

AUSTRALIAN COUNCIL FOR  
EDUCATIONAL RESEARCH

AUS

THIRTY-SEVENTH  
ANNUAL REPORT  
1966-1967

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Frederick Street, Hawthorn, Victoria 3122

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## Members of Council for 1966-67

*Including Annual Meeting 1967*

### COOPTED MEMBERS

Major-General Sir Alan Ramsay, C.B., C.B.E., D.S.O., E.D.,  
B.Sc., Dip.Ed., F.A.C.E.

**President**

Professor Sir Fred Schonell, M.A., Ph.D., D.Lit., F.B.Ps.S.,  
F.A.C.E.

**Vice-President**

Mr W. Wood, M.A., B.Ed., A.B.Ps.S., F.A.C.E.

**Vice-President**

Dr J. A. L. Matheson, M.B.E., M.Sc., M.C.E., Ph.D., M.I.C.E.,  
M.I.Struct.E., M.I.E., F.A.C.E.

**Co-opted member**

Professor G. W. Bassett, M.A., Dip.Ed., Ph.D, M.A.Ps.S., F.A.C.E.

**Co-opted member**

Professor P. H. Partridge, M.A., M.A.C.E.

**Co-opted member** (joined Council August 1967)

A. H. Webster, B.A., B.Ec., M.A.C.E.

**Co-opted member** (joined Council August 1967)

### MEMBERS APPOINTED BY STATE INSTITUTES FOR EDUCATIONAL RESEARCH

Associate-Professor D. Spearritt, M.A., M.Ed., Ed.D.

**New South Wales**

G. D. Bradshaw, B.A., B.Sc., Dip.Ed., M.A.Ps.S., M.A.C.E.

**Victoria**

S. A. Rayner, M.A., M.Ed., Ed.D., M.A.C.E.

**Queensland**

K. L. Berndt, B.Sc., B.A., M.A.C.E.

**South Australia**

S. W. Woods, B.A., B.Ed., C.Ed.A., M.A.C.E.

Alternate in 1967 for

R. S. Adam, M.A., Dip.Ed., M.Ed., Ph.D., F.A.C.E.  
**Western Australia**

H. L. Dodson, B.A., B.Ed., M.A.C.E.  
**Tasmania**

*Footnotes:*

1. **President.** At the Annual Meeting in 1967 Sir Alan Ramsay announced his retirement, and the Council elected as his successor T. L. Robertson, M.A., Ph.D., Dip.Ed., F.A.C.E.
2. **Observers.** At the Annual Meeting of the Council, Mr F. H. Brooks represented as an observer the State Directors-General of Education, and Mr A. P. Anderson was present as an observer for the Commonwealth Department of Education and Science.



MAJOR-GENERAL SIR ALAN RAMSAY  
C.B., C.B.E., D.S.O., E.D., B.Sc., Dip.Ed., F.A.C.E.

## Appreciation: Retiring President

Sir Alan Ramsay accepted the Presidency of the Council when Professor C. R. McRae resigned in 1960 owing to ill-health.

At the Annual Meeting in 1967 he announced his retirement, and the Council recorded the following minute of appreciation of his services:

'The Council of the ACER records with deep appreciation the services given by Sir Alan Ramsay to the ACER during his term of office as President from 1960 to 1967. To its annual deliberations as well as to the work of the Council between meetings, he has given in a warm and friendly way skilful guidance and firm direction where needed.

During his term of office the Council's activities and staff grew rapidly, and a number of major decisions of policy were taken, including that of building and moving to the Council's own premises. His interest in that progress, his readiness to listen to plans and proposals for further steady development, and his capacity for wise and realistic decisions, have been greatly valued by all those members of Council who have been fortunate to share with him the management of Council affairs. They all join in wishing him a continued fruitful retirement.'

*Annual Report to the Council by the Director for the Year  
1966-67 presented at the Annual Meeting of the Council,  
7th and 8th September, 1967*

## Part 1: Some Significant Developments

If the need continues to grow, as I think it must, for evaluation of current practices in education, for a rapid expansion of carefully appraised innovation and experiment, and for continuing research both on learning and on the presentation of well-designed educational materials, there is little doubt that given the resources the Council's work and activities must expand. The record presented in the following pages is itself one of steady activity in all three aspects of the Council's work—research, development and services. My hardest task, as I look back, has been to say 'No' to so many ideas for research, for experiment, for development, because the staff and facilities were already fully if not over-committed. Possibly the next hardest has been to give to many, eager to take up research work or to assist in development, the necessary warnings about undue hopes of epoch-making results and about expecting too much too soon.

In the present state of the science of research in education we can establish the obvious facts of many general situations fairly rapidly without undue difficulty where survey techniques, based on sampling from known populations, are feasible. We can establish with reasonable accuracy the short-term advantages and disadvantages, or the merits and defects, or the results in pupil achievement, of innovations and changes. It is much more difficult and more time consuming to isolate and to establish the lasting value of particular teaching procedures, or particular modes of presentation of instructional materials, or particular kinds of organization of school or class. General laws, when research establishes them, appear to need modifications and qualifications in particular educational situations. To build up knowledge of these modifications and qualifications in the apparently limitless variety of teaching and learning situations is a long task, requiring many hands.

Knowledge of this was at the back of the statement repeatedly made at the Research Conference held in May last by the Council (see pp. 8-9), that on many crucial matters we need to know a great deal more which can only be discovered through research.



It is easy in this situation to feel that our efforts are so small beside the magnitude of the task, that we can offer little that is helpful in knowledge about the fundamental processes of education, or towards the improvement of some current practice or mode of organization which is not proving satisfactory. It is easy therefore to be despondent. It is more difficult and at the same time more rewarding to analyse the situation and to bring to bear on its component parts such knowledge as is available. It is frequently true that such analyses and applications will yield no certainty, but hypotheses only, and therefore that they put the applied researcher into a position where he can make no strong recommendations, but only suggestions for further work, for the testing of hypotheses, and for action based upon such testing. It is only by such constant testing, change, retesting and further change that improvement will occur.

The field of education is so enormous, of course, that even if the Council's total resources were multiplied ten-fold it could undertake research and development on only a relatively small part of that field. The selection of projects of major general importance is neither an easy task nor one to be carelessly approached. Personal interests, and the narrowing of viewpoint that often accompanies specialized study or the cultivation of a field of educational practice, can blind even the most able to important problems and to matters of high priority outside those interests and fields. Ascertaining the views of a wide range of those concerned with education, which the state institutes have this year undertaken at the Council's request, will help, I have no doubt, to correct the potential biases which I and other members of the staff of the Council may develop because of our immediate work, and which the Council itself may unconsciously have because of its composition. Soundings of the views and perceptions of others, available to the Council at regular intervals, should in association with the knowledge and experience of its members ensure that the Council's programme is concerned with important problems.

### *Composition of the Council*

Following the decision made by the Council in 1966 to increase its membership by cooption of four to six additional members, the Executive made recommendations to the Council in April. As a result, in order to add to the Council's range of interests and experience in education, Professor P. H. Partridge and Mr A. H. Webster were invited and agreed to join the Council for a term of

four years, commencing at the 1967 Annual Meeting. Representation from industry and commerce was given a good deal of consideration. At the Executive's wish I discussed the proposal with potential representatives, and as a result action to invite such representatives has been deferred. However, a small number of distinguished leaders, known to have an interest in educational problems, has been approached by letter to seek their statement on outstanding problems which might lend themselves to research.

### *Changes in the Research Scene*

At least four events of some significance to the research scene in Australia have occurred during the year covered by this report.

In November last it was announced that a Commonwealth Ministry of Education and Science had been created, and that a Department of Education and Science was to be established. It seems to me inevitable that as Federal policies are fashioned they will require facts rather than opinions as a basis, and that research upon them will be called for. It is of more than passing significance that \$250,000 was provided by the Commonwealth over the years 1967-68-69 for research into aspects of the Colleges of Advanced Education, and that the Commonwealth Advisory Committee on Advanced Education has established a sub-committee to advise it on research projects and proposals.

The availability of funds of this 'magnitude' by Australian standards, for research studies into a small segment of the Australian education scene, is in my view likely to have far more beneficial effects on practice than grants for education projects which may be made through the Australian Research Grants Committee. The latter will be relatively few and there is no mechanism which would concentrate them on a limited field of inquiry.

Shortly afterwards applications were called for the head of an Educational Research Unit to be set up within the School of Social Sciences of the Institute of Advanced Studies of the Australian National University. Such a unit within such a university, with its high level and wide range of academic excellence and its steady output of research, should have a major influence on the study of the web of social forces within which education functions, and of its impact upon that web.

At Macquarie University the first appointment was made to the Centre for the Advancement of Teaching. Although the direction that the Centre will take, and the full scope of its proposed

activities, are still not certain, there seems little doubt that it should make a considerable contribution to curriculum and learning.

The fourth event was, I believe, the conference on Research in Education arranged by the Council at the Melbourne Teachers' College in May last. This was significant not only because it was the first of its kind, but because it brought together, for formal and informal discussions, research persons from USA, Canada, New Zealand, New Guinea, and all the Australian states and territories. Both state departments and universities were represented, as were experienced research people from disciplines other than education. Although I was disappointed that we reached few conclusions about priorities, or about how best to use our all-too-limited Australian resources, or how best we should develop a stronger research effort, I was perhaps unduly sanguine about what could be done in the space of six days, even within a group so willing to work hard as those at the conference. The opportunity to find out what others were doing, the initiation of associations which will later be fruitful, and the awareness of others' problems, were probably the most important outcomes.

## Part 2 : Activities 1966-1967

### RESEARCH AND DEVELOPMENT

Mr M. L. Turner

#### *Research Conference*

The theme of the research conference, held from May 18th-23rd at the Melbourne Teachers' College, was 'How to make research into education as valuable as possible in the practice of education in Australia'. Apart from ACER staff, over 70 individuals attended, most of them for the whole period of the conference, and with more than 40 in residence at the College. The generosity of the Carnegie Corporation enabled us to have at the Conference Dr W. G. Fleming of the Ontario Institute for Studies in Education, and Dr S. C. Ericksen of the Center for Research on Learning and Teaching of the University of Michigan. Dr Ralph Flynt, Associate Commissioner for International Education of the US Office of Education, was to have attended also, but at the last minute pressure of official duties compelled him to withdraw. Dr J. A. Culbertson of the (US) University Council on Educational Administration, who was in Australia at the time for other purposes, joined the Conference for several days and was able to address participants on the general theme of research in USA, which Dr Flynt was to have dealt with. Introductory and background papers were given, and discussed, on

- the social context within which education and research will operate in the next decade in Australia (Professor P. H. Partridge)
- research within a state department of education (Dr H. S. Wyndham)
- the Ontario Institute for Studies in Education (Dr W. G. Fleming)
- the work of the Center for Research on Learning and Teaching at the University of Michigan (Dr S. Ericksen)
- a headmaster's view of research and the school (Mr B. W. Hone)

Four papers on the nature and results of research into specific aspects of education were prepared and distributed, either prior to the Conference or before the particular session, and discussed first in small groups and later in full session with the author—

- classroom practices (Professor J. Campbell)
- school organization (Mr R. W. McCulloch)
- social theory underlying education (Dr J. Wylie)
- factors affecting the educability of children (Professor H. Philp)

All these papers reported a considerable volume of research but drew attention to gaps in it, and to further needed research.

Three papers, dealt with in the same way as the previous group, analysed the present situation in Australia and presented suggestions for improvement in

- current resources for research and their effective use (Professor R. Selby Smith)
- the training, recruitment and selection of the research worker (Messrs G. D. Bradshaw and G. McK. Brown)
- overcoming limitations to the rapid and effective use of research findings (Drs S. B. Hammond and N. Cox)

With the exception of the middle group, the papers presented at the Conference, and a final brief statement in which I attempted to sum up the main points arising from the discussion and to consolidate the various suggestions made, are being prepared for publication.

#### GENERAL RESEARCH

##### COMPARATIVE-HISTORICAL

Senior Research Officer: Mr R. T. Fitzgerald  
Research Assistant: Mrs P. Segall

#### *Secondary Education in Australia*

The manuscript of a Review of Secondary Education in Australia over the last decade is in its penultimate form. Completion has been delayed in order to include the latest figures on enrolments, teachers, and expenditure, and the data and developments discussed will now include at least those for 1966. The topics covered are recent trends in growth of enrolments, patterns of expenditure, school staffing, school organization, courses and examinations.

#### *Quarterly Review of Education*

An appraisal of the information services available to educators in Australia suggested that a quarterly review would be valuable,

each one of which dealt with one or two matters of importance and attempted to bring together information not otherwise readily accessible in consolidated form, or coordinated. A pilot number dealing with (a) reorganization of Catholic schools in New South Wales, and (b) recent developments in non-university tertiary education in Australia, was issued in June, and accompanied by a request for opinions on the proposal that a regular review should be available on subscription. No adverse opinion has been received, and all comments so far received have been so favourable that we have decided to go ahead with at least the first volume of four numbers.\* This review seems to me a likely way to put into effective practice the decision made by Council in 1964, that it should prepare and distribute collations of information on particular matters, based on information available to it, which deal with matters of current concern in Australia.

### *Abstracts*

(a) We provided to UNESCO abstracts of important documents published in Australia in 1966 which related to Australia as a whole rather than to one state. The scheme has not been continued in 1967.

(b) In the constant process of evaluation which we carry on of the use made of the *Australian Education Index*, we found a number of users interested in abstracts of some of the important documents referred to. Many of the users are in institutions where only a small number of journals or periodicals are received, and where often it is difficult to obtain access to say an official report, or a published Act of Parliament. As we were already making abstracts of much of this material as well as other matter for the Uniterm Coordinate Reference system, we decided to reproduce a small number of abstracts, and for a period of 12 months to distribute these on a trial basis to such centres as departments of education, research branches, and schools of education. Already the response is enthusiastic and the service may fill a real need.

(c) The response in 1966 to the scheme for the distribution of abstracts of unpublished research studies was a poor one, and as a result we had decided to end it. However, many members at the research conference referred to the need for a better dissemination of research findings, and we decided to continue the scheme for one more year at least. One response to the approach

\* The first appeared in September and dealt with changes in expenditure on education over the last decade.

made this year was that a special abstract section might be included in *The Australian Journal of Education*. A close examination of the costs of this proposal will be necessary. Although I still believe this distribution of abstracts to be a potentially valuable service, it does not appear to be greatly used by recipients. One difficulty is, of course, in the processing by libraries of the abstracts.

(d) ERIC. The rapidly developing scheme in USA for the dissemination of reports on completed research studies, organized by the US Office of Education with the acronym ERIC (Educational Research Information Center), has interested us, and we have obtained a good deal of information about both the central and regional clearing houses already set up. As a result of an inquiry as to whether materials from outside USA are to be included, we have been asked informally to put forward any views we might have about the mechanisms for collection and inclusion of Australian material.

#### *Music Education in Primary and Secondary Schools*

Mr Bartle has completed the final manuscript of his report on music education in primary and secondary schools in Australia, and it is now with our publishing staff. Unavoidable delays in the final preparation occurred, as Mr Bartle was called upon unexpectedly, owing to a colleague's death, to undertake additional duties after he left ACER. The manuscript, however, has benefited from close and critical reading by music educators, and in the final form should be a valuable account of current practices.

#### *Bibliographies*

(a) Mr R. McSweeney has already compiled an impressive list of references for his bibliography of Australian education. He visited the southern states early in the year and examined library resources in both Sydney and Melbourne.

(b) We have undertaken to draw up, in response to overseas requests, bibliographies of Australian studies, either reported or unreported, which have made use of

- (i) the Bloom taxonomies of educational objectives;
- (ii) Piagetian-type tests, or developmental 'tasks' based on his approach.

Letters have been sent to all likely centres in connection with the latter, and an interim list prepared.

*Interstate Movement of Pupils at Secondary Schools*

Following upon a number of enquiries made to us about whether there was data relating to the extent of the interstate transfer referred to in public discussion about uniform school organization and common curricula, we wrote to state departments, Catholic offices of education, and to a small number of independent schools, asking whether such data was available for students at the secondary level, and if not whether, if required, it could be quickly collected. Some data is available in some state departments, but it does not appear to be collected regularly. A special inquiry would be needed to obtain the information.

## ORGANIZATION, CURRICULUM AND METHODS

Senior Research Officer (to May 1967): Mr J. P. Keeves  
From September 1967: Mr M. Rosier

*Mathematics in the Primary School*

The guidebook to mathematics for primary schools, in the preparation of which Mr Keeves was deeply involved, has been printed in Victoria and New South Wales, and is available in all states with the title *Background in Mathematics*. Mr Keeves corrected the proofs and prepared the index for the New South Wales printing, in addition to his earlier work on the Victorian printing.

*Programmed Instruction—Calculus*

A complete revision of the first experimental edition of the programme in matriculation level calculus has been made, using the comments on that edition made by teachers and students, and incorporating tests in each section. Dr Davis gave us great help in the final revision and alterations made have his approval. The new revision has been printed and is now on sale.

*Aims and Objectives of Teachers' Colleges*

In order to obtain a better idea of what would be involved in any study in depth of the aims, achievements, and organization of teachers' colleges in Australia (which would be required if the 'Toledo' study reported on last year eventuated), Mr Keeves spent some time with the staff of one of the metropolitan colleges in Victoria discussing their objectives, their methods, and their modes of evaluation. Although relatively little was done, it has been sufficient to show that lengthy personal visits to colleges would be needed if such a study were to eventuate.



### *Learning and Teaching in Colleges of Advanced Education*

An agreement has been signed with the Department of Education and Science for the ACER to undertake a three-year study of aspects of teaching and learning in one or two selected subjects in the most popular courses in the colleges of advanced education, viz. engineering, business studies and commerce. It has been necessary to make two appointments for this study, one in each field, and to rent rooms to house the study. Mr B. Wise has been appointed for work in the business studies field (accountancy being the particular subject) and Mr B. C. Horne for the study in engineering, where physics or/and mathematics will be the subject or subjects to be studied. After an exploratory year using Victorian institutions, the study will spread to the other states.\* It seems likely that we will be able to integrate this study with others to be undertaken in Victoria.

### *Study of Society*

Following a request to us to provide information, which we had compiled for other purposes, to assist in the Unesco Seminar to be held in August 1967 in Melbourne on the Teaching of the Social Sciences at Upper Secondary School Level, we addressed at very short notice an inquiry to all secondary schools throughout Australia seeking information about courses given, time allotments, textbooks, and related matters. Mr Bennett, who undertook the inquiry, will be using analyses made of the replies (over 80 per cent of the questionnaires sent out were returned with complete or incomplete information) both for the Seminar and for further information to be sent to the IEA Committee for Civic Education. He has had a most difficult task in handling a big and complex inquiry at short notice, but we thought that the importance of the Seminar justified emergency measures.

#### MEASUREMENT AND EVALUATION

### *International Study of Educational Achievement (IEA Project)*

(a) Mathematics. In the mathematics phase of this project, pupils and teachers in 166 government schools in five states of Australia participated. Twelve countries were involved: Australia, Belgium, England, Federal Republic of Germany, Finland, France, Israel, Japan, Netherlands, Scotland, Sweden, and the United

\* Mr Wise took up his appointment in September, and Mr Horne will commence in January 1968.

States. The international report was published in such a way that press publicity about it reached Australia before either press releases or the publication itself had reached us.

Information about Australian performance on the tests, however, was in the hands of the departments of education before then, and a report was sent to participating schools immediately the international report was released. This report, with the title *Evaluation and Achievement in Mathematics*, was primarily concerned with the construction of the mathematics tests, with the performance of the Australian students who took the tests at the two levels we were involved in—13-year-olds, and pre-university mathematics students—and with certain technical characteristics of the tests and their individual items.

A national report, referred to in the last annual report, was completed after the international report was published, and is awaiting final comment from one state department of education before being submitted to the printer with the title *Variations in Mathematics Education in Australian Schools*.

(b) Phase 2—Science, Reading Comprehension, Civic Education, Literature, French as a Foreign Language, English as a Foreign Language. With the exception of English as a foreign language, we agreed to participate in the preparatory stages of Phase 2 of the project, in which the subjects listed are to be studied. Our participation involves comments on the rationale of the study proposed, provision of information about courses of study and other related matters, preparation of suggested test questions, examination and criticism of statements of objectives, and similar work. It is already apparent that considerably more work than was initially contemplated has been and will be required. This will be costly, and my present view is that we should limit our final participation to two subjects—science and reading comprehension.

(i) Science. Mr Keeves was invited to be a member of the International Committee for Science Education, and will continue in that position although he has now left us.

(ii) Travel. Mr Keeves attended a meeting in Hamburg of the International Committee for Science in November last, and I attended a meeting in London in March of this year of the International Council, at which a number of decisions were made about the continuation of the project.

(c) Attitudes to Mathematics. Mr Keeves used some of the material on attitudes drawn from the international study, in asso-

ciation with the results of attitude scales he prepared, in a thesis successfully presented to the University of Melbourne. A brief report on this work is available for reference at ACER in manuscript form, but, owing to the pressure on our Publications Fund, I cannot envisage that we can at present distribute copies of it.

#### *Commonwealth Secondary Scholarships: Intercorrelations*

ACER had full responsibility for marking papers in the 1966 CSSE examinations in four states—Victoria, South Australia, Western Australia and Tasmania. Tables of intercorrelation between the several parts of the Written Expression paper, the whole of that paper, and the papers in Science, Quantitative Thinking, and Humanities were again compiled for each state separately. As a result of broadening the range and type of questions used in the Humanities paper, the correlations between the Humanities paper and the Science and Quantitative Thinking papers, which in 1965 we thought were higher than they should be, were reduced. Mr Renehan has directed this work, as well as that reported in the paragraphs on 'Validity' and 'Follow-up at University Level' below.

#### *Commonwealth Secondary Scholarships Examination: Validity*

(a) Analyses have been completed of the relation between the students in Western Australia who took the CSSE examination in 1964, and their Leaving results in 1965. The correlation between (i) the sum of the Written Expression and the best two of the other three CSSE papers, and (ii) the best five subjects at the Leaving Certificate level in the following year, for 212 candidates, drawn systematically from the candidates of 1964, is about 0.50.

(b) Correlations with school rank orders. Correlations between the ranking given to candidates in Victoria in 1966 by their schools, and the rank order of the candidates in the examinations, have been taken out for all schools. There is considerable variation between schools, as might be expected. The average correlation over schools presenting more than 30 candidates is about 0.70. We think this is a reasonable figure, but are deferring a clearer judgment on it until we have examined the relative predictive value of marks and school ranks separately and in combination.

#### *Commonwealth Secondary Scholarships Examination: Reliability*

Samples of 1200 children in Victoria and 800 in Western Australia were asked to sit for the 1966 papers a second time between six and eight weeks after the actual scholarship examination, and

more than 90 per cent did so. The principals of their schools answered a questionnaire about the extent of the discussion of the papers that ensued between the two testings. The correlations have been calculated between test and retest for the Science, Quantitative Thinking, and Humanities papers, and the remarking done for the Written Expression composition papers. Test-retest correlations differ as between the papers, but are all between 0.8 and 0.9 in both states. (Approximately 300 children in Victoria and 200 in Western Australia did each paper twice.)

*Commonwealth Secondary Scholarships Examination:  
Follow-up at University Level*

Of these candidates whose papers have been marked by ACER the Victorian ones who sat for one-year examinations in 1964 are the only ones who can readily be followed up at university level. They have all completed secondary education now, and about one quarter of the first 4,200 of the candidates (of whom about 2,800 received scholarships) were at university in 1966. It is of interest that, even with a gifted group of this kind, schools have been unable to give the post-school destinations of about one fifth, and have apparently given wrong information about another 5 per cent. Detailed work on the follow-up study will constitute most of the research on the CSSE papers in 1967-1968.

*Commonwealth Secondary Scholarships Examination:  
Follow-up of Small Sample of 1966*

In an endeavour to obtain some data about the home background of scholarship winners, about candidates for whom there are discrepancies between scholarship marks and school examination performance and prediction of later success, and about the possible effect of the award or non-award of a scholarship on family plans, we have approached a carefully drawn sample of 28 schools in the Melbourne area, and will follow-up about 400 of their 1966 applicants for scholarships, by examination of school records, discussions with teachers, and if possible interviews with parents.

LEARNING IN SCHOOL SITUATIONS

Senior Research Officer:

To Feb. 1967, Miss M. C. Nixon

From Feb. 1967, Mrs M. de Lemos

Miss Nixon is re-examining data obtained in her cross-sectional study of classification tasks and ability in language, and following

up the five-year-olds first tested in early 1966. By agreement, she has taken with her to Monash University, where she took up an appointment as Senior Lecturer in 1967, the records of the children she is studying. These will be available to ACER if required. Miss Nixon has agreed to prepare a report on her study when the re-examination of data is complete.

Mrs de Lemos, who was awarded her Ph.D. from ANU shortly after taking up her appointment with ACER, has done a considerable amount of work with Piaget-type tests of child development, and particularly with tests involving 'conservation' in the Piagetian sense. Some of this work threw doubt on the invariance of the order of successive stages upon which Piaget had based at least part of his theory of intellectual development, and raised questions such as the role in assessed performance of experience in the tests and of the order in which tests are taken. Mrs De Lemos' study, being undertaken with children aged 6 to 9 years in four metropolitan schools, will explore aspects of experience with the tests and make a study of the effects, on the apparent development of conservation, of presenting the tests of conservation of weight, volume, and quantity in different orders.

#### PERSONAL RESEARCH

##### *Facet Analysis of Verbal Comprehension*, M. L. Clark

During the year scoring criteria have been prepared and validated for all free-response tests in a battery of reading and listening comprehension tests. Test papers for a final sample of 163 girls and 198 boys at Grade 7 level have been marked, and normalized standard scores determined. These are in process of transfer to punched cards for computer processing. Inter-correlations of the 64 tests will be factor analysed to test hypotheses concerning the structure of the tests. In addition, the Guttman-Lingoes smallest space analysis programmes will be used to see whether there are hierarchical patterns in the tests based on their degrees of complexity.

##### *The Learning of Symmetry Principles and Their Transfer to Tests of Spatial Ability*, M. L. Turner

Factor analyses have failed to produce convincing argument, either of logical or empirical kind, on the nature, especially the differential nature, of spatial abilities. Considerations of a large number of tests of spatial factors suggested that a spatial ability might be considered to be an aggregate of discrete principles or learning-sets. It also suggested that certain classical symmetry prin-

ciples were a likely major component in performance on very many spatial ability tests. Learning materials were devised to teach three different symmetry principles (for example, the plane of symmetry, bilateral symmetry, or mirror image symmetry principle) to experimental groups of Grades 4 and 5 children. On post-testing, the experimental groups and the control group did not differ on tests of the verbal, perceptual speed, or perceptual closure factors, but there was substantial transfer in the experimental groups to those items of spatial ability tests where it was previously hypothesized that acquisition of one or more symmetry principles would facilitate performance on such items. The test evidence also strongly supported the hypothesis that these symmetry principles are learning-sets and are acquired on an all-or-none basis. Most of the variance of certain spatial tests was found to be accounted for by the presence or absence of a particular principle: that is, that each item was substantially testing for the presence or absence in the child of the same principle.

Part of the learning experiences of the children were separately timed tasks taken in order. Repeated measures, mixed-effects, analysis of variance models based on a 15 x 15 Latin Square design were used to estimate variance components in task-taking or learning times. The model was derived from Cronbach's theory of generalizability. In the conditions of the experiment with these children it was shown that variance components associated with tasks and individual differences in children were large, compared with the variance component associated with order of presentation (averaged learning). Certain other variance components, for example that associated with task x order interaction, were judged negligible. There were indications that the task variance might be largely explained in terms both of the objective properties of the geometric models which constituted the stimuli for the tasks and of a mode of perception common to all subjects, and also that the individual difference variance could be largely explained in terms of a complex of motivational, attitudinal, and, perhaps, cognitive 'set' variables. These indications deserve further research.

Of interest to practical educators is the fact that all subjects achieved a mastery criterion on each of the symmetry principles, but that for each principle the slowest child took ten times as long to achieve mastery as the fastest child. If this finding were to be generalized to the learning of the large variety of learning sets or principles which constitute much of cognitive classroom learning, those devoted to individualizing instruction with mastery in view

should be warned of the problems implicit in this factor of ten in time.

#### MISCELLANEOUS PROJECTS

##### *Directory of Philanthropic Trusts*

Mr E. K. Hart, previously a senior partner in the legal firm of Arthur Robinson & Co., took up an appointment in March as the research officer in charge of this project, which is fully supported by the Myer Foundation. He has accumulated a good deal of valuable information about trusts operating in Victoria, or with headquarters in Victoria, and is about to extend the inquiry by visits to the other states, where he has already established liaison by correspondence with individuals and institutions likely to be able to help him. Support for the Directory has been mixed, as we expected. Some trustees are obviously reluctant to give information about their activities for fear of a deluge of applications. Others take the view that they have an obligation as trustees to make their trusts widely known so that they will attract all who could benefit by their help.

We expect to have a Directory of about 150 pages, with very useful information in it both to trustees of existing trusts, potential founders of trusts, and potential applicants.

##### *Review of Commercial Education*

The Commercial Teachers' Association in Victoria is undertaking, also with the financial support of the Myer Foundation, a one or two year study of such aspects of commercial education in schools as the destinations of ex-students from commercial courses, the qualifications of teachers, the expectations of employers, the automation of office work, and related matters. We have provided office accommodation for Mrs K. Gizycki, the research officer concerned, and I am acting as a member of the Advisory Committee for the project. Much of the information gained should have a wider interest than for Victoria alone.

#### PUBLICATIONS

##### BOOKS AND PAMPHLETS

*Marking English Compositions*, G. Gosling (No. 81 in ACER Research Series)

In December 1966 an edition of 1,000 copies was published of this report on the reliability of a well planned scheme for marking

the essays submitted by candidates for the Commonwealth Secondary Scholarship Examinations. It has been highly commended by Wiseman in the UK and Diederich at ETS as a research study and as a report on a good marking scheme well illustrated by examples. As an example of book production in a paper-back format it was highly commended in the recent Book Publishers' Awards.

*Education in the Inquiring Society*, M. Mackie

In December 1966 an edition of 2,000 copies of Miss Mackie's brief exposition of a philosophy of education for Australians was published. In its proof form it had been highly commended by several principals of teachers' colleges, and others concerned with courses at primary teachers' colleges. It earned a first place for book production in the paper-back section of the Book Publishers' Awards. We hope that in 1968 it may be recommended or prescribed as reading for students in teachers' colleges.

*An Australian School at Work*, K. S. Cunningham and D. J. Ross

A number of unavoidable delays prevented this appearing until early in July, when an edition of 1,250 was published. The delays were, in a way, fortunate because the book, which is the second of the secondary education monograph series, appeared shortly after the revised edition of the first of the series, W. F. Connell's *Foundations of Secondary Education*.

*Matriculation Calculus*, W. Davis (with assistance from J. Keeves, J. Pringle and L. Stebbing)

This has already been referred to. An edition of 1500 was produced as a 'sales' item. Copies are on sale at a retail cost of \$4.50 per copy, and its availability has been advertised with considerable success.

REVISIONS AND REPRINTS

*Foundations of Secondary Education*, W. F. Connell

This has been a book with steady sales. Since it was first published in 1961, three reprints have been produced. As some of the statistical and other material was out of date, Professor Connell was asked if he wished to revise the material, and this has been done. We expect the demand for the revised edition to be as steady as for the earlier one, and an edition of 1500 copies has been produced at a retail cost of \$2.50 per copy.



*Growing Up in an Australian City*, W. F. Connell, E. P. Francis and E. Skilbeck

Although the material in it is now over 10 years old, this still continues to be regarded as a basic reference, and a reprint has been called for.

*Other reprints* undertaken during the year were:

Listening Aids through the Grades

Making the Classroom Test

Primary School Studies No. 2—The Individual Child

Primary School Studies No. 6—The Purposes of Teaching

Two of the Council's books on library development have been in constant demand for courses for librarians. Both are out of print. The first is the Munn-Pitt report on *Libraries in Australia* which had such an impact when it was published in 1935. The Public Library of South Australia has asked permission to reprint it in its 'Occasional Papers for Librarians' series and this has been given, subject to appropriate acknowledgement, the provision of a small number of free copies for our use, and the availability of other copies at cost. The second is McColvin on *Public Libraries in Australia*. A request has been made for this to be reprinted for use as a textbook for the Registration course of the ALA. We have advised that there is no objection in principle, either on the same basis as for the Munn-Pitt report, referred to above, or perhaps if the demand is large enough, for reprinting by the Council.

### *Special Duplication*

In collaboration with Monash University, where the stencils were typed, we brought out in duplicated and bound form and distributed to selected centres in Australia, the names of which were supplied by Mr R. Lamerand, a comprehensive bibliography which he had prepared on *Teaching and Testing in Foreign Languages*.

### BULLETINS

During the year one Information Bulletin, three Memoranda, and three Bulletins for Psychologists were prepared and distributed.

The *Information Bulletin* (IB 03/66/48) was Mr Bennett's report on the *SRA Writing Skills Laboratory—an Evaluation Report*.

The *Memoranda* were

- M 03/66/5 *Report on the 1964 Victorian Primary Schools Testing Programme*  
 M 04/66/6 *Evaluation of Achievement in Mathematics*  
 M 01/67/7 *Report on the 1965 Victorian Primary Schools Testing Programme*

*Bulletins for Psychologists* Nos. 5 to 7 have been produced. The circulation of the Bulletin has risen to over 1150, and its production is now a considerable item in the budget of Advisory Services. Apart from its value as a means of communicating information about new tests and psychological materials, it is used to report on special projects, or on experience with particular tests, which we think it important to distribute.

#### BOOKS AND PAMPHLETS IN THE PRESS

*New Methods and Materials in Spelling*, D. M. Bennett

This will be a small paper-back in which Mr Bennett examines many of the current approaches to teaching spelling, and looks critically at the present materials, spelling lists, and programmes. Considerable doubt is cast upon many current practices. The monograph should appear in September. It will be No. 82 in the ACER Research Series.

*Measurement and Evaluation in the Secondary School*, S. S. Dunn

Professor Dunn's monograph is the third in the secondary education monograph series. It is a short one, addressed to teachers, with a practical bias. An edition of 2,000 has been printed.

*Variation in Mathematics Education in Australia*, J. P. Keeves

This report presents, in an Australian context, the information on test results, teaching practices, attitudes to mathematics, and the relationship between these and pupil, teacher, school, and certain social variables (such as parental schooling, father's occupation, indices of expenditure on education). Some interstate comparisons are made, but because of the great variety shown in such matters as content of courses, time allotments, and ages of students in supposedly comparable grades, the foolishness of comparison of test results is stressed.

*Music in Australian Schools*, Graham Bartle

This will be No. 83 in the ACER Research Series. It will be a book of about 250 to 300 pages combining description of good and bad practices, statistical data on many aspects of school music, and a number of 'case studies' of actual school situations. The picture presented by Mr Bartle is one of great variety. As a subject its effectiveness, and in some cases its very existence in a school, depends all too often it seems on the chance presence of a qualified and enthusiastic teacher.

*Research in Education in Australia*

This report on the ACER's research conference is being prepared for limited distribution, probably by duplication.

*The Writing Ability of Adolescents*

This selection of good, average, and poor scripts chosen from examination papers submitted for the Commonwealth Secondary Scholarship Examinations in 1965 and 1966 has been brought together by Mr Gosling, who will also provide an explanatory commentary. Although some of the scripts are disturbing sometimes in their content and sometimes in the poor quality of the writing, others are of a high quality which cannot help but impress. The collection will, we believe, help teachers to better assess the quality of their own pupils, and be at the same time a corrective to the occasional jeremiads about the generally poor quality of children's writing.

MANUSCRIPTS IN PROSPECT

We have been asked to consider, for publication, a report on the teaching of foreign languages in Australian schools prepared by Dr O. Wykes and others. The manuscript is in the final stages of preparation, and we expect to receive it in the next few weeks. It arises out of a request for such a report made to the University of Melbourne some years ago by the Australian Unesco Committee for Education.

PERIODICALS

*The Australian Journal of Education* has a circulation of about 4,000. The steady rise in circulation has enabled us to keep subscription costs reasonably low, and to absorb most price increases.

In May of this year the second meeting of the editor and assistant editors of the journal was held. A number of helpful suggestions

were made which should lead to improvement in the presentation of journal material. State institutes will be given space, if they wish for it, to report on their activities, just as the Chapters of the College of Education now do. Reprints to authors will be given in an improved format, and as from the first number of Volume 12, in 1968, there will be 16 more pages in the journal. Costs have risen and will rise, and it is almost certain that the price per volume will rise by 50c to \$3.20 for the normal subscriber and \$2.50 for the institute and college members.

*The Australian Education Index* had 150 subscribers in 1967. The increasing quantity of material to be indexed, and a reduction in voluntary help in indexing, meant that the Index could not be continued in its present form. For Volume 10, therefore, it was decided amongst other things to:

- (a) reduce the volume to three numbers, and not four;
- (b) eliminate a good deal of the less important material.

It became clear, too, that a good deal of overlapping work was occurring between the Index and the Uniterm referencing system. The work done in abstracting for Uniterm has therefore been made available for Index purposes, and a good deal of time and labour thereby saved.

#### *Quarterly Review of Australian Education*

The pilot number, issued in June, was enthusiastically received by almost all to whom it was sent. Present indications are that it will be able to pay its way, or almost so, on a subscription basis. Material will be drawn from journals, periodic or special reports, news cuttings, and similar sources. It is possible that as the dissemination of information is more rapid under this scheme, and therefore more immediately useful than if left to the less frequent books of review which the Council publishes, it may replace the latter to a considerable extent. It should enable a consolidated review to cover less detail but to give more attention to evaluation and to interpretation. The basic material is often likely to be available through the Uniterm reference system. The possibility of use in the Review will act on occasions as a stimulus to seek more information from the sources referred to in the document being read and abstracted for Uniterm purposes.

#### *Library Bulletins*

Library Bulletins Nos 79 and 80 have been compiled and distributed.

### LIBRARY

Librarian: Mrs D. Wells

Limited accommodation, our present inability to employ more staff in the library, and the rapid increase in the amount of educational literature being printed, are three constant problems. Storage and retrieval of information are not likely to be decreasing problems, and like other libraries we must become familiar with, and use for our own advantage, the 'technology' which is being developed to assist those who administer and who use libraries.

Some changes have been made in the internal distribution system for Australian material, as part of the reorganization of *The Australian Education Index*, and further changes in the distribution of other journals will be made shortly. The effect will be to reduce for the library staff the burden of distribution, recording, and follow-up, and to place more responsibility for following up interests on the professional staff. As a direct result, however, we hope to ensure a more rapid availability of new journals and books to staff and others, and a more efficient system of ordering new and significant materials.

The availability of *The Australian Education Index*, and the work done in Uniterm indexing and abstracting, reduces the time spent on library searches for references to Australian material, but the very availability of this service, the wide distribution of the *Bulletin for Psychologists*, and the increase in the number of tests in our test library, have all added to the number of outside borrowers, as well as to staff loans. There is no doubt that the ACER library is the only library available to many teachers and psychologists from which books and other material can be borrowed either by post or by personal application, and to deny them this service could be a real disservice. Nonetheless, some reduction must be made, as the library staff has reached a point where no further increases to the borrowings can be contemplated. The ACER library is providing services which should be available, to teachers in particular, from other sources.

### TEST DEVELOPMENT

Head of Department: Mr T. M. Whitford

The activities of Test Development Department include three categories of educational and psychological test development, viz., contract, service and general. Accent is being shifted away from the former and more time and effort being given to the preparation

of service or testing programme instruments, and to the maintenance and extension of tests for general use.

Recognition of the need to have more tests available to assist the work of secondary schools has led us to begin a programme of developing tests in the four broad areas English, social studies, science and mathematics, which will be suitable for use in the first three or four forms of the secondary school. It is intended that initially the tests developed will be oriented toward what is primarily a practical administrative problem at the first-year secondary level, viz., the assessment of attainment and the prognosis of future success which are basic to selection of appropriate courses for students in the second and subsequent years of secondary education.

Tests of this type could provide a useful standardized supplement to teacher-made tests and assist school staff and administration in reaching important decisions in regard to each student's future schooling. Such *administrative* use of tests does not preclude their use for *instructional* purposes. It is worth commenting that the global assessment of attainment arising as a generalization from the relatively restricted sampling of an entire year's course made by a single test cannot provide the detailed picture of a student's cognitive development which can be obtained by the use of a sequence or programme of tests, each devoted to a more diagnostic appraisal of knowledge and abilities acquired in coherent sections of courses. This is one of the dilemmas facing the test constructor. Frequently in the past he fell between many stools in his attempts to serve many purposes with one test, forced into this situation by an educational setting where schools were unwilling or unable to invest money and student time in extensive testing. To some extent this situation is changing as evidenced particularly by the enthusiastic reception of programmes of diagnostic tests which have been, and are being, developed in certain subjects by ACER. They are seen by teachers as invaluable and integral aids in the instructional process.

While the tests mentioned above are a beginning, and will we believe prove valuable, they do not exhaust either the range, level, or type of test which could be developed and which could play a useful role at the secondary level. The point of entry to secondary school is another decision stage at which adequate appraisal of each student's attainment could aid in such matters as the assignment of students to instructional streams, where such a scheme is operative, or the institution of instructional schemes (general or remedial) suited to individuals or groups of individuals with similar

characteristics on entry. At the higher levels of secondary education, also, there are fields other than those for which ACER has produced or is currently producing evaluation devices, in which there is scope for, and frequently expressed interest in, the development of tests of good educational and technical quality. Primary and tertiary levels too have educational or psychological testing needs yet to be met in fields where ACER can make a contribution. There is obviously increasing interest in improving selection and guidance procedures at entry to tertiary education.

Overall, while there may be some questioning of the value of certain classical kinds of tests, there appears to be a growing appreciation, in the educational community, of a need to improve assessment and examining procedures, coupled with an optimism that improvements can be achieved and a recognition that explicit statements of test purposes and educational objectives are basic to advances. This latter recognition, however, does not automatically bring acceptable solutions of the problems and it is in the area of objectives that test development faces its second dilemma.

In any subject area in Australia at any level there are differences between and within states, not only in respect of specific topics to be treated and their depth of treatment as listed in syllabuses, but also in the expression of the general, long-term objectives or outcomes envisaged as deriving from the course to be followed.

Syllabuses are in some cases prescribed, in some cases suggested, and in others left almost entirely to the professional discretion of the educator.

Even in those states and cases where subject courses are clearly delineated for a particular section of the school system, and in all probability followed by the majority of teachers in that section, there are intra-state and inter-state differences which create a perplexing situation for the test constructor in terms of the approach, range, and depth of content he should incorporate into tests intended for particular age or grade levels. Add to this a further conflict, that between the ideal of individualized instruction and the facts of school organization and annual promotion, and the test developer feels constrained to produce a multiplicity of instruments specific to each particular setting.

Yet he must operate within the bounds of economic feasibility. He therefore seeks to determine the areas of agreement in the many curricula confronting him, and to construct tests which have a maximum coverage of elements common to all. In this he runs

the risk of pleasing none by attempting to please all. The acceptability of his tests will depend largely on his judgment in selecting content and process to produce a test suited to the needs of all or a selected set of test users. This problem has come forcibly to our notice in the preliminary planning of the junior secondary tests mentioned previously.

A further difficulty in the area of objectives derives from a current uncertainty about the relative merits, in instruction and testing, of two schools of thought, namely

- (1) that education is essentially the acquisition of 'knowledge', and
- (2) that education is concerned with the development of 'concepts'.

The extremists of each camp are inclined to entirely reject (at least publicly) the stand taken by their opposite numbers. Some resolution of this apparent conflict is needed, perhaps in terms of a recognition that both are important in education, though possibly to different extents for students of different ages and/or intellectual endowments.

As to which knowledge should be acquired, there is, as previously stated, considerable divergence between the Australian states in their syllabuses. It does not, however, seem unreasonable to believe that even though these may be semantic differences, there is probably a considerable basic agreement as between the various curricula on the question of generalized outcomes, understandings, concepts, etc. which could and should be developed by students at various levels of 'comparable' courses in the schools.

If such basic agreement does exist it would seem profitable to have its extent made explicit. It could be that there is more disparity in the expression of objectives than in the classroom activities of teachers and children.

A concern with resolving such apparent differences should not of course be taken as an interest in imposition of common curricula and our experience in certain projects in recent years has shown that interstate conferences have been mutually profitable to the participants and have revealed a marked degree of agreement on purposes and objectives of specific curricula. Such basic agreement has not hampered freedom to vary in those areas where genuine differences exist, and has resulted in fertile interchange and the development of clear statements of the nature and extent of common ground.



A national consideration of curricular objectives and a re-thinking of the desirable attributes of tests suited to assessing their attainment could perhaps be a worthwhile proposal to submit to the consideration of the various bodies concerned with curricula and certificates.

As noted above, there appears to be an extending interest among teachers in the improvement of tests and examinations. During the past year numerous requests have been received for ACER staff to give advice or to conduct seminars on test construction. There is a wider appreciation that there is a high degree of expertise in the preparation of good quality measuring instruments, and those seminars conducted have brought home to participants that construction of superior tests is a time-consuming and demanding task to which the teacher, with his many other responsibilities, is often unable to give the necessary time and attention.

While the testing movement in Australia has centred largely on the concept of *standardized* tests it is sometimes forgotten that irrespective of standardization (i.e. the provision of data on national, state, or other reference groups) there are good tests and bad tests. It is the quality test, appropriate to a stated purpose, which has the greatest intrinsic value and greatest potential for improving instruction. We believe that many teachers could extract more information from, and make more effective use of, the tests they administer. ACER evidently must accept the need to develop in users a better appreciation of the potential uses of students' test performances, at the level either of item response or of total score. This could be a valuable contribution to more effective teaching and learning.

#### CONTRACT TESTS

*Commonwealth Secondary Scholarship Examinations*, Messrs T. Whitford, B. Rechter, N. Wilson, G. Gosling, K. Piper, Miss J. Maling, and panel members from ACER staff and outside organizations

Four papers were prepared for use in all states in connection with the award of Commonwealth Secondary Scholarships. These tests will also be used in three states in the selection of Technical Scholarship winners.

The Commonwealth Department of Education and Science has agreed to publish the Statement of Educational Objectives Underlying the CSSE Papers, which was prepared in 1966. When published, the statement will be made available to state education departments for distribution to schools.

*WA Leaving English*, Miss J. Maling

A test was again prepared for use by the WA Public Examinations Board in the Leaving Certificate English Examination.

*Commonwealth Public Service Board—Advanced Level General Ability Test*, Mr D. Bruce, Miss J. Russell

Items for a proposed Form B of this test have been prepared and submitted to the Commonwealth Public Service Board for consideration.

*AMP Society Selection Test*, Mr T. Whitford, Mr D. Bruce

On a cooperative basis with the AMP Society, an American questionnaire has been adapted for use in selection of life assurance representatives, and consideration given to the criterion problem. Since the beginning of 1967 the adapted questionnaire has been administered to all the Society's applicants for positions as representatives, and the completed answer sheets are being accumulated at ACER in readiness for statistical analysis and development of a scoring system, probably in 1968-69.

*Commonwealth Public Service Board—General Ability Test*, Mr D. Bruce, Miss J. Russell

At the request of the Commonwealth Public Service Board, ACER has undertaken the development of two general ability tests for use in selection of clerical staff. Four trial forms have been prepared and submitted to the Board for comment.

## SERVICE TESTS

*Victorian Matriculation Physics Programme*, Mr N. Wilson, Mr L. Blazely and panel members

Work was completed on trial forms and, following trial testing and statistical analysis, final forms of eight diagnostic tests and a terminal attainment test were prepared. Diagnostic aid sheets and a teachers' manual were prepared and the entire testing programme was offered to schools from the beginning of 1967. This project was supported in the development phase by a grant from the Victorian Education Department.

*Victorian Leaving Physics Programme*, Mr N. Wilson

Additional data on test and item statistical characteristics were obtained and incorporated in a supplement to the teachers' manual.

*Matriculation Chemistry Testing Programme*, Mr B. Rechter and panel members

Early in 1967 a proposal for development of diagnostic and attainment tests suited to the Victorian Matriculation Chemistry course was submitted to the VUSEB Standing Committee for Chemistry, with a request for their support in principle. The proposal was accepted and developmental work commenced. To date, trial forms for two of the projected seven tests have been produced and three trial forms related to one of the topics have been distributed to schools. It is hoped that this will be financially supported in the same way as the physics tests were.

*Leaving Biology Testing Programme*, Mr B. Rechter and panel members

The Victorian Standing Committee for Biology has expressed approval of an ACER proposal to develop a set of diagnostic tests suited to the first year of the two-year biology course based on the Australian adaptation of the BSCS course. A panel has been organized in Victoria and item writing has commenced. In association with this project Mr Rechter conducted item-writing workshops in Hobart and Adelaide and some useful test material was produced at these sessions.

As the course concerned is used now in Victoria, Tasmania and South Australia, and *will* be used in Queensland, any tests produced will have a wide circulation.

*Victorian Primary Schools Testing Programme*, Miss J. Maling

Final forms of Tests E3 (Grammar and Sentence Structure) and E4 (Vocabulary) have been prepared for this programme.

#### TESTS FOR GENERAL USE

*Non-Verbal Analogies Test*, Mr D. Bruce, Miss J. Russell

Two trial forms of a Picture Analogies test have been prepared from new material and from a selection of items from ACER Higher Test WNV.

*Cooperative Reading Test*

Some hundreds of Form II and III students in selected Victorian secondary schools were tested in order to establish equivalence of Forms L and M of the test and to obtain reliability data and interim norms. A full scale standardization is being arranged for 1968.

*Junior Secondary English Comprehension Test*, Miss J. Maling

Final forms of tests to assess three aspects of vocabulary development, and a test of reading comprehension have been prepared. These tests are intended for use in late primary and early secondary years and standardization is planned for 1968.

*Junior Secondary Social Studies*, Mr K. Piper

An analysis of objectives and topics suggested or specified in syllabuses for social studies, history, geography and related subjects, in all states at the secondary level, was undertaken with the object of determining the extent of similarity and difference in the various courses. This analysis was seen as an essential first step in establishing the feasibility of producing tests and related materials in this area. The study has been extended in connection with the IEA project and Unesco Seminar as described in the General Research section of this report.

*Junior Secondary Mathematics*, Mr N. Wilson and panel

Work has commenced on preparation of a framework for the development of diagnostic topic tests in mathematics, primarily at the junior secondary level.

*Number Readiness Test*

Following re-examination of data obtained in NSW and Victoria, items have been selected for the final form of this test and a teachers' manual has been prepared.

*Higher Tests SL and SQ*, Miss J. Russell

These tests were developed as lower-level versions of Higher Tests RL and RQ, at the request of the Vocational Guidance Bureau of the NSW Department of Labour and Industry. Tests RL and RQ continue in use for older vocational guidance cases, but Tests SL and SQ were intended for use mainly with fourteen-year-olds who constitute the majority of children tested. Information recently obtained (by the Research Section of the Vocational Guidance Bureau) from broad sampling of vocational guidance cases suggests that further modification of the tests will be necessary. Requirements are currently being examined.

*Advanced Test B40*, Mr D. Bruce

Completed test papers obtained from some major users in tertiary education institutions are being analysed as a basis of revision of content and norms of this test.

*Advanced Progressive Matrices (1962)*, Mr D. Bruce

A provisional manual for Australia and New Zealand has been prepared by Professor Aubrey Yates (Aust.) and Dr Alan Forbes (NZ) in consultation with Mr J. Raven. This provisional manual contains data from investigations conducted by the authors.

Further data are being collected and a more extensive manual is planned.

*ACER Short Clerical Test (Form C)*, Mr D. Bruce, Miss J. Russell

Form C, a decimal currency revision of Form B, has now replaced the latter and a new manual has been published.

*Wechsler Intelligence Scale for Children (Australian Revision)*, Mr D. Bruce

The Australian Revision of the WISC has been completed by Professor J. Radcliffe and Mr E. Trainer of the University of Sydney, and the manual prepared by them is currently being processed for publication together with the revised test materials. (Grants made by the Council helped in the revision of the test and its norming.)

#### OUTSIDE ACTIVITIES OF T.D. STAFF MEMBERS

Members of Test Development staff continue to engage, both in their private capacities and as ACER representatives, in making contributions to the activities of outside educational bodies and groups. Apart from other matters referred to later under 'Staff', the following should be recorded.

Mr Whitford led four of the lecture-discussion courses given in the first term in the course of Measurement in Education at the University of Melbourne.

Mr Rechter serves as a member of the Standing Committee for Revision of the Victorian Leaving Chemistry course and is a member of the Examination Review Panel for Matriculation Chemistry. He is also currently the Federal Secretary of the Australian Science Teachers Association, and a Council member of the Science Teachers Association of Victoria.

Mr Wilson is a member of the VUSEB Physics Standing Committee, and an examiner in Matriculation Physics.

At the request of Professor B. Johnson, Senior Examiner in Biology at the matriculation examination in Tasmania, Mr Rechter visited Hobart earlier this year to conduct a workshop on examining and item-writing in biology. Participants included members

of the staff of the zoology and botany schools of the University of Tasmania, and selected matriculation biology teachers from Hobart and Launceston.

Mr Rechter and Mr Wilson visited Adelaide for three days to conduct two item-writing workshops, and participate in discussions on science examining, organized by the South Australian Education Department, Adelaide Teachers College, and the University of Adelaide Physics Department.

Miss Maling was coopted as a member of the Advisory Committee for English in Technical Schools to assist in the development of English curricula for technical school Forms I to III. More recently Miss Maling has assisted the committee in consideration of objectives and evaluation in English.

Miss Maling has also been engaged during 1967 in tutoring in English Method at Monash University Education Faculty, and conducted seminars at a conference of Australian teachers of English.

#### MATERIALS DEVELOPMENT

*Individual Mathematics Programme (IMP)*, Mr J. Izard assisted by Mrs K. Wright

##### *Kit B*

A special bulletin, amplifying recommended procedures to teachers implementing the scheme and to be used with the teachers' handbook, has been prepared in conjunction with Advisory Services Division. Additional material which will clarify for teachers the prerequisites for introduction of IMP has been prepared with a view to publication in the Advisory Services Bulletins.

Mr Izard has demonstrated that children using IMP for the first time make normal progress in attainment, but have clearly more favourable attitudes towards mathematics as well as appearing to have a more positive attack on assignments. Children using IMP expressed a preference for its more varied approaches compared with standard procedures.

The IMP project has been abstracted in the 1966 and 1967 'Report of the International Clearinghouse on Science and Mathematics Curricula Developments' (a joint project of the American Association for the Advancement of Science and the Science Teaching Centre, University of Maryland). As a consequence there have been a number of requests from overseas for the descriptive and other materials listed in the abstract.

*Kit C*

This project has been further supported through the extension of Mr Izard's secondment to the end of 1967 by the Victorian Education Department. It is hoped that by the end of this period the development of all materials for Kit C will have been completed. Mr Izard has had the assistance of Mrs K. Wright in coordinating the work of the authors Miss B. Blackall, Messrs G. Whitehead, B. Haig, F. Smith and D. Goodger. Mr L. Blazely has also contributed material since his return to the Tasmanian Education Department.

Draft materials for Kit C have been submitted to the Curriculum Branches of each State Department of Education for critical comment. Subsequently, trial materials have been used with 12 classes (11 classes in 3 Victorian schools and 1 NSW class) at the Grades 5 and 6 level. Tests have been tried in the Victorian classes. It is expected that two parallel forms of each of the placement and mastery tests planned for Kit C will be derived from the trial test items.

Materials on fractions have been tried extensively, more restricted trials have been made of materials dealing with decimals, pattern, length, money, capacity, and statistics, and materials on all these topics were ready for more intensive trial at the beginning of July. Materials on area, time, volume, and weight are ready for trial and draft material on graphs, spatial knowledge, and operations with whole numbers have been prepared. Thus a substantial proportion of all necessary writing has been completed. The remainder of 1967 will be devoted to trial and revision with a view to publication.

*Kit A*

Preliminary discussions on the feasibility of a kit at the lower primary level have been held. Arrangements have been made to develop materials for one or two topics at the preparatory levels and to seek the reactions of infant teachers.

*Western Australian Reading Development Scheme (WARDS),*  
Miss M. O'Donnell

A revised edition of WARDS has been published during the year. The format of 10 cards at each of 10 grade levels (2 to 11) in the original WA Education Department edition has been retained, but some cards have been revised or replaced and many items in the power or pace-promoter tests have been changed. The format of the student record book has also been changed as a

result of experience with other reading schemes. All these changes necessitated an extensive revision of the teachers' handbook. The revisions, together with changes in type-setting and design, have produced, we believe, a publication quite comparable in quality with similar materials produced by overseas educational publishers.

The collection of information on the placement and progress of pupils is planned for a sample of schools using WARDS. Among other things, it is hoped to determine whether additional cards are necessary. As an interim measure to assist schools with large classes, separately boxed 50-card units have been prepared and made available.

*Study Skills Project*, Mr J. Newby assisted by Mrs J. Smith

As indicated in the last annual report, it was judged necessary to spend considerable time in planning the development of the study skills materials. Mr Newby, Mr Bennett and Mr Turner contributed to this planning in the second half of 1966. Useful criticism and a generally favourable reaction to proposals was obtained, among others, from Victorian teacher-librarians.

Most subsequent developmental work has centred on one of the planned major strands—graph skills. The use of a learning-set hierarchy, advocated by the American psychologist, Robert Gagne, has been used as one device for the more detailed planning and development of the sequence of learning materials and of the placement and other tests which are incorporated.

Most of the graph skills strand has been written and classroom trials conducted. Only minor revisions to these materials seem necessary. Results confirm the general usefulness of the approach and it is planned to use the same approach with the other strands. Completion of the trials of graph skills materials, analysis of results, and the production of a revised version will be completed by the end of 1967. It is hoped that more extensive trials can then be conducted both in Victoria and other states.

Considerable attention has also been given to another strand—reference skills. Development of materials will continue and, following local trials and revision, it is hoped that reference skills materials can also be given a wider trial, after the wider trial of graph skills materials. Some thought has been given to other skills and further planning and development of these will be fitted into the programmed development referred to above.

The Western Australian Education Department has seconded Mr Searle in replacement for Mr Newby, whose secondment will



end in November 1967. A period of overlap in their secondments will be valuable for continuity of approach and it is hoped that Mr Newby will be able to make further contribution by conducting trials of materials in Western Australia as they are developed.

### *Spelling Materials, Writing Skills and Social Studies*

Despite very useful preparatory work and thought in each of these areas, it has not been possible this year to find staff and the other resources necessary to develop materials. While this decision was necessary, it is to be regretted that staff and resources could not be found or diverted, especially as we receive constant reminders of the need for such materials in these and in many other fields. Learning materials, which meet the many criteria necessary if they are to command widespread approval and be effective, are relatively expensive to produce. Those who have helped develop courses of study, or have written textbooks of a more traditional kind and who have also attempted the development of learning materials, have ample personal experience to verify this conclusion. It is to be hoped that substantial funds can be found to undertake these and other potentially rewarding but difficult tasks.

### *Junior Secondary Science Project, Mr L. Dale (Project Director)*

In this project we are collaborating with the Victorian Universities and Schools Examination Board. The Board's Standing Committee on Science has set out a proposed course for the first four years of the secondary school, and it is the purpose of the project to express this through materials intended for use by children at the appropriate form level.

The work begun in February 1966 has been accelerated over the last twelve months. All the materials prepared are being tried out in Victoria. Fourteen schools and twenty-four classes are involved in trials, testing, and reporting. Some of them are also being tried in schools in South Australia, Tasmania, and New Guinea.

An agreement has been completed with Cheshire's Pty Ltd, by the VUSEB and ACER, which provides for publication of the first year's materials. There will be 9 'units' for the first year, and the final production of these, rewritten after trial, will not be completed until about mid-1968. The *first* three published units, however, will be ready for use in schools at (Victorian) Form I level at the beginning of 1968. Each unit is 'boxed', and each box provides sufficient material for 40 pupils. The normal science equipment

and supplies of the school are assumed to be available for use by teachers and pupils.

Some Form 2 units are being tried out also, and others are being written for trial. As with the Form 1 units, they are tried in schools, and their effectiveness assessed by observation by writers and teachers, and by tests. After revision based on this assessment they are rewritten and retried.

During the year, as a result of comments made by a small panel involved in preparing tests to evaluate the units, a restatement of the objectives of the course was prepared for the Standing Committee. The project 'writers' have used this restatement to give more direction to the single units; evaluation in terms of the stated objectives of each unit is therefore possible.

The project was, like the Individual Mathematics Programme, reported in the International Clearinghouse Report, and many requests for materials from it have been received.

The manner in which the materials for use by pupils have been developed makes it possible to use them, often with no adaptation, almost anywhere in Australia. Some parts of some units would need minor adaptations if they were used outside Victoria. The project as a whole, therefore, appears to be one that is providing materials that are not limited to one state. The production by 'units' also seems to make it possible for the project to expand in such a way that a number of units could be developed at each level, from which teachers could, in fact, choose their own selection. This would provide well-prepared materials on a range of topics without imposing a particular course on any state or on any school. If collaboration with other states than Victoria proves to be possible, the project could obtain the wider support it needs.

The project is at present paid for by

- (a) the secondment of Mr Dale and Mr Robinson by the Victorian Education Department;
- (b) advance royalties paid by Cheshire's;
- (c) grants from the Potter and the Myer Foundations (in 1966, grants were also received from the Percy Baxter Charitable Trust, ICI, BHP, and Electrolytic Zinc Co. of A/asia Ltd);
- (d) ACER funds.

The amount available for 1968 from sources (b) and (c) is still not known. Early expectations that royalties would finance development from 1968 onwards were unrealistic; other substantial sources of funds will undoubtedly be needed in 1968, and probably again in 1969.

## EDUCATIONAL SERVICES AND ADMINISTRATION

Mr M. L. Clark

### TESTING AND ADVISORY SERVICES

Mr W. T. Renehan

TESTING SERVICES

Mrs N. McBean

During the year a Matriculation Physics Testing Programme has been introduced in Victoria, and the Basic Skills Testing Programme has been partly implemented in Tasmania. Otherwise there has been no basic change in the activities within this particular division. The Commonwealth Secondary Scholarship Examination has continued to absorb a very large amount of Mr Renehan's time for administrative purposes as well as for the research activities mentioned earlier in this report.

#### *NSW Basic Skills Testing Project*

Reading, listening, spelling and study skills tests were made available again this year for use in Grades 3 to 6 in those NSW and New Guinea schools electing to take part in the programme. No decisions were reached with the Department of Education (NSW) concerning revision of the arithmetic tests or extension of the English series. However, plans for renorming the tests have been discussed with the Department; norms at present in use are those obtained in the years 1962-64 on the occasion of each test becoming part of the battery.

The steady growth in the number of schools participating in the project has been maintained. This year a total of 1830 schools will be involved comprising 1672 departmental, 99 Catholic, and 24 independent schools in NSW and 35 in New Guinea. Over 7,000 teachers will be concerned with administration of the battery and approximately 216,000 children will be tested.

The Education Department of Tasmania has this year broadened the scope of its mid-year testing in primary schools by the inclusion of the NSW Basic Skills Listening Test (Test L) in its programme. It is intended to incorporate some other NSW Basic Skills tests in future programmes.

#### *Victorian Primary Schools Testing Programme*

Tests administered this year will be in continuation of the general purpose of the programme to obtain at regular intervals

information on standards of performance in basic skills in the middle and senior sections of the primary school.

The four tests used in 1967 will be Tests R (Reading) and E1 (Spelling), which were used in the 1963 programming, and Tests E3 (Grammar and Sentence Structure) and E4 (Vocabulary), which were used in trial form in the 1966 programme.

A report on the 1966 programme has been prepared for the Education Department of Victoria. Results from a sample of approximately 1600 children in Grades 3 to 6 for 87 schools indicate the superiority of girls in all these aspects of English usage tested. Comparison of results with data from the 1946 ACER Curriculum Survey using the ACER English Usage Tests (Part 1: Word Usage; Part 2: Sentences) shows no falling off in the standards.

#### *Commonwealth Secondary Scholarships Examination*

Arrangements for processing papers from the 1967 examination remain as they were for 1966, which means that more than 75,000 essay scripts will be marked at the ACER marking centre in Hawthorn during August and September; 120 teachers of English will be the markers. All other papers from 40,000 candidates in Victoria, South Australia, Western Australia, and Tasmania will be processed also under the direct supervision of ACER.

This year agreement has been reached by the Commonwealth with all six states separately, to use some form of assessment by the school to modify the final rank order of candidates. Such a procedure has been followed in previous years in Victoria and South Australia only.

#### *Cooperative Scholarship Testing Programme*

The number of schools making use of the tests offered in this programme for independent schools continues to increase. Schools in five states will take part in the 1967 programme.

As the programme has now been in operation since 1962 plans are being prepared for a follow-up study of the effectiveness of the tests as a selection procedure.

#### *Victorian Leaving and Matriculation Physics Tests*

The Victorian Leaving Physics programme was introduced on a full scale to Victorian secondary schools in 1966. In 1967 the matriculation programme, which employs similar re-usable materials and similar distribution procedures, came into operation. Both

programmes consist of a number of diagnostic tests, each of which is related to a particular unit of the syllabus, a number of corresponding 'diagnostic aids' and a final achievement test.

### *Testing Services*

ACER continues to act as the Melbourne test centre for all Educational Testing Services programmes, e.g., the College Entrance Examination Board tests, and the Graduate Record Examination, and gives general information to a great number of enquiries about these facilities.

ACER also acts on behalf of Psychological Corporation as the 'controlled testing centre' for all Australian administrations of the Miller Analogies Test.

A number of other testing services continues to be maintained.

### *Data Processing*

The IBM 120 optical scanner for processing test answer sheets has been tried out in cooperation with the Educational Research Unit of the University of New South Wales. The experiment utilized answer sheets marked by children in Grades 3, 4, 5 and 6 as part of the 1966 Victorian Primary Schools Testing Programme. A report is being prepared; results seem to indicate the usefulness of this form of test scoring in large programmes.

#### ADVISORY SERVICES

Miss M. O'Donnell

Although transfer of the SRA agency took place officially in December 1966, there was some carry over of advisory services into 1967 as intending purchasers of laboratories directed their enquiries to ACER. Increased activity in connection with the Individual Mathematics Programme has prevented any reduction in the commitments of the advisory group. There has been a steady stream of enquiries through the post or in person at the Frederick Street offices. Miss O'Donnell has spoken on the IMP on several occasions to both country and metropolitan groups in Victoria.

Experience with a similar activity in New South Wales, and a desire to meet what was thought to be a widespread need for assistance in getting the IMP started in the classroom, led to the arrangement in Victoria of two all-day seminars at the Associated Teachers Training Institute, Mercer House. From replies to questionnaires completed by participants, it would appear that the venture was successful in providing teachers (including some

already familiar with the scheme) with insights to the use of IMP in the normal classroom.

As in previous years numerous displays have been mounted. These appear to be appreciated by teachers and psychologists. They do however require considerable time for assembling and checking back into storage. The Annual Conferences of the Australian College of Education and the Australian Psychological Society (in Hobart and at Monash University respectively) were attended again this year, as was the Sydney Teachers College Post-College Course in January. In addition, displays were provided at the Newcastle Teachers College Post-College Course, the Associated Mistresses Biennial Conference at Strathcona, Frankston Teachers College, the State School Headmasters' Seminar at the Victorian Education Department camp, and the Australian Association of Mathematics Teachers at Monash University. These have tended to be in Victoria, but efforts have been made to penetrate the eastern states. Further interstate displays are planned, funds permitting, for the future. As an interim measure, moves have been made to set up permanent display centres in South Australia and Queensland. It is of considerable help to be able to direct teachers to such displays instead of relying merely on descriptive brochures or sample review sets. The latter, though used extensively, give a limited 'feel' for the material. Moreover, they are in such demand by country teachers that there are waiting lists for circulating available sets.

Apart from the general functions described above, the advisory services group has produced several informative materials during the year. A new Educational Catalogue was distributed widely, and has been followed by various brochures and leaflets. The *Bulletin for Psychologists* has been produced and continues to receive widespread support from psychologists. This has led to considerable correspondence regarding new materials added to our test library, and has undoubtedly added to the demand for 'special' orders from overseas.

#### PUBLISHING

Mr I. Fraser

It is clear from the list of publications given earlier in this report that the publishing staff has had a full year.

Among the publications handled, the most substantial and time-consuming have been the revised edition of the Western Australian

Reading Development Scheme; the trial forms and final forms of the Victorian Matriculation Physics Test series; six new books, including the revised edition of *The Foundations of Secondary Education*, and the limited edition of *A Bibliography of Teaching and Testing in Foreign Languages*.

Besides the increased activity in book publishing there are two other significant trends worth mentioning. One is that there has been a marked rise in the number of reprinted items for stock; a similar pattern holds for the programme tests. The other noticeable trend in publishing activity has been in publicity, not only in the production of brochures featuring ACER publications but also in the writing and design of advertisements for periodicals and the press.

In April Mr Fraser attended the annual meeting in Sydney of the Australian Book Publishers' Association, where it was announced that two ACER books had received design awards—one full award for *Education in the Inquiring Society*, and a commendation for *Marking English Compositions*. Later in the year, he had discussions with the Victorian State Librarian over the question of the legal deposit of the Council's publications, especially those of a confidential nature. Satisfactory arrangements have been instituted for keeping files of these documents.

#### DISTRIBUTION SERVICES

Mr E. McIlroy

Following the transfer of SRA stock to its new company in Sydney this year, there has been a considerable change in the activities of this division. There has been some reduction in despatch and sales staff as a consequence, but this has not been directly proportional to the loss in SRA sales income. Relatively more man-power has been required to cover an increase in sales of other materials.

Sales income for 1966-67 slightly exceeded estimates. Sales of other than SRA materials were 10 per cent higher than for the comparable group of products in 1965-66. Price increases made in April 1967 contributed only a small amount to this higher level of income. To achieve this increase over 17 per cent more orders for these items were handled.

During the year a considerable volume of material was moved in and out of the store, requiring the clearance of over 700 stock orders, and comprising 4,500,000 tests and answer sheets, 125,000

manuals, books and score keys, 2,000 laboratory-type units, 200,000 students' record books, and 1,800 special orders from overseas.

Customs work this year has continued to grow. The issue of a Ministerial Determination covering duty free entry of all *printed* educational and psychological test material has accelerated clearance through Customs.

#### STAFF

The Council had on its staff on 30th June 1967, for the activities listed in the previous pages, 67 full-time staff including 3 secondments, and 15 part-time staff including 1 secondment. I would like to record my appreciation of the support they give to the Council's programme, and my personal appreciation of their cooperation.

These numbers do not include, of course, a number of short-term temporary appointments for particular purposes. For example, for special work connected with the Commonwealth Secondary Scholarships, it is necessary for us to employ about 125 qualified teachers of English to mark the papers in written expression, and about 22 clerical workers (mostly full-time) for a period of 6-8 weeks to handle the incoming papers.

#### RESIGNATIONS AND RETIREMENTS

Miss M. Nixon, who had been working on concept development in young children, left us in February 1967 to take up a position as a Senior Lecturer in Education at Monash University.

Mr J. P. Keeves, who had been responsible for most of our work in curriculum, method and school organization, left at the end of May 1967 to take up a three-year appointment as a Research Fellow at The Australian National University.

Miss T. Sloss, one of our Advisory Services Officers, left at the end of December to be married.

Mr D. J. Arney, after twelve months as an assistant in testing services, giving assistance with computer programmes and other aspects of the CSSE, left in February to undertake full-time studies in psychology at the University of Melbourne.

Mr H. Williamson reached retiring age in March, after 15 years service with the Council. He has been able to help us in a number of small but useful ways since his retirement.

Mrs F. Harvey and Miss M. Sharp, for domestic and personal reasons, resigned from the Accounts staff; Mr C. Tiddy and Mr C. Welsby from the Distribution staff; Mrs S. Phillips, Mrs P.



Robin, Mrs P. Nabbs, Miss J. Peacock, Miss G. Adams and Miss S. Caulfield from the office staff to take up other positions; and Miss G. Browning and Miss M. Summers from the Clerical and Technical Assistant staff.

Miss L. Henderson resigned from the Library staff to take up clerical work elsewhere.

#### DEATH

In October last we were grieved at the sudden death of Mr T. Coleman, who had served us well, although for only a few years, in the Distribution staff, where for the few months prior to his death he had been in charge.

#### APPOINTMENTS AND SECONDMENTS

Dr M. de Lemos was appointed in February as a Senior Research Officer in the 'school learning' section of the General Research Department, and she will be working on certain aspects of concept development.

Mr B. Rechter was appointed as a Senior Research Officer in February to fill the place left by Mr Blazely's resignation from Test Development Department, and has already been deeply involved in the preparation of science tests.

Mr D. Bruce was appointed as a Senior Research Officer in Test Development with particular responsibility for psychological tests.

Mrs K. Wright and Mrs J. Smith were appointed to assist Mr Izard and Mr Newby in the development of their kits of materials.

Mrs M. Locke came to us from Queensland in February as an Advisory Service Officer.

Mr M. Rosier, from the Western Australian Department of Education, joined the staff in August as a Senior Research Officer in the General Research Department for work in Curriculum, Methods and Organization.

On the Junior Secondary Science Project we have appointed, since the last report, as writers of materials, Mr A. R. Shannon (full-time), and Mesdames S. Taylor, M. Beaumont, A. Tulloh, and Miss J. Fox (all part-time). (Mrs Wilkinson, who had been spending half-time on the project during 1966, became a full-time member of the writing team in 1967); and as clerical and technical assistants, Mesdames E. Taft and J. Selway, and Miss L. Nicol.

Miss A. Simpson was appointed in April as an assistant in the Testing Services Department, and Miss P. Vickery in May as an assistant in the library.

Mrs P. McCallin and Miss D. Wall were appointed for temporary full-time work, the first on Commonwealth Secondary Scholarships, and the latter on tertiary education.

On the technical, sales, distribution and office staffs, new appointments during the year, now working on the staff, are: Mrs S. Pendrey, Mrs K. Rees, Mrs K. Tregallis, Mrs V. Zachariah, Miss S. Ahearn, and Mr R. Oders.

#### STUDY LEAVE

Mr Whitford and Mr Gosling have both become due for study leave, and leave of absence has been given to them to undertake postgraduate studies abroad. They both left Australia in September. Mr Whitford will be at Stanford University, USA, and Mr Gosling at Manchester University in the UK.

#### STAFF TRAVEL

Mr R. Fitzgerald completed his assignment to the Commonwealth Parliamentary Library as a Research Officer in November 1966, and returned to full-time duty at ACER.

Mr Keeves visited South Australia several times to assist in some residential courses in action research undertaken by the Department. He also paid a brief visit to Hamburg in connection with the IEA Project in science, and renewed associations in England and USA.

Mr Turner accompanied Mr Keeves to Adelaide in April, and participated in a conference on objectives and examinations in science and mathematics. He also attended, as ACER representative, a week's conference in Sydney in early July 1967 of heads of research branches of the state departments of education.

Mr Whitford attended a week's conference of guidance officers, in Sydney, in June, and visited other centres there during the week.

Mr Gosling visited Tasmania and New South Wales and spoke to teachers and others on questions of examining in English and in written expression.

Mr Rechter visited Tasmania for a test-writing seminar, and with Mr Wilson visited South Australia for the same purposes.

Mr Bruce visited Queensland and New South Wales in connection with ACER publication of psychological materials.

Miss O'Donnell visited Queensland, New South Wales and Tasmania in connection with displays and demonstrations of ACER tests and materials.

Mr Renehan spent a week in New Guinea in connection with their primary school testing programme, and visited New South Wales on his return trip.

I have, during the year, been able to visit all states and the ACT. In March, I was invited to attend a week's meeting of the Council of the IEA Project in London, and spent a further week there on visits, and several days in USA on the way back to Australia. The opportunity to make new associations and to renew old ones was a valuable one.

Although the opportunities to meet colleagues through professional associations, and through other meetings, are increasing, and the awareness of others' work and problems is enhanced as a result, these are not, for ACER staff, a substitute for the more detailed and regular visits necessary to keep au fait with developments, with plans, and with the persons involved in educational research. Even more of such travel will, I think, be essential if we are to keep abreast of important activity in research, testing, curriculum and organization.

#### DIRECTOR'S OUTSIDE COMMITMENTS

My outside commitments have been with the Victorian Committee of the Winston Churchill Trust, with La Trobe University, with the Britannica Award Scheme, with the Unesco Committee for Education, and with a special Unesco group arranging for a seminar on planning in education, with the Australian College of Education, with a Research and Advisory Committee of the Commonwealth Advisory Committee on Advanced Education, and with the Australian Broadcasting Control Board.

#### ACCOMMODATION

During the year we have found it necessary to renovate and make adjustments to one of the two houses adjacent to the Frederick Street offices, to make it suitable for office accommodation for the JSS Project.

Outside accommodation has also been required for the tertiary education project, and we have found suitable quarters not far from Frederick Street.

Any further additions to staff will require similar arrangements for renting suitable office accommodation.

Library and storage facilities are overtaxed at present, and adjustments will be needed to both of these during the ensuing year.

### FINANCE

Accountant: Miss P. M. Staurengi

#### GOVERNMENT GRANTS

Government grants continued at the level fixed in 1965, and amounted to \$60,000 for the year. Half came from the Commonwealth and half from the states.

This accounts for about ten per cent of the Council's income, and from it a considerable part of the research staff is maintained.

The remaining eighty to ninety per cent of the staff and its work are paid for by the other sources of revenue—contracts for testing, and for research, charges made for services, grants from trusts and foundations, special grants from governments either direct or indirect through secondment of staff, and the sale of tests, books, and educational materials.

With the steady rise in salaries and wages for comparable positions and equivalent rises in the costs of other services, the work-value of the grants is less in each succeeding year. It would be satisfying to have a system in operation by which the grants were automatically increased when, for example, a salary, a wage, or a cost of living increase was announced.

#### SPECIAL GIFT

In 1966 the students of the University of Sydney made a collection for ACER, at their Commemoration Day Appeal. From this, \$5,276 was paid to us late in 1966, and we have used it to meet expenses of the Study Skills Project, as we believe this will benefit schools and pupils in all kinds of schools in New South Wales as well as in other states.

#### BUILDING COMMITMENTS

At 30th June 1967 the Council owed \$18,000 on its building at 9 Frederick Street, and \$15,045 on the two properties in Wakefield Street. Capital expenditure on Frederick Street in the 1966-67 year was \$740 and on the Wakefield Street properties \$1,270.

## SRA AGENCY

The SRA agency *for materials* remained with us for the first six months of the financial year, and the transfer from us to them was effected very amicably and smoothly at the end of 1966. In those six months the sales amounted to \$128,000. Our total SRA sales for the year were about \$190,000 lower than in the previous year, and funds available from this source for general expenses therefore less by about \$70,000. As a minor balancing item sales of other *materials* contributed about \$10,000. (Sales of tests and accompanying materials also contributed more than we estimated a year ago.)

## GENERAL POSITION 1966-67

Including a 'gross profit on trading' of \$186,600, the Council's income for 1966-67 was \$452,900. Its expenditure was \$437,600, leaving a credit balance of \$15,300. In view of the estimated income and expenditure for 1967-1968, I would like it to have been very much higher.

*Income*

The main items of income were, excluding special grants for JSSP:

Government Grants	\$60,000
Gross Profit	\$186,600
Test and Materials Development Income from Contracts, Advances, etc.	\$38,500
Test Services Income	\$147,400

*Expenditure*

The main items of expenditure were:

Salaries, superannuation, payroll tax, etc.	\$224,000
Costs of occupancy (light, maintenance, cleaning, etc.)	\$19,000
Office and administration expenses	\$22,000
Freight and postage	\$22,000
Royalties	\$6,800
Test Development (excluding salaries)	\$7,800
Testing Services (excluding salaries)	\$98,600
Publicity	\$9,500

Included in the income is an amount of \$12,000 not yet physically received, but properly a part of income for 1966-67. Stock decreased in the year by \$18,400.

In 1967-68 we estimate that the 'gross profit from trading' will be about \$150,000, rather than the \$187,000 of 1966-67. This is after allowing for increased sales of the tests and other materials which provided a sales income in 1966-67 (excluding SRA income of \$128,000) of \$245,000.

In 1967-68 we will face a considerable increase in salary costs, because of recent increases proposed for the university salaries against which those of Council staff are matched, and recent rises in clerical and other awards. Overall, the increase, if staff remains at the present figure, would be \$30,000 (approximately) for the year. Other costs will rise also. Without an increase in our prices, which have only recently been revised, an unexpected increase in sales, or the availability of some other source of funds not at the moment in sight, there will be between income and expenditure a gap of about \$67,000 (\$37,000 'trading' and \$30,000 'other') to close. We will be able to make some savings on salary by not replacing staff absent on study leave, and by reducing expenses here and there in other ways, but I expect that we will need to call on reserves to meet an expected deficit for the year.

#### CONCLUSION

Although it has become almost a regular matter for me to make such a statement, I must in all sincerity say again that, set against the tasks which a body like the Council could be undertaking in initiating and fostering research, in disseminating information, in encouraging and evaluating innovation and experiment and development, its resources are still slight and its effect far less than it might be. Within the limits of the resources, the Council's work is spread over a wide front rather than concentrated upon any one field or area or facet of the education system. This is, I think, only right, but it is taxing more and more the time and the competence of the senior members of staff at a time when so much change and development is occurring. If they are to have real expertness in one field and a high level of competence in at least several others, they must be first-class people in the first instance. They must then be allowed adequate time and facilities to develop that expertness. I think they need supporting professional staff as well as others to handle both the more routine assignments which we all inevitably have, and to help them to keep abreast of developments in fields close to their own centre of interest in which they have not the time for full exploration.

It is impossible for me to give from the research grants that proper measure of assistance even to the four people covering the four areas in our general research field, while still carrying on the other services necessary (library, clerical and some advisory). And in the test development and materials development fields the Council has not the capital funds (and the 'market' is not sufficient to supply them while still keeping costs at a reasonable figure) to enable it to allow its senior staff in these fields the time to think, to explore, to experiment, without constant regard to costs and return.

In the long run I am sure the apparent 'leisure' and 'unprofitable' time which I feel to be necessary will lead to more efficient effort, because from it the nature of the problems becomes clearer, the necessary research and experiment is made sharper (and often simpler), and the relevance of results is more apparent.

Despite the above, I wish to make it clear that I believe the record of work over the past year, reported in the foregoing pages, has only been possible because so many of the staff have given freely of their private time to Council affairs. It is a good record, I believe, and particularly so because of that interest and concern.

## Staff at Council Headquarters

*Frederick Street, Hawthorn, Victoria 3122,  
at 7th September 1967*

### Director:

W. C. Radford, M.B.E., M.A., M.Ed., Ph.D., M.A.Ps.S., F.A.C.E.

### Assistants to Director:

#### ADMINISTRATION AND SERVICES

M.L. Clark, B.A., B.Ed. (Hons), M.A.Ps.S., M.A.C.E.

#### RESEARCH AND DEVELOPMENT

M. L. Turner, B.Sc., B.Ed., M.A., M.A.C.E.

### General Research:

R. T. Fitzgerald, M.A., Dip.Ed., M.A.C.E.

(Mrs) M. M. de Lemos, M.Sc., Ph.D. (from 16.2.67)

G. W. H. Gosling, M.A., B.Ed., M.I.L. (Fr.)

E. K. Hart (from 16.3.67)

M. J. Rosier, B.Sc., B.Ed. (from 28.8.67)

(Mrs) P. F. Segall, B.A.

### Test Development:

T. M. Whitford, B.A., B.Ed. (Hons), M.A.Ps.S.

D. W. Bruce, M.A., M.A.Ps.S. (from 16.2.67)

K. P. Piper, B.A. (Hons), Dip.Ed.

B. Rechter, M.Sc., B.Ed. (from 19.1.67)

N. L. Wilson, B.Sc., B.Ed.

(Miss) J. M. Maling, B.A., Dip.Ed. (seconded by Vic. Educ. Dept)

(Miss) J. L. Russell

(Miss) E. Watson, B.A.

### Materials Development:

D. M. Bennett, B.A. (Hons), T.Dip. (London)

J. F. Izard, B.Sc., B.Ed., T.P.T.C. (seconded by Vic. Educ. Dept)

(Miss) R. Hamilton, T.P.T.C. (from 5.9.67)

J. H. Newby, B.A. (seconded by WA Education Dept)

M. Searle (seconded by WA Education Dept) (from 28.8.67)

(Mrs) J. D. Smith, B.A. (from 6.1.67)

L. G. Dale, B.Sc., B.Ed. (seconded by Vic. Educ. Dept)

(Mrs) M. B. Wilkinson



M. E. Robinson, B.Sc., B.Ed. (seconded part-time by Vic. Educ. Dept)

A. G. Shannon, B.Sc., Dip.Ed., A.C.P. (from 8.6.67)

(Mrs) M. Beaumont, B.Sc. A.T.T.I. (part-time) (from 16.2.67)

(Miss) J. Fox (part-time) (from 16.2.67)

(Mrs) S. Taylor, B.Sc., Cert.Ed. (part-time) (from 7.2.67)

(Mrs) A. Tulloh, B.Sc. (part-time) (from 7.2.67)

#### **Educational Services:**

W. T. Renehan, B.A., B.Ed.

##### ADVISORY

(Miss) M. E. O'Donnell, T.P.T.C., M.A.C.E.

(Mrs) D. M. Bradshaw, B.A., Dip.Ed., M.A.Ps.S. (part-time)

(Mrs) M. P. Locke (from 16.2.67)

##### TESTING

(Mrs) N. E. McBean, B.A., Dip.Ed.

(Miss) A. J. Simpson, F.S.T.C. (from 13.4.67)

(Miss) J. E. Prior

##### DISTRIBUTION

E. P. McIlroy

(Mrs) M. E. Clarke

(Mrs) M. Engellener (part-time)

T. M. George

R. W. Jupp

(Mrs) M. E. Lane

R. A. Oders (from 17.4.67)

(Mrs) J. Russell

(Miss) H. Watts

L. Williams

##### LIBRARY

(Mrs) D. L. Wells, B.A. (Hons), Librarian

(Mrs) J. Gregory, B.A.

(Miss) P. Vickery (from 15.5.67)

##### AUSTRALIAN EDUCATION INDEX

(Mrs) F. E. McPherson, B.A. (Hons), Dip.Ed. (part-time)

(Mrs) B. E. Hay, B.A. (Hons) (part-time)

(Mrs) W. Williams (part-time abstracting) (from 31.7.67)

##### PUBLISHING

I. C. Fraser, M.A.

(Miss) S. Young, B.A.

(Mrs) L. Botham

## ACCOUNTANCY

- (Miss) P. Staurengi, B.A., B.Com., Accountant  
(Mrs) P. Arnold (part-time)  
(Mrs) T. Wilson (from 17.7.67)

## SECRETARY TO DIRECTOR

- (Miss) K. A. Saunders

## OFFICE

- (Miss) S. Ahearn (from 13.4.67)  
(Mrs) N. Allen  
(Mrs) L. Car (from 18.8.66)  
(Miss) D. B. Hayles  
(Mrs) R. R. Jupp  
(Mrs) J. V. King  
(Mrs) J. Loye (from 8.8.66)  
(Miss) L. Nicol (from 17.7.67)  
(Miss) M. Olsson (from 17.7.67)  
(Mrs) K. Rees (from 16.3.67)  
(Mrs) J. Selway (from 7.11.66)  
(Mrs) E. Taft (part-time) (from 20.2.67)  
(Miss) K. E. Tregillis (from 13.4.67)  
(Mrs) I. N. Wiseman (part-time)

## CLERICAL AND TECHNICAL ASSISTANTS

- (Mrs) C. Bayley  
(Mrs) M. Corfe  
(Miss) E. Orr (from 16.4.67)

## Contributors to Council Funds

The Council wishes to acknowledge, with thanks, the following contributions received during the financial year ended 30th June 1967:

**Australian Governments:**

Commonwealth . . . . .	\$30,000	
New South Wales . . . . .	11,440	
Victoria . . . . .	8,280	
Queensland . . . . .	4,400	
South Australia . . . . .	2,680	
Western Australia . . . . .	2,160	
Tasmania . . . . .	1,040	
	<hr/>	\$60,000.00

**Teachers' Associations:**

Tasmanian State School Teachers' Federation . . . . .	200.00
Sydney Teachers' College SRC . . . . .	200.00

**Trusts, Foundations, etc.:**

*Ian Potter Foundation . . . . .	3,000.00
*The Myer Foundation . . . . .	6,000.00
*Broken Hill Proprietary Co. Ltd . . . . .	1,000.00
*ICIANZ . . . . .	1,000.00
*Electrolytic Zinc Co. of A/asia . . . . .	500.00
SRC University of Sydney Commemoration Day Appeal . . . . .	5,276.48
The Myer Foundation (Directory of Philanthropic Trusts) . . . . .	4,000.00
Miscellaneous . . . . .	1,545.26

\* Contributions specifically for Junior Secondary Science Project.

## State Institutes for Educational Research

### *NATURE AND FUNCTION*

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

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

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

### *MEMBERSHIP ON COUNCIL OF ACER*

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

### *AN EXAMPLE OF AN INSTITUTE'S OBJECTIVES AND CRITERIA FOR MEMBERSHIP*

During the year, the NSW Institute re-examined its objectives and its criteria for membership, and the following statement was prepared. It is stressed that the institutes are autonomous bodies. Each has its own constitution and/or rules and practices, and the

statement set out below for New South Wales should not be regarded as applicable to any other of the state institutes.

### *Objectives*

As set out in the constitution adopted by the 1961 Annual General Meeting, the principal objective of the Institute is to *encourage study, research and service in education.*

In pursuance of this objective, the Institute elects a representative to and interests itself in the activities of the national body, the Australian Council for Educational Research. In addition, it provides opportunities for:

- (a) members to read, hear and discuss papers on matters of current educational interest;
- (b) the dissemination of educational information particularly the reporting of current trends in educational research;
- (c) the identification of suitable areas for research and the identification of appropriate research projects within the broader areas;
- (d) bringing these areas and projects to the attention of persons or bodies likely to be interested in conducting such research, or, in appropriate circumstances, conducting the research as an Institute activity;
- (e) discussion, criticism and general guidance in the planning and conduct of research projects.

In recent years, a further activity has been sanctioned by practice, if not specifically by the constitution. The Institute not only provides opportunities for members to discuss vital educational issues but also, when deemed appropriate, seeks to take a more positive role in promoting educational progress, by bringing to the notice of those concerned with educational policy-making at the state and/or national level, relevant data and the views of the Institute on vital educational issues.

### *Membership*

According to the constitution, the Institute shall consist of members elected at a duly convened meeting and possessing as entrance qualifications interest in, and capacity for, educational study and research. In interpreting this direction, the following criteria have, in general, been taken into account in determining a potential member's eligibility for nomination for the Institute.

- (a) A first degree or its equivalent;
- and (b) at least five years practical experience in education, some of which has involved either:
- (i) senior administrative work, and/or
  - (ii) tertiary teaching, and/or
  - (iii) guidance and/or planning of special educational activities or services;
- and (c) contributions to educational progress in the form of:
- (i) advanced teaching, and/or
  - (ii) publications (books, journal articles, etc.), and/or
  - (iii) membership of committees established to report on educational issues, and/or
  - (iv) participation in important educational research projects.

ANNUAL REPORTS OF THE STATE INSTITUTES  
*NEW SOUTH WALES*

*Office-bearers*

**Patrons:**

Professor C. R. McRae, Dr G. E. Phillips

**President:**

Dr T. W. G. Miller

**Vice-Presidents:**

Dr R. L. Debus, Mr R. W. Stanhope, Mr Lester Fragar

**Secretary:**

Mr J. C. Nield

**Treasurer:**

Mr K. V. Mathews

**Librarian/Research Officer:**

Dr M. R. Dunstan

**Assistant Editor, Australian Journal of Education:**

Mr A. P. Anderson

**Additional Committee Members:**

Miss Joan Fry, Dr V. J. Couch

**Representative on ACER:**

Professor D. Spearritt (Mr Stanhope as alternate)

During the year the following members were coopted to the committee: Mr R. Pert, Mr A. H. Webster, Mr J. Sheppard, Mr L. Whiteman.

### *Meetings*

The following meetings were arranged:

July 22, 1966—Dr L. Kasatkina: *Soviet Higher Education*

Sept 23, 1966—Madame de Vits: *Education for International Understanding*.

April 7, 1967—Professor S. Encel: *The Changing Private and Public Sectors in Education*.

### *Seminars*

April 26, 1967—Dr W. G. Fleming of the Ontario Institute for Studies in Education, Toronto.

May 12, 1967—Dr S. C. Ericksen of the Center for Learning and Teaching, University of Michigan.

*Membership.* At present there are about 115 members, a number of whom are stationed in the country. In addition, the newly-founded Newcastle Branch has 37 members.

*Bulletin.* Three issues were published in 1966.

*Constitutional amendments.* To allow for changes incidental to the formation of a branch outside Sydney, to make our finances more flexible, and make our name consistent with that of the ACER, changes in the constitution were approved.

*Composition and Policy of ACER.* The state institutes have had a chance to comment on proposed changes of representation and policy in the ACER and will have further opportunities in the coming year.

*Research Seminar.* A seminar on 'Research and Policy in Pre-School Education', after being partly planned, was reluctantly relinquished.

*Correspondence with the Federal Minister for Education.* Following lengthy discussions in general meetings and drafting and redrafting, the Institute wrote a letter to the newly-appointed Federal Minister for Education, expressing its concern about, and its hopes for, a Federal initiative in education.

*Corporate Research.* Two projects were proposed for Institute members to investigate in a tentative preliminary way: Objectives of Teacher Education, and the Transition from Secondary to Tertiary Education. Two member-pairs have begun to work on topics, one in each field. Two other members have volunteered but as yet have nobody to partner them.

## VICTORIA

*Office-bearers***President:**

Dr L. W. Shears

**Immediate Past President:**

Dr T. H. Coates

**Vice-Presidents:**

Messrs G. D. Bradshaw, W. C. Watson

**Honorary Secretary:**

Mr L. M. Bell

**Honorary Treasurer:**

Mr G. J. Whitehead

**Representative on ACER:**

Mr G. D. Bradshaw

**Executive Members:**

Mrs B. Falk, Messrs G. McK. Brown, L. L. Foster, G. J. Allen, Drs R. Rowlands and D. Cohen and Professor S. S. Dunn.

**Assistant Editor, Australian Journal of Education:**

Dr L. W. Shears

*Membership*

At the end of 1966 there were 510 members, an increase of 35 over the previous year. In August 1967, the membership had reached a record of 516.

*General Meetings*

October 1966: Professor P. H. Karmel on 'The Arithmetic of Education'. (In association with the Extension Committee and the Faculty of Education, The Tenth Theodore Fink Memorial Seminar in Australian Education.)

November 1966: Mr G. J. Allen on 'Measurement of Attainment in Social Studies'.

March 1967: Annual Meeting, and Dr P. G. Law on 'The Work of the Victoria Institute of Colleges'.

April 1967: Dr S. Murray-Smith on 'The Story of Technical Education in Victoria'.

May 1967: The John Smyth Memorial Lecture: Professor W. G. Fleming on 'Educational Research and Tomorrow's Society'.



June 1967: Fourteenth Frank Tate Memorial Lecture: Mr R. A. Reed on 'The Organization of Secondary Education'.

#### *G. S. Browne Prizes*

The prize for educational practice was awarded to Mr G. A. Reid for an entry entitled 'Team Teaching and Fluid Grading in English in Forms I and II'. The prize for educational research was awarded to Mr B. C. Fitzgerald and Mr K. J. Pigdon for a joint entry entitled 'An Investigation into the Effects of a Twenty-Week Course in Listening Training and Experience on the Listening Ability of Sixth Grade Pupils'.

#### *VIER Bulletin*

Bulletin No. 15 was issued in November 1966 and No. 16 in May 1967. These issues contained information from general programmes of the Institute and reports from groups.

#### *Groups of the Institute*

The Primary Education Today Group and the Research Group both continue to expand their membership and diversify their activities. In addition to these groups the regional groups are now three in number. Colac Group has maintained a full programme of meetings and the Wimmera Group and the Glenelg Group were founded in June and August 1967.

### QUEENSLAND

#### *Office-bearers*

##### **Patron:**

The Hon. the Minister for Education

##### **President:**

Mr W. J. Brown

##### **Vice-Presidents:**

Mr G. F. Berkeley, Dr J. C. Greenhalgh, Mr R. P. Tisher

##### **Executive:**

Miss E. M. Outridge, Sister Mary Teresina, Mr N. R. Anderson, Professor G. W. Bassett, Dr D. Drinkwater, Mr R. Hoskins, Mr D. G. Tweedy, Mr W. Wood

##### **Hon. Secretary:**

Miss B. H. Watts

**Hon. Treasurer:**

Mr N. D. Alford

**Representative on ACER:**

Dr S. A. Rayner

**Assistant Editor for Queensland, Australian Journal of Education:**

Dr S. A. Rayner

*Membership*

The following table shows the state of membership at 31/5/67 and the movements during the year.

## Active (financial) members:

Total at 31/5/66	188
New members joined	48
Former members resumed membership	32
Transferred from associate status	1
	<hr/>
	269

Did not continue membership (resigned, left state, overseas, etc.)	36
	<hr/>

Total active membership at 31/5/67	233
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## Associate financial members:

Total at 31/5/66	7
Transferred to active	1
Did not continue membership	4
	<hr/>
Total at 31/5/67	2

*Meetings*

During the year the following meetings were held:

Six general, including the annual general meeting; seven executive.

Proceedings at the general meetings are summarized below, the figures in brackets indicating the attendance of members and visitors (in that order).

14th June, 1966 (Annual Meeting)—Mr M. Dunkin: 'Teachers versus the Rest: The Nature, Incidence and Implications of Several Types of Conflicts of Queensland Teachers' (43 : 10).

14th July, 1966—Dr G. K. Holland: 'International Understanding and Development through International Education' (30 : 12).

- 20th October, 1966—Discussion: Combined Subject Association Review of New Junior Syllabus (106 members and visitors).
- 23rd February, 1967—Mr J. R. Clark: 'Developments in Scottish Education' (49 : 10).
- 28th March, 1967—Research reports by (i) Mr K. Collis, who discussed the relationship of textbook organization to mathematical understanding, and (ii) Mr R. P. Tisher, who reported on his research into teacher-pupil verbal behaviour patterns in Queensland science classrooms (37 : 13).
- 18th April, 1967—Dr W. G. Fleming: 'What Directions for Professional Educational Researchers?' (46 : 10).

### *Public Lecture Series, 1966*

The Lecture Series for 1966 was held on September 26th and 27th in the Assembly Hall of the Brisbane State High School, South Brisbane. The topic for the series was 'Examinations and Evaluation in the Modern School'. Mr A. Webster, Chief of the Division of Research and Planning in the NSW Education Department, delivered both lectures.

A widespread interest in this subject was evidenced by the large attendance on both nights and the quality of the lectures ensured the stimulation of yet further interest in this field.

### *Lecture Series, 1967*

After a review of the content of recent QIER Lecture Series and of other fast-developing fields of interest to Queensland teachers, the Executive was of the opinion that the launching of the new primary school syllabus in science made the present year a particularly opportune one in which to arrange a Lecture Series on science. Some of the Queensland leaders in specialist branches of science have been asked to indicate to teachers the modern trends in their own fields and to discuss the implications of these trends for teachers in the primary school. Attention will be focused on rocketry and nuclear physics, geology, zoology and botany.

The Lecture Series will be held in September/October.

### *Library*

The Library is at present situated at the Faculty of Education and members are invited to make inquiries of the secretary regarding its holdings. It is hoped that in future more use will be made of the Library.

*The Year in Retrospect*

1. Increased Membership. The last year has again seen a notable increase in membership, from 195 to 235 financial members and associates. State schools, private schools, teachers' colleges, special education services, senior administrators from the State Education Department and the University are now well represented at the Institute.

2. The 1966/67 Programme. Programmes in the past have been arranged in an attempt to secure a balance between addresses from overseas speakers and meetings devoted to research discussions.

During this past year we have been particularly fortunate in our overseas speakers. Dr G. K. Holland, President of the Institute of International Education, shared with us his wide experience in the field of international education. Mr J. Clark, Director of Education, Aberdeen, Scotland, reviewed the Scottish educational scene and brought to our notice some very interesting current developments, particularly in his own area. Dr W. G. Fleming, Assistant Director of The Ontario Institute for Studies in Education, who came to Australia to participate in the ACER Research Conference, described the structure and function of a major research institution.

As in previous years the Institute continued to provide a platform for researchers to report on their investigations. Members were extremely interested in the reports presented by Dr Dunkin (who was recently awarded the Ph.D. degree), Mr Tisher and Mr Collis. As a new venture, for this year's annual general meeting, all members have been asked to consider and then to discuss research topics which they feel merit investigation. A summary of this discussion will be presented to the ACER Annual Meeting by our representative, Dr Rayner.

Late in 1966 the Institute was able, through the cooperation of the subject associations, to devote an evening to a review of the new junior syllabuses. Members will recall that, in 1960, the QIER presented a submission to the Queensland Committee of Enquiry on Secondary Education. With the first cycle of the operation of the new syllabuses nearing completion, the Institute felt that a review was particularly timely.

3. QIER Prize. For some years past, the QIER has taken the view that it should take positive steps to stimulate an interest among practising teachers and research students in educational research with direct implications for classroom practice. Shortly

after the present Executive was appointed, it finalized a set of conditions for a QIER Prize for Educational Research and Practice and published these conditions both within the Institute and in the Queensland Teachers' Journal.

A panel of the Executive has now reviewed the entries and has unanimously recommended that the Prize for 1967 be awarded. The Prize will be presented at the annual general meeting.

4. Sale of Booklet: Modern Mathematics for the Primary School. Sales of this booklet, the Institute's first publishing venture, have been very encouraging, not only in Queensland but also interstate. Further copies are available and may be obtained from the Secretary at a cost of 50 cents each.

#### *SOUTH AUSTRALIA*

##### *Office-bearers*

**Patron:**

The Director-General of Education, Mr J. S. Walker

**President:**

Mr E. D. Lasscock

**Vice-Presidents:**

Messrs K. L. Berndt, R. S. Coggins

**Executive Committee:**

The President, Vice-Presidents, Secretary, Treasurer, Miss F. Nichterlein, Messrs R. Cole-Stokes, R. J. Gilchrist, W. L. Manser

**Hon. Secretary:**

Mr W. G. Boehm

**Hon. Treasurer:**

Mr J. M. Cosh

**Representative on ACER:**

Mr K. L. Berndt

**Assistant Editor, Australian Journal of Education:**

Dr N. A. Nilsson

**Hon. Auditor:**

Mr N. W. Edwards

##### *Membership*

The membership as at 30th June, 1967, was 120, with some 80 per cent of members coming from Departmental Schools, Teachers' Colleges and Education Administration.

*Meetings*

During the year the following meetings were held: seven general, including the annual general meeting; five executive committee. Speakers and topics at the general meetings were as follows, with approximate attendances shown in parentheses:

July 1966—Professor L. F. Neal, Department of Education, University of Adelaide, spoke on 'The place of experiment in modern education in England'. (25)

September 1966—This meeting was held at Scotch College. Mr R. J. Gilchrist, Headmaster of the Junior School, spoke on 'Team Teaching', showed a film on the Norwalk (USA) School, and described preparations for a Team Teaching experiment at the College. (30)

October 1966—Mr E. N. Pfitzner, Principal of Western Teachers College, described 'Colleges of Education in England and Wales'. (35)

March 1967—Annual general meeting and election of officers, followed by a discussion of 'The Role of the Institute'. Principal speakers were Messrs D. J. Anders, K. L. Berndt and L. E. Kiek. (25)

April 1967—Dr E. Roe, Department of Education, University of Adelaide, spoke on 'Educational Research in the United Kingdom', and mentioned his recent experiences in England with the NFER. (40)

May 1967—Dr W. G. Fleming, formerly Assistant Director of the Institute for Studies in Education, Toronto, gave an address on 'Some Indications of Research in Canada'. (20)

June 1967—The President, Mr E. D. Lasscock, presented a report of proceedings at the Melbourne Conference on Research in Education, May 1967.

The sum of \$150 was made available from the SAIER Research Fund to Miss M. A. Watson, Western Teachers College, who is attempting to evaluate the new mathematics course in operation at Cowandilla Demonstration School.

*WESTERN AUSTRALIA**Office-bearers***Patron:**

Mr H. Dettman

**President:**

Dr R. Adam (on leave 1967)

**Vice-President:**

Mr S. W. Woods

**Hon. Secretary/Treasurer:**

Mr A. Uhe

**Hon. Auditor:**

Mr C. Cook

**Committee:**

Mr W. Halliday, Dr D. Mossenson, Mons J. Bourke

**Representative on ACER:**

Mr S. W. Woods

**Assistant Editor, Australian Journal of Education:**

Professor C. Sanders

*Membership*

The current membership of the Institute is 74. This includes two new members who have been admitted since June, 1966. During the same period, two members have resigned, and one has died. Four members are on leave overseas.

*Meetings*

June 1966—Dr B. R. Hammond spoke on 'The Public School Problem in England'.

July 1966—Dr R. Bovell, A/Supt of Research and Planning, WA Education Department, spoke on the '1965 Survey of Primary School Achievement'.

August 1966—Mr W. Loudon, of the same branch, spoke on 'The Achievement Certificate in Secondary Schools'.

September 1966—Dr K. H. Thompson, Associate Dean of Berea College, Kentucky, USA, spoke on higher education in the United States. A large number of visitors from the College of Education and teachers studying Education Administration attended this meeting.

October 1966—Mr Colin Cook, of the Department of Teacher Education, Technical Extension Service, spoke on 'The Education of the Non-academic Student'.

November 1966—Mr E. A. Nottage, Superintendent of Music, Education Department of WA, spoke on 'Experimental Developments in School Music in Western Australia'.

April 1967—Mr R. Biggins, Superintendent of English, Education

Department of WA, spoke on 'Education for Matriculation in England and the USA'.

May 1967—Dr W. G. Fleming, a visiting Canadian educationist, spoke on 'Educational Research'.

June 1967—Mr S. W. Woods, Director of Special Services, Education Department of WA, spoke on 'The Role and Function of the International Institute for Educational Planning, Paris'.

July 1967—A combined meeting was held with the WA Chapter of the Australian College of Education to hear an address by Mr Brian Powell on 'Creative Writing'.

#### TASMANIA

##### *Office-bearers*

###### **Patron:**

The Honourable, the Minister for Education, Mr W. A. Neilson, M.H.A.

###### **President:**

Mr H. L. Dodson

###### **Vice-Presidents:**

Mr A. V. Gough, Mr P. W. Hughes

###### **Representative on ACER:**

Mr H. L. Dodson

###### **Hon. Secretary:**

Mr M. T. Webberley

###### **Hon. Treasurer:**

Mr R. D. Traill

###### **Hon. Auditor:**

Mr J. Besier

###### **Committee:**

Miss E. P. Vaughan, Messrs R. G. Brett, G. L. Johnston, N. H. Campbell, N. J. Holland

###### **Assistant Editor, Australian Journal of Education:**

Mr N. H. Campbell

##### *Membership*

The current financial membership is 55. The annual subscription has been changed to \$3.00 which includes the subscription to the Australian Journal of Education.



### *General Meetings*

Meetings have been held at Hobart and Launceston centres. Mr H. S. Payne has been the Institute's representative at Launceston and has convened meetings at that centre. The following speakers, topics and films have been presented:

1. Mrs H. Featonby and Mr L. McKenzie, 'An experiment in time-table changes in a primary school'.
2. Miss M. Poole: 'An investigation into the effects of various methods of teaching English at a new high school'.
3. Dr L. W. Shears: 'Experimental work in school organization with emphasis on individual differences'.
4. Mrs B. Pearson and Mr D. G. Lennox: 'Home room and specialist teaching for primary and early secondary grades'.
5. Mr F. G. Groom: 'An experiment in streaming in the primary school'.
6. 'Sense Perception': Moody Institute of Science (film).
7. Miss M. Richmond: 'Creative teaching in the infant school'.
8. Dr Joan Farrar: 'Dyslexia'.
9. Mme Madeline de Vits: 'Education—understanding young persons'.
10. Mr E. H. Fist: 'Practical education in the UK'.
11. Miss M. Hill: 'Education in Malaysia, Nigeria and Ethiopia'.
12. Mr H. S. Payne: 'What has Plowden for Tasmania?'.
13. Professor P. Scott: 'New examination requirements for Tasmania'.

### *Executive Meetings*

There have been six meetings of the executive to consider the year's programme and the activities for 1966/67.

### *Prizes*

The 1966 awards for outstanding scholarship at the teachers colleges were made as follows:

- The H. T. Parker Prize: Mrs Beryl Griffiths, Hobart Teachers' College
- The G. V. Brooks Prize: Mr Robert Bensemman, Launceston Teachers' College

### *Annual Institute Address*

Dr L. W. Shears, Principal of Burwood Teachers' College, Victoria, delivered the 1966 Annual Institute Address in both Hobart

and Launceston. The title of the address was 'Experimental Work in School Organization (with particular reference to catering for Individual Differences in Primary and Secondary Schools)'. The address was arranged in conjunction with the Adult Education Board and in both centres formed part of a seminar which allowed for considerable group discussion.

#### *North West Coast Members*

It was regretted that the Institute was unable to arrange for meetings to be held in the North West. It is hoped that further efforts will be made to provide speakers for an area which has responded very well to the provision of speakers in previous years.

#### *Research Projects for ACER*

A circular outlining the desire of ACER for advice from interested persons, organizations and institutions as to suitable research projects was sent to some seventy such bodies. The result, less than 10 responses, was disappointing, though not completely unexpected.

#### *Membership*

An analysis of membership indicates strengths and weaknesses which could well be considered in the next year.

State Schools	24	<i>Regional Subdivision</i>	
Headmaster	17	Southern Tasmania	34
Assistant	7	Northern Tasmania	14
Private Schools	0	North West Coast	7
Catholic Schools	1		
Individuals	2		
Teachers' Colleges	13		
Administration, etc.	15		