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WHAT CAN WE LEARN FROM INTERNATIONAL LITERACY SURVEYS? A
CRITICAL LOOK AT THE EVIDENCE FROM BRITAIN
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What can we learn from international literacy surveys? A critical look at the evidence from Britain

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Abstract

Despite criticisms, interest in the results of international literacy surveys continues, and three such surveys have taken place in the last three years. This paper is an attempt to show just a few of the lessons that can be learnt from the results of such surveys, using data from Britain as illustrations.

International literacy surveys, 1960-2002

The first international literacy survey took place in 1960, and between then and 2002 there have been eight in all. Table 1 lists them and shows which parts of the United Kingdom took part in them.

England has therefore taken part in seven of the eight surveys, Wales in five, Scotland also in five (though not all the same ones as Wales), and Northern Ireland in two. Portugal took part in the IEA studies of 1991, and in PISA in 2000.

Table 1 - International literacy surveys, 1960-2002, with UK participation shown

Date	Name	Principal references	Age-range(s)	Parts of the UK which participated*
1960	IEA 12-Country Study	Foshay <i>et al.</i> (1962)	13/14	England & Wales, Scotland
1971	IEA 15-Country Study	Thorndike <i>et al.</i> (1973)	9, 13/14, 15/16	England & Wales, Scotland
1983	IEA Written Composition Study	Gorman <i>et al.</i> (1988); Gubb <i>et al.</i> (1987)	13/14	England & Wales; also Wales separately for writing in Welsh
1991/96**	IEA Reading Literacy Survey	Elley (1992); Brooks <i>et al.</i> (1996)	9	England & Wales
1996	OECD International Adult Literacy Survey (IALS)	Carey <i>et al.</i> (1997)	16-64	Britain***, Northern Ireland
2000	OECD Programme for International Student Assessment (PISA)	Gill <i>et al.</i> (2002)	15	England, Scotland, Northern Ireland
2001	IEA Progress in Reading Literacy Survey (PIRLS)	(not yet available)	9	England, Scotland
2002	OECD Adult Literacy and Lifeskills Survey (ALL)	(not yet available)	16-64	(none)

Key: IEA = International Association for the Evaluation of Educational Achievement
OECD = Organisation for Economic Cooperation and Development

Notes: *Where 'England & Wales' is shown, the two countries took part as one jurisdiction.
**This survey was conducted in 1991 in 27 other countries, and was replicated in England & Wales in 1996.
***Separate results for England, Wales and Scotland are given in the report.
The 1983 survey was the only study of writing; the rest covered only reading.

Problems in attempting international comparisons

Some of the problems in undertaking international comparative studies of this sort that are mentioned by various authorities include the following:

- countries differ widely in levels of development, etc.
- the test questions are likely to suit some countries better than others
- translation can affect the levels of difficulty posed by specific questions
- comparable samples of pupils are very difficult to achieve because of the different features of education in participating countries
- the studies are intermittent
- the same countries do not always take part, so that monitoring changes in comparative differences is not easy.

It is also very difficult to ensure that cultural differences will not confound the results, or that the surveys are administered in the same way in different countries. For example, in the first round of IALS in 1994, the result for France was so low (seventh out of eight countries taking part, well below the sixth country, and only just above Poland) that just two weeks before publication the French government ordered that the results for France should be deleted from the report. A cultural difference in attitude towards test-taking was later found to be responsible: when faced with very simple opening items, French people of average and high ability were much more likely than their peers in other countries to refuse to continue with the test; but they were then attributed a low score, thus depressing the French average.

Again, in a four-country follow-up to IALS (which included England and Wales) there were found to be radical differences in the method of administration of the survey, even though the national coordinators had all agreed on the same approach and (supposedly) trained their national teams to follow that approach. For writing, the problems of comparison are especially acute, since there has been only one international survey of attainment in writing.

Despite all this, many governments have been keen to take part in order to get some sense of how well their education systems are performing compared to others.

Findings

The 1960 study placed the 12 participating countries in the following order: Yugoslavia, Scotland, Finland, England and Wales, United States, Switzerland, West Germany, Sweden, France, Israel, Belgium, Poland. However, this was very much a pilot study, and the methodology would probably not stand up to modern scrutiny.

The 1971 study produced the rank orders of countries for the three ages involved shown in Table 2.

Table 2 - Rank order of countries in 1971 IEA study of reading in 15 countries at three ages

Age 9	13/14	15/16
Sweden	New Zealand	New Zealand
Italy	Italy	Scotland
Finland	United States	England & Wales
England & Wales	Belgium (French-speaking)	Netherlands
Scotland	Finland	Finland
Belgium (French-speaking)	Scotland	Belgium (French-speaking)
Netherlands	Sweden	Sweden
Belgium (Flemish-speaking)	Hungary	Israel
United States	England & Wales	Belgium (Flemish-speaking)
Hungary	Netherlands	Italy
Israel	Belgium (Flemish-speaking)	Hungary
Chile	Israel	United States
India	Chile	Chile
Iran	Iran	Iran
	India	India

With the 1996 result for England and Wales inserted, the 1991 study produced the rank order shown in Table 3 for age 9 — it should be noted that in this list the countries between the two horizontal lines were not statistically significantly different from England and Wales, while those above the upper line were significantly better, and those below the lower line were significantly worse, than England and Wales (Elley, 1992; Brooks *et al.*, 1996). Portugal was in a group of lower-attaining countries.

Table 3 - Rank order of countries in 1991 IEA reading literacy study, age 9 (with 1996 result for England and Wales added)

Finland
United States
Sweden
Italy
France
New Zealand
Norway
Singapore
Iceland
Ireland
Canada (British Columbia)
Hong Kong
Switzerland
Greece
Germany (West)
England & Wales (1996)
Belgium (French-speaking)
Hungary
Germany (East)
Spain
Slovenia
Netherlands
Cyprus
Portugal
Denmark
Trinidad & Tobago
Indonesia
Venezuela

These rankings are inherently not very reliable, but do seem to indicate relatively high placings for England and Wales, and Scotland, in the earlier studies, and some slippage for England and Wales at age 9 by the 1990s.

What is very noticeable about the lists is the high correlation between the affluence (or poverty) of the participating countries and their positions. This is particularly clear in Table 2 for Chile, India and Iran, and in Table 3 for Indonesia, Trinidad and Tobago, and Venezuela. This suggests, unsurprisingly,

that the amount of money that a country can afford to invest in its educational system pays off in terms of educational attainment.

The 'dispersion of test scores'

Inspection of the distribution of scores reveals another point of interest. Even in the 1960 study it was noted that England and Wales had 'by far the largest dispersion of test scores' (Pidgeon, in Foshay, 1962, p. 59), with Scotland close behind. In the 1971 study, the standard deviations for England and Wales, and Scotland, were among the largest at ages 9 and 13/14 (though not at age 15/16). And in the 1991/96 study the distribution of scores for England and Wales had a noticeable 'long tail' or 'trailing edge' of underachievement: whereas in the middle and upper parts of the range children in England and Wales performed as well as those in countries much higher in the rank order, those at the lower end did much worse. Among industrialised western countries only Denmark had a similar (in fact, worse) trailing edge.

Pidgeon had a theory on the 'dispersion of test scores' in 1962:

'The general aim of the grade class teacher may tend to result in a relatively smaller dispersion. Perhaps exerting a greater influence, however, is the belief a teacher may have that innate ability is of paramount importance in determining the level of attainment to be expected from a child. Streaming by ability, which is viewed as an administrative device resulting from the acceptance of this belief, will merely tend to enhance its effects. When all these factors act in the same direction the effect will clearly be greatest and this is what happens in England. Here, it is claimed, the aims and, more especially, the beliefs of most teachers and educational administrators lead them to expect wide differences in performance, and this is what is therefore achieved. Where, on the other hand, the grade placement system operates and especially where, within such a system, teachers do not attempt to measure innate ability and therefore do not expect their pupils' attainments to be matched to it, then the dispersion of achievement will be much less.'

(Pidgeon, in Foshay, 1962, pp. 61-2)

In other words, low expectations of some children contribute to their low achievement; and in this respect very little seems to have changed in British education. If this expectation effect is true, it would seem to imply a 'devil take the hindmost' attitude, possibly rooted in Britain's class structure, and a need to counteract this by concentrating special help on those most in need.

However, in the 2000 PISA study, the mean score for 15-year-olds in England was again closer to the top of the list, while Portugal was again towards the bottom (see Table 4, derived from Figure 3.2 in Gill *et al.*, 2002, p. 32).

Table 4 - Rank order of countries in reading literacy in year 2000 PISA study, age 15

Finland
Canada
New Zealand
Australia
Ireland
Korea
United Kingdom
England
Japan
Sweden
Austria
Belgium
Iceland
Norway
France
(United States)
Denmark
Switzerland
Spain
Czech Republic
Italy
Germany
Hungary
Poland
Greece
Portugal
Luxembourg
Mexico

The mean score for England was significantly higher than the average for all countries taking part, significantly lower only than Finland and Canada, and significantly higher than all countries in the list from Austria downwards,

except the United States (Gill *et al.*, 2002, Figure 3.1, p. 29). There was, however, again a relatively large 'dispersion of test scores'. This implies both that the highest-scoring pupils in England were among the highest scorers overall, and that the lowest-scoring pupils in England were among the lowest scorers overall. The average score for Portugal was significantly higher than those for Luxembourg and Mexico, not significantly different from those for Germany, Hungary, Poland and Greece, and significantly lower than all the rest.

The success of Finland

In all six of the school-level rank orders so far cited in this paper, Finland has been either at the top or very close to it — why? One frequent suggestion is that the pervasiveness of subtitled programmes on television — a country whose two national languages (Finnish and Swedish) are spoken by relatively small numbers in global terms cannot afford dubbing — compels children to learn to read early and well if they are to understand what is going on. However, Portugal also has a high frequency of subtitled programmes, and is much lower in the rank orders.

Three other factors seem more plausible: Finland is a prosperous country, which resources its education system well; socially, it is very homogenous, with much less marked differences between rich and poor than in, for example, Britain; and it has a strong and long-standing tradition of introducing children to books at a very early age, typically before they can walk or talk.

Adult literacy

Further evidence for a substantial proportion of people in England having poor literacy is found in adult literacy surveys. For adults there is so far only one international survey (IALS, 1996), so comparisons have to be made with national adult literacy surveys in the UK from the 1990s. Relevant data from four such surveys and IALS are shown in Table 5.

Table 5 - Estimates of functional illiteracy rates from adult literacy surveys in Britain, 1991-96

Year	Age	Reference	Estimate of functional illiteracy rate
1991-2	21	Ekinsmyth & Bynner (1994)	19%
1993-4	22-74	ALBSU (1995)	15%
1995	37	Bynner & Parsons (1997)	19%
1995	16-64	BSA (1997)	16%
1996	16-64	Carey <i>et al.</i> (1997)	23%

The four surveys of 1991-95 all attempted to use the same definition of functional illiteracy (based on national Communication Standards for adult basic skills current in England and Wales at the time), and produced estimates of functional illiteracy among adults of between 15% and 19%. IALS used a slightly higher criterion, and unsurprisingly produced a higher estimate, 23%. A rough average is therefore about 20%, or about 7 million people.

Despite the different age-ranges involved, the estimates in Table 5 do roughly converge. When the figures for the three cross-age surveys are separated by age groups, however, a different trend emerges. For instance, the 1993-94 survey covered people aged 22-24, 32-34, and so on, up to 72-74 (this oldest group were people who were born around 1920, and entered school around 1925). Comparisons of the average scores for these age groups showed a rise between 22-24 and 32-34, then a plateau to 42-44, then a slow decline across the three older age groups. Essentially the same pattern emerged in the 1995 and 1996 surveys of people aged 16-64.

By itself, this pattern could have either of two explanations (or, indeed, a mixture of the two):

- people's literacy skills do not materially alter once they leave school, and any earlier survey would therefore have found much the same level for each cohort; or
- people's literacy skills do alter after they leave school, improving into early middle age, then remaining steady for some time, before declining again in later years.

The only piece of evidence that hints at a decision between these explanations is a longitudinal 1961-72 study (Rodgers, 1986), which seems to show that average literacy skills do improve into early middle age (specifically, in this study, between age 15 and age 26). This suggests that the second, 'lifetime trend', explanation is the more likely.

Whatever of the truth of that, the British adult literacy data clearly show that *the tendency of a significant proportion of the population to have low literacy skills is not a recent phenomenon, but dates back at least to the generation who entered school around 1925.*

Why are standards of literacy so often said to be falling?

The data cited here do not suggest that levels of attainment have been falling; on the contrary, they suggest that those levels have been fairly constant over a long period of time. So why do so many commentators think that standards have been declining? For Britain, I believe that one main reason is a true perception that is distorted by a false one. Many of those who believe that standards have declined are middle-aged and of above average attainment in literacy. They perceive, correctly, that levels of attainment among people younger than themselves are lower than their own, especially among school-leavers (16-year-olds in Britain); but they also believe, incorrectly, that their competence in literacy was just as high when they completed their secondary education as it is now — when in fact the survey evidence suggests that they have almost certainly improved. Given their belief that the road they have travelled is flat, they perceive the lower standard of attainment of younger people as representing a decline when in fact it is probably about the same as theirs at that age.

Conclusions

The British educational system has been generally successful in maintaining the standard of achievement in literacy despite economic cycles, the rise in numbers having a first language other than English, the spread of other sources of information and entertainment, and the substantial broadening of the school curriculum. The international evidence seems to show that the levels achieved by middling and high performers are good.

But the international evidence and surveys of adult literacy also show that there is a significant proportion of the population who have poor or very poor literacy skills; and this pattern seems to have persisted for many decades.

The principal implication for educational policy in Britain (and this may well be true elsewhere) would seem to be the following. The most effective way of raising average levels of achievement would be to *intervene early in children's lives to ensure that those already failing or at risk of doing so are equipped with the literacy skills necessary for the rest of their education and for life.*

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O QUE PODEMOS APRENDER COM AS AVALIAÇÕES INTERNACIONAIS DA LITERACIA? UM OLHAR CRÍTICO SOBRE AS EVIDÊNCIAS DA GRÃ-BRETANHA

Resumo

Apesar de todas as críticas, continua vivo o interesse nos resultados das avaliações internacionais da literacia. Só nos últimos três anos, tiveram lugar três destes estudos. Este texto pretende mostrar algumas das lições a retirar dos resultados de tais estudos, usando, como exemplo, os dados da Grã-Bretanha.

QU'EST CE QU'ON PEUT APPRENDRE AVEC LES ENQUÊTES INTERNATIONALES SUR LA LITTÉRATIE? UN REGARD CRITIQUE SUR LES ÉVIDENCES DE LA GRAND-BRETAGNE.

Résumé

Malgré tous les critiques, il continue l'intérêt sur les résultats des évaluations internationales de littératie et pendant les trois dernières années ont eu place trois de ces études. Avec ce texte on veut montrer quelques leçons à retenir à partir des résultats de telles études, usant pour l'effet des indicateurs de la Grand-Bretagne.