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## **Interpretation of Reading Test Scores**

Marion M. de Lemos

Scores on reading tests are frequently converted to 'reading ages' on the basis of statistical data on the average reading level at different ages. The convention seems to have arisen of classifying as 'remedial' any child whose 'reading age' is two or more years lower than his chronological age.

This practice is questionable. First, because what is measured by reading tests will vary according to the type of test used and the age of the child tested. And second, because it seems to assume that all children at a particular age should be reading at exactly the same level. There is in fact a wide variation in reading ability at any age, and it is difficult to determine exactly where the line should be drawn between what is normal variation, and what is abnormal or 'remedial'.

There are generally two types of reading tests. First, there are tests that assess progress in acquiring the basic skills of reading, that is, the translation of the written symbol into the spoken word. Second, there are tests of reading comprehension. These tests depend to a large extent on reading experience, vocabulary knowledge, and general ability, particularly reasoning ability and the ability to make inferences on the basis of the material presented. The way in which one interprets the scores of a reading test will depend largely on what type of test has been used.

Mastery of the basic skills of reading is generally achieved between about nine and ten years of age. Reading tests designed for children up to this age usually assess progress in achieving these basic skills, and scores on this type of test may indicate the extent to which the child has mastered the basic skills of reading. However, reading tests designed for older children are usually tests of reading comprehension, and depend mainly on reading experience, acquired vocabulary, and general ability. A poor score on a reading comprehension test does not necessarily indicate that a child is a 'remedial' reader in the sense that he has not vet mastered the basic skill of reading. He may be able to read the material well enough, but his poor score could be due to poor reasoning ability, a limited vocabulary, or lack of skill and experience in interpreting written material.

The definition of a 'remedial' reader should be based on an absolute rather than a relative criterion. One cannot define as 'remedial' any student who is reading two years below his chronological age. A sixteen-year-old reading at a fourteen-year-old level has probably achieved a high degree of reading skill, and can hardly be labelled as 'remedial'. On the other hand, an eight-year-old reading at a six-yearold level indicates a much more serious lag. Such a child is probably having difficulty with his reading, and is likely to need remedial help.

To identify students needing remedial help a minimum level of reading skill required at different stages needs to be determined. This minimum level needs to be defined in terms of basic reading skills, and not in terms of reading comprehension tests which depend to a large degree on general ability and reasoning. The identification of 'remedial' readers could then be based on a meaningful criterion, and appropriate remedial teaching could be applied to develop the particular skills that are required to achieve the level of reading skill defined.

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### **Community and School**

David Pettit

The March 1974 ACER Newsletter (No. 20) carried a report of the results of a pilot survey into the relations between school and community undertaken at an inner suburban High School in Melbourne. The second pilot study, using the same research techniques, has been completed at a High School in a middle income, fast expanding outer suburb.

The following comments are based upon the nine hypotheses developed as a result of the experiences at the inner suburban school. All but two of these hypotheses were definitely confirmed. Hence at both schools (i) the Advisory Council had limited itself to maintenance and improvement of grounds and buildings and (ii) the Mothers Club had restricted its activities to provision of funds. (iii) the staff resented being directed by local people over what and how they taught and (iv) the parents themselves were unwilling to give advice on matters for which they considered they had no training. (v) only the staff appeared capable of making the Principal compromise his actions. (vi) almost all parentteacher contact was school initiated and (vii) no unanimity of opinion existed in the Advisory Council over the Education Department's proposed administrative changes.

The only two hypotheses that could not be considered supported were (viii) those concerning the role of the Principal vis a vis the local populace and (ix) the effect of the school-community culture gap upon student alienation. Unlike the inner suburban school the Principal channelled most day-to-day parent contact through his senior staff and concerned himself more with local community 'spokesmen' contact and official business. Perhaps surprisingly, the middle class nature of the outer school's catchment area, an environment similar to that from which most teachers themselves

come, did not appear to decrease the amount of student alienation found in the first study. The third of the student intake that remains at school through to the VI Form is only slightly higher than the inner suburban school. The average time that teachers stay, in what is a relatively congenial area, is marginally shorter than the inner suburban school. The parents are, in the main, in a higher income bracket and are slightly better educated but this has no impact upon their willingness to become involved; indeed almost the converse takes place. Many of them, at the lower end of a professional or 'skill' ladder, appear even more conscious of a 'professional image' that colours their attitudes to the highly accredited teachers.

Several additional features distinguish the outer suburban school. There is a high use of the school buildings and grounds by the local community as the school does not appear so apprehensive of damage; this is possibly related to the relative age—seventeen years—of the outer suburban school whereas the inner suburban school was only three years old. The outer suburban school lies in a politically active area and intervention by the local MPs at both State and Australian level for publicity purposes is accepted and utilised. There is no locally-based Progress Association to promote locally-inspired educational aims. The distance between the Advisory Council and the teachers, described as 'remote' at the inner suburban school, could be characterised as 'latently hostile' at the outer suburban school. Contact between the two is virtually non-existent and over half of the Advisory Council were critical of teachers, their hours, lack of maintenance of 'standards', part-time study leave and, in particular, strikes. On the other hand the staff were more in favour of parent influence than Advisory Council interference which was seen as 'isolated' and 'irrelevant' by nearly half of them. Finally the presence of eight other secondary schools within a radius of three miles from the school makes it difficult for the school to create a distinctive ethos around which local involvement could build.

If these two schools are relatively typical of schools throughout the metropolitan area and contemporary opinion remains favourable towards local involvement being expressed through schools, what can be done to improve the level of co-operation and involvement?

With this question in mind the next stage of the project is to investigate the manner of operation of a school that has as one of its specific ideals a high level of involvement between it and the community it serves.

One other major aspect is also being investigated. In June 1974 the Victorian Minister for Education announced that school governing bodies—School Committees, School Councils and Advisory Councilswould in future be able to choose from four models, the composition of members best suited to their local needs. The structures for the governing boards and the powers they are given is obviously pertinent to this study and will be investigated from 'two points of view-firstly their potential for stimulating involvement at the local level and, secondly, the response they stimulate from those large bodies-the unions, the parent and school organisations at state level and the Education Department itself-which tend to dominate the media and have widespread influence.

The full report of the inner suburban pilot study school will be published as a double issue ACER, *Australian Education Review* called *School and Neighbourhood: A Case Study* and will be available from ACER,

## **ACER Library and its Publications**

Mary Carrick

A monograph collection of 12,000 titles and a serials collection of some 1800 titles, establish the ACER Library as one of the most comprehensive sources of information in Australia on education and related fields.

As well as providing a service to readers from its own resources, the Library is constantly involved in an interchange of information and material to and from other libraries, particularly through the network of Inter-Library-Loans which librarians have established throughout Australia.

Possibly the major portion of Inter-Library-Loan requests is for periodicals or periodical articles and one of the important means of locating these much-needed references is the list of holdings of some fifty libraries' periodicals which was compiled by a member of the ACER Library staff. The list is entitled: Serials in education in Australian libraries. A union list, edited by M. A. Findlay, 3 vs., 1973. It gives the name of the periodical and the names of the libraries from which it may be borrowed. This list is widely held throughout Australia and helps to make tremendous resources available to libraries and their users.

Further publications produced by the Library to provide information on the different kinds of literature of education include such titles as: *Bibliography of Australian education from colonial times to 1972*, edited by Cecily Brown; *Education theses: a list of theses in education accepted for higher degrees at Australian universities*, compiled by Cecily Brown.

The Library's involvement in the compilation of the *Directory* of *Philanthropic Trusts in Australia*, by E. K. Hart and revised by Cecily Brown has helped to make more widely available knowledge of the many trusts now in existence, not only in the educational field, but

also in social, artistic, charitable and religious areas.

But possibly the most widely used of the Library's publications is the *Australian Education Index*, edited by Mary Carrick. The first issue of the *Index* was produced in 1957 and it was described then as an attempt to assist 'all those faced either with the task of trying to keep in touch with what is being published about education in Australia, or concerned to find comprehensive information about particular subjects'.

Seventeen volumes later the *Index* is still filling this role and it is still the only Australian publication in this field. It is the first place to look for information on almost anything written or spoken about education in Australia.

#### ARRANGEMENT

The *Index* is very easy to use as the arrangement of the entries is in one alphabetical sequence; this is both straightforward for users and a feature common to many other much-used indexes. The *Index* gives both subject and author information, as most people want either information about certain subjects, or information about what certain authors have written.

#### COVERAGE

Material currently being indexed includes books and individual chapters of some of them, articles in periodicals, newspaper articles, theses, seminar and conference reports, legislation, parliamentary debates.

There are therefore two main requirements for information which are met by the *Index*. The first is for access to *current* material and the second is for *searching* for 'all' the material published. To attempt to satisfy both needs, the *Index* is published in two forms: a bi-monthly issue from May to November, to ensure that entries for current material are published as soon as possible after they are recorded, and an annual cumulation which gathers together into one sequence all the entries for the year. This makes retrospective searching much easier, as one volume only need be looked through for the whole year's publishing. In addition, to assist those who want to know what books were published during the year, an annual *Bibliography of Australian education* is included in each cumulation.

#### USAGE

The Index constitutes a major source of information in the school library. The school student wanting material for a project on 'State Aid to Education' for example, or the school librarian wanting to provide background information on a project dealing with 'State Aid to Education', would have their needs readily catered for under that subject heading in the Index. The teacher wanting to keep in touch with the latest techniques of teaching the slow learning child has only to look under that heading to find all significant material ready to hand. For the researcher, the Index provides an information source to material over a span of years and provides the complete reference for the identification of the right kind of material.

When the reader has selected the material required, the next step is to obtain it. The first source to be checked is the reader's own library—school library, university library, local public library, local state library. If local sources cannot provide the material then readers, through their librarians, have access to the holdings of libraries beyond the immediate locale.

The Australian Education Index is used in tertiary institutions, in general and special libraries and by individual researchers and teachers. The subscription of \$25 per year covers both the current bi-monthly volumes and the annual cumulation.

# About School Leavers

William C. Radford

In 1959-60, the ACER asked all schools in Australia from which students would be leaving for work or for further education, to provide it with information about all students leaving between 1st April 1959 and 31st March 1960. It obtained useful data on some 114,000 leavers, and reported the results in *School Leavers in Australia 1959-60* (published in 1962). In that twelve month period some 145,000 left Australian schools.

In 1971-72 ACER repeated the study. Mr. R. E. Wilkes and Dr. W. C. Radford have been responsible for gathering and analysing useful data on some 110,000 leavers. In 1959-60 the data covered about 80 per cent of those leaving, in 1971-72 only about 50 per cent of the estimated 215,000 leavers. We do not know whether those on whom data were available in 1971-72 are a representative sample, and therefore the information that follows cannot be regarded as applying to all leavers-only to those about whom we have information.

Of these 110,000 leavers, about 54,000 were girls, and about 60,500 came from metropolitan schools. About 37 per cent left before they turned 16. On the other hand, about 36 per cent were 17 or more when they left—39 per cent of the boys, and 33 per cent of the girls.

About 52 per cent left at the end or before the end of the third last year of schooling—i.e. grade 10 if the terminal year is called grade 12. But 29 per cent left from the terminal year. Again, boys tended to stay longer at school than girls— 31 per cent of boys as against 28 per cent of girls leaving from the terminal year. Almost 80 per cent of the leavers stayed on until the end of the working school year, although this was not always December. About 30 per cent leave in October or November.

There were naturally enough differences between girls and boys in the occupations entered; the most marked, and the most expected perhaps are that 3 per cent of the girls as against 10 per cent of the boys entered the skilled manual trades. For the unskilled and semi-skilled trades the figures were 5 per cent girls and 8 per cent boys. Other occupations of interest are:

university (including theological college and service colleges): girls 6 per cent, boys 8 per cent teachers colleges: girls 6 per cent, boys 2 per cent.

The relation between father's occupation and the student's destination on leaving school aroused a good deal of interest in the 1959-60 study, particularly amongst those interested in tertiary education. Of the 95,000 leavers in the 1971-72 study whose father's occupation was known, some 10 per cent came from homes that we classified as professional or professional-technical: 20 per cent from homes where the father was classified as a semiskilled or skilled manual tradesman, 12 per cent from homes where the father was in a clerical-administrative-type occupation, and 29 per cent from homes where the father was in a slightly skilled or unskilled occupation.

Slightly more than 50 per cent of the children of fathers in professional occupations (48 per cent of boys and 55 per cent of girls) went into jobs, or took up further studies, which could be regarded as professional or leading to professional occupations. For the skilled manual trades the figure for such 'occupation stability' was 37 per cent for boys and 5 per cent for girls, and for the unskilled and semiskilled occupations 28 per cent of boys and 14 per cent of girls.

Of the 989 boys and 2753 girls reported as entering teachers colleges whose father's occupations were reported, 10 per cent of the

boys and 12 per cent of the girls came from the 8 per cent of homes where the father's occupation was classified as professional; 18 per cent of the boys and 15 per cent of the girls came from the 28 per cent of homes where it was classified as unskilled or slightly skilled. Of the 4202 boys and 3115 girls reported as entering universities for whom father's occupation was given, the two sets of figures were 29 per cent boys and 21 per cent girls from the homes where the father was classified as professional, and 3 per cent boys and 2 per cent girls from homes where he was classified as unskilled or slightly skilled.

It is worth noting that in the 1959-60 survey, 54 per cent of the fathers were in skilled, semi-skilled and unskilled occupations and their children were 37 per cent of those going to teachers colleges and 21 per cent of those going to universities. In the 1971-72 survey there were 49 per cent of fathers in these categories; they contributed 34 per cent of the entrants to teachers colleges and 24 per cent of the entrants to universities. This may be a real difference. It may however be due to the bias introduced by the low percentage of leavers about whom we have data, and its unrepresentative nature.

An interim report on aspects of the study is available for reference at ACER. It is expected that the final report will be completed by the end of September 1974 and available for reference at ACER then.

#### New ACER Titles

Directory of Philanthropic Trusts in Australia (\$10.00) E. K. Hart, revised by C. A. Brown.

Hierarchical Structure of Comprehension Skills Vol. 2 (\$10.00) by Milton L. Clark.

Education Theses: A list of theses in education accepted for higher degrees at Australian Universities (\$3.50) Compiled by Cecily Brown.

The Primary School in the Community: A Survey of Teacher, Student and Parent Attitudes (\$2.25) by R. T. Fitzgerald.

#### AUSTRALIAN COUNCIL FOR EDUCATIONAL RESEARCH

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#### IEA (AUSTRALIAN) REPORTS: 1974 SERIES

ACER announces the release of the first three volumes in the 1974 series of IEA (Australia) Reports.

- 1974: 1 An examination of the internal structure of the Coopersmith Self-esteem Inventory for Australian 16-year-olds. By Kenneth N. Ross (Cost: 50 cents)
- 1974: 2 The effects of the conditions of learning in the schools on educational achievement. By John P. Keeves (Cost: 50 cents)
- 1974: 3 Implications of the results of the IEA Science Project for the teaching of science in Australia. By Malcolm J. Rosier (Cost: 50 cents)

The next issue of the IEA (Australia) Newsletter will be distributed in about three weeks. It contains a summary of some of the 1973 and 1974 IEA (Australia) Reports, and an outline of work in progress on the IEA Follow-up Projects.

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