrative Officer

Kruse, Julie

ACER Press

Head of Division

Genat, Patricia, DipEd *Deakin*, GradDipLib, BEd *Melb.*, MBus(Mkt) *Monash*

Administrative Officer

Taylor, Margaret

Thomson, Virginia, BA *Monash*, CertBusStud *RMIT*

Promotions and Marketing Coordinator

Bonaccorso, Mara, BA (Management Communication) *Deakin*

Education

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

Parenting

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

Personnel and Human Resources Management

Power, Marian, BA(Hons), MA (Applied Psychology) *Melb.*, GradDip Careers Educ *RMIT*, MAPS, MAHRI (from August 1998)

Human Resources and Psychology, Sydney

McColough, Melissa, BSc(Psych)Hons, MPsych(Applied)Hons *UNSW*, MAPS

Psychology

Verbyla, Daiva, BEd *Melb State Coll.*, GradDipAdol&ChildPsych, MEdPsych *Melb.*, MAPS, MISH

Customer Service

Manager

Higgins, Christine

Campbell, Yvonne, (to March 1999)

Gardiner, Jan

Keele, Julie

Manuel, June

Rankin, Stephanie

Whitehead, Simone

Store and Despatch

Manager

O'Neill, Steven

Gilder, Peter

Matravers, Philip

Smith, Ian

Publishing

Manager

Morris, Deirdre BA *ANU*

Senior Editor

Miller, Elaine, BA(Hons), MA (to September 1998)

Cantrill, Siobhan, BA *Sydney* Dip Editing & Publishing (from October 1998)

Production Manager

Seddon, Roger

Publishing Assistant

Phillips, Michelle, BA(Hons) *LaT.* (to March 1999)

McGinnes, Andrew, BMedia Studies *RMIT* (from April 1999)

Corporate Services Division

Corporate Services Manager

Moore, Robert, BCom *Melb.*

Human Resources Coordinator

Fiona McSweeney, BA(Hons) *Melb.*, GradDip IR/HRM *RMIT*

Administrative Officer

Mitchell, Kylie (to August 1998)

Sonia Bowditch, BA *ANU* (from March 1999)

Receptionists

Coyne, Meg

Lowry, Ann

Richter, Beatrice

Accounting and Finance

Manager

Dawes, Wayne, BBus *Chisholm*, FCPA

Assistant Accountant

Cameron, Andrew, BCom *Deakin*

Administrative Staff

Car, Lyn

Evans, Dilsie

Harvey, Faye

Hodder, Gwen

Thomas, Alison, BBus(Acc) *Bendigo*

Information Technology

Manager

Crossland, John, BSc, DipEd *LaT.*,
GradDipMgtSys *Swinburne*

Computer Services

Hare, John

Miller, Hilary, BA *Monash*,
GradDipAppSocPsych *Swinburne* (to
September 1998)

Nguyen, Daryl, BA(Computing) *Monash*

Owers, Patricia (from March 1999)

The Cunningham Library

Manager

Findlay, Margaret, BA *VicColl.*, AALIA

Senior Librarians

Cuskelly, Maxine, BA *UNSW*, GradDip Lib
UNSW, GradDip Ed & Pub *RMIT*, ALIA,
AITEA

Haby, Steven, BSocSci *RMIT*

Librarians

Hughes, Stuart, BA(Hons) *Otago*, MA
Monash, AALIA

Psiliakos, Lula, BBus *RMIT*, AALIA

Library Technician

Ashfield, Cheryl, AssocDipAppSocSci
(Lib&InfSt) *Box Hill TAFE*

Brinson, Laura, AssocDipAppSocSci
(Lib&InfSt) *Swinburne*

Communications and Project Publishing

Manager

Robinson, Julia, BA(Journ.) *RMIT*

Project Publishing Coordinator

Rigby, Caroline (from April 1999)

Clark, Judith

Locock, Gloria

Roberts, Tracey, BSc(CompSci) *Melb.*

Records Services

Manager

Fraser, Simon

Bonning, Judy

Project Services

Manager

Buckley, Carole

Cowhey, Pauline

Underwood, Catherine, BA *Swinburne*

Despatch

Evans, David

Photocopying Services

Koglin, Dianne

Cleaning Services

Skiadopoulos, Marina