

OIDEAS

Geimhreadh, Winter 2001

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INVITATION

The Editor invites teachers and educationists to contribute articles for publication in *Oideas*. Articles should be at least 1,500 words in length and should not exceed 5,000 words, and they should deal with aspects of education of current, practical, or historical interest.

Book reviews and shorter notices will be published also and publication will be subject to the approval of the Editorial Board.

Articles and reviews should be typed in black, in double spacing, and on one side of the paper. A short note on the writer's background should accompany every article submitted and an abstract of the article also should be supplied.

Reference to authorities should be made in the text by the use of either the Footnote Style with superscript numbers, or the Harvard style. The names of authorities should be set out in alphabetical order in the list of references.

Preferably books should be cited in the following form:

DRUDY, S. and LYNCH, K. (1993) *Schools and Society in Ireland*, Dublin, Gill & Macmillan.

Titles of journals should not be abbreviated.

Articles should be cited thus:

CARTER, G. L. A. (Winter 1973) 'Strategy for Curriculum Reform', *Irish Journal of Education*, Vol. 7, no. 2, pp. 66-78.

AN GHAELGE

Cuirfear fáilte ar leith roimh ailt i nGaeilge. Mura gcuirtear ar fáil dúinn iad ní féidir linn iad a fhoilsiú.

Aon tuairimí a nochtar sna hailt in *Oideas* is iad tuairimí na n-údar féin iad. Ní gá go léireoidís, ná go réiteoidís le, beartas na Roinne Oideachais agus Eolaíochta.

Opinions expressed in articles in *Oideas* are those of the authors. They need not necessarily express, or be in accord with, the policy of the Department of Education and Science.

Foilsítear *Oideas* faoi stiúradh Boird Eagarthóireachta.

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Nóta ón Eagarthóir

Le breis agus céad bliain anuas faightear ceist na gcaighdeán inmheachta ina téama lárnach sna díospóireachtaí i measc oideachasóirí agus feictear dúinn gur gnách leosan i ngach ré a mhaíomh go bhfuil an ghnóthachtáil acadúil imithe i léig. D'eascair 'Ré na dTorthaí' as an imní a nocht Coimisiún Powis 1869-'70 agus mhair sí ar feadh tríocha bliain nach mór. D'imir an tastáil bhliantúil cúngú mí-ámharach ar chleachtais an oide ranga agus, fairis san, tháinig meath ar an gcomhghaol idir an riarachán lárnach agus oidí. Insítear scéalta faoi 'Ré na dTorthaí' go fóill agus go dtí le déanaí d'fhág sí rian diúltach ar dhearcadh oidí i leith choincheap an mheasúnaithe, go háirithe sa chás go mbeadh an measúnú faoi chúram dreama ón taobh amuigh. Ach sa lá atá inniu ann aithníonn pobal an oideachais an tábhacht nach beag a bhaineann le measúnú an chaighdeáin inmheachta i bhforbairt na foghlama. Ar bhealach praiticiúil, ciallaíonn sé sin gur den riachtanas ag lucht pleanála ag an leibhéal náisiúnta agus ag leibhéal na scoile é eolas iontaofa bheith acu faoi dhul chun cinn na scoileanna d'fhonn leasuithe inmhianaithe a chur i bhfeidhm. Aithnímid, dá bharr sin, a thábhachtaí atá sé ár léitheoirí a chur ar an eolas faoi thorthaí suirbhéanna náisiúnta agus idirnáisiúnta.

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Díríonn an Dr Kellaghan aire ar leith ar na caighdeáin léitheoireachta ó thús na seascaidí. In ainneoin ar tugadh le tuiscint sna meáin chumarsáide ó chianaibh, táimid ar an meánleibhéal idirnáisiúnta gnóthachtála de réir dealraimh; is cosúil áfach nach bhfuil aon fheabhas tagaithe ar na torthaí le fiche bliain anuas. Tagraíonn sé freisin d'inniúlacht an duine fhásta anois i gcomhthéacs na hEorpa agus, cé go léiríonn sé nár mhiste dúinn a bheith inníoch faoin gcaoi ar chruthaigh an dream is ísle inniúlacht, níl aon bhunús le ráitis a mhaíonn go bhfuil céatadán thar cuimse againn de dhaoine nach bhfuil an léitheoireacht acu.

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na Sasanaigh san eolaíocht. Ar an iomlán agus gach ní a chur san áireamh, léiríonn na torthaí go ngabhann cumas nach beag agus an-éifeachtacht lenár gcuid scoileanna.

Léiríonn an tOllamh Kathy Hall an claonadh le blianta anuas béim fhabhrach a leagan ar pharaidím na foghlama, bíodh go leantar le haitheantas a thabhairt don pharaidím síciméadrach fós. Cé go n-aithníonn sí an fiúntas a ghabhann le meastóireacht shuimitheach, cuireann sí ar na súile dúinn go bhfuil buntáisti suntasacha ag gabháil le measúnú múnlaitheach. Molann sí dá bharr infheistíocht bhreise in oiliúint mhúinteoirí agus, maille léi, comhtháthú idir tacaíocht ón mbarr anuas agus ón mbun aníos.

Eiseamláir is ea an t-alt leis an Dr Kathleen Murphy den bhorradh nach beag a tháinig ar an obair thaighde faoi chúrsaí ban in ollscoileanna na tíre le tamall anuas. Déanann sí cíoradh ina halt ar an dearcadh atá ag grúpa ban a chláraíonn le haghaidh cúrsa staidéir thart ar fhiche bliain tar éis doibh éirí as scolaíocht fhoirmiúil. Fiafraíonn sí díobh céard ba chúis lena bhfillleadh agus iad meánaosta, agus, ina theannta sin, cén fáth nár lean siad ar aghaidh nuair a bhí siad sna déaga. Faoi mar a fuair scoláirí eile amach roimpi, léiríonn sí go raibh an-tionchar ag tosca socheacnamaíocha ar an gcinneadh ach d'fhan sé mar sprioc ag na mná go dtapóidís an deis díriú ar chúrsaí foirmiúla léinn uair éigin eile. Agus, dar leo, ba le fonn mór a bhí siad ar ais ar scoil ag déanamh rud éigin chun a leasa féin.

Tá léitheoireacht sa dara theanga idir chamáin ag an Dr Tina Hickey agus ina halt spreagúil cíorann cúrsaí léitheoireachta sa Ghaeilge i gcomhthéacs an churaclaim nua-leasaithe. Leagann sí béim ar an tábhacht nach beag a ghabhann le sonas a chur ar fáil don léitheoir óg agus chun na críche seo sólathraíonn sí raon de mholtaí praiticiúla.

Léadh trí cinn de na hailt, iadsan leis an Dr Kellaghan, Dr Hall agus Dr Hickey, ag comhdháil i mBaile Átha Cliath anuraidh agus táimid faoi chomaoin ag Cumann Léitheoireachta na hÉireann agus an Tionscnamh Náisiúnta Léitheoireachta as an gcead foilsithe. Tá na hailt éagsúla maraon leis na léirmheasanna á gcur faoi bhráid an phobail oideachasúil againn chun daoine a chur ar an eolas agus iad a spreagadh. Agus, má chuireann an t-ábhar dúshlán fúthu díriú orainn lena ndearcadh féin ar a bhfuil iontu a léiriú, nach mar sin is fearr é?

Editorial Comment

The issue of standards has been a persistent theme in education debate here and abroad for over a hundred years and in nearly every decade commentators have argued that current attainment levels compared unfavourably with those achieved in a previous golden age. Concern was expressed by the Powis Commission of 1869-'70 for example, and this led to the institution of the payment by results scheme which lasted for nearly thirty years. The annual testing of primary school pupils that followed led to an unfortunate narrowing of teacher focus in the classroom and a regrettable deterioration in the quality of relations between central administration and teachers. Payment by Results is still part of the folk memory in this country and even yet it affects how some teachers view the concepts of evaluation and assessment[I have done the deletion here] when undertaken by agencies external to the school. But, significantly, attitudes are changing and now there is virtual agreement in the education community that the assessment of standards is a key component in the promotion of achievement. Put simply, it is clear that policy makers either at national or school level need to have secure information on how the system or school is performing so that on the one hand good practice may be recognised and disseminated and, on the other, so that necessary corrections may be addressed in appropriate ways. Hence, we readily acknowledge the importance of presenting to our readership the findings of attainment surveys, either national or international, as a contribution to the debate on the factors that underpin our successes and shortcomings.

In the current issue of *Oideas*, now revamped with new cover and in larger format, we present three papers that focus on standards of achievement. The first, by Dr Tom Kellaghan, deals with reading literacy standards in Ireland; the second, by Dr Margaret Clarke discusses Ireland's performance in the Third International Mathematics and Science study of 1995 and the third, by Professor Kathy Hall, looks at the developmental potential of formative assessment in the promotion of good practice in the teaching of reading. In addition, there is a paper on the teaching of Irish reading by Dr Tina Hickey and another, by Dr Katherine Murphy, on the perceptions of women who re-enter education in midlife.

In his comprehensive treatment of reading literacy standards Dr Kellaghan pays particular attention to standards of reading achievement since the first tentative steps to secure empirical evidence in the early 1960's. Contrary to impressions given in the popular press, he demonstrates that standards in Irish schools are at about the international average, though it appears that there has been no improvement over the past twenty years. Readers will be particularly interested in his discussion of the standards of literacy achieved by Irish adults. While noting that their performance relative to those in other EU countries is a matter of no little concern (particularly in respect of the proportion at the lowest literacy level), he dismisses the impression given by some commentators recently that Ireland has an inordinately high level of people who are illiterate. In fact, the various surveys fail to shed any light on the extent of illiteracy in the population and hence those who have achieved at the lower levels of literacy in the International Adult Literacy Survey may not be designated 'illiterate'.

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Thomas Kellaghan

READING LITERACY STANDARDS IN IRELAND

Dr Thomas Kellaghan is Director of the Educational Research Centre, St Patrick's College, Dublin. He is a fellow of the International Academy of Education and a member of the Academia Europaea. He is currently serving as president of the International Association for Educational Assessment. He recently chaired the Minister's Working Group on Primary Preservice Education.

INTRODUCTION

The paper begins by addressing the terms in the title, reading literacy and standards, both of which are considerably abused in current educational debate. A brief review of concerns expressed about standards over a long period in Irish education is followed by a description of contemporary evidence on standards provided by national and international surveys of achievement in reading. Evidence is presented relating to standards of reading literacy in recent decades, standards in Ireland compared to standards in other countries, particularly in European Union and Organisation for Economic Co-operation and Development (OECD) member states; and performance in domains of literacy. Finally, a number of related issues are considered: growth in literacy during students' educational careers; the distribution of reading literacy achievements in the population, gender differences, and factors associated with literacy achievement.

READING LITERACY AND STANDARDS

Reading Literacy

Definitions of literacy vary. In the study of the International Association for the Evaluation of Educational Achievement (IEA), reading literacy was defined as 'the ability to understand and use written language forms required by society and/or valued by the individual' (Elley, 1992, p.3), while in the International Adult Literacy Survey (IALS) literacy was more broadly defined as 'using printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential' (OECD, 1995b, p. 14). Both are in agreement in regarding the meanings and uses of literacy as more complex and diverse than the decoding and comprehension skills measured in traditional tests of reading achievement. The approaches in both studies also go further and conceptualize literacy in terms of domains or sets of skills that are regarded as particular to a type of material and within which varying levels of competence are identified. Three domains were used in the IALS and IEA studies. The first domain (in both studies), *prose literacy*, is the knowledge and skills needed to understand and use information from continuous text in which the writer's main aim is to tell a story (fact or fiction), normally following a linear time sequence. The second domain (also in both studies) is *document literacy*, which encompasses the knowledge and skills required to locate and use structured information displays presented in the form of charts, tables, maps, graphs, and lists or sets of instructions. The third set (used in the IEA study but not in the IALS) is *expository literacy* which relates to the knowledge and skills needed to understand and use information from continuous text designed to describe, explain, or otherwise convey factual information or opinion to a reader. IALS included an alternative category of *quantitative literacy*, which involves the knowledge and skills required to apply arithmetic operations to numbers embedded in printed materials (OECD/Human Resources Development Canada, 1997). An important factor in considering the results of the IEA and IALS studies is that they were designed to assess levels of literacy, not illiteracy.

Standards

A standard, according to the *New Shorter Oxford English Dictionary* (1993), is 'a thing serving as a recognized example or principle to which others conform or by which the accuracy or quality of others is judged.' It also can mean 'a required or specified level of excellence, attainment, wealth, etc.' These definitions allow several interpretations, any of which one is likely to find used, if not clearly articulated, in discourse on standards of reading or of any other area of achievement. In one interpretation, standards are descriptive, relating to performance as it is; in another they are prescriptive, declaring how performance should be. One definition has a comparative element, which may be satisfied by examining how one performance relates to another (performance in the past, performance in another school, state, or country), or it may involve a judgment

about how performance relates to a criterion. In the latter case, the criterion may also be proposed as a target or an ideal.

There are several problems in the use of standards, which will not be elaborated on here (see, for example, Gonzalez & Beaton, 1994; Thomas, 1994). Suffice it to say that the term standard and the frequently used term 'world-class standards' are meaningless in the absence of further specification, and that the technical issues are not trivial when one attempts to determine criteria for standards, as is necessary, for example, if one is to identify readers as 'basic', 'proficient', or 'advanced', or when one compares data obtained in two or more assessment situations.

EARLY CONCERN WITH STANDARDS

Long before attention was focused on such technical matters, and before standardized measures of achievement were available, concern was frequently expressed about standards. Indeed, criticism of the standards of the achievements of pupils, either while at school or on leaving school, has been a persistent theme in commentary on education systems. This goes back at least 130 years, when a Royal Commission of Inquiry into Primary Education (1870) concluded that 'the progress of the children in the national (elementary) schools of Ireland is very much less than it ought to be.' The commission was particularly concerned about the poor standard of English, and recommended as a remedy the adoption of a scheme in which teachers' salaries would be dependent in part on the results of annual examinations in reading, spelling, writing, and arithmetic. It was felt that the scheme, known as 'payment-by-results,' would be 'an effective inducement to more work on the part of teachers.'

Payment-by-results is of interest, not just for its attention to standards and accountability, but also because it set a pattern in education in these islands in which examinations dictated to a large extent what was taught in schools and how it was taught.

By the turn of the century, when the payment by results system ended, school inspectors reported an improvement in reading standards. By the 1920s, however, criticisms of standards were again being made. A Commission on Technical Education noted in 1927 that constant reference was made by representatives of educational associations and by committees of technical institutions 'to the difficulties experienced in the technical school with students whose primary education was defective' [*Irish School Weekly*, 1928, p. 268].

Criticism of scholastic standards was frequently echoed in parliamentary debates. On November 12, 1925, for example, a Dáil deputy complained that primary education had deteriorated and 'that if it continues to deteriorate at the present rate, we must emerge in a short time as almost a nation of illiterates' [*Dáil Éireann*, 1925, p. 269]. In reply, the Minister for Education stated that school standards were as high as they ever had been. He focused on the difficulty in comparing one period with another, pointing out that 'every one of us knows that

as people advance in life they are always discovering all the excellent things that existed 20, 30, 40 years ago, sometimes rightly, but sometimes it is a sort of imagination that develops with advancing years' [*Dáil Éireann*, 1925, p. 364].

The difficulties in making comparisons over time were again raised in 1941. Faced once again with criticisms of standards, the then Minister for Education pointed to the lack of empirical evidence on the matter, indicating that something more than our own recollections was needed. He also recognized that, even if information on performance over time on comparable tests were available, the interpretation of trends would have to take into account changes in social and educational circumstances [*Dáil Éireann*, 1941, p. 1219].

The inadequacies of the kind of evidence on which early criticisms were based scarcely need comment. There is, in fact, little that can be learned about trends in standards from the reports of commissions, schools' inspectors, or parliamentary debates at the time. Many of the commentators, with the exception of school inspectors, would have had little day-to-day contact with schools, and their opinions would most likely have been based on limited and perhaps untypical evidence about particular schools or particular sets of students. They are also unlikely to have taken account of factors that might affect general levels of achievement such as changes in socioeconomic conditions and, in particular, in the composition of the school population.

The first effort to provide empirical evidence about standards of achievement in the Irish education system was John Macnamara's (1966) study of bilingualism which was carried out in 1961 with fifth grade pupils. This was followed by the survey of English reading of 11-year olds carried out by the Teacher Study Group in 1964 (Kelly & McGee, 1967). The Teacher Study Group study used a representative sample, though one confined to the Dublin area, and was the first attempt in this country to provide data on the achievement outcomes of primary schools. Further, data were collected with a view to monitoring levels of achievement over time, and, in fact, significant improvements in reading were recorded between 1964 and 1979 (Kellaghan & Madaus, 1982; Ward, 1982). Macnamara's study drew schools from all over the country, but its main purpose was to make comparisons between the achievements in English, Irish, and arithmetic of pupils attending schools categorized by medium of instruction. Neither the Teacher Study Group study or the Macnamara study was designed to make international comparisons, but comparisons with performance in Britain were inevitable since British tests in English and arithmetic, for which normative data were available, were used. In both studies, Irish pupils performed significantly less well than British pupils.

STUDIES IN IRELAND DESIGNED TO ASSESS SYSTEM ACHIEVEMENTS

During the late 1960s and 1970s, a number of research studies were beginning to focus on the effectiveness of the education system (Kellaghan, 1985). In one such study, the perceptions of teachers of the scholastic progress in key

curriculum areas, including reading, of a representative sample of pupils nearing the end of their primary education were solicited (Kellaghan, Macnamara, & Neuman, 1969). In a later national survey, information was obtained on teachers' perceptions of the incidence of literacy problems among pupils at the end of primary schooling (Fontes & Kellaghan, 1977). Around the same time, data collected for another purpose were used to assess students' mastery of 55 objectives in the primary-school mathematics curriculum at the point of transition to secondary schooling (Kellaghan, Madaus, Airasian, & Fontes, 1976). While these studies did not meet the technical standards of contemporary national assessments, they provided empirical evidence on the outcomes of the education system, and were pointing the way towards a more formal and systematic way of monitoring them.

In 1972, the first formal national assessment was carried out by the Department of Education. Given the concern that the findings of Macnamara (1966) and of the Teacher Study Group (Kelly & McGee, 1967) had given rise to, it is not surprising that English reading was the topic chosen for assessment. Since that time, four further assessments of English reading have been carried out — in 1980 (Department of Education, 1982), 1988 (Department of Education, 1991), 1993, and 1998 (Cosgrove, Kellaghan, Forde, & Morgan, 2000). Standardized tests were used to assess reading at age 10 in 1972, at grades 4 and 5 and at age 10 in 1980; at grade 5 and at age 11 in 1988 and 1993, and at grade 5 in 1998.

National studies cannot tell us how the achievements of students stand in an international context. And without comparative data, it is possible to claim, as a former secretary of the Department of Education did, that not only was the Irish system of education the best in the world, it was the best of all possible systems. But then along came international comparative studies, and, despite the problems associated with the interpretation of their findings (see, e.g., Carey, 2000; Kellaghan & Grisay, 1995), they may have brought with them the possibility of empirically testing a platonic ideal. Ireland has taken part in two international studies of reading literacy: the 1991 study of the International Association for the Evaluation of Educational Achievement (IEA), which assessed 9-year olds and 14-year olds, and in which 32 systems of education participated (Elley, 1992; Martin & Morgan, 1994), and the International Adult Literacy Survey (IALS) in 1995 (Morgan, Hickey, & Kellaghan, 1997; OECD, 1995b; OECD/Human Resources Development Canada, 1997; OECD/Statistics Canada, 2000), which was carried out between 1994 and 1998 in 20 countries (15 of which were European) to provide a profile of the literacy skills of adults aged between 16 and 65 years. The Irish component of both studies was carried out by the Educational Research Centre, the first in collaboration with IEA, the second in collaboration with Statistics Canada. (The OECD later used the results of the studies in its publications which may account for the fact that the IALS is frequently incorrectly attributed to it.)

WHAT DO THE SURVEYS TELL US ABOUT STANDARDS?

National Assessments

In the 1998 national assessment of reading literacy, about 4,000 fifth grade pupils in 150 schools participated (Cosgrove et al, 2000). As a national probability sample was used, inferences may reasonably be drawn about the reading achievements of fifth grade pupils in general in Irish primary schools (with some clearly specified exceptions). Analysis of performance points to pupil difficulty with tasks that required several steps for their solution and with ones that involved higher levels of cognitive complexity. When considered in the context of earlier assessments, it can be concluded that standards among fifth grade pupils have not changed in the past two decades.

Teachers were asked as part of the assessment to rate each individual pupil's reading achievements in an attempt to get criterion-based information. When asked to indicate the level of proficiency at which pupils read, 1 in 10 (10.5%) pupils was considered 'weak/inadequate', a quarter (24.8%) as 'basic', 4 in 10 (41.73%) as 'proficient', and almost a quarter (23.0%) as 'advanced'. In another categorization, a quarter (26.3%) was judged to be reading below fifth grade level, 4 in 10 (40.4%) at fifth grade level, and a third (33.4%) above that level. Teachers felt that 3 in 100 pupils would not be able to cope with the reading and writing demands of post-primary schools, while about a fifth would need assistance in this (Cosgrove et al, 2000).

International Comparative Studies

As noted, international studies provide a comparative aspect that is absent in studies that are confined to a single country. Thus, it is of interest to examine the performance of Irish 9- and 14-year olds in the IEA reading literacy survey, particularly in the context of performance in other EU and OECD countries. Irish 9-year olds ranked 12th among 27 participating countries in this study on overall literacy score. Their mean score was 5th of 12 EU countries and 10th of 19 OECD countries that took part in the survey (Martin & Morgan, 1994, Table 3.1).

The limitation of rankings becomes obvious when tests of the statistical significance of differences between the mean scores of countries are applied. When this is done, participating OECD education systems fall into three groups from an Irish perspective. In the first group, there are eight countries (Finland, USA, Sweden, France, Italy, New Zealand, Norway, and Iceland) in which pupils have a mean score that is significantly higher than the Irish mean. In the second group, the mean score of seven countries is close to the Irish mean (Switzerland, Belgium, Greece, Spain, West Germany, Canada, and Hungary). The third group contains three countries that have a mean score that is significantly below the Irish mean (the Netherlands, Portugal, and Denmark) (Martin & Morgan, 1994).

Irish 9-year old pupils performed best on the Narrative scale, on which they had the 8th highest average score of the 19 OECD countries (or 5th of the 12 European Union countries). They also performed well on the Expository scale, achieving results close to those on the Narrative scale. (They had the 9th highest

average score of OECD countries and the 5th highest of the EU countries.) However, they did less well on the Documents scale, scoring below European and OECD averages. In this domain, pupils in 15 countries achieved higher mean scores than pupils in Ireland (Martin & Morgan, 1994, Table 3.1).

At the 14-year old level, Irish pupils ranked 20th among all 31 participating countries. Among EU countries, Irish 14-year olds ranked 9th out of 12 countries. Among OECD countries, mean Irish performance was 16th among 19 education systems. Performance was inferior to student achievement in Finland, France, Sweden, New Zealand, Switzerland, Iceland, and the United States. It did not differ from mean performance in East Germany, Denmark, Portugal, West Germany, Norway, Italy and the Netherlands. Only Spain and Belgium (French Community) had significantly lower mean scores [OECD, 1993, Table R1 (A)]. Thus, the position of Irish pupils relative to that of pupils in other education systems was lower at 14 years of age than at 9 years of age. Older pupils, however, had a more balanced pattern of performance across the domains than 9-year olds.

At the adult level, results for 20 countries are available in the International Adult Literacy Survey (IALS). On the prose literacy scale, the mean score of Irish adults placed them 14th. They performed significantly less well than adults in Sweden, Finland, Norway, Netherlands, Canada, Germany, New Zealand, Denmark, Australia, and the United States; at about the same level as adults in Belgium (Flanders), the Czech Republic, the United Kingdom, and Switzerland; and significantly better than adults in Hungary, Slovenia, Poland, Portugal, and Chile. Results on the document and quantitative literacy scales were somewhat poorer, but not greatly dissimilar (OECD/Statistics Canada, 2000, Table 2.2, p.137; Figure 2.3, pp. 20-21).

GROWTH IN READING LITERACY

Longitudinal data are not available on growth in reading literacy. However, the IEA reading literacy data have been used to estimate improvement between the ages of 9 and 14. The mean scores of the two groups were computed and scaled for participating OECD countries. Thirteen items administered to both age samples were used to align the two sets of scores. A 'five-year difference in reading' indicator was obtained by subtracting the mean score of the younger group from the mean score of the older group, dividing by the age difference of the groups, and multiplying by five. Of 18 countries, the difference for Ireland ranked fourteenth. Thus, growth in Ireland was less than in most other countries. Very high growth rates were found in Canada, Germany, Iceland, and the Netherlands. Countries that shared a low growth rate with Ireland were the United States, Sweden, Spain, Norway, and Italy (OECD, 1995a). Not surprisingly, since they were based on the same data, these findings support the finding described above that the mean score of Irish pupils relative to that of pupils in other countries is lower at 14 years of age than at 9.

THE DISTRIBUTION OF READING LITERACY ACHIEVEMENT

So far, results of studies have been considered in the context of mean levels of performance. The distribution of scores is considered in this section, using the performance of Irish pupils in an international context as the frame of reference. In the IEA reading literacy assessment, among 18 OECD countries, Ireland had the second largest percentage of pupils (3.8) at 14 years of age scoring 2 standard deviations or more below the overall country mean [Belgium (French Community) had more at 8.2%]. At the other extreme, 2.0% of Irish pupils had a score of 2 standard deviations or more above the mean. Seven countries had higher percentages, so the Irish performance was above the median. Thus, Ireland tended to have relatively more high achievers and relatively more low achievers [OECD, 1993, Table R1(B), p. 155].

The distribution of performance at the adult level is the aspect of international studies of reading literacy that has received most attention in this country. The scales of performance on the literacy tasks in IALS were divided into five levels reflecting an empirically determined progression of the information-processing skills and strategies required at each level.¹ The percentage of Irish respondents who on the basis of their performance were assigned to the lowest (Level 1) category has been of particular interest to the media. For example, the Irish education system has been described as one 'that has failed successive generations of Irish people, resulting in an adult illiteracy rate of 23 per cent' (Emer O'Kelly in *The Sunday Independent*, August 13, 2000). Another commentator claimed that 'according to an OECD survey, Ireland has the highest illiteracy rate in Europe', which is described as 'scandalous' (Ann-Marie Hourihane in *The Sunday Tribune*, September 3, 2000); another claimed that 'the illiteracy rate among school-leavers is at Third World levels' (Vincent Brown in *The Irish Times*, April 25, 2000), while yet another said that 'our illiteracy rate at 20 per cent is among the worst in the European Union' (Dick Walsh in *The Irish Times*, October 21, 2000).

To what extent are such statements justified? First, it should be noted that comments were often based on a report when data were available for only five other European countries (Morgan et al, 1997), though that did not deter commentators from drawing conclusions that implied that data were available for all European countries. By the time the cycle of surveys was complete, data were available for 15 European countries, nine of which are members of the European Union. France also had participated, but results have not been included in OECD reports because of French Ministry of Education dissatisfaction with the findings (attributed to a flawed methodology) that the percentage of individuals who scored at the two lowest levels was 75 for prose literacy, 63 for document literacy, and 57 for quantitative literacy (Blum & Guérin-Pace, 2000). Comparable figures for Irish respondents were 52%, 57%, and 53% respectively (OECD/Statistics Canada, 2000, Table 2.2, pp. 136-137).

A second point to be noted in considering comments in the Irish media is that the IALS dealt with levels of literacy, not with illiteracy. The OECD/Human

Resources Development Canada (1997) report made this clear when it stated that 'the survey does not challenge the reality that the great majority of adults in OECD countries can read' (p. 15). Data from the survey, as indeed everyday experience, confirm this view. Individuals that were approached to participate in the survey were required to respond correctly to at least two out of six items on a screening test before being allowed to proceed to the main assessment. Some idea of the literacy level required to pass the screening test can be obtained by considering one item. On this item, respondents were asked to read a passage about heart attacks, and then to say who they should call for help if they noticed signals of an attack. Obviously, failure to respond correctly would not mean that the individual was 'illiterate'.

Some indication of literacy problems might still be gleaned from considering response rates to the screening test items. In the Irish sample, 2.6% of respondents failed the test. A further 4.9% refused to do it. Refusal could have been because of inability to read, but could also have been for other reasons. On the basis of these figures, we can say that a minimum of 2.6% and a maximum of 7.5% of the population have problems that are sufficiently severe to prevent them from reading material similar to that presented in the screening test.

Those who passed the screening test went on to take Level 1 items on the main assessment. An indication of what was required for satisfactory performance at this level may be obtained by considering one prose item. In this, a respondent was asked to read the directions on a bottle of aspirin and to find out 'the maximum number of days a person should take this medicine' (see Morgan et al, 1997). Again, it is obvious that failure on this item could not be taken as evidence of complete lack of literacy skills.

One further point is worth making about Level 1 performance. An examination of the distribution of the scores of Irish respondents at this level (which ranged from 0 to 225) reveals that it was strongly negatively skewed. For example, on the prose scale, only 5.5% of respondents obtained a score of less than 100. Furthermore, 50% had a score that exceeded 193. If the cut-off point had been 200 rather than 225, the percentage of Irish respondents assigned to the Level 1 category would have been 12.8 rather than 22.6 (Kellaghan & Millar, 2000). This finding again serves to underline the point that Level 1 performance represents a level of literacy, not illiteracy. 'Illiterate' individuals could not have obtained high scores on Level 1 items.

While Level 1 performance on IALS cannot be taken as evidence of illiteracy, the relatively high proportion of Irish respondents at this level means that one cannot be complacent about literacy levels in the country. Over a fifth (22.6%) fell into this category for prose literacy, and a quarter for both document literacy (25.3%) and quantitative literacy (24.8%). Only four European countries had a higher percentage of Level 1 respondents. The range in other countries on the prose and document scales ran from less than 10% (in Sweden, Norway, and Denmark) to over 40% (in Chile, Portugal, Poland, and Slovenia). On the quantitative scale, the three Scandinavian countries were joined by Germany and

the Czech Republic with less than 10% at Level 1. More than 40% fell into this category only in Chile and Portugal (OECD/Statistics Canada 2000, Table 2.2, pp. 136-137).

Less than 1 in 7 Irish respondents (13.5%) scored at the top end of the scale (Levels 4 and 5 which were combined) for prose literacy. The percentage in other countries ranged from 1.6 to 32.4. For document literacy, the percentage for Irish respondents was lower (11.5), while for quantitative literacy it was higher (16.2). The percentage range for other countries for Levels 4/5 in document literacy was 1.5 to 35.5, and for quantitative literacy 2.6 to 35.8. Countries with high percentages of Levels 4/5 scores tend to be those with low percentages of Level 1 scores (Sweden, Norway) (OECD/Statistics Canada, 2000, Table 2.2, pp. 136-137).

GENDER DIFFERENCES IN READING LITERACY

Girls perform better than boys on reading literacy tasks. In the 1998 national assessment, the mean score of girls exceeded that of boys on the total scale as well as on the narrative and documents scale. Furthermore, the reading achievements of boys, as well as a variety of their social and classroom behaviour characteristics, were rated less favourably than those of girls by teachers (Cosgrove et al, 2000).

In the IEA international literacy survey, girls performed better than boys in all countries at the 9-year old level, and in most countries at the 14-year old level. Girls had the greatest advantage in the narrative domain, less in the expository domain, while there were few differences in the documents domain. Gender differences were greater in Ireland than in most other countries. Irish pupils exhibited the sixth largest difference (out of 27 countries) at age 9, and the third largest (out of 31 countries) at age 14. Furthermore, Ireland was one of the few countries in which the advantage of girls over boys actually increased between ages 9 and 14 (Martin & Morgan, 1994). An additional feature of the performance of Irish pupils was the poor performance of boys compared to girls at lower levels of achievement. Nearly three times as many boys as girls at age 14 had relatively poor reading achievement based on the criterion of scoring one standard deviation or more below the mean. This disparity seems higher than in other countries (Morgan & Martin, 1993).

At the adult level, men tended to perform better than women on the quantitative and document scales of the IALS in analysis of performance in a sub-set of participating countries,² while there was a slight advantage for women on the prose scale. Irish differences were generally smaller than differences in other countries on the quantitative and documents scales, and greater on the prose scale (OECD/Human Resources Development Canada, 1997, Figure 1.11, p. 34).

FACTORS ASSOCIATED WITH LITERACY ACHIEVEMENT

National and international surveys of achievement have not added a great deal to our knowledge of factors associated with achievement, as can be seen in a few examples of not very unexpected findings. In the most recent (1998) national assessment of English reading, a variety of pupil characteristics and behaviours (as well as gender as we have just seen) were found to be related to reading literacy scores. The strongest correlates were pupils' 'general learning ability' ($r=.67$) and a number of social and classroom behaviours ($r=.30$ to $.58$), all rated by teachers. Weaker relationships were found for time spent on homework and frequency of doing certain kinds of homework (e.g., reading library books), while time spent playing computer games and watching TV/videos was negatively related to reading literacy scores. Home background factors (socioeconomic status, activities that reflect a structured approach to the management of the household, and an emphasis on educational activities) were also related to achievement (Cosgrove et al, 2000).

The results of the IEA international study are broadly in line with these findings. A consistent finding across countries is that access to books and reading resources is one of the most significant predictors of success in reading. High scoring countries tended to have large school libraries, even when allowance was made for a country's level of economic development. In Ireland (as well as in ten other countries), schools with high achieving pupils tended to have more books in libraries than schools with lower achieving pupils (Martin & Morgan, 1994).

At the adult level, the strongest predictor of literacy proficiency was found in the IALS to be respondents' level of education in 18 of 20 participating countries.³ In Ireland, level of education predicted 48.5% of variance in proficiency, considerably more than the next strongest predictor, occupational category, which accounted for 7.1% of variance. As one might expect, age was negatively related to performance, but not as strongly in Ireland as in some other countries (e.g., Norway, Denmark, Finland) (OECD/Statistics Canada, 2000, Table 3.21, p.165).

CONCLUSION

A number of conclusions can be drawn from the data considered in this paper. First, reading standards in Irish schools, by comparison with standards in other developed countries, are at about the international average. Nine-year olds actually performed better than one would have predicted on the basis of the country's per capita GNP, while 14-year olds performed at about the expected level (Elley, 1992, Table 2.1). Second, reading literacy standards in primary schools do not seem to have improved over the past two decades. Third, the mean literacy level of Irish adults is the same or higher than the level of adults in

eight European countries that participated in an international survey and lower than the level in six other European countries. Fourth, standards are highest in the youngest population assessed, and seem to deteriorate as individuals grow older, a conclusion that is based on the poorer performance of 14-year olds and of adults than of 9-year olds.

The findings point to a number of problems. While Irish pupils perform reasonably well in reading when dealing with data presented in a simple linear sequence, they perform less well when required to search, locate, and use information in a text. Furthermore, they tend to have difficulty with tasks that require higher levels of cognitive complexity and more steps in their solution. This conclusion, supported by the differences in performance between 9 and 14 years of age, suggests that while pupils on the whole establish basic reading skills, they are less successful in making the transition to higher levels of literacy. Further problems relate to the relatively high incidence of reading problems among boys, and the relatively poor performance of Irish participants on literacy tasks involving structured information displays.

The performance of adults relative to performance in other European Union countries for which data were available in the International Adult Literacy Survey, particularly in the proportion scoring at the lowest literacy level, is also a matter of concern. However, it is important that the performance be correctly interpreted. One thing that is clear is that it does not throw any light on the extent of illiteracy in the population. Indeed, while estimates of illiteracy have been made from time to time in the past (see Kellaghan, 1992), supporting empirical data have never been available. To ignore this fact and to confuse illiteracy with low levels of literacy may make for good newspaper headlines; however, it renders a serious disservice to those really in need of assistance, and who have a right not to be excluded from the major social and occupational institutions of society, a situation that can result from illiteracy. If one were to base a campaign to address the literacy needs of the population on the assumption that a quarter of that population is illiterate, one could be sure that it would have little impact on the most disadvantaged. One may hope that those responsible for policy and its implementation in the National Reading Initiative will attend more to the facts than to the myths being created by misinformed commentators, and that their efforts will focus on the real needs which empirical studies have identified.

NOTES

- ¹ Scores for each level were: Level 1 (0 to 225); Level 2 (226 to 275); Level 3 (276 to 325); Level 4 (326 to 375); and Level 5 (376 to 500).
- ² Australia, Belgium, Canada, Germany, Ireland, Netherlands, New Zealand, Poland, Sweden, Switzerland, United Kingdom, United States.
- ³ The exceptions were Australia and Germany. Native vs. foreign language was the strongest predictor in Australia; occupational category in Germany.

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Marguerite Clarke

IRELAND'S PERFORMANCE IN THE THIRD INTERNATIONAL MATHEMATICS AND SCIENCE STUDY IN COMPARISON TO OTHER EUROPEAN UNION COUNTRIES

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INTRODUCTION

The Third International Mathematics and Science Study (TIMSS), the largest comparative study of student achievement ever conducted, took place during the 1995 school year in over 40 countries. In this article, TIMSS results are presented and interpreted in a European context.¹ In particular, the performance of Irish first- and second-year secondary school students is compared to that of their counterparts in three European Union (EU) countries: Flemish-speaking (FI) Belgium², Denmark, and France. Belgium (FI) was one of the top-performing EU countries in TIMSS in both mathematics and science; France and Ireland were mid- to high-performers (depending on the age of the students and the subject); and Denmark fell among the lower-performing countries in both subject areas (see Appendices A and B for the performance of all 41 participating countries in mathematics and science).

This article is divided into three sections. First, the TIMSS study is described. Second, the performance of Irish students in TIMSS is compared to that of students in Belgium (Flemish-speaking), Denmark, and France in particular, and participating EU countries in general. Finally, the main findings of the TIMSS study in relation to Irish students are summarized and some implications for the Irish education system are outlined. Readers interested in Ireland's performance relative to that of two of its nearest neighbors, Scotland and England, are referred to an earlier *Oideas* article by O'Leary (2000).

THE TIMSS STUDY

TIMSS was a huge undertaking. Forty-five countries collected data on the mathematics and science performance of more than half a million students (Beaton et al. 1996a; 1996b). Information about the social and cultural contexts for learning within each country was also collected through student, teacher, and school background questionnaires. While data on student performance was obtained at three points in the education system (equivalent to third/fourth class at the primary level, and to the first/second and final years of schooling at the secondary level in Ireland), this article only focuses on the data collection procedures, test design, and performance results for students in the first two years of secondary school.³

In order to obtain a representative sample of students, TIMSS sampled schools within countries, and then intact mathematics classes within schools. For the most part, the national samples were drawn in accordance with TIMSS sampling procedures, and achievement results can be compared with confidence. However, despite efforts to meet the TIMSS specifications, several countries did not do so. Therefore, their results are presented in a separate section of the achievement tables in the TIMSS main reports and should be compared with caution to those for countries that met all sampling guidelines. While Denmark is one of the countries that did not meet sampling guidelines, it is still discussed in this article as an example of a low-performing EU country as it is more similar to Ireland (economically, geographically, and socially) than the other lower-performing EU countries in TIMSS (i.e., Greece and Portugal).

The mathematics and science tests used in the study were prepared in English and translated into the languages of the participating countries. The tests were given so that no one student took all of the questions (151 mathematics and 135 science questions), but all students took some mathematics and some science questions. Each student took only one booklet (there were eight in total), which took 90 minutes to complete, and the questions were rotated through the booklets so that each question was answered by a representative sample of students. About one fourth of the mathematics and science questions were in free-response format, requiring students to generate and write their answers; the rest were in multiple-choice format, requiring students to select the correct answer from the choices given.

The questions on the TIMSS mathematics test were divided among six content areas: *Fractions and Number Sense*; *Algebra*; *Geometry*; *Data Representation, Analysis and Probability*; *Measurement*; and *Proportionality*. The questions on the TIMSS science test were divided among five content areas: *Life Science*; *Physics*; *Earth Science*; *Chemistry*; and *Environmental Issues and the*

Nature of Science. As is evident from Table 1, not every content area received the same number of questions. For example, the bulk of the mathematics questions (67 percent) cover *Fractions*, *Geometry*, and *Algebra* (roughly similar to the coverage given these topics in the Irish mathematics curriculum for first- and second-year students). The bulk of the science questions (60 percent) deal with *Life Science* and *Physics*. Questions in the *Life Science* and *Environmental Issues and the Nature of Science* content areas most closely reflect the content of the biology curriculum for Irish first- and second-year students, while the *Earth Science* questions cover content introduced in the geography curriculum at this level.

Table 1
Number of Items and Content Areas in the TIMSS Tests

Content Areas	# of Questions	% of Test	Content Areas	# of Questions	% of Test
Fractions & Number Sense	51	34%	Life Science	40	30%
Algebra	27	18%	Physics	40	30%
Geometry	23	15%	Earth Science	22	16%
Data Representation, Analysis & Probability	21	14%	Chemistry	19	14%
Measurement	18	12%	Environmental Issues/Nature of Science	14	10%
Proportionality	11	7%			
Total	151	100%	Total	135	100%

Source: Martin and Kelly, 1996.

In order to assess the extent to which countries felt that questions derived from these content areas were aligned to what their students were taught, a curriculum matching analysis was carried out. This analysis allowed individual countries to select those questions for the mathematics and science tests in TIMSS that were most appropriate for their curriculum. Results showed that omitting questions tended to improve the results for the country doing the omitting, but also tended to improve the results for all other countries, so that the overall pattern of results remained unchanged. These findings were taken as an indication that the TIMSS mathematics and science tests are a reasonable basis for comparing achievement for the participating countries.

The overall mathematics and science results were reported in the form of a scale score. These scores were produced by averaging the responses of each

student to the questions they took in a way that takes into account the difficulty of each question. The result is a common scale on which performance can be compared across countries. Because these scores are estimates of national performance based on samples of students, they are accompanied by a standard error. This standard error is a measure of the degree of uncertainty surrounding a particular score.⁴ Standard errors for the TIMSS scores discussed in this article are presented in parentheses in the tables.

THE PERFORMANCE FIRST - AND SECOND-YEAR LEVEL STUDENTS ON THE TIMSS TESTS

Twelve EU countries participated in TIMSS: Austria, Belgium (French- and Flemish-speaking areas), Denmark, France, Germany, Greece, Ireland, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom (England and Scotland only).⁵ There was little variation in terms of years of formal schooling completed and the average age of students across the participating EU countries (Table 2). In terms of the four countries discussed in this article, students in Belgium (FI), France, and Ireland had completed the same number of years of formal schooling at the time of testing, whereas Danish students had completed one year less. Danish students were also slightly younger than those in Belgium (FI), Denmark, and France (and the EU in general). Irish students were slightly older than those in Belgium (FI), Denmark, and France and above the EU and international averages for this population level.

Table 2
Profile of Students Tested in TIMSS

	Years of Formal Schooling^a		Average Age	
	First-year Level	Second-year Level	First-year Level	Second-year Level
Belgium (FI)	7	8	13.0	14.1
Denmark	6	7	12.9	13.9
France	7	8	13.3	14.3
Ireland	7	8	13.4	14.4
EU Average ^b	7	8	13.1	14.2
International Average ^c	7	8	13.3	14.3

a The number of years of schooling does not include pre-primary. In an Irish context, this means that Junior and Senior Infants were not included.

b EU average based on all participating EU educational systems.

c International average based on all participating educational systems.

Source: Beaton et al. 1996a.

Despite small differences between adjacent countries when all TIMSS participants are ordered by their performance in mathematics or science, the differences between the highest- and lowest-performing countries are very large (see Appendices A and B). This pattern is reflected in the performance of the participating EU countries, with large score differences between the highest- (e.g., Belgium [FI]), and lowest- (e.g., Denmark, Greece and Portugal) performing countries.

Table 3 compares the performance of Irish first- and second-year students to those in Belgium (FI), Denmark, and France in terms of their average scores on the TIMSS mathematics and science tests. Ireland's performance is also compared to the EU and international averages in these subject areas. The symbol beside each country's score indicates whether that country's score is statistically significantly higher (upward arrow), lower (downward arrow) or no different (circle) from Ireland's score in the same column. (Statistically significant means that, taking sampling variability into account, one can be reasonably sure that the magnitude of the differences in these cases represent "real" differences between scores.)

Table 3
Average Performance of First- and Second-year Level Students on the TIMSS Tests

	Mathematics		Science	
	First-year Level	Second-year Level	First-year Level	Second-year Level
Belgium (FI)	▲ 558 (3.5)	▲ 565 (5.7)	▲ 529 (2.6)	● 550 (4.2)
Denmark	▼ 465 (2.1)	▼ 502 (2.8)	▼ 439 (2.1)	▼ 478 (3.1)
France	● 492 (3.1)	● 538 (2.9)	▼ 451 (2.6)	▼ 498 (2.5)
Ireland ^a	500 (4.1)	527 (5.1)	495 (3.5)	538 (4.5)
EU Average	▼ 483 (0.9)	● 514 (1.1)	▼ 480 (0.8)	▼ 520 (1.0)
International Average ^c	▼ 484 (0.6)	● 513 (0.6)	▼ 479 (0.6)	▼ 516 (0.6)

▲ Mean achievement significantly higher than Ireland

● No statistically significant difference from Ireland

▼ Mean achievement significantly lower than Ireland

^a Comparison results for this and all other tables are based on all participating EU educational systems and adjusted for overall .05 significance.

Source: Beaton et al. 1996a; 1996b.

For example, Ireland's mean mathematics achievement is significantly higher than Denmark's, is not significantly different from France's, and is significantly lower than Belgium's (FI) for both first- and second-year level students. In fact, among EU countries that met all TIMSS sampling guidelines, only Belgium (FI) scored significantly higher than Ireland at the first- and second-year levels in mathematics.

In science, Belgian (FI) first-year level students scored significantly higher than Irish first years, but second-year level students in each country performed about the same. French and Danish students scored significantly lower than Irish students at both levels. Among EU countries that met all TIMSS sampling guidelines, none scored significantly higher than Ireland at the second-year level and only Belgium (FI) and England scored higher at the first-year level.

The final two rows in Table 3 give the EU and international average scores for first- and second-year level students in both mathematics and science. The EU average is the average of the country means for all participating EU countries. The international average is the average of the country means for all 41 countries that participated in TIMSS. It is interesting to note that Ireland scored significantly higher than the EU and international averages at the first-year level in mathematics and at both the first- and second-year levels in science.

DIFFERENCES BETWEEN FIRST-AND SECOND-YEAR LEVEL STUDENT PERFORMANCE

Differences in mean mathematics performance between first- and second-year level students ranged from an EU low of 8 in Belgium (FI) to an EU high of 46 in France. Ireland had an increase of 28 points between first- and second-year students' mathematics scores, just below the EU average increase of 31 and the international average increase of 29 points. Differences in the mean science performance for first- and second-year level students in each country ranged from an EU low of 22 points in Belgium (FI) to an EU high of 46 points in France. The increase in Ireland between first- and second-year students was 43 points, comparable to that of France, and higher than the EU average increase of 41 and the international average increase of 37 points.

According to the TIMSS main report (Beaton, 1996b), the small increase in mean mathematics and science performance in Belgium is the result of a policy whereby lower-performing students at the end of primary school continue their study of the primary curriculum and then re-enter the system as part of the vocational track in second year. Since these lower performing students are not included in the first-year results, but comprise about 10 percent of the second-year level sample, this contributed to the reduced performance difference between the lower- and upper-year levels. This is an example of the way in which policy differences between countries should be taken into account when comparing performance across countries.

In general, there is no change in the relative rankings of countries between first and second year. Thus, if a country is performing well at the first-year level, it is generally performing about the same at the second-year level. Due to the stability of the rankings across the first- and second-year levels, the rest of this article will focus only on the performance of second-year level students. However, if there are major differences between first- and second-year level student results, these will be noted.

DIFFERENCES BETWEEN HIGH- AND LOW-PERFORMING STUDENTS WITHIN COUNTRIES

The achievement scores presented so far are useful for examining differences in student performance across countries. However, it is also useful to examine the extent to which student achievement differs within countries – i.e., how are the ‘weakest’ and ‘strongest’ students in each country performing? Table 4 shows the performance of the highest (95th percentile) and lowest (5th percentile) achieving second-year level students in the four EU countries. The EU and international averages for these percentile points are also presented. Performance at the 5th and 95th percentiles represents the extremes in both lower and higher achievement. For example, for mathematics or science, only 5 percent of students within each country performed below the 5th percentile for that country and only 5 percent of students within each country performed above the 95th percentile for that country.

Table 4
Performance of Second-year Level Students at the Lower and Higher Achievement levels

	Mathematics		Science	
	5th Percentile	95th Percentile	5th Percentile	95th Percentile
Belgium (Fl)	▲ 416 (7.7)	▲ 710 (3.5)	▲ 416 (5.3)	▼ 680 (1.4)
Denmark	● 369 (9.8)	▼ 641 (5.9)	▼ 334 (5.4)	▼ 615 (3.0)
France	▲ 415 (5.2)	▼ 666 (3.4)	● 374 (3.9)	▼ 623 (4.6)
Ireland ^a	381 (6.5)	681 (3.3)	383 (2.6)	694 (1.9)
EU Average	● 380 (1.5)	▼ 657 (0.8)	● 375 (1.2)	▼ 666 (0.6)
International Average	● 376 (0.8)	▼ 658 (0.4)	▼ 371 (0.8)	▼ 665 (0.4)

▲ Mean achievement significantly higher than Ireland

● No statistically significant difference from Ireland

▼ Mean achievement significantly lower than Ireland

^a Comparison results for this and all other tables are based on all participating EU educational systems and adjusted for overall .05 significance.

Source: Beaton et al. 1996a; 1996b.

Irish students at the 5th percentile in mathematics scored significantly lower than students in both Belgium (Fl) and France and about the same as the Danish, EU, and international averages for this percentile. At the other extreme, students at the 95th percentile in Ireland scored significantly better than those in France and Denmark, as well as the EU and international averages for this level. Among participating EU countries, Belgian (Fl) students had the highest scores at the 5th and 95th percentiles in mathematics, Danish students were among those with the lowest scores at both extremes, and Irish and French students were towards the top of the group.

In science, Irish students at the 5th percentile only scored significantly better than those in Denmark, but Irish students at the 95th percentile scored significantly higher than those in Belgium (FI), Denmark, and France. In addition, Irish scores at the 5th and 95th percentiles were significantly higher than the EU and international averages for each of these levels. Among participating EU countries, Belgium (FI) was among those with the highest scoring students in science at the 5th percentile (but were towards the middle of the bunch at the 95th percentile), and Ireland was among those with the highest scoring students at the 95th percentile. French and Danish students were among the lowest performing at both percentiles.

PERCENTAGE OF SECOND-YEAR LEVEL STUDENTS ACHIEVING INTERNATIONAL MARKER LEVELS

Another way to look at student performance in mathematics and science is to examine the percent of second-year level students in each country that reached certain performance standards. Since the TIMSS tests did not have any pre-specified performance standards, three marker levels - the *Top 10%*, the *Top Quarter* (25%), and the *Top Half* (50%) - were chosen on the basis of the combined performance of all students (i.e., from all 41 participating countries) at each year-level in the study. For example, 10 percent of all second-year level students in TIMSS achieved at the level of 655 or better in science. This score point, then, was designated as the marker level for the *Top 10%*. If every country had the same distribution of high-, medium-, and low-performing students, then each country would be expected to have approximately 10 percent of its students reaching the *Top 10%* level, 25 percent reaching the *Top Quarter* level, and so on. As illustrated in the first row of Table 5, in mathematics, the score points for the *Top 10%*, *Top Quarter*, and *Top Half* marker levels were 656, 587, and 509 respectively. In science, the score points corresponding to these marker levels were 655, 592, and 522 respectively.

Table 5
Percentage of Second-year Level Students Achieving International Marker Levels

	Mathematics			Science		
	Top 10% Score = 656	Top Quarter Score = 587	Top Half Score = 509	Top 10% Score = 655	Top Quarter Score = 592	Top Half Score = 522
Belgium (FI)	17 (1.2)	41 (2.3)	73 (2.9)	10 (0.8)	31 (1.8)	64 (2.1)
Denmark	4 (0.5)	17 (1.0)	47 (1.6)	2 (0.3)	9 (0.7)	32 (1.3)
France	7 (0.8)	26 (1.5)	63 (1.5)	1 (0.2)	11 (0.8)	37 (1.5)
Ireland	9 (1.0)	27 (1.9)	57 (2.4)	12 (0.9)	29 (1.6)	57 (2.0)
EU Average	6 (0.2)	22 (0.3)	51 (0.4)	8 (0.2)	22 (0.3)	48 (0.4)

Source: Beaton et al. 1996a; 1996b.

Among the four countries in Table 5, Belgium (FI) did best overall in terms of the percent of students reaching the marker levels in each subject area, with Ireland following up a close second, and France and Denmark trailing behind. The only change in this pattern occurs for the Top 10% in science where Ireland has the most students reaching this marker level. Among EU countries that met all sampling guidelines, Belgium(FI) and Ireland did best at meeting the international markers in mathematics and were among the best at meeting the international marker levels in science.

GENDER DIFFERENCES IN AVERAGE MATHEMATICS AND SCIENCE ACHIEVEMENT

One of the main findings in TIMSS at the first- and second-year levels was that gender differences were minimal in mathematics but widespread in science (Beaton et al, 1996b). Table 6 displays the gender differences in mathematics and science achievement at the second-year level for Belgium (FI), Denmark, France, and Ireland, as well as the EU and international averages. Note that boys, in general, had a higher average score in mathematics and science than girls, but that these differences were only statistically significant in Denmark (for both mathematics and science) and France (for science). For all other countries in Table 6, the differences, while sometimes large, were not significant.

Table 6
Gender Differences in Average Mathematics and Science Achievement, Second-year Level

	Mathematics			Science		
	Boys' Mean	Girls' Mean	Difference ^a	Boys' Mean	Girls' Mean	Difference
Belgium (FI)	563 (8.8)	567 (7.4)	● 4 (11.5)	558 (6.0)	543 (5.8)	● 15 (8.4)
Denmark	511 (3.2)	494 (3.4)	▲ 17 (4.7)	494 (3.6)	463 (3.9)	▲ 31 (5.3)
France	542 (3.1)	536 (3.8)	● 6 (4.9)	506 (2.7)	490 (3.3)	▲ 16 (4.3)
Ireland	535 (7.2)	520 (6.0)	● 14 (9.3)	544 (6.6)	532 (5.2)	● 12 (8.4)
EU Average	518 (1.4)	510 (1.3)	▲ 9 (1.4)	529 (1.3)	511 (1.2)	▲ 18 (1.2)
International Average	519 (0.8)	512 (0.7)	▲ 8 (0.9)	525 (0.8)	509 (0.7)	▲ 17 (1.0)

▲ Boys scored significantly higher than girls

● No statistically significant difference

▼ Boys scored significantly lower than girls

^a Because results are rounded to the nearest whole number, some totals may appear inconsistent.

Source: Beaton et al. 1996a; 1996b.

Across all participating EU countries, gender differences in mathematics achievement (overall, and by content area) were generally nonsignificant. However, the direction of the gender differences that did exist favoured boys rather than girls (except in *Algebra*). Boys significantly outperformed girls at the second-year level in four EU countries (Denmark, Spain, Portugal, and Greece), and at the first-year level in two EU countries (Belgium (Fr) and England). These findings are consistent with results obtained in previous international studies (Robitaille, 1989; Martin et al., 1991, 1992).

More significant gender differences were evident in science than in mathematics. For example, at the first-year level, Belgium (Fl), France, Denmark, and Ireland (along with six other EU countries) had significant differences favouring boys in science. At the second-year level, all EU countries except Ireland and Belgium (Fl) had significant differences in science score by gender. According to the TIMSS main science report (Beaton et al., 1996b), these findings of significant score differences by gender are consistent with results obtained in previous international studies (Postlethwaite and Wiley, 1992) and are attributable mainly to significantly higher performance by boys in *Earth Science*, *Physics* and *Chemistry*.

PERFORMANCE ON THE MATHEMATICS AND SCIENCE CONTENT AREAS

The results reported so far reveal the extent of achievement differences on the overall mathematics and science tests for EU countries in TIMSS. This section examines the question of whether or not the participating countries achieved at the same level in each of the mathematics and science content areas as they did on the test as a whole. Results in this section are based on the average percent of correct responses to questions within each content area and overall - calculated for each participating country (scale scores weren't created for the different content areas).⁶

Table 7 gives the average percent of correct responses to questions in the mathematics content areas for second-year level students in Belgium (Fl), Denmark, France, Ireland, the EU, and across all participating countries. Among EU countries, those that did well on the overall test (e.g., Belgium (Fl), France, and Ireland) tended to do well in each of the various content areas, and those that did poorly overall (e.g., Denmark) tended to do so in each of the content areas. There are differences in the relative standing of countries within each of the content areas and their overall standing, but these differences are small when the standard errors are considered. Among the countries in Table 7, Belgium (Fl) generally performed best in each content area, with either France or Ireland close behind.

Table 7
Average Percent Correct for Second-Year Level Students by Mathematics Content Areas

	Overall	Fractions/ Number Sense	Geometry	Algebra	Data Representation Analysis and Probability	Measurement	Proportionality
Belgium (Fl)	66 (1.4)	▲ 71 (1.2)	▼ 64 (1.5)	● 63 (1.7)	● 73 (1.3)	● 60 (1.3)	● 53 (1.8)
Denmark	52 (0.7)	▼ 53 (0.9)	● 54 (0.9)	▼ 45 (0.7)	▲ 67 (0.9)	● 49 (1.0)	● 41 (0.8)
France	61 (0.8)	▼ 64 (0.8)	▲ 66 (0.8)	▼ 54 (1.0)	▲ 71 (0.8)	● 57 (0.9)	● 49 (0.9)
Ireland	59 (1.2)	▲ 65 (1.2)	▼ 51 (1.3)	● 53 (1.3)	▲ 69 (1.1)	▼ 53 (1.3)	▲ 51 (1.2)
EU Average	56 (0.3)	59 (0.3)	54 (0.3)	51 (0.3)	66 (0.3)	52 (0.3)	44 (0.3)
International Average	55 (0.1)	58 (0.1)	56 (0.1)	52 (0.2)	62 (0.1)	51 (0.1)	45 (0.2)

- ▲ denotes content area is significantly easier for this country than the test as a whole
- ▼ denotes content area is significantly harder for this country than the test as a whole
- denotes content area is neither harder nor easier for this country than the test as a whole

Source: Beaton et al. 1996a.

The EU and international averages in Table 7 show that the content areas were not equally difficult for students taking the tests. Looking down the columns, the content areas with the highest average percents correct across EU countries and internationally were *Fractions and Number Sense* and *Data Representation, Analysis and Probability*. On average, questions dealing with *Fractions and Number Sense* were answered correctly by 59 percent of students in EU countries and 58 percent of students in all participating countries, while questions pertaining to *Data Representation, Analysis and Probability* were correctly answered by around 66 percent of EU students and 62 percent of students internationally. *Proportionality* had the lowest average percents correct across EU countries and internationally, with only 44 percent of the former and 45 percent of the latter responding correctly. It is important to keep these differences in average difficulty in mind when reading Table 7. Simply comparing

performance across the rows gives an unclear picture of each country's relative performance across the content areas because the varying difficulty levels of the items in each area have not been taken into account.

To facilitate more meaningful comparisons across rows, TIMSS developed profiles of relative performance within countries. These profiles are designed to show whether participating countries performed better or worse in some content areas than they did on the test as a whole, after adjusting for the difficulty of the items in each of the content areas. An up-arrow in Table 7 indicates that a country did significantly better in a content area than it did on the test as a whole, a down-arrow indicates significantly lower performance, and a circle indicates that the country's performance in a content area is not very different from its performance on the test as a whole.

Most countries had at least one content area in which they did relatively better or worse than they did on the test as a whole. This is consistent with the existence of differing curricular patterns and approaches among countries as discussed in the TIMSS curriculum analysis report (Schmidt et al., 1997a, 1997b). For example, Irish students did significantly better in *Fractions and Number Sense*; *Data Representation, Analysis and Probability*; and *Proportionality* and worse in *Geometry* and *Measurement* than they did on the mathematics test as a whole. Looking down the columns, students in most of the countries did significantly better in *Data Representation, Analysis and Probability* than they did on the overall test and about the same on *Measurement* and *Proportionality* as they did on the overall test. The same pattern is reflected across all participating EU countries and internationally.

Table 8 shows the average percent of correct responses by science content area for second-year level students in Belgium (FI), Denmark, France, Ireland, the EU, and across all participating countries. Consistent with the idea of countries having different emphases in curriculum, some EU countries performed better than others in *Earth or Life Science*, some performed better in *Physics* or *Chemistry*, and others performed better in *Environmental Issues and the Nature of Science*. When comparisons are made across the four countries in Table 8, Belgian (FI) students generally have the highest average percent correct in each science content area although Irish students have higher average percents correct in *Chemistry* and in *Environmental Issues and the Nature of Science*. Denmark generally does worst in each area.

Table 8
Average Percent Correct for Second-year Level Students by Science Content Areas

	Overall	Earth Science	Life Science	Physics	Chemistry	Env. Issues/ Nature of Science
Belgium (Fl)	60 (1.1)	▲ 62 (1.2)	● 64 (1.1)	● 61 (1.1)	▼ 51 (1.3)	● 58 (1.5)
Denmark	51 (0.6)	● 49 (0.7)	▲ 56 (0.7)	▲ 53 (0.7)	▼ 41 (0.8)	● 47 (1.0)
France	54 (0.6)	▲ 55 (0.8)	▼ 56 (0.8)	● 54 (0.5)	▼ 47 (0.9)	● 53 (0.9)
Ireland	58 (0.9)	▲ 61 (1.0)	▼ 60 (1.1)	▼ 56 (0.8)	● 54 (1.0)	▲ 60 (1.1)
EU Average	56 (0.2)	56 (0.2)	60 (0.2)	56 (0.2)	51 (0.3)	54 (0.3)
International Average	56 (0.1)	55 (0.1)	59 (0.1)	55 (0.1)	51 (0.2)	53 (0.2)

▲ denotes content area is significantly easier for this country than the test as a whole

▼ denotes content area is significantly harder for this country than the test as a whole

● denotes content area is neither harder nor easier for this country than the test as a whole

Source: Beaton et al. 1996b.

The same symbols employed in Table 7 are used here to indicate, for each country, which science content areas were significantly harder or easier than the overall test. For example, Irish students found *Earth Science* and *Environmental Issues and the Nature of Science* significantly easier, and *Life Science* and *Physics* significantly harder, than the overall test. Most EU countries found *Earth Science* about the same as or significantly easier than the overall science test. Most EU countries also found *Chemistry* about the same as or significantly harder than the overall test (internationally, students had the most difficulty with the chemistry items).

MAIN FINDINGS AND IMPLICATIONS

This article compared the performance of Irish first- and second-year secondary school students in TIMSS to that of students in Belgium (FI), Denmark, and France in particular, and the EU in general. Some of the main findings in relation to Ireland's EU standing in TIMSS were:

- Ireland's performance was significantly above the EU and international averages in mathematics at the first-year level and in science at both the first- and second-year levels. Among EU countries that met all TIMSS sampling guidelines, only Belgium (FI) scored significantly higher than Ireland at the first- and second-year levels in mathematics, and only Belgium (FI) and England scored significantly higher at the first-year level in science (no EU country scored significantly higher than Ireland at the second-year level in science).
- Irish students at the lower and higher levels of achievement (i.e., 5th and 95th percentiles) performed significantly better than many of their EU counterparts in mathematics and most of their EU counterparts in science.
- Among EU countries that met all sampling guidelines, Belgium (FI) and Ireland did best at meeting the international marker levels in mathematics, and England, Ireland, and Belgium (FI) did best at meeting the international marker levels in science.
- For most EU countries, gender differences were not significant in mathematics, but were significant in science. In particular, boys tended to significantly outperform girls in *Physics*, *Chemistry*, and *Earth Science*. Statistically significant gender differences were not evident in Ireland except at the first-year level in science (in favour of boys).
- Relative to their overall mathematics performance, Irish pupils performed best in the areas of *Fractions and Number Sense*; *Data Representation, Analysis, and Probability*; and *Proportionality* and worst in *Geometry* and *Algebra*.

Relative to their overall science performance, Irish pupils performed best in the areas of *Earth Science* and *Environmental Issues and the Nature of Science* and worst in *Life Science* and *Physics*.

While these findings are important, they do not tell us why Ireland did better than some EU countries but worse than others, both overall and by content area. An important next step, therefore, will be to try to relate the background information that TIMSS gathered on cross-national educational policies and practices to differences in mathematics and science achievement. In particular, the Irish gender gap in science at the first-year level needs to be understood and addressed so that it does not widen. Further attention should also be paid to identifying the out-of school factors that affect student achievement. Analyses of

the TIMSS background questionnaires have already shown that home factors are strongly related to mathematics and science achievement in almost every TIMSS country (i.e., educational resources, books in the home, and parents' education). More analyses of this kind need to be conducted with a focus on Ireland and Irish educational policy.

NOTES

- ¹ Thanks to Kelvin D. Gregory at the TIMSS International Study Centre, Boston College, for his help with this article.
- ² The Flemish and French educational systems in Belgium participated separately in TIMSS.
- ³ For details on the other populations tested, see Martin et al. 1997; Mullis et al. 1997; and Mullis et al. 1998 or visit the TIMSS website at <http://TIMSS.bc.edu>.
- ⁴ The standard error of a statistic is an indicator of the extent to which the sample statistic may be expected to vary about the true (but unknown) population value. A confidence interval for a statistic (consisting of the region from two standard errors below the statistic to two standard errors above the statistic) may be constructed so that, if the sampling procedure were repeated a large number of times and the sample statistic recomputed on each occasion, the confidence interval would be expected to contain the population value in 19 samples out of 20 (this represents the 95 percent confidence interval for the corresponding population result). For example, in Table 3 of this article the mean mathematics score for Irish second-year students is 527, with a standard error of 5.1. The 95 percent confidence interval around this mean score ranges from 516.8 to 537.2, meaning that we can be 95 percent confident that the true population value for Irish second-year students lies somewhere within this score range.
- ⁵ Italy also participated but was unable to complete the steps necessary for their data to appear in the TIMSS reports.
- ⁶ For the purposes of comparing overall achievement between countries, it is preferable to use the earlier scaled-score results.

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APPENDIX A

Mathematics Achievement for First- and Second-year Level Students in TIMSS

First Year			Second Year		
Country	Average	SE ^a	Country	Average	SE
International Average	484	(0.6)	International Average	513	(0.6)
Singapore	601	(6.3)	Singapore	643	(4.9)
Korea	577	(2.5)	Korea	607	(2.4)
Japan	571	(1.9)	Japan	605	(1.9)
Hong Kong	564	(7.8)	Hong Kong	588	(6.5)
Belgium (Fl)	558	(3.5)	Belgium (Fl)	565	(5.7)
Czech Republic	523	(4.9)	Czech Republic	564	(4.9)
Slovak Republic	508	(3.4)	Slovak Republic	547	(3.3)
Belgium (Fr)	507	(3.5)	Switzerland	545	(2.8)
Switzerland	506	(2.3)	France	538	(2.9)
Hungary	502	(3.7)	Hungary	537	(3.2)
Russian Federation	501	(4.0)	Russian Federation	535	(5.3)
Ireland	500	(4.1)	Ireland	527	(5.1)
Canada	494	(2.2)	Canada	527	(2.4)
France	492	(3.1)	Sweden	519	(3.0)
Sweden	477	(2.5)	New Zealand	508	(4.5)
England	476	(3.7)	England	506	(2.6)
United States	476	(5.5)	Norway	503	(2.2)
New Zealand	472	(3.8)	United States	500	(4.6)
Scotland	463	(3.7)	Latvia (LSS)	493	(3.1)
Latvia (LSS)	462	(2.8)	Spain	487	(2.0)
Norway	461	(2.8)	Iceland	487	(4.5)
Iceland	459	(2.6)	Lithuania	477	(3.5)
Spain	448	(2.2)	Cyprus	474	(1.9)
Cyprus	446	(1.9)	Portugal	454	(2.5)
Lithuania	428	(3.2)	Iran, Islamic Rep	428	(2.2)
Portugal	423	(2.2)	<i>Countries Not Satisfying Guidelines for Sample Participation</i>		
Iran, Islamic Rep	401	(2.0)	Australia	530	(4.0)
<i>Countries Not Satisfying Guidelines for Sample Participation Rates</i>			Austria	539	(3.0)
Australia	498	(3.8)	Belgium (Fr)	526	(3.4)
Austria	509	(3.0)	Bulgaria	540	(6.3)
Bulgaria	514	(7.5)	Netherlands	541	(6.7)
Netherlands	516	(4.1)	Scotland	498	(5.5)
<i>Countries Not Meeting Age/Grade Specifications</i>					
Colombia	369	(2.7)	Colombia	385	(3.4)
Germany	484	(4.1)	Germany	509	(4.5)
Romania	454	(3.4)	Romania	482	(4.0)
Slovenia	498	(3.0)	Slovenia	541	(3.1)
<i>Countries with Unapproved Sampling Procedures at Classroom Level</i>					
Denmark	465	(2.1)	Denmark	502	(2.8)
Greece	440	(2.8)	Greece	484	(3.1)
South Africa	348	(3.8)	Thailand	522	(5.7)
Thailand	495	(4.8)	<i>Unapproved Sampling Procedures at Classroom Level and Not Meeting Other Guidelines</i>		
			Israel	522	(6.2)
			Kuwait	392	(2.5)
			South Africa	354	(4.4)

^aStandard error

Source: Beaton et al. 1996a

APPENDIX B

Science Achievement for First- and Second-year Level Students in TIMSS

First Year			Second Year		
Country	Average	SE ^a	Country	Average	SE
International Average	479	(0.6)	International Average	516	(0.6)
Singapore	545	(6.6)	Singapore	607	(5.5)
Korea	535	(2.1)	Czech Republic	574	(4.3)
Czech Republic	533	(3.3)	Japan	571	(1.6)
Japan	531	(1.9)	Korea	565	(1.9)
Belgium (Fl)	529	(2.6)	Hungary	554	(2.8)
Hungary	518	(3.2)	England	552	(3.3)
England	512	(3.5)	Belgium (Fl)	550	(4.2)
Slovak Republic	510	(3.0)	Slovak Republic	544	(3.2)
United States	508	(5.5)	Russian Federation	538	(4.0)
Canada	499	(2.3)	Ireland	538	(4.5)
Hong Kong	495	(5.5)	Sweden	535	(3.0)
Ireland	495	(3.5)	United States	534	(4.7)
Sweden	488	(2.6)	Canada	531	(2.6)
Russian Federation	484	(4.2)	Norway	527	(1.9)
Switzerland	484	(2.5)	New Zealand	525	(4.4)
Norway	483	(2.9)	Hong Kong	522	(4.7)
New Zealand	481	(3.4)	Switzerland	522	(2.5)
Spain	477	(2.1)	Spain	517	(1.7)
Scotland	468	(3.8)	France	498	(2.5)
Iceland	462	(2.8)	Iceland	494	(4.0)
France	451	(2.6)	Latvia (LSS)	485	(2.7)
Belgium (Fr)	442	(3.0)	Portugal	480	(2.3)
Iran, Islamic Rep	436	(2.6)	Lithuania	476	(3.4)
Latvia (LSS)	435	(2.7)	Iran, Islamic Rep	470	(2.4)
Portugal	428	(2.1)	Cyprus	463	(1.9)
Cyprus	420	(1.8)	<i>Countries Not Satisfying Guidelines for Sample Participation</i>		
Lithuania	403	(3.4)	Australia	545	(3.9)
<i>Countries Not Satisfying Guidelines for Sample Participation</i>			Austria	558	(3.7)
Australia	504	(3.6)	Belgium (Fr)	471	(2.8)
Austria	519	(3.1)	Bulgaria	565	(5.3)
Bulgaria	531	(5.4)	Netherlands	560	(5.0)
Netherlands	517	(3.6)	Scotland	517	(5.1)
Countries Not Meeting Age/Grade Specifications					
Colombia	387	(3.2)	Colombia	411	(4.1)
Germany	499	(4.1)	Germany	531	(4.8)
Romania	452	(4.4)	Romania	486	(4.7)
Slovenia	530	(2.4)	Slovenia	560	(2.5)
Countries with Unapproved Sampling Procedures at Classroom Level					
Denmark	439	(2.1)	Denmark	478	(3.1)
Greece	449	(2.6)	Greece	497	(2.2)
South Africa	317	(5.3)	Thailand	525	(3.7)
Thailand	493	(3.0)	<i>Unapproved Sampling Procedures at Classroom Level and Not Meeting Other Guidelines</i>		
			Israel	524	(5.7)
			Kuwait	430	(3.7)
			South Africa	326	(6.6)

^aStandard error.

Source: Beaton et al. 1996b.

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Kathy Hall

READING ASSESSMENT AS AN INSTRUMENT OF PEDAGOGIC REFORM

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ABSTRACT: This paper argues that national assessment policy should be used as a vehicle for pedagogic reform. It describes the kind of assessment policy and practice that needs to be in place in order to raise reading standards. It describes and discusses the various approaches to the assessment of reading that teachers might consider in promoting reading achievement and it examines the issues involved in obtaining an appropriate balance between different purposes of reading assessment. It is less about the issues associated with monitoring national standards in reading than it is about ensuring that reading assessments positively impact on reading achievement and development. In this regard, it is concerned with effective teacher assessment in the classroom and with the potential role of national policy in driving and supporting this kind of assessment in the case of reading.

INTRODUCTION

The paper begins with a brief examination of contemporary theory on assessment and learning while the main part of the paper goes on to detail the variety of assessment methods that are appropriate and necessary in order to assess reading well. The importance of *consistency* in teacher judgements, for formative and summative assessment purposes, is considered and a possible role for national policy in this regard is suggested. Finally, tentative recommendations for reading assessment policy and practice in Ireland are offered.

OVERVIEW OF AN ASSESSMENT MODEL FOR READING: PRINCIPLES AND RATIONALE

Reading is a key medium through which pupils access the curriculum and as pupils progress through the education system reading assumes greater significance as a medium of learning. It is arguable that competence in reading is one of the most important aims of schooling. In order to maximise achievement in reading, pupils' progress needs to be assessed in a way that furnishes worthwhile evidence that can be used by learners themselves and by all those seeking to support their development. In this paper I am advocating that the kind of assessment that is likely to promote better teaching, thereby raising standards in reading, is formative assessment i.e. the kind of assessment that yields information that teachers and learners can use to inform the next steps of learning. In this section I will outline the principles of and rationale for this approach to assessment while in the next section I will detail some of the assessment procedures for reading that would comply with those general principles and rationale.

There is now abundant, robust research to show that attention to formative assessment and its consequent feedback to the learner can lead to significant learning gains (see Black and Wiliam, 1998, for a comprehensive review). The conclusion of Black and Wiliam's analysis of over five hundred studies is unequivocal: *[t]he research reported here shows conclusively that formative assessment does improve learning. The gains in achievement appear to be quite considerable, and ...amongst the largest ever reported for educational interventions* (p.61). This body of research demonstrates another important point too – that formative assessment helps low attainers more than the others, and so reduces the range of attainment while raising attainment overall. This means that it has the potential to address the 'tail' of low educational achievement that testifies to so many learners not reaching their potential.

Why is this kind of assessment so successful in enhancing learning? Formative assessment directs teacher attention to what needs to be taught and pupil attention to what needs to be learned i.e. it is integrated into the teaching and learning. It is characterised by attending to the learners' understandings, learning strategies and dispositions to learn, and it engages with the way the learner interprets the assessment tasks set and the criteria for their success. A salient feature of formative assessment is that it makes the criteria for success explicit to learners. It is probably this factor that accounts for the relative gains made by pupils initially classified as 'low achievers' since it is reasonable to suggest that these pupils previously suffered from lack of clear guidance regarding what counted as success rather than from any lack of ability.

Given the significance of sharing success criteria, it is worth considering this element of formative assessment in a little more detail. Sadler's conceptualisation of this process is especially instructive (1989 and 1998). He talks about 'guild knowledge' that teachers build up and share over time as a

community of knowers and judges of pupils' work. This guild knowledge, according to Sadler, enables the teacher make sound judgements about pupils' work. However, he notes the problematic of making this knowledge explicit since guild knowledge is not always articulated but exists as 'lore'. The challenge for teachers, therefore, is to render it explicit so it becomes available to pupils. What follows from all this is that it is necessary to involve pupils in conversations about the quality of their work and performances so they get to apply a concept of quality that is in line with that of the teacher's (Sadler, 1989). Sadler advocates a process of induction or apprenticeship whereby the authoritative (but not authoritarian) teacher (*a connoisseur* who has 'insider' knowledge regarding what counts as a good performance) explicitly supports pupils in acquiring a metalanguage or a language to talk about and assess their own performances. He advises teachers to enable students *to develop their evaluative knowledge, thereby bringing them within the guild of people who are able to determine quality using multiple criteria* (1989, p.135). Other assessment theorists have argued along similar lines. Frederiksen and Collins (1989) suggest that: *[t]he assessment system should provide a basis for developing a metacognitive awareness of what are important characteristics of good problem solving, good writing, good experimentation, good historical analysis, and so on*. Clearly such an approach addresses, not only the product one is trying to achieve, but also the way of achieving it, that is, the habits of mind that contribute to successful writing, reading, problem solving etc. The assumption underpinning these recommendations is that simply providing feedback to the learner is not enough, in itself this does not guarantee improvement. The criteria for success must be understood by pupils in their terms and not just remain in the teacher's head. For feedback to be useful, the learner must know what to do and how to do it in order to bridge that gap between what it is they can do and need to be able to do. Moreover, as Shepard observes (2000), as well as pushing pupils towards higher standards, involving pupils in dialogue about their own work in relation to success criteria builds ownership of the assessment process and offers pupils more control over their learning.

It is not altogether surprising that the available research on formative assessment also highlights that policy makers have under-estimated the difficulty of doing it well and that there is considerable scope for and need to improve the practice of this kind of assessment in most classrooms (Black and Wiliam, 1998; Torrance and Pryor, 1998). Given its significance for raising standards, it seems imperative that policy makers should locate assessment reforms in classrooms so they will be tied to teaching. If the function of assessment is seen exclusively in terms of the needs of politicians and bureaucrats then pupils and teachers feel under surveillance and the information generated from the process of assessment will not be perceived by teachers and learners as useful. If, however, the purpose of assessment is to provide rich data on pupil performance, to encourage better teaching and promote higher standards, then teachers are more likely to see its professional and pedagogical relevance while learners are more likely to see it as directly benefiting them.

US (Shepard, 1989; Gifford and O'Connor, 1992; Graue, 1993) and UK (Gipps 1994) assessment theorists have argued that educational assessment has witnessed a paradigm shift in recent decades with the new paradigm emphasising learning itself rather than the measurement of it. Formative assessment epitomises this new paradigm. The kinds of assessments that are most worthwhile in terms of giving insights into learning are those with maximum ecological validity: where a demonstration of the specific performances, reasoning abilities, oral and written communication skills etc. that we wish pupils to acquire are captured in the assessment tasks (Shepard, 1992). The greater degree of similarity between the real-world activities of, for example, reading and reading assessment models, the less fragile is the claim that what is being assessed is the same thing. Assessments that do not capture authentic learning activities distort teaching and learning – as Shepard demonstrates (1989), proxy measures like standardized tests invite distortion because it is possible to raise test scores without genuinely improving student achievement. She goes on to explain that the reason policy makers should be willing to invest in what she calls 'performance' assessment is not just because it will result in more valid data but because the right kinds of assessment tasks will lead education reform in the right direction. In line with the emphasis on learning, performance assessment occurs *in situ*, during a performance. The history of the old assessment paradigm, in relation to literacy, did not prioritise pupils and learning, its emphasis on pupils as passive test-takers imposed a narrow definition of reading and writing and often, did not produce useful information.

A factor influencing the paradigm shift from the measurement (or testing or psychometric) paradigm to the learning paradigm is what we know about the way people learn. What the contemporary theories (such as constructivism and situated cognition) tell us is that learning is a complex process of personal knowledge-building and meaning-making, that it is dependent upon previous knowledge and experiences, and that it is also dependent upon the context of its occurrence and demonstration, especially the social context and the motivation and perceptions of the learner. A learner's performance on, say, a test is similarly context-bound and is also dependent upon the values of whoever is doing the assessing. The point is that learning cannot be assessed accurately, reliably and objectively as was assumed in the old psychometric paradigm where measurement in the form of grades and scores reigned supreme. As Gipps says, *assessment is not an exact science*. The upshot of this contemporary view of learning and assessment is not that we should abandon attempts to provide evidence of achievement – transparency of judgements is important and needs to be demonstrated. What it does imply is that there is not a finite assessment or a perfect or infallible assessment. Teachers need information about learners that is multidimensional, drawn from a variety of sources and contexts, and that illuminates the learning process.

METHODS OF ASSESSING READING

What would constitute a defensible portrayal of reading? Methods used to assess reading should map onto what we believe reading is as well as current theory about how reading is learned. We know that reading is complex and multi-faceted - it is about being able to decode the words on the page, to interpret word meanings and grammatical structures, it is about being able to use, reflect on and critique what is read in a meaningful way, it is about what is chosen (and not chosen) to be read and knowing when to read, it is about how and why the reader reads, and it is about time devoted to reading, types of texts read, responses to what is read, and the variety of genres read. It is about understanding the purposes and intended audiences of texts, about being able to recognise devices used by writers to convey messages and to influence readers, and being able to make sense of texts by relating them to the situations in which they appear. Reading must be assessed in all this complexity. Mindful of this complexity, the point noted above that assessment is an inexact science, the demands of ecological validity, and views of learning that imply that accessing the learner's mind is far from a straightforward matter, evidence about reading achievement needs to be multi-task, multi-mode and multi-contextual.

Table 1 offers an overview of some reading assessment approaches, identifying the source of evidence for various elements of achievement and noting some key published accounts of the use of those particular devices. The list is more illustrative than exhaustive. Brief reference will be made to major ones in the remainder of this section.

Miscue Analysis and Retelling

This is a procedure for analysing how children use different cueing systems (grapho-phonetic, syntactic and semantic) and strategies (initiating, predicting, confirming) as they read a text aloud. Originally based on the work of Kenneth and Yetta Goodman in the US, it has since been adapted by others (e.g. Arnold, 1982; Moon, 1990). A Running Record is similar in focus (Clay, 1985). Both procedures are observation-based and assess reading directly – they take account of the situational specificity of reading knowledge as the performance of the reader is intertwined with the genre of the text being read, the reader's knowledge of the theme of the text, the reader's familiarity with the text, the illustrations in the text, its length and other linguistic features (Murphy *et al*, 1998). Both procedures involve the observation, recording and evaluation of 'errors' a child makes while reading aloud and a judgement about how well the child understands the text. In practice, an oral reading assessment of this kind requires that a pupil read aloud while the teacher makes annotations of the differences between the text as read and the text as written. The underlying assumption is that the miscues the reader makes offer insights into the range and efficiency with which s/he applies the range of cues and strategies. The outcome of the assessment is both a descriptive and interpretive/evaluative account of the

reader's strategies while reading. The merit of the descriptive-interpretive distinction is that interpretation is tied to data, thus providing transparency – a feature that is much more challenging in documenting reading than it is, say writing.

Table 1
Examples of Reading Assessments

Source of Evidence	Target Aspect of Reading	References
Miscue Analysis and Retelling, Running Record, Cloze Procedure	Reading strategies, cueing systems, reading fluency, comprehension	Goodman, Watson and Burke, 1987; Moon, 1990; Arnold, 1982; Barrs et al, 1992; Au, 1994; Clay, 1985; Tompkins, 1997.
Language and Literacy Conference, Observational / Anecdotal Records, Self and Peer Assessments, Grids / Checklists, Reading Scales	Awareness of the reading process and attitudes to reading Experience as a reader across the curriculum	Barrs et al, 1992; Tompkins, 1997; Au et al, 1997; Darling-Hammond et al 1995; Barrs et al, 1992.
Questioning and Observation	Reading processes / strategies	Torrance and Pryor, 1998; Cowie and Bell, 1999
Portfolios, Response Journals, Self and Peer Assessments, Essays, Book Reports, Oral and Written Retellings, Drawings and Photos	Response to reading: interpretation / understanding	Valencia and Place 1994; Valencia, 1990; 1998; Johnston, 1992; Barrs et al, 1992; Murphy et al 1998; Darling-Hammond et al 1995; Harrison et al, 1998.
Profiles/Reading Indicators, Reading Benchmarks, Descriptive Reading Scales	Extent to which curriculum content/outcomes or performance goals have been met	Shiel and Murphy, 2000; QCA/SCAA Exemplification material. Barrs et al, 1992.
Portfolios, Log Books, Booklists	Breadth and nature of reading	Murphy et al, 1998.
Standardised, norm - referenced tests	Extent to which a child's performance as a reader is in line with a national norm	

Cloze Procedure

This is an informal tool for assessing comprehension. The teacher selects an excerpt of say 300 words from a text – informational book, textbook or storybook. Then s/he deletes say every fifth word in the passage and the task for the pupils is to use their knowledge of the topic or narrative, of word order in English, and of the meaning of words within sentences to decide on the missing words in the passage. Variations on this procedure include deleting the content words, deleting phrases or even whole sentences. Pupils work in groups or individually and they discuss and justify their selections. In the case of those children who may be the focus of the assessment, the teacher observes the meaning-making strategies they use. The advantage of this approach over more traditional question and answer comprehension questions is that it expands on the idea of comprehension so that it involves reconstructing, responding to, or interpreting a text rather than merely answering questions about it.

Reading Conferences

The literature interprets the reading conference in a variety of ways with some of the US literature seeing 'reading conferences' as synonymous with any interaction between teacher and pupils about texts. Barrs *et al*, (1992), on the other hand, view this as a more specific procedure. Their *Primary Language Record* suggests that teachers conduct two conferences per year with each pupil – one in the autumn term, the other in the summer term. The purpose of a conference is to give the child an opportunity to talk about and discuss with the teacher his or her achievements, interests and achievements as a language user. It is suggested that it should be a continuation of 'an already existing dialogue between the child and teacher, as a means of establishing, in a more structured way, children's views of themselves as language learners and language users in and outside school' (p.14). Together the child and the teacher may discuss specific pieces of work and shared experiences, plan ahead. It should allow time to discuss the child's own perceptions of his or her strengths and weaknesses. The teacher records decisions arrived at during the conference (see Barrs *et al*, for examples). It is noteworthy that the promotion of learning strategies and children's awareness of themselves as learners and readers would appear not to be prominent features of classroom life (e.g. Hall *et al*, 1999).

Portfolios

Portfolios can take different forms from a simple individual folder of work including lists of books read and discussed, written responses to literature, drawings or paintings in response to literature, final pieces and drafts of work in progress. They may also include anecdotal records and observations made by teachers (and others) made of pupils during readers' workshops and lessons. Valencia (1990) advocates including a variety of items in the portfolio so that it offers a comprehensive portrayal of the pupil's growth in literacy. Valencia and Place (1994) talk about different kinds of portfolios – the *showcase portfolio*, for

example, may be used to display the pupil's best or favourite pieces of work; *documentation portfolios* capture the pupil's growth over the year while *process portfolios* capture the steps taken by a pupil to complete a given project and these usually contain pupil reflections of their own learning. Creating and managing a portfolio takes time, the teacher needs to set aside time to meet with pupils individually to review their portfolios – this could be part of an individual reading conference (see above). Portfolios can be used as public documents, providing concrete examples of the pupil's accomplishments and areas for further development that can be shared with parents and other teachers. Pupils themselves can review their progress over time, take pride in their achievements and make plans for future learning. I believe however, that portfolios struggle to make reading visible – they are much better for writing than for reading.

Profiles, Reading Indicators, Benchmarks, Scales and Checklists

These can take different forms and be used for different purposes. For example the scaled indicators of achievement developed at the Educational Research Centre in Drumcondra, Dublin (Shiel and Murphy, 2000) are outcome statements at class level designed to support teachers in summarising pupil achievement at the end of a year but also to help clarify ongoing teaching and learning goals and expectations, sequence instruction and offer feedback. In the light of Irish teachers' professional development needs regarding reading assessment in general (Shiel and Murphy, 1998) it is likely that these indicators will provide teachers with a necessary supportive framework for describing, recording and reporting their pupils' achievements in reading as well as providing a vehicle for ongoing, formative assessment. They have the particular advantage, too, of having been developed in collaboration with Irish teachers and literacy specialists and of connecting with the revised curriculum for English. The Framework itself together with the wide range of Appendices offering guidance on assessment, could be used as a basis for staff development in the assessment of reading.

Any assessment criteria or set of indicators, however, will need to be interpreted by those who use them. As Dylan Wiliam (1998) has observed in relation to assessment criteria in general, it is a fundamental error to imagine that the words laid down in the statements will be interpreted in the same way by all teachers who use them. They need to be subjected to an ongoing and collective process of shared interpretations such that their meaning is made manifest. This becomes vital if consistency across teachers and schools is to be maximised. In addition, such collaboration gives teachers a source of professional support and access to a wider range of pedagogical ideas. When engaged in unpacking the meaning of achievement indicators, teachers inevitably become more critical of a host of issues pertaining to assessment such as the nature of the evidence, the way the evidence was collected to demonstrate the achievement of the criteria, how much evidence constitutes achievement of an indicator, the amount of support offered the learner, the task context, the motivation of the learner and so on.

What is significant to note about the *Drumcondra English Profiles* is that their

implementation does not require the use of specific tasks, rather their implementation fits well with the other approaches endorsed in this paper since their implementation recommends that teachers draw on 'information gleaned in a broad range of assessment contexts' (4).

In relation to the point emphasised in the previous section about helping learners judge the quality of their own work, it follows that benchmarks and indicators need to be understood by learners too, and not just internalised by teachers. Pupils could be encouraged to write the standards in their own language, to discuss examples of evidence of reading and to discuss what artefact or response would be suitable to evidence, say, their own response to a text. It is in such discussions and in sharing of ideas about evidence that learners come to grips with the standards they are aiming for. In addition, they are learning that the interpretation of evidence is an open one, that evidence can be contested, that assessment is about values and judgements and it makes these aspects explicit. Parents, too, arguably, need to be part of the process of making transparent the evaluative criteria, so that the 'guild knowledge' becomes shared in a community of interpreters. In this way assessment can be seen as socially constructed, that there is no perfect or infallible method. Instead, assessment is merely people working collectively and individually to try to describe what is valued (in reading) (Murphy, *et al*, 1998).

Like indicators, benchmarks and standards, reading scales give an account of what the child can do with increasing ease on the way to developing as a reader. One reading scale for younger children (aged 5-7) detailed in Barrs *et al*, 1992, charts progress on a continuum from dependence to independence while another scale for older children plots the developing experience of readers and describes how they extend and deepen their competence in reading a range of texts. Along with offering teachers a conceptual framework for understanding pupils' reading development, they help teachers become better observers of children, they guide instructional decisions by pointing out the full range of strategies and skills that make up reading proficiency (Falk, 1998). Reading scales, profiles and indicators have merit in that they provide a shared view of reading among teachers and across grades – this helps teachers become more knowledgeable about the different processes and stages and this, in turn, better equips them to address the different needs of pupils.

Observational or Anecdotal Records

These are notes kept by teachers about observations made when pupils are working on various reading tasks e.g. independent (silent) reading, pupil-led and teacher-led discussions of literature, independent or collaborative work on book-related projects. Observation times can be planned when the teacher focuses on particular pupils and makes anecdotal notes about those pupils' involvement in literacy events – the focus being on what those pupils do as they read and write. Checklists can speed up this process (Au *et al*, 1997). These notes and checklists help teachers determine which skills and strategies need to be

addressed with a group or individual in forthcoming (mini)lessons or to be the focus of a discussion/conference. Fluency, independence and confidence when reading may depend on the type of text being read or the social (pair, small group, child and adult) or learning/curricular context itself. Observations need to take place across a range of different contexts and with a range of different texts in order to build up a pattern of a child as a reader.

Observation and Interaction

Shepard (2000) talks about dynamic assessment which allows teachers to provide assistance as part of assessment. This, she argues, does more than help teachers gain valuable insights about how understanding might be extended. It also creates perfectly targeted occasions to teach and provides the means to scaffold next steps. Bell and Cowie (1999) unpack a similar notion when they talk about *interactive formative assessment* by which they mean the process used by teachers and children to recognise and respond to pupil learning in order to enhance that learning during the activity or task. Assessment and the promotion of learning are not separate activities, therefore. In the course of assessing, teachers can mediate the learning there and then in the here and now as opposed to sometime in the future. Teacher skill in *noticing* and *recognising* what is significant there and then and being able to *respond* to pupil thinking there and then are crucial for formative assessment. The complexity of assessing in this way has not been recognised by policy makers though it is acknowledged in the theoretical literature (Perrenoud, 1998; Torrance and Pryor, 1998). *Interactive formative assessment* is characterised by activity that is teacher and pupil-driven rather than curriculum driven. The aim is to understand the learner's sense-making.

Tests

Standardised reading tests have been a traditional feature of reading assessment and are an increasing feature of life in Irish classrooms (e.g. Curran, 1994). Norm-referenced tests like the Micra-T indicate how the reader rates in relation to other same-age readers in the population. However, what we need, in my view, are accounts of what the reader does rather than how the reader stands in relation to others. Moreover, the description contained in a score is not fine-grained enough for the purpose of improving teaching nor is it usually capable of offering diagnostic guidance (Brookhart, 1999). Reading tests usually contain subsets for decoding, comprehension and vocabulary. As one source of evidence among other sources, noted above, a test result may be a useful indicator of achievement. However, the problem arises when the outcome of the test is given more status than it merits which often happens in accountability stakes (e.g. Hall and Harding, 1999). With reference to the US, Madaus (1994) pointed out that achievement tests were less for teachers and pupils and more for politicians and bureaucrats. The greater the press for accountability through standardised tests the more likely it is that teachers' descriptive assessments of children's literacy

development are brief, standardised, and global rather than extensive, specific, and personalised (Murphy *et al*, 1998). As these authors note tests tend to focus teachers on what children cannot do rather than on what they can do. This scenario leads teachers to teach to the test and the curriculum and pedagogical strategies get narrowed as a result. It is now well established that what you test is what you get and you do not get what you do not assess. This is an argument for policy makers to design and support assessments that connect directly with what is believed to be valuable learning.

In recent years, standardised tests have come under a high degree of criticism (e.g. Tierney, 1991; Shepard, 1992; Gipps, 1994; Broadfoot, 1995). In sum, there appears to be four main problems with them: i) they reflect an outmoded view of classrooms and they restrict goals for learning, ii) they reflect a limited view of reading and writing, iii) they disenfranchise teachers and constrain instructional possibilities, and iv) they do not engage pupils in self-assessment.

The strength of the above approaches, with the exception of tests, is their directness – the evidence and results arising from them do not require inferencing back to abilities in context. Instead the competencies are assessed in naturally-occurring contexts. The multiple lines of data that exist in multitask, multicontextual assessment allow interpretation by a variety of stakeholders – pupils themselves, teachers, parents. ‘The interpretive community’ in such assessments are compelled to decide whether the evidence supports the interpretations drawn (Murphy *et al*, 1998). Most importantly, interpretation focuses on identifying patterns in the data that can be a guide to teaching. In this sense, curriculum, instruction and assessment are aligned. Because of the authentic nature of these approaches the issues of transfer of skills and abilities is bypassed. In addition, they involve pupils in their own learning and assessment and they capture pupil development over time and in different situations. They are grounded in the assumption that good teaching comes from teachers’ knowledge of their pupils and that teachers need to know their pupils well in order to plan effective learning experiences for them. While the evidence remains partial since all assessments are partial, even ecologically-valid ones, the above approaches are more in line with contemporary thinking about the complexity of reading, reading development and assessment than standardised measures of reading emanating from tests.

HOW IMPORTANT ARE RELIABILITY AND CONSISTENCY OF TEACHER JUDGEMENT?

A criticism levelled against the qualitative assessments outlined above is that reliability and generalisability are sacrificed in favour of validity. This begs the following question: to what extent and for what assessment purposes should we be concerned about standardisation, replicability and generalisation? The main

purpose of reading assessment in primary education is not to credentialise, to select, or compare pupils or schools – it is to render an account of individual pupils as readers, an account that reflects what reading is and that indicates progress as well as achievement. It is important that summaries of pupils as readers (summative assessment) that are prepared for parents and other teachers are based on systematic evidence and not mere opinion, and that these accounts are as trustworthy as is practical. And this would involve some moderation of judgements to ensure standardisation and thus reliability. One way of trying to maximise trustworthiness is to provide teachers with exemplification material in relation to standards or indicators and to provide ‘time out’ for teachers to learn about assessment issues including the contexts of learning to read, how to support reading development, the nature of errors and misconceptions and what they reveal about the learner’s strategies. Just as important as consistency in the judgements of evidence is the consistency of approach i.e. the reading assessment task set and its context or setting. In order to ensure consistency of approach teachers need to have a grasp of and share notions of what counts as reading. Teachers in Ireland need the opportunity to develop a language around these processes.

Formative assessment does not have to be, cannot be, standardised⁷. Teachers need help in using the assessment evidence to promote learning, not just in collecting the evidence to make a summative judgement that will be passed onto parents and other teachers. Teachers may collect information, but unless they use it formatively, the effort of collecting and recording is not worthwhile. It is the use to which assessment information is put that distinguishes its purpose. Any assessment will only be as good as the teachers who use it so alongside assessment reform will have to run teacher development. As Murphy *et al* (1998, p. 168), with reference to the US, put it, what is needed is *top down support for bottom up reform*. Staying with the US, Pearson *et al* (1998, p. 77) put it more strongly. They say:

(a)ssessments that place a premium on teacher judgement make sense only under the assumption that high levels of professional knowledge – about subject matter, language, culture and assessment – are widely distributed in the profession. Whenever and wherever the assumption of professional knowledge is suspect, we will have to invest in staff development. School systems must either decide to make this investment or resort to tests that require little or no interpretation.

Recently research conducted at Stanford University (Darling-Hammond, 2000) using data from 50 US states, shows that measures of teacher preparation and certification are by far the strongest correlates of student achievement in reading and mathematics, both before and after controlling for poverty and mother tongue status. It would seem that investment in teacher professional

development is key to raising standards of literacy.

Research has shown that teachers are capable of taking a key role in both the formative and summative assessment of their pupils. A survey of testing practices and the use of assessment confirms that primary teachers in England prior to the introduction of the National Curriculum Assessment framework, were unsophisticated in their approach to assessment – they tended to act like technicians, applying standardised tests. They were not using assessment evidence to feed back into learning and much of the assessment that did happen tended to be intuitive and was not referenced to anything (Gipps *et al*, 1995). Since National Curriculum Assessment was introduced in England, teachers assessment practices have become much more sophisticated (Gipps *et al*, 1995; Hall *et al*, 1997) although it must be added that the priority in practice given to the results of the standard tests for accountability purposes together with the significant reduction, in more recent years, of support for the conduct of teacher assessment mean that the health of good quality assessment is far from guaranteed (Hall and Harding, 1999, Hall and Harding, 2001). If national policy in Ireland emphasises and supports the approaches to assessment noted above, it is very likely that, with time for the appropriate professional development and support, teachers' pedagogical practices would align with current theoretical perspectives on reading, reading development and assessment.

CONCLUDING COMMENTS

Finally, I offer some recommendations for the policy and practice of reading assessment in Ireland.

It is important that policy makers and practitioners recognise the inter-relatedness of assessment and pedagogic practice and that whatever assessment policy is endorsed, supported or mandated, it will impact on teaching and learning. The current context also needs to be recognised, specifically teacher-preparedness, educationally and professionally, for these ways of assessing. There is evidence that very many teachers are unfamiliar with the approaches to assessment outlined in this paper (Shiel and Murphy, 1998). Professional development that focuses on formative assessment needs to be a priority for teachers. It is likely that they are already carrying out formative assessment in reading but they may not always be aware of exactly what they are doing that could be called 'formative assessment'. New Zealand-based evidence demonstrates that when teachers are made aware of the issues associated with formative assessment they are able to reflect in new ways on their practice and they incorporate new strategies into their assessment repertoire (Cowie and Bell, 1999). Teachers also need to be supported in making connections between assessment results and their teaching approaches.

The system of Whole School Evaluation (WSE) might usefully play a role in monitoring and supporting good quality assessment in reading by discussing

with staff how evidence of reading achievement and progress (and they're not the same) is collected and used and how pupils themselves and parents are involved. A reasonable expectation that inspectors might have of all schools is that they should have a well-designed assessment system that operationalises and communicates the kinds of learning in reading the school wishes to foster in pupils, that focuses pupil attention on valued learning outcomes, that encourages achievement higher-order thinking and reflection in reading as well as achievement in the basics of reading.

A recently-published, conceptual evaluation of pre-service teacher education in Ireland invites us to reconsider the balance obtained between the study of 'academic subjects' and 'curricular areas' (Burke, 2000). I would suggest that we need to consider too what constitutes 'academic' and 'curricular' study. The field of reading research alone is an enormously active one where the knowledge base is significant, yet constantly changing. A comprehensive analysis of what beginning teachers need to know about reading concludes that *the knowledge base is there, that it is absolutely essential that teachers at all grade levels understand the course of literacy development and the role of instruction in optimizing literacy development* (Snow *et al*, 1998, 329). Teacher education curricula should be changed, according to the report, to incorporate this knowledge base and the authors specify the minimum knowledge base that elementary teachers should have in order to promote pupils' reading – the list in question draws on psycholinguistic, sociological, anthropological, pedagogic (incorporating assessment) and psychological perspectives. In the light of the debate initiated by Andrew Burke's challenging paper, it is now opportune to examine what primary teachers need to know about language and reading development.

NOTES

⁷ See Harlen and James (1997) for a full discussion of the relationships between different types of assessment and the consequences for standardisation.

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Kathleen Murphy

WOMEN AND EDUCATION IN IRELAND: FACTORS LINKED TO THE CESSATION OF FORMAL EDUCATION IN ADOLESCENCE AND RE-ENTRY INTO EDUCATION IN MIDLIFE

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INTRODUCTION

A higher education puts a woman in control of herself and that lasts a lifetime. According to DeMott (1990), the resource most widely used as a tool for upward mobility is education. However, for many women, the opportunity to pursue a second or third level education does not present itself at age appropriate times. There are many issues related to the educational choices women make in late adolescence and throughout their lifespan. This paper endeavours to investigate and make proposals based on findings which could contribute to the understanding of the psychosocial backdrop to the choices women make regarding education both in late adolescence and in midlife. This paper will report demographic information, women's reasons for discontinuing formal education and women's reasons for returning to education. It will also explore women's perceptions of personal goals in their early twenties. Correlations of independent variables will also be reported to identify links between socioeconomic factors and the pursuit of educational goals.

Women's educational experiences are often disrupted by circumstances beyond their control. According to Goldthorpe (1996), the prevailing culture of

more advantaged classes leads parents within these classes to set a higher value on education than parents in other classes. Parents in more advantaged classes are better equipped to encourage and promote educational success on the part of their children. The concept of social class for psychology implies that social class may importantly shape, constrain, and mediate the development and expression of knowledge, beliefs and attitudes (Stewart and Ostrove, 1993). Social and economic factors are indistinguishably intertwined as a significant indicator of success at second and third-level education.

There are a number of factors which encourage women to return to education in midlife. Women in midlife often pursue education as changes in socioeconomic factors and in social roles permit greater amounts of time that can be used for personal development. A significant number of women are choosing to re-enter the educational setting to pursue new or continuing goals. Long and Porter (1984) coined the term "time gap" which reflects a woman's realization that she has many years left before retirement age, with perhaps no husband due to separation, divorce or death; no children at home; and no means of supporting herself socially or economically. Cornwall (1991) suggests that educational institutions serve as a supportive holding environment for women in transition. Overwhelmingly, the most cited reason for re-entry into the educational system by mature women is cognitive interest and a desire to learn (Novak and Thacker, 1991). The second most important motivating factor for returning to higher education in adulthood is personal growth and satisfaction (Ibid). According to Scala (1996), women were more likely to state that they came back to college because they always wanted to go to college but never had the opportunity. Many women in midlife have, for the first time since their early twenties, the freedom from the constraints of social role involvements to make choices regarding their personal futures (Mitchell & Helson, 1990). Women's construction of possible selves are more likely to be sociocentric or connected than men's construction of possible selves (Curry et al., 1994). Feelings of connectedness and relatedness are part of girls' self concept (Chowdrow, 1978). Although some of women's experiences of self may be achieved in isolation from other people, by far the greater portion of women's sense of self arises out of relationships with others (Snygg & Combs, 1949). It is often therefore not until social role constraints have lessened that women again begin to consider how to develop themselves.

The questions this paper endeavours to address are what factors may influence if young women drop out without completing second level education, what factors indicate that young women will enter third level education at the appropriate age and what factors are linked to women returning to education in midlife. The literature suggests that, in adolescence, parental expectations and socioeconomic factors are linked to attainment of educational goals (Vallerand et. al, 1997). In midlife, social role constraints are correlated with the choice to pursue further education. This paper investigates whether the women who did not pursue education in late adolescence in retrospect perceive that education was always a goal for them. Mitigating factors inhibiting the pursuit of educational goals or the lack thereof are explored.

THE STUDY

Sample

This study, conducted in 1999, was designed to explore the links between socioeconomic factors and education in a broad sample of women in midlife. As a result, the research focused on five sub-groups: [1] women pursuing university education in midlife (N=20), [2] women with leaving certificate education and no university education (N=20), [3] women with no leaving certificate education (N=20), [4] women pursuing leaving certificate education in midlife (N=20), [5] women who earned their university degrees directly after leaving school (N=20). The participants pursuing education in midlife were selected from Trinity College and Dublin based Vocational Education Programs. The women not involved in education in midlife were drawn from friends of the groups pursuing education.

All 100 women were between the ages of 35 and 55; their partners on average were two years older. All had been married at some point; 78% were still married, 20% were separated and 2% were in second relationships. All of the participants had at least one child; 78% had three children or less. There was a wide variety of types of employment held by the participants, and by their partners, although they tended to cluster in the higher social classes if the level of education was higher. Most of the participants gave birth to their first child between the ages 21 and 25. This is true of all the groups except the Trinity Alumnae Group in which (55%) of the participants gave birth to their first child when they were 30 years of age or older and 85% were 26 or older.

Measures

The present study explored the possible differences in attitudes and beliefs of the five groups of women. Demographic information was collected which included the following variables: marital status, partner's age, level of education of the respondent partner, number of years married, number and ages of children, occupation and partner's occupation, years at present employment, salary range and partner's salary range, joint bank account, own bank account. Information was collected on the women's educational achievements and their goals both in their early twenties and in midlife through a semi structured interview. The questions were related to current goals and current perception of past aspirations. The following variables were included in the semi-structured interview: personal goals in early twenties, current ultimate goal, conflict associated with current goal, current mental stimulation, lack of mental stimulation, reason for cessation of pursuit of formal education, reason for return to formal education. The Personal Attitudes Rating Scale was developed by the researcher to measure self-actualization. The questions on the Personal Attitudes Rating Scale (PARS) were adapted from three existing scales; Shostrom's Personality Orientation Inventory (Shostrom, 1962), Rotter's Internal-External Locus of Control Scale (Robinson and Shaver, 1973, pp. 107-111 and 227-234) and the Tennessee Self-Concept Scale (Roid & Fitts, 1988). Four existing instruments were used in conjunction with PARS to measure self-

actualization, ego identity, self perception and general health: The Short Index of Self-Actualization(Jones & Crandall, 1986), the Ego Identity Scale (Tan et al.,1977) the Adult Self-Perception Profile (Messer & Harter, 1986) and the General Health Questionnaire (Goldberg, 1978).

Results

Socioeconomically there were marked differences between the 5 groups which constituted the sample. Perhaps the most interesting finding is the number of women who responded that they had no income; between 50% and 85% of women from all the groups except the Trinity Alumnae Group reported that they have no income. Those who were employed had incomes at the very lowest level, and this was true even for the majority of the Trinity Alumnae group, of whom, 59% reported incomes of less than £15,000 per year. However, 36% of the Trinity Alumnae group had an income over £22,000 p.a.; neither the No Leaving Certificate Group or the Leaving Certificate Now Group had any respondents in the last two categories. The women in the Leaving Certificate at 18 Group also had a higher level of income indicating that the higher the education level the more likely one is to have a higher income level. However, it is clear that no matter what the education level, women have a lower work place attachment than men and this is reflected in their salaries.

The total number of women with partners was 80 and all partners were employed. Focusing on the partners of the women 6% of husbands/partners had an income between £5,000 and £10,000 p.a., 9% had an income level between £10,000 and £15,000, 22% had an income level of £15,000 to £20,000 and 14% between £20,000 and £25,000, 38% were in the more than £30,000 bracket. The partners with the lowest income levels were married to the women in the No Leaving Certificate group. The partners with the highest incomes were with the women in the Trinity Alumnae Group.

In response to the question 'what is your occupation': 46% responded housewife, 24% responded full time student, 2% self employed, 18% full time professional employment, 7% part time employment, 2% professional part time employment and 1% responded unemployed. It is interesting to note that only one woman considered herself unemployed while 70% of the women were not earning a paycheck. The financial arrangements of the women were as follows: 78% of the women had their own bank accounts; 64% had joint bank accounts; all 100 women had either their own bank account or joint bank accounts with their husbands/partners.

CORRELATIONS BETWEEN SELECT INDEPENDENT VARIABLES

Table 1 illustrates the correlations between the education level of the participants and other salient independent variables. For all of these correlations N=100.

Table 1
Correlations between Select Independent Variables

Variables	Partner's Ed Level	Partner's Salary	Partner's Occupation	Age Birth	Child Number	Own Salary	Own Occupation
Education	r=.57,	r=.46,	r=.26,	r=.55,	r= -.20,	r=.51,	r=.54,
Level	p<.05	p<.000	p<.01	p<.000	p<.05	p<.000	p<.000

There was a strong correlation between a number of the independent variables and education level; education level was highly correlated with partner's educational level, partner's salary, partner's occupation, age when first child was born, number of children, own income, own occupation, own salary.

Major Personal Goals in Early Twenties

The participants were asked, "What were your major personal goals in your early twenties?" Table 2 shows that, for the majority of participants, except the Trinity Alumnae Group, to get married was the number one response under this category.

Table 2
Number One Response to "What were your major personal goals in your early twenties?"

Response %	Group 1 Trinity Students	Group 2 Leaving Cert at 18	Group 3 No Leaving Cert	Group 4 Leaving Cert Now	Group 5 Trinity Alumnae
Get Married	55	40	55	55	25
Children		5	10	15	5
Wealth			5	15	10
Career	30	35	20	5	35
Happiness	15	20	10	10	25

The participants second responses to this question, illustrated in Table 3 indicate that to have children was the second most important goal for all of the women except the Trinity Alumnae group. They differ from the other groups on both of these responses with their responses being spread more heavily over the wealth, career and happiness categories.

Table 3
Number Two Response to “What were your major personal goals in your early twenties?”

Response %	Group 1 Trinity Students	Group 2 Leaving Cert at 18	Group 3 No Leaving Cert	Group 4 Leaving Cert Now	Group 5 Trinity Alumnae
Get Married	20	35	35	20	20
Children	50	45	50	55	10
Wealth	10	5		5	25
Career	15	10	5	15	25
Happiness	5	5	10	5	20

Why the pursuit of formal education ended

The participants were asked what circumstances led them to cease pursuing formal education when they did (Table 4).

Table 4
Number One Response to “Reasons for Finishing Formal Education”

Response %	Group 1 Trinity Students	Group 2 Leaving Cert at 18	Group 3 No Leaving Cert	Group 4 Leaving Cert Now	Group 5 Trinity Alumnae
Expectation	70	40	40	16	
Money	5	20	10	50	
Job	15	20	10	28	
Poor Results		15		6	
Married	10		35		
Rebelled		5	5		
Degree					100

The most common response for all the groups except the Trinity Alumnae Group was that parents did not encourage or expect their daughters to continue with formal education. This was particularly so in the Trinity Students Group. One woman from this group responded with a certain amount of anger:

My father wanted us to get out there and earn money and find a man. He felt his job was done the day we finished the Leaving Certificate. Passing was not even that important, we just had to

finish out the time. He thought what is the point of educating the girls they are just going to get married and have babies anyway. My brother is a dentist. That always made me very upset. I was smarter than he was in school and I got nothing. It didn't bother me so much when I was younger. It's as I got older I saw the injustice.

50% of the women in the Leaving Certificate Now group responded that money was the overriding factor in their decision to stop pursuing formal education; a further 28% indicated that they stopped pursuing education because they had a job. Money and job were the second highest responses in the Leaving Certificate at 18 group also. A woman from the Leaving Certificate at 18 Group responded:

I got a job with the bank and loved it. I had my own money, clothes and had my friends. It was a very happy time in my life.

The highest percent of those who said that they had left school to get married was in the No Leaving Certificate Group; 35% responded they left school to get married. One woman from the No Leaving Certificate Group said:

Where I come from you just got married. You had a baby the same year and you got on with it. It was what growing up was all about. We were just kids really but we thought when we got married and had a baby we were grown up.

Table 5 indicates the responses of the women when asked “What made you return to formal education” the women’s responses were distributed in the following categories.

Table 5
Number One Response to “What Made You Return to Education? ”

Response %	Group 1 Trinity Students	Group 2 Leaving Cert at 18	Group 3 No Leaving Cert	Group 4 Leaving Cert Now	Group 5 Trinity Alumnae
For Self	25			47	
Always Goal	30			21	
Career	20			26	
Opportunity	20			5	
Family Gone	5				
Post Grad					40
NA		100	100		60

25% of the Trinity group responded that they were pursuing a degree for 'something for themselves' and 30% indicated that it was always a goal. 47% of the Leaving Certificate Now group responded that they were pursuing education for something for themselves and 21% responded that it was always a goal.

CONCLUSION AND DISCUSSION

The results indicated that level of education is linked to socioeconomic status. The women in the two groups with lower levels of education were from lower socioeconomic backgrounds. Similarly, the women with higher levels of education were from higher socioeconomic backgrounds. The results clearly indicate that socioeconomic background is a strong predictor of women's education level. The results support a number of theories relating to education and socioeconomic background. According to Goldthorpe (1996, p. 488), "the prevailing culture of more advantaged classes, it is held, leads to parents within these classes setting a higher value on education than parents in other classes and being better equipped to encourage and promote educational success on the part of their children". Members of the middle and upper classes are more likely to be educated than members of the lower classes (Ibid). The concept of social class for psychology implies that "social class may importantly shape, constrain, and mediate the development and expression of knowledge, beliefs, attitudes, motives, traits and symptoms" (Stewart and Ostrove, 1993, p. 476). According to DeMott (1990), the resource most widely trusted as a tool for upward mobility is education. The women who tend to return to education in midlife are usually middle-class with a comfortable lifestyle (Ibid). The women who tend to leave school before completing secondary school requirements are from more disadvantaged backgrounds than those who stay. The results of this study clearly support these theories.

The participants were asked why they stopped pursuing formal education when they did. The most common response for all the groups except the Trinity Alumnae Group was that parents did not encourage or expect their daughters to continue with formal education. The second most common response for the Leaving Certificate Now Group was that money was the overriding factor. Socioeconomic factors were a concern for the Leaving Certificate Now Group when they left school, and they appear to remain a concern for them now; the Leaving Certificate Now Group had the lowest personal incomes and their partners had lower incomes than the partners of the other women. Money and job were the second most common responses for the Leaving Certificate at 18 Group. This finding has a different significance for this group in that with a Leaving Certificate education, the women in this group were employable in relatively high paying jobs in the late sixties and early seventies. University education was not a prerequisite for entry into the workforce in the same way that it was in the nineties. The highest percentage of those who said they left school

to get married was in the No Leaving Certificate Group. This is reflective of the conservative traditional social norms of those from lower socioeconomic backgrounds in the late sixties and early seventies.

The women in the Leaving Certificate at 18 Group, the No Leaving Certificate Group and the Leaving Certificate Now Group noted more often than the other women that they felt restricted by the educational system and rebelled as a result of the perceived lack of autonomy. Those students involved in this study who rebelled failed to achieve their Leaving Certificate qualification by age eighteen or failed to pursue their intellectual potential at third level. The literature suggests that the teacher's expectations of the rebellious child influences student achievement (Rosenthal & Jacobson, 1968). Teacher expectation predicts achievement more strongly for low achievers than for high achievers (Madon et al., 1997). The participants with the lowest levels of education reported that teacher perceptions of them were negative and that that affected their sense of competence in the academic arena. Perceived competence, individuals' beliefs that they are doing well or are making progress toward their goals, is an important factor in goal attainment (Bandura, 1982; 1991; Harter, 1989; Ford, 1992). Clearly, the women involved in education in midlife have reassessed expectations of them and have redefined the expectations that they have for themselves.

Lacking formal education can mean lacking depth and meaning in life which can make women feel inferior and less adequate in relation to other people and the type of work for which they are qualified (Bailey, 1982). The participants were asked what made them return to formal education. The most common answer for the Trinity Students Group was that it was always a goal. The second most common answer was *'something for myself'*. The most common response for the Leaving Certificate Now Group was *'something for myself'* followed by career. Career and opportunity when combined was the single most important factor leading the Trinity Students Group to return to education. Research indicates that these responses are not uncommon. Scala (1996) found that women, when asked why they returned to education, stated that they always wanted to go to college but never had the chance. Cox (1991) found that women reenter the educational system for personal growth and satisfaction. Women in midlife often pursue education as changes in other roles permit greater amounts of time that can be used for personal development (Cornwall, 1991). Women often realize during midlife that they have a limited number of years left before retirement, with perhaps no husband due to separation, divorce or death, no children at home and no means of supporting themselves socially or economically. Cornwall (1991) suggests that educational institutions serve as a supportive holding environment for women in transition. This was certainly true for the participants of this study. Goals, accomplishment and fulfillment were repeated themes associated with the pursuit of formal education in midlife. Goal attainment through formal education, which was perhaps inconceivable for some women twenty years previously, plays an important role in women's discovery of potential in midlife.

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Tina Hickey

READING IN A SECOND LANGUAGE: TEACHING IRISH READING⁸

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INTRODUCTION

Irish schools operate in a context in which significant amounts of time each day are assigned to the teaching of Irish oral and literacy skills. A majority of Irish children learn Irish as a their second language, and as a single subject rather than in all-Irish (immersion) schools. Some aspects of the teaching of reading in Irish will be explored here, in the context of research on second language reading and second language acquisition.

Research on reading in a second language has tended to focus on the difficulties involved, raising questions such as ‘is it a reading problem?’, ‘is it a language problem?’ ‘is it a motivational problem?’. This article attempts to look at the more fundamental issues of why we want language learners to read, and what we want them to do with their second language reading. As Harris *et al.* (1996) point out, it would not be reasonable to expect children to engage in Irish reading simply for the sake of it, when we accept that they read in their first language for enjoyment, pleasure and information. There may be significant differences in the approaches adopted by teachers to Irish reading, between those who view it as providing mainly secondary support to the principal task of teaching oral language skills, and those who view Irish reading as a valuable and

integral part of a communicative approach to second language learning. This paper will look at Irish reading in the context of some of the research on second language acquisition and second language reading, and of the recommendations of the Revised Curriculum. The implications of the research findings on second language reading will then be considered in the context of what can be done to help Irish reading.

WHY TEACH IRISH READING?

In the audio-visual approach to Irish teaching, the teaching of reading in Irish was seen as a mainly secondary skill in the language learning process, which consolidated the material learned orally. Communicative approaches to language teaching view L2 reading as a valuable and integral part of the process of language learning. There is a body of research which points to the advantages for language learning of second language reading, and the following provides a brief overview of some of the positive effects:

L2 Reading

Reinforces oral learning & develops automaticity of decoding

'Familiarity breeds automaticity' Day & Bamford 1998:16

Develops L2 vocabulary

Krashen 1993, Cho & Krashen, 1994, Day *et al.* 1991, Pitts *et al.* 1989

Improves oral skills

Elley, 1991; Day & Bamford, 1998

Improves L2 reading comprehension

Caruso, 1996, Masuhara *et al.*, 1996, Walker, 1997

Provides input in minority languages when other forms of input are restricted

Hafiz & Tudor 1990, Tudor & Hafiz, 1998, Hickey, 1991

Successful experiences of L2 reading increase positive attitudes to L2 learning

Rodrigo, 1995, Constantino *et al.* 1997, Hickey 1991

Krashen (1993) points out that it has been established that reading, especially voluntary reading, is a powerful means of developing second language competence.

Those who read have larger vocabularies, do better on tests of grammar, write better, and spell better... Nevertheless second language acquirers do not typically take advantage of the power of reading.

Kim & Krashen, 1997:27

Research on second language learning now views reading as an important strand in the acquisition process, rather than as a secondary skill only in the language learning process. These views are represented also in the Revised Curriculum for Irish that is currently being introduced to teachers, and its recommendations with regard to Irish reading are examined briefly below.

IRISH READING AND THE REVISED CURRICULUM

The Revised Curriculum for Irish views Irish reading as an integral part of language learning. It gives as one of its main aims '*éisteacht, labhairt, léitheoireacht agus scríbhneoireacht a fhorbairt ar bhealach comhtháite*' (Curaclam na Bunscoile: Gaeilge, 1999:14). In *Treoiríníte do Mhúinteoirí* (1999:2) teachers are advised to develop games and enjoyable tasks to elicit communication using all four skills from children. The section of these guidelines devoted to reading notes that Irish reading supports the development of the other language skills, provides enjoyment and accesses information. The need to make Irish reading enjoyable is stressed, as well as the need to promote a positive attitude to it. The Guidelines strongly recommend that a range of texts and genres be presented to children, such as picture books, posters, comics, matching games, labels, sentence cards and non-fiction materials.

In the youngest classes the Revised Curriculum recommends that children's listening and speaking skills be supported by reading stories aloud to them frequently, or by using tapes of stories, with the emphasis on developing their awareness of the rhythm of the language and their enjoyment of it. Interactive reading is encouraged, where children complete lines or play the role of a character. Teachers are advised to discuss illustrations to develop children's comprehension strategies using context, pictures and background knowledge to enable them to understand the stories they hear. The use of tape-recorders and listening stations to allow both individual re-reading and small group work is also recommended.

The *Treoiríníte* acknowledge that skill transfer occurs from English reading to Irish reading, by recommending that the formal introduction of Irish reading is not begun before Rang 2 (second-grade) in English-medium schools, by which time children are expected to have a reasonable foundation of English reading skills and spoken Irish. Teachers of children embarking on Irish reading are advised to address the different sound-symbol correspondences they encounter in Irish in a planned and systematic way. However, in general it is recommended that reading for meaning be stressed from the outset, rather than merely the 'sounding out' of texts.

The Revised Irish Curriculum emphasises the need to encourage interest in, and enjoyment of, Irish reading throughout the school years. It especially recommends the use of a wide range of reading materials at all stages, with children developing stories for their own and other classes, and with higher classes reading poetry, song lyrics, game instructions, interviews and drama scripts, as well as stories and cartoons. Teachers of older children are advised to encourage higher-order skills such as recognising text types, constructing meaning, finding information and using context, grammar and background knowledge to deal with unknown vocabulary. It is recommended that older pupils be exposed to different types of reading such as scanning, fast identification of particular information in a text, wide reading aimed at getting the general meaning of a text without every word being understood, and close reading requiring examination of the language, grammar and style used. It is suggested that having children read aloud in Irish often disrupts the rhythm of reading, and instead silent reading is recommended, or reading aloud in small groups, especially when the children are very familiar with the rhythm and pronunciation of a text. Children who are reading silently can be given particular tasks, such as finding the main events of the story or ticking the answers to simple questions prepared by the teacher to encourage focused reading.

The Revised Curriculum therefore stresses the need to expose children to a wide range of Irish texts throughout their school years, to read aloud in Irish to them frequently from the early years in order to help them to enjoy Irish reading, and to promote their interest in and enjoyment of Irish reading for a wide range of purposes in the class and at home.

Aspiration vs. Implementation

Having examined the ideals of the Revised Curriculum as they relate to Irish it is useful to look at a recent study that examined the conflicts and tension between teachers' beliefs about L2 reading instruction and their actual practices. Graden (1996) interviewed a group of secondary school teachers in the US about what they believed would be the best way to develop good L2 reading skills, and compared this to observations of their teaching methods. She found that:

[the teachers in the study] subordinated the beliefs that they shared about reading instruction to their beliefs about the motivational needs of their students. Because of these student factors, at times the teachers' actual instructional practices differed strikingly from their preferred practices...They often articulated a frustrated awareness of the inconsistencies between their stated beliefs and what they actually did in the classroom.

Graden (1996:393)

For example, the teachers believed that students need the opportunity to read frequently in order to become proficient, but reading was found to occur

infrequently in their classrooms, due to student resistance and their low L2 ability. The teachers asserted that interesting texts at suitable levels of language difficulty were needed to promote L2 reading, but they relied in practice on graded readers. The teachers stated that they discriminated between reading for comprehension and for pronunciation practice, yet the most common reading activity was reading aloud by pupils. Overall, the teachers' aims to establish best practice in L2 reading were frustrated by poor pupil motivation, and their attempt to keep the whole class active. Graden concluded that this represented a classic conflict of beliefs about preferred reading instruction and beliefs about pupils' willingness and ability to participate in those practices. This unwillingness to engage in L2 reading has been noted elsewhere. Day & Bamford commented:

In general, students learning to read a second language do not read and they do not like reading.

Day & Bamford 1998:4

HOW CAN L2 READERS BE ENCOURAGED TO READ MORE OFTEN?

Research on L2 reading appears to point to the value of more frequent Irish reading. However, as Moran & Williams (1993) noted, it is ironic that despite universal acceptance of the view that one becomes a good reader by reading, the amount of time spent on reading (as opposed to discussion, answering questions, pronunciation practice) is relatively small. Nuttall (1996) posits a 'Virtuous Circle' for reading: the child who reads more reads faster, understands more, enjoys reading, reads more, and so on. Day & Bamford (1998) argue that the way to implement best practice in teaching L2 reading is to focus more on the ultimate goal of producing readers who *can* and *want* to read, rather than exclusively on the short-term goals of developing lower-level skills.

In an ideal world, are there any reading teachers who would NOT want their students to a) read a great deal and b) enjoy reading? It is unlikely. But such aims may seem remote, unattainable and even irrelevant to the job at hand...The second language reading lesson can avoid being merely an empty ritual...by addressing the two aims of students reading a great deal and students enjoying reading.

Day & Bamford 1998

A number of studies have considered ways of encouraging L2 readers to read more widely and more often. The concept of Book Floods and Extensive Reading are explored below.

Book Floods

'Book Flood' experiments offer children access to a large amount of minimally controlled, comprehensible reading materials in their L2, and a number of studies

of this approach have been carried out internationally. These projects have involved 'floods' of as few as 48 books in one case and over 250 in another, and have targeted children as young as six years of age. The results from a number of such studies show positive effects on:

- Motivation to read, and increased enjoyment of L2 reading
- Word recognition skills
- Oral language test results
- Reading comprehension
- Listening comprehension
- Vocabulary
- Grammar

Analysing the effects of the Book Flood experiment in Fiji, which targeted 9-11 year olds and supplied about 250 books over the course of the first eight months, Elley (1991:388) commented:

The effect of a large input of high-interest, illustrated reading materials, with related activities designed to ensure that the children actively processed the text, produced an unusually rapid rate of language growth...Initially the effects [of the Book Flood] were greatest in the receptive modes, reading and listening, but in the second year these effects spread to writing and vocabulary.

Elley's conclusions are that the book flood experiments are successful because of the following:

- 1 An extensive input of meaningful print, chosen for appropriateness of difficulty and interest level
- 2 Incidental language learning
- 3 The integration of oral and written activities in the shared book method, which deliberately links reading, discussion and writing
- 4 Focus on meaning rather than form
- 5 High intrinsic motivation to read in the L2. Children and teachers reported enjoyment of, and good attention during, the stories, with consequent improvement in attitudes to reading in general

One example of a book flood, the FiaFia ('Fun') program, is described in more detail below:

The Fia Fia Programme

Children: 8 year olds on South Pacific Island of Niue. The programme continued for a year.

Books: 48 illustrated books (black and white) developed locally. Each book

contained a complete story designed to be interesting (local themes, elements of excitement or humour), without tight control over vocabulary or grammatical structures (though level of difficulty was considered generally appropriate).

Teaching approach: Shared book experience, whereby the teacher shared the reading of the books with the children over several days, until they became familiar enough to join in with the text. Discussion of characters, events and language was encouraged, with follow-up activities such as art, drama, rewriting with modifications, vocabulary games, and reading aloud in pairs. Formal written exercises were avoided and classes usually spent five or six sessions on a story, but returned to it later if it was popular.

Results: The children showed significant improvements in reading comprehension, word recognition, oral language skills, and in some cases their scores were double those of controls who were following an audio lingual programme with an associated graded reader. In addition, the Fia Fia children, their teachers, and principals had far more positive attitudes towards the programme than to the other methods of teaching.

Extensive Reading

The term Extensive Reading has also been used for programs that focus on reading a large amount in the L2. Day and Bamford (1998: xii-xiv) offer the following definition:

Extensive reading is an approach to the teaching and learning of second language reading in which learners read large quantities of books and other materials that are well within their linguistic competence. [It] is appropriate at all stages of language learning.

Extensive reading programmes give pupils the time, encouragement and materials to read pleasurably, at their own level, as many books as they can. A number of studies⁹ have shown that extensive reading has a positive effect on second language learning.

Can language learners read extensively without becoming frustrated?

Teachers are very aware that pupils become frustrated when they do not understand enough words in the text to be able to follow the story. Book Flood exponents argue that learners acquire new vocabulary in context, and that the shared book experience approach helps them to address unfamiliar vocabulary or syntax and develop skills and strategies to deal with them. Books were selected for the Fiji book flood if they were judged to be at an appropriate level of linguistic difficulty and of interest to the age group in question, with common-sense controls over language difficulty, rather than detailed analyses of each text.

A compromise is seen in some Extensive Reading experiments which aim to have pupils read and enjoy a large number of graded readers and supplementary reading schemes, as well as other accessible texts at their level. Hafiz & Tudor (1990) provided primary-school L2 learners with extensive reading of graded readers at their level, and showed that they made significant gains in vocabulary

and writing skills. Walker (1997) developed an extensive reading programme using graded readers for older L2 students, so that they were familiar enough with most of the vocabulary to be able to read the material independently. These studies stress the merits of providing extensive experience of materials that readers can feel reasonably comfortable with, so that their reading is for meaning, rather than decoding and language drills.

HELPING IRISH READING

Drawing together the information about second language reading discussed above, how can teachers help reading in Irish, and how can Irish reading be used to develop overall competence in the language, and pleasure in learning it? Several practical strategies are suggested below in relation to the teaching of decoding skills, the provision of good models and access to Irish books, the development of new materials and greater use of existing materials, the use of taped books and the facilitation of parental support for Irish reading. :

Target decoding skills in Irish

Children's problems with some aspects of Irish orthography¹⁰ need to be addressed explicitly, as is recommended in the Revised Curriculum. Second language readers tend to decode more slowly because they make less use of redundancies and predictable letter patterns. They also tend to decode to non-words (e.g. 'trasid' for *tsráid*)¹¹ or to the wrong word category (e.g. 't-arán' for *tharraing*). Encoding into English sounds is also a feature (e.g. 'fetch' for *féach*) or decoding to familiar Irish words that look similar (e.g. 'múinteoir' for *muintir*). All of these difficulties cause L2 readers to read at least 30% more slowly in their second language than in their first¹². This slower reading rate makes it more difficult to extract meaning from a text.

Tackling some of the decoding problems explicitly is recommended. Materials such as the posters and exercises developed by Muintearas (*Scéim Foghraíochta*) to focus on long vowels and lenited consonants would be helpful in alerting children to the different sound-symbol correspondences they meet in Irish. An extension of these materials to include word-initial (eclipsed) clusters such as *ts-*, *mbr-*, *tsr-*, *bhf-* would also be valuable, as these present serious difficulties to young readers who are unused to such combinations word-initially in English. Improving the decoding of such clusters would improve automaticity and as a result would release processing space for comprehension.

Provide good models of Irish reading: Teacher Reading Aloud

If classroom reading mainly revolves around the intensive practice of a page of a graded reader, with pupils being taught grammar and vocabulary and presenting to each other more or less flawed attempted at reading it aloud, then they are not learning good L2 reading habits. Instead, their tendency to read slowly and non-fluently and to focus on individual words as they read aloud discourages the development of sufficient reading speed to synthesise meaning

from the passage (Hamp-Lyons, 1985). Amer (1997:46) showed that frequent reading aloud by the teacher significantly improved pupils' reading comprehension scores. Reading aloud by the teacher may help pupils to get away from the 'bottom-up' reading style that characterises ineffective readers, and focus more on meaning than on surface-level features. Romney *et al.* (1989) showed that 7-year-old children who heard their teacher read aloud to them each day for 30 minutes had improved receptive vocabulary and communicative skills at the end of three months, and Elley (1989) showed that children aged 7-10 years who were exposed to reading aloud by their teacher even for short periods had improved vocabulary. Ricketts (1982) showed that 11-year-olds who were read to for 20 minutes every school day for eight months had improved listening and reading skills.

These results show the value of reading aloud each day in the second language to all grade levels, and it is important that this should not be viewed as a less valuable learning activity because it seems less challenging for pupils or is more enjoyable. The Revised Curriculum advises that teachers read aloud in Irish regularly, and this practice should not be confined to the junior classes, but should be a regular occurrence at all levels, as it has been shown to improve language skills and positive attitudes to reading. Other ways of providing good models of Irish reading are discussed later.

Provide greater access to Irish books

The issue of access to books is central to promoting reading. It is accepted that children learning English reading need a wide range of reading experiences both in school and at home, yet many children's only experience of Irish reading is limited to their class reader. The IEA comparison of reading attainment noted that

The most consistent finding from the IEA literacy survey is that access to books and reading resources is one of the most significant predictors of reading success.In Ireland....more effective schools tend to have more books in libraries than less effective schools.

Martin & Morgan 1994: 93

It is reasonable to expect that greater access to Irish materials and more reading aloud to all grades will have a similar impact on reading in Irish. Access is discussed below both in terms of the need to develop more materials, but also in terms of using those that are already available.

Development of Materials

Teachers are well aware that there can be a gap between a book's level of linguistic difficulty and its interest level. Thus, Irish books which are sufficiently simple in linguistic terms may not always be of interest to nine and ten-year olds. As a result, it is difficult at present to find sufficient simple 'real' books (as

opposed to reading text books) in Irish to constitute a substantial book flood, unless graded readers are used as well. Hopefully this will begin to be remedied with the introduction of new materials for the Revised Curriculum.

There is a clear need to develop more Irish books based on research on young learners' spoken language, as occurred in the Welsh context (e.g. Ogwen, 1980). The development of eight or more book series of about ten titles at the same level of linguistic difficulty (rather than 'stand alone' books) would assist teachers significantly in providing suitable materials and would give children a sense of achievement as they move between books within the same series. While these books would be graded in terms of linguistic difficulty, they would ideally not be used in the way that current reading textbooks are, but would have interesting stories and be simple enough to allow some independent reading and/or small-group work. The emphasis would be on providing enjoyable reading experiences that motivate a child to continue reading, rather than on specific language teaching or reading skills exercises.

There are numerous examples of such book series in English for L2 readers, where publishers have invited successful writers to contribute, within certain clear guidelines, and where the emphasis is on providing interesting and enjoyable material that is within a learner's competence at a particular stage. It is also important that these books should look similar to the real books children read, rather than like graded textbooks. The costs of publishing such materials could, if necessary, be reduced by illustrating them only in black and white, as occurs in some ranges of English-language first independent readers. While there have already been some welcome developments in the provision of a number of familiar stories in Irish in an attractive series by An Gúm (e.g. *An Sionnach Glic*), an extension of this approach to all grade levels would be beneficial.

Young readers find great satisfaction in renewing their acquaintance with the same characters or situations over a number of different books (see the success of series such as *The Famous Five*, *Secret Seven*, *Animal Ark*, *Babysitters*, or *Harry Potter*). Such series encourage reluctant readers by offering certain areas of predictability that they find reassuring. The development and marketing of some adventure/mystery series like these in Irish might be especially fruitful at present to supplement the individual books already available, and would prove attractive to the later classes if they were sufficiently simple in language terms.

Another area for exploration is the development of books that connect with TG4 programmes. Comic-style books based on cartoons would be an attractive addition to publishing in Irish, and would allow simplification of language on high-interest themes. If schools could show some of these cartoons and offer children reading materials based on them there would be a number of benefits, such as promoting reading and listening skills, raising motivation and possibly encouraging interest in viewing these programmes at home. It would also be beneficial to encourage children in senior classes to write for junior classes, making their stories relevant to the younger children by targeting their interests. Groups of older children could write cooperatively, with assistance from the

teacher, learning new vocabulary and structures in the context in which they need them, and then read their stories aloud to small groups of younger children, perhaps helping the younger children to prepare the illustrations to accompany the text or act out the stories.

The provision of a range of materials such as board games, taped story collections and children's songs, posters and simple comics in Irish is also necessary to support the Revised Curriculum. Already available is a small number of CD-ROMs such as *Drochlá Ruairí* (Fios Feasa) and *An Rí Santach* (Educational Company) that offer L2 readers enjoyable ways of reading in Irish with support for pronunciation and vocabulary. Parents need to be informed about these materials also, because they are very suitable for home use if a computer is available there. However, a less expensive form of technology, the audiotape, has not yet been utilised sufficiently in Irish publishing. The advantages of such tapes are discussed later below.

Greater Use of Existing Books

While it is certainly the case that the number of books at different levels of difficulty is smaller in Irish than it is in English, those that are already available could be used more, and not all teachers are aware of the materials that have become available in recent years. Schools which accept that access to a wide range of English materials is necessary to achieve good reading results do not always apply this thinking to Irish, and either have few Irish books, or have books which are not accessible at each grade level, so that the experience of individual children is restricted to the class reader. Given the emphasis in the Revised Irish Curriculum on giving children frequent story-reading sessions from the early years on, as well as other enjoyable experiences of Irish texts, it would be timely to make a grant to schools specifically for the purchase of Irish reading materials, with the aim of providing every class with no fewer than 50 appropriate Irish books to promote and extend Irish reading.

These class libraries could include all of the graded readers from the different schemes available for each class level, as well as real books, in order to maximise the materials that are appropriate. Nation & Wang Ming-tzu (1999) argue that using graded readers as supplementary reading materials (rather than as intensively taught textbooks) gives readers extra practice in reading, reviews and fixes vocabulary learned, stretches vocabulary by presenting it in different contexts, and encourages the learner by showing that what has been learned so far allows engagement in an enjoyable experience.

Nor should real Irish books (i.e. books other than graded readers) be excluded: Nation (1997) showed that well written real books for young native speakers can be similar in terms of difficulty to graded readers aimed at older second language learners. Young L2 readers may have difficulties with some of the vocabulary used in some real Irish books, but the rest of the text may be accessible to them if they are helped to overcome this barrier and offered other supports. There are a number of real Irish books already available that are simple enough for L2 readers in the middle grades (especially if they were read aloud to

them initially, or provided on tape). Book Flood experiments show that children can enjoy reading well-produced and illustrated real books aimed originally at younger native speakers. Similarly, children here could also benefit from and enjoy the simpler books already available in Irish if these books were read to them regularly and if the children were given regular access to them and helped to use them (e.g. tapes, small group work), and encouraged to feel that reading even a simple book in one's second language is an achievement, and can also be enjoyable.

The wider use of real Irish books would be helped by the use of a more clearly defined grading scheme for L2 learners by *An Gúm*. This would give brief information about each book's language difficulty (vocabulary and structures) and likely interest level, and would greatly assist teachers in using the Irish books currently available in extensive reading programmes. Collections of 5-10 books at the same level of difficulty could then be re-marketed as packages to schools, to be used at particular grade levels, ideally with teachers' notes which outline the language used and suggest activities which reinforce the language and material covered. The development of a website by *An Gúm* offering teachers materials related to particular Irish books (e.g. quizzes, dramatised versions, glossaries) would be another way to improve use of the materials already available.

A pilot programme is underway (Hickey, in preparation) to investigate the effect of providing an extensive reading programme that uses both graded readers and authentic storybooks with a group in Rang 2 learning Irish in an English-medium school. Rather than a class working its way slowly through a graded reader over a term, children were encouraged to select a book (a real book or an extract from a graded reader in booklet form) and read it frequently while listening to the tape accompanying that book on their Walkman, with instructions to focus on what was happening in the story. Children who wished later read extracts to the class, and when a group had read a particular story they were encouraged to dramatise it. The advantage of using some stories from graded readers is that they increase less proficient readers' confidence in the early stage of Irish reading by providing text that is more within their reach. It is expected that as children become accustomed to reading in Irish for story rather than for intensive pronunciation and vocabulary practice, and as they develop the reading strategies recommended in the Revised Curriculum, they will be more able to move onto the simple real books provided in an extensive reading programme.

Taped Books

An important feature of the pilot project outlined above is that the children were supplied with simple taped readings of each story or book, so that they are relieved initially of the pressure to decode, and could focus on listening and reading for meaning. Children are motivated to read a taped book in their second language significantly more often than an untaped one (Hickey 1991a) and it is this frequency which most contributes to vocabulary learning (Nation 1997). Taped books not only significantly increase children's motivation to read, they

also improve their reading rate and accuracy.¹³ Children in Rang 3 (Hickey 1991a) read a taped Irish book significantly more often, and as a result made fewer pronunciation errors, read faster and enjoyed reading more. The Revised Curriculum recommends the use of tapes to provide children with exposure to good models of reading, in addition to teachers reading aloud. It would be very helpful if all new Irish materials were provided from now on with an accompanying tape at an appropriate reading rate. Regarding existing books, tapes do not have to be of commercial standard in order to be of benefit (Gamby, 1983) and simple versions could be prepared by teachers as a teaching aid and shared between a number of classes. Tapes would provide an important support to children and their parents in the early stages of Irish reading, and their use in extensive reading of graded readers and simple illustrated real books appears to increase significantly children's motivation to read in Irish and improve their reading fluency. Taped books have the additional benefit of providing meaningful input in the second language to improve listening comprehension and general second language competence.

Helping Parents to Help

A number of surveys suggest that about 70% of parents have low Irish proficiency.¹⁴ While a majority (78%) of parents in the Rang 3 study (Hickey 1991) reported that they sometimes or often helped their children with Irish reading, 60% said they would help more if their own Irish were better, citing particular difficulties with pronunciation, grammar and vocabulary. These difficulties become more obvious as children progress through school, and Harris & Murtagh (1999) found that two-thirds of Rang 6 parents do *not* help with Irish homework, with half attributing this to their own poor level of competence.

A body of research points to the value of parental support for children's reading attainment. Kelleghan (1983) looked at environmental process variables rather than status (e.g. aspirations, quality of language, supervision, work habits) and found that 36% of the variance in Irish reading scores was explained by these parental factors. It may be that Irish reading is the aspect of Irish homework that offers most potential for parents with limited Irish. Harris & Murtagh (1999) showed that parents were more likely to help with Irish spelling and reading homework than other forms of Irish homework, and found that where parents praised *any* aspect of their child's Irish achievement, children had more positive attitudes to Irish and motivation to learn it.

Thus, it is of great importance that parents are helped to support their children's Irish reading especially, since this is the aspect of learning the language with which they feel most able to help. Involving parents with Irish reading homework has the additional benefit of helping to revive some of their own dormant Irish abilities. If parents are to be involved then it would be most effective to elicit their support in the pre-school and early school years, when they are less challenged by the Irish level being taught. The attempt by the National Reading Initiative¹⁵ to encourage new parents to read to babies and toddlers went

some way towards addressing the issue of parental support for reading. However, parents may need more persuasion that they can contribute to their children's Irish reading, as well as more practical help with finding and choosing suitable books.

Even parents in Gaeltacht communities choosing to send children to Irish-medium pre-schools do not show high levels of Irish reading to children at present: a survey (Hickey, 1999) found that only one third of these parents read Irish books to their children regularly. Nor was this group modelling Irish reading in the home, in that only 18% of this sample of Gaeltacht parents said they themselves read Irish books regularly, and over a half said that they never read books, newspapers or magazines in Irish. Parents need to be convinced that reading attractive simple books in Irish regularly to their children will significantly help their progress with Irish, even when their own ability is limited. Teachers can help to inform parents of the value of their contribution to, and interest in Irish reading, even when the parents' Irish is limited. Parent's motivation to help with Irish and confidence that their support is worthwhile may be as important as Irish ability in this regard.

A very practical source of support for Irish reading in the home is the taped book, since surveyed parents cite difficulties with pronunciation. Ideally, a school adopting an extensive reading approach to Irish would involve parents by sending taped versions of simple books home to give parents and children a good model of Irish reading that they could listen to together. At the very least, even where schools continue to depend on a class reader in Irish, it would be helpful to provide a taped version of that book to help parents to support their child's Irish reading homework. The wider commercial availability of a large number of real Irish books with good tapes might encourage more parents to do some voluntary Irish reading in the home and car, and it is regrettable that the provision of this valuable aid has been so long delayed here. Training parents to use the Shared Reading approach to Irish reading would also be of benefit, not only in terms of increasing children's exposure to Irish reading, but also in showing a positive interest in their children's acquisition of the language. Shared Reading could be included as part of an extensive reading approach using taped books.

A Welsh initiative uses end of book glossaries and advice for parents to assist them in supporting L2 reading. Offering parents and teachers the option of downloading a glossary for a particular book from a website could make already published materials more accessible. Reading groups for parents have also shown considerable success in Wales. In these groups (run in libraries and preschools) a facilitator selects a book suitable for the children of the parents who attend, and models how to read it, answering questions and explaining the language during a short session. Parents then practise reading this book aloud to each other, and are asked to read the book to the child each night for a week. They were found to be more prepared to read in Welsh to their children when they were confident that they could read the book correctly and answer their

children's possible questions.

Finally, parents need to be informed that one of the most effective aids they can offer their children's Irish is, surprisingly, the television. It has been found that, while watching TV in English detracts from children's English reading, watching TV and reading in the second language seem to reinforce each other, with both improving vocabulary and comprehension in the language (Romney *et al.* 1995). Providing parents with guidance about which TG4 programmes would be suitable for their children, and information about Irish videos already available would therefore be beneficial.

Conclusion

There are a number of ways that teachers can help children to read more in Irish and to enjoy Irish reading more. Briefly summarised they can:

- Target decoding problems (e.g. difficult consonant clusters) directly using materials such as those developed by *Muintearas*
- Read aloud to children daily, simplifying text as necessary initially, and helping children to arrive at the meaning through discussion
- Focus on increasing children's motivation to read in Irish by moving away from dependence on a class reader and using instead a wide range of Irish reading materials comprising both real books and graded readers.
- Provide where possible (and demand from publishers) tapes to accompany the Irish books used, and provide opportunities for children to read along with these tapes in class and at home.
- Actively elicit parental support for Irish reading by setting up Shared Reading programmes, providing parents with taped models of the Irish books being read in school by the child and informing parents of the importance of their praise for children's progress in Irish.
- Encourage and promote watching of Irish videos and TV programmes.

The Revised Irish Curriculum will provide a new impetus to the teaching of Irish in primary schools, and will require the provision of a range of new teaching materials. It is vital that the recommendations regarding Irish reading be implemented so that the role of reading in supporting and extending second language learning and providing attractive and enjoyable input can be fully realized, and so that Irish reading can be seen as a linguistically enriching and enjoyable experience, rather than merely secondary support for oral skills. Teachers are well aware that classroom intensive reading of English textbooks may help develop reading skills, but does not of itself produce children who enjoy and benefit from reading. Similarly, an attempt to teach Irish reading without providing frequent enjoyable experiences of a range of different materials will not produce children who are Irish readers.

In order to implement the Revised Curriculum teachers need to apply methodology and materials that maximise meaningful input in the language and give children a feeling of success and positive engagement with all the strands of language learning, integrating Irish reading with listening, speaking and writing skills. The goal for Irish reading in particular is to provide children in all grades with daily enjoyable reading experiences in Irish, through teacher, tape and small group readings, as well as individual reading in the middle and higher grades. Such extensive reading (and listening) would link into oral use of the language through role-play, discussion and games, as well as linking with the writing of simple texts for themselves and others to read. In addition to these classroom developments, there is an urgent need to mobilise those parents who are reasonably well-disposed towards the language by informing them of the importance of their role in supporting Irish and Irish reading especially in the home, and providing practical support and information to parents. A combination of these developments would reap significant benefits for the teaching of Irish.

NOTES

- ⁸ Tá leagan Gaeilge den alt seo le foilsiú i d*Teangeolas* 40, le fáil ó ITÉ, 31 Plás Mhic Liam, Baile Átha Cliath 2. Teil: 01-6765489.
- ⁹ Caruso 1996, Davis 1995, Mason & Krashen 1997, Masuhara *et al.* 1996, Walker 1997, Day & Bamford 1998, Yu 1993, Anderson 1999.
- ¹⁰ See Hickey (1992) and Máirtín (1992) for a fuller discussion
- ¹¹ These decoding errors are taken from Hickey (1992) and Hickey (in preparation)
- ¹² Kellaghan & Macnamara (1967), Hickey (1991)
- ¹³ McMahan (1983), Reitsma (1988), Rasinski (1990) Hickey (1991a & b)
- ¹⁴ Harris & Murtagh (1999), Hickey (1997, 1991), Ó Riagáin & Ó Gliasáin (1984)
- ¹⁵ The parents of all babies born during 2000 were given a pack of books, including one Irish book in the case of Galltacht parents.

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REVIEWS

Teaching and Learning Irish In Primary School: A Review of Research and Development le John Harris agus Lelia Murtagh, 1999, ITÉ, Baile Átha Cliath 1999 ISBN 0-946452-96-2. Ocht bpunt, 515 leathanaigh.

Mórtuascáil thathagach ar thaighde a deineadh ar theagasc agus ar fhoghlaim na Gaeilge sa bhunscoil atá sa leabhar toirtiúil seo. Is leabhar ceannródaíoch é, ina dtugann na húdair ar baill d'fhoireann taighde ITÉ iad, faoi mhionanailís a dhéanamh ar nádúr agus ar phróisis mhúineadh agus fhoghlaim na teanga sa séú rang sa bhunscoil le linn tionscnamh taighde a chuimsigh fiche scoil ionadaíoch a fud na tíre.

Is tráthúil foilsíú na tuarascála anois nuair atá an siollabas nua Gaeilge á chur i bhfeidhm sna bunscoileanna, mar tá eolas tábhachtach le fáil inti faoi fhonnadhaint na bhfoghlaimeoirí, faoi thuairimí múinteoirí agus daltaí araon i leith an rang Gaeilge, faoi ghnáthstruchtúr agus ábhar ceachta Gaeilge i bpraitic, faoi chur chuige agus faoi mhodhanna éagsúla múinte. Dá thoradh seo, ní amháin go soláthraítear bonn tábhachtach taighde do na siollabais nua sa saothar seo, ach tugtar spléachadh an-suimiúil ann chomh maith ar imeachtaí agus ar ghníomhaíochtaí laethúla na sórt ceachtanna Gaeilge a bhíodh á gcleachtadh le linn gnáthlá oibre sa seomra ranga de réir an tseanchuraclaim.

Sa réamhrá, luaitear na trí thionscadal taighde a bhfuil torthaí orthu le fáil sa saothar. Chomh maith leis an suirbé a deineadh ar mhúineadh agus ar fhoghlaim na teanga sa séú rang bunscoile agus atá á anailísiú sa chuid is mó den tuarascáil, tá torthaí agus impleachtaí dhá phársa shuimiúla taighde eile curtha san áireamh ag na húdair anseo. Tá eolas i dtaobh ábhair agus áiseanna foghlama mar thoradh ar staidéar a deineadh, féachaint mar a d'fhéadfaí prionsabail an chur chuige cumarsáide a chur i bhfeidhm ar bhonn córasach praiticiúil sa seomra ranga. Tá cuntas á sholáthar anseo ar an iarracht a deineadh le dul i ngleic le cuid de na deacrachtaí agus na dúshláin a tháinig chun solais le linn taighde ar an bhfiche rang bunscoile. Ina theannta seo, tá torthaí staidéir eile curtha san áireamh a bhaineann arís le háiseanna agus ábhair a fhorbairt le go

bhféadfaí ábhair eile (Ealaín agus Eolaíocht sa chás seo) a theagasc trí mhéan na Gaeilge (cur chuige ábhairdhírithé).

Míníonn na húdair an fiúntas agus an tábhacht a bhaineann leis an taighde féin:

...the report presents for the first time a full description of a number of new instruments for studying the teaching of Irish in primary school. These instruments are likely to prove useful in the context of research on the implementation of the new curriculum.... we include in appendices here a variety of information which, combined with the quantitative data, produce a more complete picture of Irish in primary school.

Ba í ceann de na cúramaí a bhí ar na húdair agus iad i mbun na tuarascála ná féachaint chuige go mbeadh torthaí a gcuid taighde ábharthach do fheidhmiú na siollabas nua, trí dhíríú ar ghnéithe ionmholta ó thaobh an theagaisc chumarsáidigh a tháinig chun solais san iniúchadh ar an bhfiche rang bunscoile. Chonacthas torthaí áirithe ar an teagasc cumarsáideach sa staidéar a d'fhéadfadh maolú ar chuid de na deacrachtaí a bhain leis an seansiollabas.

Fad is a bhí an staidéar áirithe seo ar siúl 1989-1997, bhíothas ag feitheamh ar na siollabais nua ón Roinn agus agus níl aon fhianaise againn gur cuireadh athrú ar bith i bhfeidhm ar chóras teagaisc ar léir a bheith míshásúil le linn na tréimhse céanna. Éinne a léifeadh an saothar seo chífedh sé/sí mar a chuaigh torthaí an taighde i gcion ar ábhar agus ar threo an tsiollabais sa tslí go bhféadfaí a rá gur cineál forógra d'athruithe a bhí le teacht sa siollabas féin atá sa tuarascáil.

Cé go n-admhaíonn na húdair go bhféadfaí bonn níos leithne taighde a chur faoi iniúchadh na teanga ag leibhéal na bunscoile, mar sin féin moltaí tábhachtacha déanta acu a thabharfadh treoir nua do theagasc agus do fhoghlaim na Gaeilge dá gcuirfí i bhfeidhm iad. Seo a leanas comhairle na n-údar i leith na moltaí atá acu:

To implement even these recommendations, however, would require a research-and-development effort considerably greater than that which is presently in place. But the real scale and importance of the task of supporting Irish in primary school can only be determined by enlarging our frame of reference. Two issues in particular are important (a) the crucial role of ordinary primary schools within the larger national effort to promote bilingualism and the implications for the teaching of Irish of the fact that , outside Gaeltacht areas, Irish is a minority second language (Ich 336).

Is í an phríomhaidhm ar a dtógann siad a gcuid moltaí ná cur le fonnadhaint fhoghlaiméoirí an teanga a shealbhú laistigh den ghnáthchomhthéacs scolaíochta. Tá míshástacht á lua le múineadh na Gaeilge sna scoileanna le

roinnt blianta anuas. Go hachomair, tá an chuma ar an scéal go bhfuil ag dul de pháistí an teanga a thabhairt leo tar éis trí bliana déag de theagasc. Tá an scéal amhlaidh ainneoin go bhfuiltear fós ag brath ar scoileanna le húsáideoirí cumasacha Gaeilge a sholáthar.

Sainíodh siollabas nua de réir an chur chuige chumarsáidigh do mhúineadh na teanga san iar-bhunscoil deich mbliana ó shin agus cheal taighe iomlán eolaíoch, níltear deimhnitheach fós faoin toradh fadtéarmach atá ar an athrú siollabais seo nuair a thagann sé chomh fada le cainteoirí agus úsáideoirí cumasacha teanga a chur ar fáil do phobal dátheangach na tíre. Idir an dá linn, leanadh ar aghaidh sna bunscoileanna leis na seanchúrsaí teanga a dearadh sna seachtóidí. Dealáítear an cúlra áirithe seo sa saothar agus feictear na forbairtí i dtreo shiollabas nua cumarsáide atá mar chuid de nuachuraclam na bunscoile anois.

Ach feictear ann chomh maith cuid den ghruaim agus den éadóchas a bhain le saothrú na teanga sa bhunscoil le linn na mblianta nuair a bhíodhas ag tnúth leis an gcuraclam nua agus nuair a cuireadh srian dá thoisic le nuálacht agus le forbairtí cruthaitheacha teagaisc sna scoileanna. Is teist nach beag atá sa saothar taighde seo ar an ngá a bhí le siollabas nua a shainiú don bhunscoil.

Lasmuigh de thagairtí don taighde a deineadh do *Cúrsaí Nua Gaeilge na Bunscoile: Moltaí agus Ábhar Samplach* le Harris *et al* 1996, níl aon fhianaise thathagach á soláthar sa saothar mar sin féin, a chruthaíonn gurb é siollabas sainithe de réir phrionsabail an chur chuige chumarsáidigh an siollabas ab fhearr chuig feabhas a chur ar theagasc agus ar fhoghlaim na teanga sa bhunscoil. Is léir go gcuireann sé feabhas ar fhonnadhaint fhoghlaiméoirí sa ghearrthearma, ach níltear chomh cinnte faoi fhiúntas an chur chuige féin sa bhfadtéarma. Molann na húdair áfach (Ich 236):

...If the beneficial effects of communicative teaching activities on participation and language use are to be fully realised, the new curriculum will have to promote a more developed version of communicative teaching than exists at present. This version should incorporate a greater number of those features which research and practice have now identified as conducive to successful learning.

Fuarthas amach sa tionscadal taighde a nglaothar *The Twenty Classes Study* air go mbíonn toradh dearfa ar ghníomhaíochtaí cumarsáideacha sa rang. Tá an tionscadal taighde seo an-spéisiúil ann féin sa mhéid go gcuirtear bonn ann faoi ionstraim taighde a d'fhéadfaí úsáid a bhaint as i bhforbairtí taighde sa seomra ranga amach anseo. Tá mórfhiúntas ag baint leis an ionstraim anailíse atá forbartha ag na húdair atá taobh le modheolaíocht chineálach agus chainníochtúil araon (Caibidil 2). Tá mórchreidiúint ag dul do na húdair ach go háirithe as ionstraim nua taighde a fhorbairt le dul i ngleic le heolas den chineál a nglaothar siad 'process type information' air. Tá na húdair faoi réir ag an gcur chuige seo chomh maith nuair a thugann siad faoi chóras anailíse Sterling a chur

in oiriúint do thaighde an ILAS (Irish Lesson Analysis System) agus is saibhríde an toradh dá bharr.

Rinne na húdair iniúchadh agus anailís ar cheachtanna Gaeilge i bhfiche rang a roghnaíodh ar bhonn náisiúnta de réir critéar áirithe (lch 25). Is í an aidhm a bhí leis ná:

- 1 To describe the range of conditions under which Irish is taught and learned by studying a small number of diverse classes*
- 2 To describe the teaching and learning of Irish in this small group of classes in more detail, and from a greater number of different perspectives than had ever been done hitherto*
- 3 To develop the instruments and observations procedures necessary to collect the new kinds of data implied by (2) above (lch 8).*

Ceann de na torthaí a leagann na húdair béim air ach go háirithe ná dearcadh na ndaltaí féin i leith fhoghlaim na teanga. Cé go bhfuil dearcadh cuibheasach fabhrúil ag daltaí i gcoitinne i leith na teanga féin, níl an dearcadh dearfa céanna i gceist nuair a chuirtear a gcuid tuairimí i leith fhoghlaim na teanga sa seomra ranga san áireamh. Tuigtear nach bhfuil coibhneas díreach idir an dearcadh cuibheasach dearfa seo agus fonnadhaint na ndaltaí leis an teanga a fhoghlaim. Faoi mar a bheifí ag súil leis agus faoi mar atá ar eolas ag múinteoirí teanga le fada an lá, éiríonn níos fearr le daltaí a bhfuil an dearcadh agus an fhonnadhaint i gceart acu. Arís ní díol mór suntais é ach oiread go gcruthaíonn an staideár seo go bhfuil baint nach beag idir dearcadh na bhfoghlaimoirí agus dearcadh a dtuismitheoirí i leith na teanga. Bhí an tuiscint seo ag múinteoirí go hiomasach le fada an lá ach a bhuí leis an saothar seo, cuirtear bunús barántúil taighde ann anois di. Léirítear an imní a bhíonn ar fhoghlaimoirí sa rang Gaeilge, feiniméan a ngloatar *language anxiety* air, agus ar deineadh faillí ann go dtí seo.

Ceann de na gnéithe is spéisiúla agus a thugann dúshlán mhúinteoirí Gaeilge ná an léargas a thugtar ar thuairimí foghlaimoirí i leith na gceachtanna Gaeilge féin. Cloistear anseo guthanna na ndaltaí féin mar shéideán úr gaoithe:

Pupils' reactions to the Irish lesson, expressed in their own words, indicate that they often experience the materials and lesson content to be boring, old-fashioned and repetitious. They would like a course which is more modern, more fun and more realistic, with a greater

emphasis on conversations and games (Ich 307).

Ba chóir go mbeadh foghlaimeoirí i gcoitinne níos mó ar a suaimheas agus spreagadh chun foghlama á fháil acu as seo amach sa siollabas nua Gaeilge, mar a bhfuil ionchur teanga curtha ar fáil mar ullmhúchán don fhíorchumarsáid agus an bhearna eolais is dlúth agus inneach don chur chuige cumarsáideach á líonadh le linn gach ceachta agus an chumarsáid féin mar sprioc le gach ceacht.

Cuirtear síos chomh maith ar an tionscnamh taighde a cuireadh ar bun in ITÉ (Institiúid Teangeolaíochta Éireann) idir 1993-1996 le hábhair agus áiseanna foghlama a fhorbairt, féachaint mar a d'fhéadfaí prionsabail an chur chuige cumarsáide a chur i bhfeidhm ar bhonn córasach praiticiúil sa seomra ranga. Deineadh an t-ábhar seo a thriail agus a phiólótú i ranganna sóisearcha agus sinsearacha agus fuarthas tacaíocht mhúinteoirí Gaeltachta agus Galltachta araon. Séard a bhí ann ná iarracht dul i ngleic le cuid de na deacrachtaí a tháinig chun solais le linn an staidéir an an bhfiche rang trí ábhar agus ceachtanna samplacha cumarsáide a chur ar fáil.

Cloítear anseo leis an ábhar a cuireadh ar fáil do na scoileanna lasmuigh den Ghaeltacht amháin, mar a mbíonn sealbhú an dara teanga mar aidhm ag múineadh na Gaeilge, cur chuige atá inmholta mar go bhfuil sé ag teacht le torthaí taighde an fiche rang a chloígh le foghlaimeoirí Galltachta amháin chomh maith céanna.

Toisc go gcuirtear an dá staidéar seo taobh le taobh sa leabhar céanna, bheadh an léitheoir ag ceapadh go mbeadh baint ag an dá cheann acu le chéile. Is fíor go bhfuil mórimplachtaí ag torthaí taighde an fiche rang don chineál cúrsa Gaeilge agus ábhair a sholáthraítear sa bhunscoil, sa mhéid go n-éilíonn daltaí ábhar níos cumarsáidí agus go n-éiríonn níos fearr le daltaí le linn idirghníomhaíochtaí cumarsáide, ach ní hionann seo is a mhaíomh ámh go mbeidh toradh níos fearr agus níos éifeachtaí ar ráta sealbhaithe teanga na bhfoghlaimeoirí sa bhfadtearma de thoradh na cumarsáide. Cuirtear é seo san áireamh nuair a luann na húdair (Ich 236)

Superficially this pattern of results may seem to suggest that we can unreservedly recommend that 'the more communicative the lesson the better'-that increasing the proportion of communicative activities and decreasing the proportion of language practice activities will improve the standing of classes on a whole range of indicators such as achievement in Irish, attitudes to Irish and interest in the Irish lesson. In fact we will have to content ourselves with a rather more modest and circumscribed conclusion that this. The kind of correlational evidence provided by this study and indeed by most studies in second-language acquisition is not strong enough to support cause-and-effect conclusions.

Is léir, pé scéal é go bhfuil forbairtí móra tagtha ar an saol sa teangeolaíocht fheidhmeach ó cuireadh an cur chuige cumarsáideach i bhfeidhm den chéad uair

breis is fiche bliain ó shin. Níltear iomlán deimhnitheach de go bhfuil ag éirí leis ag leibhéal na hiar-bhunscoile ó cuireadh I bhfeidhm ansin é deich mbliana ó shin. Is mithid mar sin súil a chaitheamh ar a bhfuil ag titim amach in ár seomraí ranga Gaeilge arís. An mbíonn deis ag foghlaimeoirí teacht ar thuiscint ar a bhfuil i gceist le foghlaim na Gaeilge agus an dtuigeann siad nádúr na cumarsáide le pobal na Gaeltachta sa Ghaeltacht agus lasmuigh de?

Is é an tríú tionscadal taighde de chuid ITÉ atá curtha san áireamh anseo ná an *Teaching Through Irish Project* (1995-1997). Bhí caoga múinteoirí páirteach sa tionscadal seo a thug faoi ábhar teagaisc, téacsleabhair agus cúrsaí trí mhéan na Gaeilge don Eolaíocht agus don Ealaín a chur ar fáil, Ní aistriúcháin ar shaothair agus ar théacsleabhair a bhí ar fáil cheana atá anseo ach iarracht ag múinteoirí leis an gcuid ab fhearr d'ábhair a bhí triailte acu sa rang a chur ar fáil. Is é an modh seo a shamhlaítear le cineál an tumoideachais a bhfuil an oiread sin ratha air, ina n-úsáidtear an sprioctheanga mar theanga an teagaisc d'abhair áirithe nó do na hábhair ar fad. Tá an-rath ar an gcur chuige seo de réir taighde atá déanta i gCeanada agus sa bhFionnlainn. Is é is dóigh leis na húdair ...the communicative syllabus in Irish now being introduced and the teaching materials which will follow from it, should inject a new vitality into the Irish lesson in ordinary schools (lch 16). Fáilítear roimh ré nua dhóchais a bheith á tuar arís.

Chuirfeadh toirt na tuarascála féin as don ghnáthléitheoir ginearálta, cé go bhfuil na caibidilí go léir soléite a ndóthain. Gheobhaidh an gnáthléitheoir, an taighdeoir mar aon le lucht polasaí teanga ábhar seo a ghriogfadh chun machnaimh iad. Tá eolas cuimsitheach sna trí thuarascáil seo ar chur chuige nua chun anailís a dhéanamh ar chaint agus ar idirghníomhaíochtaí an tseomra ranga (b'fhiú ach go háirithe súil a chaitheamh ar PCBR- Pupil Communicative Behaviour Record) agus ar thorthaí an tionscadail a léiríonn an gá a bhí le siollabas nua a shainiú do na bunscoileanna. Tá moltaí fiúntacha ann do lucht pholasaí agus pleanáil teanga, smaointe don té a bheadh ag dul i mbun taighde mar aon le hinnéacs agus aguisíní tathagacha cabhracha. Déantar achoimre úsáideach ar na caibidilí go léir i gcaibidil a deich, áis atá fíorthábhacht agus fíorchabhrach don léitheoir. Más spéis leat cursaí oideachais agus cúrsaí teanga nó más taighdeoir, tuismitheoir nó múinteoir tú, is mór is fiú duit an t-am a éilíonn an saothar tábhachtach seo a chaitheamh á léamh agus á scrúdú.

Muiris Ó Laoire

Tá an Dr Ó Laoire ina léachtóir san Institiúid Teicniólachta i dTrá Lí agus údar *Athbheochan na hEabhraise: Ceacht don Ghaeilge* leis An Clóchomhar Tta i 1999. Fara san, i gcomhpháirt le Helen Ó Murchú, tá sé ina eagarthóir de *Teagasc na Gaeilge*, Imleabhar 7, Meán Fómhair 2000, á fhoilsiú ag Comhar na Múinteoirí Gaeilge.

Education in Ireland, 1904 –1922: the case of the Bilingual Programme of Instruction, Thomas A. O’ Donoghue. Murdoch: Centre for Irish Studies, Monograph Series, No. 1, 2000. Published at \$A15.00 including postage. Details on web page at <[http:// wwwsoc.murdoch.edu.au/cfis](http://wwwsoc.murdoch.edu.au/cfis)>

In an era of curricular change and intensive in-service, the publication of this book is timely because it gives teachers and the wider education community an historical context against which they may evaluate the present reform initiatives. It is welcome for the additional reason that there has been an appreciable decrease in recent times in the number of books and articles being written on the history of Irish education, and it would be unfortunate if sight was lost of the important contribution which this field of study can make towards gaining fresh insights into educational issues. This monograph is the first of a series to be published by the Centre for Irish Studies in Australia, and the aim of the series is to make available in an inexpensive format the work of established scholars and postgraduate students in Irish and Irish – Australian studies which do not attract the attention of commercial publishers.

The book is organised into seven chapters, and in the opening chapter the broad historical context for the introduction of the Bilingual Programme of Instruction is examined. O’ Donoghue refers to the lack of appreciation and accommodation which British imperialists accorded throughout much of the nineteenth century to minority cultures, but points out that towards the end of the century, some concessions were being made with regard to minority languages. He argues that the confluence of four factors contributed to the introduction of Bilingual Programme in 1904. Firstly, there was the manifestation of a more inclusive perspective towards minority cultures and languages throughout the British Empire. Secondly, there was a willingness to ‘kill the demand for Home Rule with kindness’ in the areas of land ownership, social services and education. Thirdly, there was the new consciousness developing in Ireland in relation to Irish tradition and culture, and this was expressed by the GAA, the Irish National Literary Society and the Gaelic League. Fourthly, there was an underpinning of the National Board of Education’s Programme of 1900 by a commitment to more heuristic, discovery type teaching methods for all subjects. This programme emphasised the value of teaching nature study and local history by bringing pupils out into their local environment, and it would have been incongruous with such a philosophy if the mother language of some pupils was ignored.

In Chapter Two, the general historical context to the sanctioning of the Bilingual Programme is provided, and there is a brief review of the impact which invasions, plantations, the Reformation, the Penal Laws and the Great Famine had on the decline of the Irish language. There is no doubt that the national schools played a key role in accelerating the decline of the Irish language during the nineteenth century, and O’ Donoghue examines the policies of the National Board in relation to the Irish language from its establishment in 1831 to 1904.

From 1831 until the late 1870s, Irish was excluded from all national schools, both as a subject and as a medium of instruction, and the Board's position appeared to have been that the Irish language did not exist. A number of individuals such as Dr Mc Hale, the Archbishop of Tuam, and Thomas Davis were very critical of this policy, but it was Sir Patrick Keenan, Head Inspector of national schools in the northern part of Ireland, who more than anyone else in the middle of the nineteenth century highlighted the plight of Irish-speaking children who did not understand English and yet were receiving a primary education through that language. Keenan was not successful in having any action taken on his various proposals with regard to the language, but from the early 1870s, pressure began to mount on the National Board to change its policy. In 1874, the INTO called for the inclusion of Irish among the subjects for which results-fees should be paid. In 1876, the Society for the Preservation of the Irish Language was formed, and one of its objectives was the creation of a pressure group to ensure that Irish would be taught in the schools. In 1878, the Society succeeded in securing the acceptance of Irish as a subject of examination in intermediate schools, and in 1879, Irish was allowed as an extra subject outside of normal school hours in primary schools. A fee of 10 shillings per pupil per annum was paid for every child who obtained a pass in the Irish course, and by 1899, there were 1,825 pupils studying Irish as an extra subject.

The Gaelic League was established in 1879, and from 1883 onwards, it sought to have a bilingual policy in primary education. The Commissioners for National Education adopted the view that it was impossible to make Irish the language of the schools in any part of Ireland, and manner in which the Gaelic League sought to change this policy is the focus of Chapter Three. Throughout its campaign for bilingual education, the Gaelic League pointed to the Welsh experience as a precedent and a justification for its agitation. The absurdity of instructing Welsh-speaking children through the medium of English had been criticised by the Commissioners in 1847, but nothing of practical significance happened until 1893, when the use of bilingual reading books was permitted, English was taught by means of translation, and the geography of Wales could be taught bilingually.

Two of the most important people in the promotion of the cause of bilingual education in Ireland were Dr William Walsh, Archbishop of Dublin, and Dr Starkie, the Resident Commissioner of National Education in Ireland. They were allies on the National Board, and it is highly unlikely that many concessions would have been achieved without their influence. In order to increase the pressure on the National Board, the Gaelic League set up an education committee in 1902 under the chairmanship of Dr Michael O' Hickey, Professor of Irish at St Patrick's College, Maynooth. In April 1904, the commissioners finally succumbed to the pressure, and they announced their approval of the Bilingual Programme of Instruction for use during ordinary school hours in Irish-speaking districts.

The Bilingual Programme was designed to be taught in schools in Irish-speaking districts and in districts where Irish and English were commonly spoken. It was set out for all classes from Infants to Seventh Standard, and the main emphasis was on developing student literacy in Irish and English, while teachers were expected to teach all other school subjects bilingually. In keeping with the spirit of the primary school programme of 1900, the emphasis was on the competencies which the children should acquire, and not on the tasks which the teachers should perform. The movement towards a child-centred approach to education was influenced by a renewed interest in the work of Pestalozzi, Froebel and Montessori, but the combination of heuristic methods, new subjects and a bilingual approach produced a challenge for teachers which was totally unrealistic. There were complaints with regard to the over-crowded nature of the ordinary programme, and these were reiterated by the bilingual teachers. The result was that a revised Bilingual Programme was introduced in 1908, and these changes were welcomed by the Gaelic League as making the programme “less pedantic and literary, and better calculated to foster Irish as the real living vernacular”.

One of the difficulties of curriculum reform is to ensure that the high aspirations of its framers are supported with practical steps to assist in its implementation, because ideals of themselves are never sufficient to guarantee that any change will occur when the initial enthusiasm has waned. This has been a recurring phenomenon in Irish primary education since the establishment of the national school system in 1831. Rarely have initiatives been supported with adequate funding, training or dissemination, and this was very much the case with the Bilingual Programme of Instruction. The teachers experienced great difficulties due to a lack of adequate training in bilingual teaching methods. The Gaelic League ascribed much of the blame to the teacher training colleges which employed lecturers in Irish, but did not develop courses in bilingual teaching. In 1907, the National Board decided that the best way to prepare teachers for bilingual schools was through recognising the Irish colleges established by the Gaelic League. (Significantly in view of the controversies which can arise at times with regard to extra personal vacation days and attendance at summer courses, the National Board funded the employment of substitute teachers so that teachers could take time off in lieu of time spent at the Irish college during the summer vacation).

The lack of adequate training was exacerbated by the lack of knowledge with regard to the most appropriate methodology for teaching bilingually. The first Irish college was opened at Ballingearry, Co. Cork, and it placed the emphasis on the *Modh Díreach*, the major underlying principle of which was to establish a direct contact between the word or phrase to be taught and the object or experience to which it corresponded. The practice of translating English into Irish was discouraged, and drills in phonetics were promoted. While the *Modh Díreach* was considered to be the most progressive method of language teaching available at the time, it was inadequate for teachers of the Bilingual Programme because it

was primarily intended as a method for teaching Irish to English-speaking pupils.

It fell to the teachers in the Irish-speaking districts to take the initiative and devise suitable teaching methods, and they did this with significant success. From 1908 onwards, bilingual associations were formed in the larger Irish-speaking districts around the country, and their members shared examples of best practice and read papers at conferences. They were facilitated greatly in this work by the *Irish School Weekly* (published by the INTO) and *An Claidheamh Soluis* (published by the Gaelic League). The bilingual teachers were also very active in producing books for the teaching of Irish to Irish-speaking pupils, and the most popular of these texts were *An Chéad Leabhar*, *An Dara Leabhar* and *An Treas Leabhar*. As an indication of how little change there has been over the years, one notes that there were no commercially produced teaching aids to deal with the teaching of Irish and English to Irish-speaking children, although there were Irish Conversation Charts which dealt with the teaching of Irish as a second language. At one level, it is possible to ascribe blame to the National Board for its neglect of methodological matters, but it is also arguable that the best results in curriculum development and curriculum improvement are achieved when teachers are directly involved in these processes as is evident in the work which was undertaken prior to and since the publication of the *Primary School Curriculum* (1999).

In Chapter Six, an exposition is presented on the broad pattern of responses to the Bilingual Programme in the various Irish-speaking districts around the country. There was the favourable response of the most intensely Irish-speaking districts of Donegal, Co. Kerry, Co. Cork and Co. Galway. The teachers in these districts were enthusiastic with regard to the programme, and there was also widespread clerical support. There was sporadic opposition from parents to the programme, and some of this was due to the fact that the National Board and the Gaelic League did not explain clearly the programme's underlying rationale. The inspectors of the National Board did not pressurise the teachers, but the Gaelic League did, and it was particularly aggressive in its approach to teachers who had been appointed prior to 1906. Indeed such was the extent of the pressure that the two Galway Branches of the INTO and the branches in Mayo joined together to condemn a statement by Douglas Hyde, President of the Gaelic League, that every schoolmaster or schoolmistress in Irish-speaking districts who could not teach the 3R's in Irish should be transferred at once or pensioned off.

There was much resistance to the Bilingual Programme in the Irish-speaking district in the western part of Co. Mayo. Consequently it was never introduced into any more than half of the national schools in the area. The important factor which contributed to this situation was the extent of parental opposition, and O' Donoghue argues that this may have developed as a result of the practice whereby men from this district spent a great proportion of each year away from home as migrant labourers in the east of Ireland, England and Scotland. They returned to Mayo with some command of English and sufficient improvement in

their standard of living to establish in the minds of the local population an association between the English language and prosperity. There was more than parental opposition operating against the widespread introduction of the programme. There was a large number of non-Irish speaking teachers in Co. Mayo, and in many instances, there were difficulties in getting any teachers to take up appointments in the more remote parts of west Mayo. The local organiser of the Gaelic League adopted an unduly aggressive approach towards the teachers who were not proficient bilingually and they might have been more enthusiastic towards the language if a sympathetic attitude had been taken towards their predicament. This situation was replicated in the parts of east Galway where the speaking of Irish was in decline and here the local organiser saw the Bilingual Programme as an opportunity to restore the language. As a result of the misinterpretation of the National Board's position, the Bilingual Programme was introduced into a number of schools against the wishes of the local clergy, parents and teachers. In the smaller Irish speaking districts of Co. Waterford, Co. Clare, east Mayo and east Cork, the Bilingual Programme was either not introduced at all or introduced merely into a small number of schools even though its introduction into a much larger number of schools would have been warranted under the criteria laid down by the National Board.

In general terms, the Bilingual Programme was accepted wholeheartedly in those Irish-speaking districts where it was compatible with existing values, but there was controversy when the Gaelic League moved away from the pedagogical argument for bilingual education to its contention that the Programme should be introduced into areas on the fringe of Irish-speaking districts. Attempts by the Gaelic League to impose Irish on non-native speakers generated a great degree of hostility towards the language, and this feeling became more widespread after the establishment of the Irish Free State when a policy of compulsory Irish was adopted for all primary school children, regardless of whether their first language was Irish or English.

By way of completing the picture with regard to the present-day status of the Irish language, O'Donoghue gives a very brief outline of the initiatives which have been taken since the foundation of the Irish State, and the doubts and misgivings which began to manifest themselves with regard to the policy of Gaelicisation. He points to a continued decline of the role of Irish in the education system, and he refers to the fact that by the late 1980s, the maintenance of the language in its traditional strongholds was under severe pressure. In the past decade however, he argues that there has been an upsurge of pride in Ireland with regard to the things Irish, and this includes the Irish language. There has been an increase in the number of Irish medium primary schools outside of the Irish-speaking districts, and this among other developments holds out fresh hope for the survival and revival of the Irish language.

Dr O' Donoghue in this scholarly work has made an important contribution to helping the reader learn about curriculum innovation by means of an historical case study. For teachers, the history of the Bilingual Programme shows a striking

number of similarities with the situation which has existed with regard to the teaching of Irish during the past thirty years where inadequate information on methodology has caused teachers to abandon the officially-sponsored approach and attempt to produce their own solutions, where the main focus has been on trying to find more appropriate teaching methods and not enough energy has been put into examining why Irish should be taught or learned in schools in the first place, where there continues to be a lack of resource material for the teaching of Irish, and inadequate use made of modern technology. It remains to be seen if the “new” communicative approach will be any more successful than those which have been tried during the previous hundred years, but we owe a debt of gratitude to Dr O’ Donoghue for presenting us with a lucid, readable account from which readers can draw their own analogies and conclusions.

Jim Bennett

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Combating Educational Disadvantage: Meeting the Needs of Vulnerable Children Theo Cox (ed.), 1999, London and New York, Falmer Press.

While there is a growing corpus of Irish based research on educational disadvantage, the recently published collection of essays entitled *Combating Educational Disadvantage*, edited by Theo Cox, adds significantly to our understanding of research, policy and practice in this area. Although primarily focused on the UK experience, it will be clear to readers that the work has many resources for those of us who are engaged in addressing disadvantage in this country. The book is divided into two sections. Firstly, a number of vulnerable groups are identified: ethnic minorities boys, pupils who are frequently absent from school, children in care and pupils who display disruptive behaviour. The second section provides many practical insights into how various educational systems, schools and teachers have responded to the needs of marginalised groups.

Helen Lucey and Valerie Walkerdine systematically expose many popular assumptions regarding boys’ underachievement. Historically, boys from working class backgrounds have not scored as well in reading as their female counterparts. However, it is the collapse of traditional manual employment that has given rise to concern for boys’ reading scores. While their reading levels may be poor, their current performance is not far behind that of working class girls. A much more significant gap exists between the reading standards of working class

and middle class children. The much highlighted superiority of girls in GCSE grades is bridged, and indeed surpassed, by boys at A levels English and Mathematics. The writers are suspicious of attributing boys' underachievement in reading to the prevalence of 'laddish' culture, inappropriate reading material and the supposed rejection by boys of the feminised nature of primary education. Varying levels of parental expectation of pupil outcome and knowledge of how the education system works may be closer to reality.

Maurice Chazan writes on 'Social Disadvantage and Disruptive Behaviour.' He lists the well-known factors which lead to disruptive behaviour such as family dysfunction and isolation, school issues and peer influences. The remainder of the article resembles a checklist of prevention strategies to counter disruptive behaviour, many of which are aspects of government policy in Ireland. Means of avoiding or minimising the frequency of exclusion of students are also discussed.

With the increase of immigration into the country, the inclusion of ethnic minorities within our educational system will assume greater priority. Eve Gregory's contribution 'Recognising Difference : Reinterpreting Family Involvement in Early Literacy' questions the extension of popular approaches to the development of reading in English among immigrant children. Educationalists would profit from examining how such children acquired literacy initially, before attempting to develop literacy in the second language. She collated research on immigrant children of Asian origin settled in London. Such groups generally acquired literacy initially through the study of religious texts, being exposed to traditional approaches such as whole-class teaching and the repetition of words and phrases, with the support of their extended family of grandparents and older siblings.

Theo Cox brings together research on pupils' perspectives on education. The article echoes many of the findings of the ERSI research carried out by Hannan and Short, *School Leavers' Views of Education: Objectives and Outcomes (1991)*. There is a strong recommendation that since parents have a direct bearing on pupil attitudes, school need to tap into the pool of parental interest and to encourage greater interest on the part of those parents who display negative attitudes to education. Schools should provide structured opportunities for student views to be heard.

Kathy Sylva makes a very convincing case for greater investment in early childhood education, even alluding to cost-benefit analyses carried out in the US. She distinguishes between various approaches to pre-school provision. Pupils who have access to high-quality, informal play-based programmes, as opposed to 'formal skill' or 'traditional nursery' approaches, are less likely to fall behind at school and more likely to develop higher self-esteem, to adopt less anti-social behaviour and generally be more socially committed. On the basis, she cautions against the recent trend of greater formality in nursery and infant education.

Peter Mortimore and Geoff Whitty attempt to answer the age-old quandary 'Can School Improvement Overcome the Effects of Disadvantage?' While there is considerable discussion beyond Bernstein's dictum 'education cannot

compensate for society', they admit that efforts aimed at tackling poverty are more likely to be successful in alleviating disadvantage than purely educational interventions. Efforts to make all schools effective only further widen the gap between the advantaged and disadvantaged. More optimistically, they believe that dynamic efforts at school improvement policies have been found to be successful in making a difference to pupil outcome. There has to be greater clarity in the public's mind as to what schools can and cannot be expected to achieve. Schools have a critical role in transforming the culture of inertia and despair which often characterises areas of disadvantage. They recommend better co-ordination of support services, early intervention, a greater focus on learning and teaching approaches used with the disadvantaged and extra support for pupils with disadvantaged backgrounds in school improvement programmes.

Many contributors recommend the need for co-ordinated services for disadvantaged children. Peter Evans addresses this specific issue in a review that takes the reader from after-school care in Finland to efforts to improve retention rates among Aborigines. Given the evidence, Evans is of the view that it is not surprising that centrally-administered services have difficulty in addressing the true needs of the families and children involved. Local initiatives are more flexible and while support is necessary from central government, budgets must be shared across professional groupings.

Professor John MacBeath, better known to readers for his involvement in the school self-evaluation project, *Schools Speak For Themselves*, discusses the latest phrase to enter the educational lexicon, lifelong learning. In a short yet thought-provoking article, he proposes that school efforts should focus more on the learner. Over-emphasis on literacy skills and certification based on written exams is to the detriment of developing personal qualities and social skills such as teamwork, enthusiasm, motivation and initiative among others. Such qualities, which paradoxically are increasingly sought by employers, would sustain pupil interest in school and in learning beyond school years.

Such qualities are not taught through a subject approach, but rather through the structures that exist and through the culture that prevails in classrooms and schools. He warns against what has been coined 'learned helplessness' since pupil failure and rebellion are closely intertwined. For schools who wish to re-engage young people disaffected with the traditional school curriculum and to lift their motivation to learn, he proposes the shortening of the 'usual' school day and the extension of the 'study support' concept to schools. The 'study support' movement has grown considerably from its humble origins in homework clubs in the late 1980s. Redolent of Friarian philosophy, it is organised on a voluntary basis. Students have the right to opt in or out. An informal atmosphere permeates activities which are chosen by students and teacher-pupil relationships are more 'easy-going' in order to promote learning as a social activity.

The above represents only a taste of what the book offers to the reader. I have not touched on some of the articles such as *Pupil Absenteeism in the Primary*

School by Tim Carroll or *The Work of a Local Education Authority Educational Psychology Service* by Irvine Gersch which indicate what promise an education welfare service and an educational psychology service hold for schools. My only disappointment with the book is that there is no treatment of disadvantage associated with students who live in rural areas. There is increasing concern 'across the water' that efforts to alleviate disadvantage are focussed excessively on urban communities. This is consistent with research carried out in Ireland by the Educational Research Centre and the Combat Poverty Agency in 1995. This criticism apart, it is a very comprehensive, interesting and thoroughly-researched book.

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