Irish Learning Support Association

I.L.S.A.

LEARN

VOLUME 36, 2014

Irish Learning Support Association

I.L.S.A.

Journal of the
Irish Learning Support Association

LEARN

JOURNAL OF THE
IRISH LEARNING SUPPORT ASSOCIATION

40 Years Supporting Learning
... And Still Learning.

1974-2014

LEARN

JOURNAL OF THE
IRISH LEARNING SUPPORT ASSOCIATION

VOLUME 36, 2014

LEARN is the Journal of the Irish Learning Support Association.

It is published annually.

LEARN 2015

Readers are invited to submit papers to be considered for inclusion in the 2015 issue of LEARN. Papers should reach the Editorial Committee, *LEARN*, ILSA, c/o Drumcondra Education Centre, Drumcondra, Dublin 9, by January 31, 2015. Papers should be relevant to some aspect of Learning Support and should not exceed 3,000 words. For information on electronic submissions please contact the administrator on our website at *www.ilsa.ie*

All members of the National Executive Committee are contactable by mail to:
The Irish Learning Support Association, c/o Drumcondra Education Centre, Drumcondra, Dublin 9, or by email through the website.

Applications forms for membership of ILSA may be downloaded from our website at *www.ilsa.ie*.

The Association is concerned with the education of children and young people with learning difficulties. Its aims include promoting cooperation between those concerned with Learning Support and enhancing the quality of service given by Learning Support Teachers through the provision of resources, lectures and seminars and provision of opportunities for peer-support.

Layout and Printing by CRM Design + Print Ltd., Dublin 12 • Tel: 01-429 0007

CONTENTS

The views expressed in the articles do not necessarily reflect those of ILSA.

Sister Thomasina Cosgrave

An Appreciation

Sister Thomasina, a much-loved and respected colleague and friend, died on 20th June, 2014. We dedicate this edition of *Learn Journal* to her, to acknowledge the many years of support that she gave to ILSA, from the beginnings of the association until a very short time before she died. ILSA was close to Sr Thomasina's heart and she was central to the success of many aspects of the association's work.

A founder-member of ILSA, Sr Thomasina cared deeply for the work of the association, and worked quietly and assiduously in supporting it during the forty years since it was founded. For many years she edited the newsletter, collecting articles from the regional groups, writing many articles herself, and organising the printing and distribution of the publication. Another extremely valuable contribution to the association was her input into organising the deposition of the archives of ILSA into the National Archives.

The National Executive Committee of ILSA was fortunate to have her as a very active member for many years. A former chairperson recalls: 'She was already legendary in the organisation when I joined the Executive. I was struck by the fact that she was not particularly interested in taking on any officer-role, but preferred to work consistently in the background, always there to organise seminars and conferences'. At conferences, Sr Thomasina created a quiet preserve in the hospitality room, where presenters were welcomed and where they often benefited from her ability to listen with interest and with total concentration. She was excellent at introducing people and believed that facilitating contacts between like-minded peers was very important.

There were many other areas, apart from ILSA, where Sr Thomasina showed her concern for access to education for people with learning needs. She was an active member of the National Adult Literacy Agency, and for many years she worked with literacy groups in Harold's Cross. Members of ILSA from the earlier days recall that she worked for many years with people who were marginalised, with women in particular.

Part of the reflection read by Sr Una O'Neill at the Eucharistic Celebration of Sr Thomasina's life describes very well the person that so many of us knew and loved:

Thomasina had a heart that embraced all who were on the margins and a love that knew no boundaries. She also had an imagination that devised many schemes to get what she thought was needed for those whom she served. Sometimes her schemes went beyond comfortable boundaries but always, always her intent was to serve others. She had little patience with systems that did not serve her purposes and it is amazing how many agencies and individuals yielded to her persuasions when she needed to bypass rules and regulations!

She was a rare woman in that she had little or no appreciation of her own giftedness and generosity (though she was very definite in her opinions!). She rarely thought of herself or of her own needs. She never looked for adulation or praise and when it was offered, she dismissed it immediately. And, like us all, she suffered. She suffered particularly in her efforts to understand and live her life as well as she could and she suffered in the face of others' suffering and pain.

At the same time she was well able to celebrate and we remember her happiness at the celebration of her golden jubilee some years ago and her 80th birthday last March. Among other things she loved her involvement with the Association of Remedial Teachers (ILSA) and travelled enthusiastically to all their conferences and meetings. She enjoyed the theatre and good literature. She loved a good discussion but what she called a discussion, many of us would have called argument! She would be provocative in her comments in order to get a reaction and it was interesting to watch the uninitiated rise to the challenge, only to lose out to her conviction that she was right! Poetry was always a consolation and inspiration for her. In recent weeks she found consolation in a poem by Des Hartford called 'Briared Daffodil'. In the gospel we are told: 'Do not let your heart be troubled and do not let them be afraid' and that was true of Thomasina's final weeks. She lived these past two months with grace and gratitude.

Those of us who were privileged to know her will remember her with respect and with great affection.

May she rest in peace.

J.J.

Editorial

This year we celebrate forty years of the work of ILSA in supporting the professional development, collaboration and cooperation of special education and learning support teachers. We take pride in an organisation that has done so much, in a relatively short time, to advance the knowledge and understanding of the difficulties that impede the learning of many young people in our education system. Our celebration is mixed with sorrow, however, with the death of Sister Thomasina, who was for so many years a very active member of ILSA and of the executive committee. It was very typical of Sister Thomasina, and evidence of her great love and concern for the work of ILSA that, while she was ill, she continued to work on an article for inclusion in this volume of *Learn*.

ILSA is going through a time of transition. Circumstances today are radically different to those that existed during the first decades of ARTI/ILSA, and perhaps the association has not adapted sufficiently yet to the changes in educational policy and provision that have taken place, particularly during the past ten years. In her article, Sister Thomasina questioned how ILSA could adapt to the changing context of special education. Her article comprises an overview of the educational context within which learning support and special education began to develop during the nineteen-sixties and seventies, and it describes the concerns of ILSA and the consequent input by the association into providing on-going professional development for remedial (later learning support) teachers, during the last few decades of the twentieth century. It ends with a brief consideration of the role of ILSA today in the context, once again, of radical changes to the provision of educational support for students with additional learning needs.

In this landmark year for ILSA, Denis Burns and Dan O'Sullivan have chronicled the development of the remedial service into learning support at primary level, over the course of fifty years. This is a comprehensive document that shows how far we have travelled along the road to inclusion over the past fifty years. It also reveals that, although the pace of change may have seemed slow at times, there was consistent progress being made all the time – there was no period of stagnation. This will be a useful document to students and researchers in the future.

In the light of recent initiatives in education, and looking towards the introduction of further changes in the provision of support for students with learning difficulties and other additional learning needs, Finn Ó Murchú's article, which focuses on managing change, is timely and relevant. The writer describes the Concerns-Based Adoption Model (CBAM) of Hall and Hord (2014), which is a useful and practical framework that was designed to assist both individuals and groups in managing change effectively and with a minimum of stress.

Dr Ó Murchú gives a detailed description of how this model may be used in one specific area of change in practice – the introduction of collaborative teaching into the classroom. He refines the model for this application of it by adding some caveats which will allow the teacher to use it more effectively.

In an obliquely related article, Martina Horkan and Bairbre Tiernan have written an interesting account of research into the collaborative use of station teaching in supporting the development of reading. The description by the writers of the management of their station teaching is as interesting and informative as their account of the research and the results of the intervention. The observation of the pupils' positive reaction to the intervention, as well as the overall positive impact on reading attainment, will perhaps persuade readers to try collaborative station teaching, if they have not already done so.

A very topical article, that will interest not only teachers of mathematics but all our readers, is Jerry McCarthy's consideration of the implications and benefits of school-wide numeracy, and his discussion of how this may most effectively be achieved. This is an energetic, even passionate, argument for an awareness of numeracy and for its inclusion across the curriculum.

In addition to the article by Martina Horkan and Bairbre Tiernan, we have three other articles that are concerned with aspects of literacy. Aoife Brennan focuses on the teaching of comprehension to students with learning difficulties. This is a valuable reminder that comprehension is not a skill that is acquired by some sort of osmotic process through reading widely, but is a skill that must be taught carefully to all students. Comprehension is still, very frequently, a neglected area in the teaching of reading, but is a skill that should be supported across the curriculum, so this article will be relevant and interesting for all teachers. Similarly, Ellen Reynor's article on vocabulary development is not only of great practical interest to the learning support and class teacher at primary level, but several of the methods suggested for supporting the acquisition and consolidation of new vocabulary may be equally useful for the subject teacher at second-level, in introducing and supporting the acquisition of subject-specific vocabulary.

Patti Roche introduces a different approach to literacy in her article about the role of drama in developing literacy skills in pupils with dyslexia. The writer makes an argument for the use of drama as a pedagogical tool in the quest to assist the pupil in drawing meaning from text. It is another way to enable children to experience and understand story, allowing 'an inner exploration of narrative through drama'. While it traces the different benefits to literacy of drama, especially for pupils who have dyslexia, the article also provides a convincing account of the holistic benefits of drama to young children.

An article on social media by Maureen Griffin will increase awareness among all teachers of the particular dangers posed by these various modes of communication, so popular even among very young children. The increased risk attached to the use of social media by vulnerable children and teenagers is emphasised. In addition to giving a comprehensive outline of the different sites that young people are using, the writer also suggests some practical steps that teachers and/or parents can take, that may limit the dangers of these sites to young users. Teachers may possibly wish to share the information in this article with parents, particularly with parents of children who have additional learning needs that may bring them into danger when using social media sites.

Mary Nugent and her colleagues have provided an account of research into the report writing of educational psychologists within NEPS. In addition to the intrinsic interest and relevance of this study and the benefit, to both teachers and parents, of the measures that have been taken as a consequence of the study, this report provides an excellent model of self-assessment. The subsequent actions taken by NEPS to ameliorate the difficulties that their research uncovered are also described.

It is valuable to our readers that the articles included in this issue have practical, as well as academic value. The ILSA Committee thanks all the contributors for their highly relevant articles that comprise this 36th volume of *Learn*.

JEAN JOHNSTON
Editor of *Learn*
August 2014

Is the Role of ILSA Relevant in 2014?

Sr Thomasina Cosgrave

This year marks forty years of the work of the Irish Learning Support Association (ILSA), an association that took its first steps on behalf of those with learning disabilities during a time of great social and educational change in Ireland. The writer will present aspects of ILSA's narrative, its aims and achievements and will ask, *Where to from here? What will it take to maintain a thriving Association in circumstances so different from those which remedial teachers experienced 40 years ago*? An overview of Irish education, prior to and covering the period during which ILSA had its beginnings, will be presented in order to place the early years of ILSA in context. This overview will be useful when considering the extent to which circumstances have changed from those of the nineteen-seventies, in order to review the role of ILSA forty years ago and to consider the relevance of its role today.

Introduction

During the nineteen fifties, Ireland struggled through a period of economic stagnation which affected all areas of social and political life, including the development of the education system at all levels. Although there had been attempts since the foundation of the state to widen access to education, the school-leaving age remained at fourteen and would not be raised until 1972 (Garvin, 2004:172). Despite efforts to broaden the curriculum, the mastery of the Irish language was the primary goal of policy in education. Cleary *et al.* (2004:4-5), in researching the conceptualisation of childhood in twentieth century Ireland, highlighted the extreme narrowing of the curriculum for primary schools in the decades following independence. The programme for national schools, introduced in 1922, allowed for one hour of Irish every day for all pupils except those in infant classes, in which children were to be taught completely through Irish. In the senior levels of the primary school, teaching of history, geography, drill and singing was to be carried out through Irish. Only Irish history was to be taught. When difficulties in implementing this programme were experienced, an amendment was made in 1925 which allowed pupils in infant classes to speak English until 10.30 am. However, in 1934, in a *Revised Programme of Primary Instruction*, a greater emphasis was placed on Irish. The requirements for arithmetic were reduced for all classes, nature study was removed from the curriculum and there was a reversion to an all-Irish day for infant classes (Department of Education, 1934). There was no programme

provided for English for the first class, but other classes were to follow a lower course in English, which meant a drop in standard of about one year's work (Coolahan, 1981: 42). The curriculum, in effect, was no longer designed to respond to the needs or abilities of the growing child, but was shaped for a political purpose, which was the restoration of the Irish language.

There was widespread public debate about this measure. Teacher dissatisfaction with policy was reflected in a report by the Irish National Teachers Organisation (INTO), which received a cold reception from the Department of Education (INTO, 1941). A second report, which contained comprehensive proposals for curricular reform, was also largely ignored and its proposals for a wider range of subjects at primary level were not implemented (INTO, 1947). From 1943, the primary school curriculum was dominated, particularly at senior primary level, by the Primary Certificate examination which consisted of three written papers in English, Irish and arithmetic. This certificate remained compulsory for sixth-class pupils until 1967. It was not until 1960 that teachers were no longer obliged to teach young children through the medium of Irish (DoE Circular 11/60).

Classes in national schools were frequently very large, particularly in city schools. In 1957, for example, the ratio was slightly higher than thirty-six to one (O'Connor, 1986: 13). This ratio concealed an enormous difference between small classes in rural schools and very large classes in large urban schools. Although an improvement in the pupil-teacher ratio was initiated by Jack Lynch in 1959, instances of classes in Dublin of seventy pupils were regularly brought to Patrick Hillery's attention after he took office as Minister for Education in 1961. In 1964, a DoE circular stated that infant classes should in future consist of no more than fifty students (O'Connor, 1986:84).

In education at second-level there were two distinct strands, the secondary schools and the vocational schools. The secondary schools were mainly privately-owned, denominational, fee-paying schools. After the foundation of the state, these were supported by state grants. In order to promote the development of Irish, from 1927/8, Irish became an obligatory subject in secondary schools. An extra grant of twenty-five percent was paid to schools where Irish was the official language, and where all subjects except English were taught through Irish. Control over secondary schools was maintained through inspection and through regulation of teacher qualifications. Secondary education was, however, for a privileged minority. By 1960 there were five hundred and twenty-six such schools, educating 76,843 students. Coolahan (1981:79) noted that this represented only 16% of the number of pupils in national schools. A government report in 1962 noted that these schools were 'the grammar school type' offering a general education (Council of Education, 1962:18). The Intermediate and Leaving Certificate examinations were introduced in 1924. As

in the case of the Primary Certificate, both these examinations were written tests. A pass in Irish was obligatory for the award of an Intermediate Certificate from 1928 onwards and for the Leaving Certificate from 1934. This was a requirement until 1973. An oral test for Irish was not introduced for Leaving Certificate until1960 (O'Connor, 1986:28).

Vocational schools were established following the Vocational Education Act of 1930, when the Technical Education Boards were replaced by Vocational Education Committees (VECs). These schools offered continuation as well as technical education. Continuation education was intended as a two year intervention to complete the education begun in primary school, before technical training was given. The curriculum, therefore, had a very narrow focus (Duffy, 2010). The Day Vocational (Group) Certificate, a compulsory examination, was introduced for students in vocational schools in 1947. Results from the first year's examinations were disappointing with very high failure rates, particularly in commerce and rural science (DoE, 1947: 136-137).

Changes in the Education System in the 1960s and 1970s

Ireland during the years 1959-1971 enjoyed the experience of precedential economic, social and educational development, as the Government under Sean Lemass prepared the country to access membership of the European Community. Increased contact with organisations such as the UN, UNESCO and the OECD removed the insularity that had characterised Irish educational policy since the 1920s (CECDE, 2004). Among teachers and their organisations, in departments of education in third level institutions and at government level, as well as among the general population, there was an increasing awareness of how education was managed in other jurisdictions. There was a developing understanding, also, that the Irish education system was neither designed to prepare students for employment, nor was capable of doing so. It was felt that something needed to be done to develop an education system that would provide an educated work-force for the industrial and technological development that was foreseen as necessary to Ireland's future as part of the European Economic Community (Coolahan,1981:131 ff.; O'Connor, 1986:61 ff.). In October 1962, a Survey Team was set up by the Minister for Education, Patrick Hillery, funded by the Organisation for Economic Co-operation and Development (OECD). Prior to the publication of the report of the Survey Team, but in response to recommendations contained in it, Dr Hillery set up a special development team within the Department of Education before he left office after the general election of April 1965. The appointment of George Colley as the new Minister for Education coincided with the publication of the report of the Survey Team, *Investment in Education* (1965).

Investment in Education (IIE) was highly critical of almost all aspects of Irish education. The brief of the survey team was to examine the resources available

to the Irish education system; to examine the trends in education and to analyse how resources were used and then, further, to consider the demands that were likely to be made on these resources in the future and to assess to what extent the system was capable of meeting those needs (1965: xxxiii). Sean O'Connor (1986), who was Assistant Secretary in the Department at that time and who was later Secretary of the Department, named the survey as 'the most important study ever made of the Irish educational scene' (p.111).

The survey of the post-primary system revealed that standards of attainment were very low in all aspects of learning in both secondary and vocational schools. An assessment was made of areas of the secondary school curriculum by measuring how many schools attained Leaving Certificate honour/s result/s in the following categories: (a) mathematics; (b) mathematics and science; (c) a continental language, and (d) mathematics, science and a modern continental language'(O'Connor 1986:117). Out of 228 schools only 34 schools met category (d). Out of 261 girls' schools, only eight met the category (d) standard. In the vocational schools it was found that most of the teaching time (70%) was spent on continuation education while, including both whole-time and part-time teaching, only about 13% was spent on technical subjects (O'Connor, 1981:118). Rather like the present-day Further Education and Training Awards, the Group Certificate was organised into subject groups, with obligatory subjects attached to each group. The success rate was not good – in the 1959/60 examinations, the failure rate was about 30% (Coolahan, 1981:99).

At primary level the standard of attainment was as worrying as that at second-level. There was found to be a degree of 'retardation' of 44% of pupils, measured by an examination of the ages of pupils at the different class levels through school. It was calculated that slightly over 22% of the school week of twenty-two-and-a-half-hours was devoted to Irish, 22% to English, 22% to mathematics and 11% to religion. The remaining 12% was available for all other subjects. More than 30% of pupils left full-time education at primary level, and the majority of these left without a Primary School Certificate. This survey did not include pupils in special schools or in special classes (Coolahan,1981:165 ff).

In response to the findings of the report, a programme of development and expansion took place almost immediately. Although there were some concerns with the heavy emphasis given in *IIE* to the economic aspects of education, the report was broadly welcomed. Several educationalists, however, spoke out against the 'human capital' model that was emerging in response to *IIE*. Seán Ó Catháin, who was a lecturer in Education at UCC, spoke in March 1966 at a public meeting on the topic, *Why Investment in Education*? He expressed strong concerns that 'education for the job' would replace education directed towards the intellectual development of the student. The President of the Association of Secondary Teachers, Dan Buckley, expressed similar concerns at the Easter Congress of the Association a month later (O'Connor, 1986:121).

The introduction of free schooling in 1967 was accompanied by changes to the curricula of both vocational and secondary schools, possibly to the detriment of both systems. The vocational school curriculum was expanded to bring it into line with that of the more academic secondary schools. This led to a reduced emphasis on technical subjects as the curriculum expanded to include a very broad range of subjects, which ultimately resulted in many VEC schools offering up to sixteen subjects during first year at second level. On the other hand, in order to be more attractive to a wider range of students, the secondary schools dropped some of the more 'academic' subjects in favour of technical ones. This led almost directly to the loss of Latin (and Greek) from the curriculum, a reduced emphasis on English literature, and a swift decline in the comprehensive study of English grammar.

The combined effects of additional schools, an increase in the number of teachers being trained, free schooling and free school transport opened up an opportunity for very many more students to continue schooling beyond the statutory school-leaving age. The success of the above provisions, largely instigated by the publication of *IIE*, was reflected in an increased number of students in full-time education. In 1965/6 the number of students in second-level was 136,187; in 1967/68 the number was 164,979 – an increase of 28,792 (O'Connor, 1986:193). In 1971, the school leaving-age was increased to fifteen years. In the same year a new curriculum was introduced for primary schools. This curriculum was based on child-centred principles, and it had a strong focus on making school a pleasant environment for the young child. The emphasis was now on making learning relevant for children and on creating a disposition for learning within the young child (CECDE, 2004). Interestingly this created a dichotomy where, within the space of about five years, the emphasis shifted towards the 'economic model' basis for education at second-level, while at primary level it moved in the other direction, to emphasise the intellectual and emotional development of the child.

Provision for Students with Special Educational Needs up to the 1960s

Although there had been schools for the deaf and blind in Ireland dating back into the nineteenth century, official recognition was only given to these schools by the Department of Education (DoE) in 1952, when a pupil teacher ratio of 15:1 was granted to them. It was not until the mid-fifties that the DoE began to consider the issue of educating children with disabling cognitive and/or physical difficulties. In 1955, Department recognition was given to schools for the 'mentally handicapped' for the first time, when a pupil teacher ratio of 20:1 was allotted to them. Three such schools, one in Cork and two in Dublin, had already been established for some time outside the education system (T.A.Ó Cuilleanáin, 1968 in Hyland and Milne, 1992:458 ff.). Until 1957, services were mainly provided in residential centres. There were 1,300 such places available in 1952, but these places had increased to 3,130 by the end of 1964. After 1957, fifteen

non-residential centres were established. In 1959 the first inspector for special education, T.A. Ó Cuilleanáin, was appointed by DoE. The first training course in Ireland for teachers of students with mental handicap was set up the following year at St Patrick's College, Drumcondra. This was a one-year full-time course intended for teachers teaching in special schools (Coolahan, 1981: 185-6).

A Commission of Inquiry on Mental Handicap was established in 1961. By 1965, the year of publication of the final report from the Commission, there were twenty special national schools, with a total of 1,434 pupils enrolled. In addition to these, there were also hospital schools and other special schools for pupils with physical disabilities, and there were twenty-eight special classes catering for 'slow-learning' pupils attached to national schools (Commission of Inquiry on Mental Handicap, 1965, p.34). During the lifetime of the Commission, in 1963 the first remedial teacher, Dymphna Mulligan, was appointed by DoE as a teacher of a special class attached to a school in Ballyfermot. The following year, two more 'special' teachers were appointed, this time to a Cork school. By 1967 there were sixty-two special schools in Ireland, most of which had been established during the preceding twenty years in response to increasing interest at international level, both by the World Health Organisation and by individual organisations that supported different disabilities. The number of these schools had more than doubled by 1980 (Coolahan, 1981:186).

As the economy improved during the sixties, more money was available to the Department of Education – O'Connor (1986:94) noted that it may have been very beneficial to the new Minister for Education in accessing funds, that Jack Lynch, the former Minister for Education, was now Minister for Finance. The State defended the cost of providing remedial support on the grounds that school failure was a waste of resources (INTO, 1994:4). The first in-service course in remedial education was provided in 1967, at which time there were seventeen ex-quota teachers in place. By 1980 more than three hundred such teachers had been appointed (Coolahan, 1981:190), but despite very swift development thereafter in appointing remedial teachers and in expanding in-service courses for these teachers, there was no official DoE policy on remedial education from 1963 until 1987.

The Beginnings: the Association of Post-Primary Remedial Teachers (APPRT)

On 20th October 1971, eleven enthusiasts launched a self-help group in Dublin. The aim of the new group was to work together with other bodies and organisations, in cooperation with professional personnel, parents and the Health Service, in order to support remedial teachers and other professionals in their work to improve provision for students with difficulties in learning. This, it was hoped, would be achieved in part by being allowed to cooperate with DoE

in the formulation of policy regarding future courses and seminars in remedial teaching. An immediate objective of the new association was to investigate the possibility of an amalgamation with the National Association of Remedial Education (NARE) while retaining the identity of APPRT as an Irish association. Another objective was to ensure that DoE would be prepared to sanction the payment of costs to members of the association attending courses and seminars at home and abroad.

Membership of APPRT was open to any teacher holding a qualification in the field of remedial education. There was a membership subscription of £2 per annum. The five member committee, which was elected from the membership present at AGM, had a term of office of five years, with one member to be replaced each year (National Archives, PRIV 1229/1/1/1). There was a steady increase in members from that date and a dialogue began with DoE about professional development for remedial teachers, and about the facilitation by the DoE of the meetings of peer support groups. While no formal link with NARE was established, close informal links were forged with that organisation, and with the Scottish Learning Difficulties Association (SLDA), with whom publications, resources and models of practice were shared.

1974: The Association of Remedial Teachers of Ireland

In 1974 after the Annual General Meeting of APPRT, in response to requests from teachers holding ex-quota posts in mainstream primary schools and from lecturers and graduates of in-service courses, the fledgling association expanded its membership. Shortly thereafter, the association changed its name, following a postal ballot of members, to become the Association of Remedial Teachers of Ireland (ARTI). An interim constitution was drawn up to cater for the expanded membership (National Archives, PRIV1229/1/2). A twelve-member executive committee was established with equal representation from primary and post-primary levels. The requirement that a qualification in remedial must be held in order to become a member was removed. The focus of the association was on the support and professional development of remedial (later learning support) teachers.

ARTI was never intended, nor did it ever act in any way as a trade union. Rather, as an independent self-help peer group, its aim was to learn from international trends and ideas and to pass on professional methods, which would improve the services available to children with learning needs. To this end, regional groups were established that were managed by locally elected committees. Meetings, seminars and workshops were held, at which expertise was provided on occasion by invited professionals, but very often by members from within the group or by members of the ARTI National Committee. From the outset, a central focus of the association was on the development and support of regional groups. These groups provided a forum where remedial teachers could exchange ideas and

resources with like-minded colleagues. It was not until after the Education Act of 1998 that the Education Support Centres were established and a coherent model for the continuing professional of teachers developed, and it was only after the establishment of the Special Education Support Service in 2003 that continuing professional development courses were provided for learning support and special education teachers. Without the support of the ARTI regional groups and the forum they provided for peer-support, remedial teachers – particularly those working in rural areas – might have been very isolated.

From 1974, an annual seminar was held in September. This gradually expanded into the annual two-day conference, familiar to members today, where presenters from schools, professional associations, third-level institutions and government departments – both Irish and international – shared their expertise with members of the association through workshops and seminars, and where members had time to meet colleagues and discuss professional interests and concerns. One may easily imagine that, at a time before education centres or opportunities to attend local professional development courses existed, these events were extremely important for the dissemination of new ideas and for sharing understandings of the range of varied learning needs that learning support teachers encountered in their daily work.

In order to support the development of regional groups, a Spring Seminar was also established. This continues to take place in a different region each year. The Spring Seminar evolved from a single seminar into a full-day event. In addition to these conferences and seminars, a quarterly newsletter was published and mailed to members. In 2012 this became a digital publication. An early journal, *Remedial Teaching, Journal of the Association of Remedial Teachers of Ireland,* was published three times annually from 1977 to 1980. *Learn Journal*, an annual publication, then succeeded *Remedial Teaching* as the academic journal of the association.

Where an understanding of the contribution of a peer-support group of educational professionals was present, the Department of Education recognised and supported ARTI. The assistance and encouragement given by some Department Inspectors in helping ARTI local branches to become established cannot be overstated. Cluster meetings, for example, with visiting ARTI speakers were encouraged for the purpose of professional development. Frequently remedial teachers were allowed to meet in local schools, during school time, to be addressed by ARTI members on topics of local professional interest and concern. In a rural situation, where travel was difficult, local branches could not have flourished without this concession. Permission was also granted by DoE for leave of absence so that teachers might attend annual conferences and regional seminars. In addition, permission was frequently sought, and given, for members to attend National Association of Remedial Education (NARE, later

NASEN) conferences in England and in Northern Ireland, and to attend conferences of the Scottish Association. There was a close, but informal, relationship between the four organisations, which is very evident in an examination of the ARTI/ILSA archives.

One of the most important functions of the association has been its interactions with the Department of Education. For several years, for example, ARTI advocated persistently and strongly –and ultimately successfully– for the awarding of a diploma to those who completed the Department courses in remedial education. ARTI/ILSA has had representation on many advisory committees down through the years and through those the association has influenced the development of provision for pupils with learning and other difficulties. The association has also been very active, from its foundation to the present day, in making submissions on a wide range of issues to the Department. The archives of the association, held in the National Archives, bear witness to this work.

1997: ARTI becomes the Irish Learning Support Association (ILSA)

By 1997, thinking was changing in regards to pupils and students presenting with difficulties in learning. Remedial education had hitherto focused on the underachievement of young people in the areas of basic skills, usually by measures provided by cognitive testing which were then compared to attainments in basic skills. The view of the learning difficulties of these young people, that the student had something 'wrong' that could be 'fixed' by remediation, was redefined into an understanding of learning difficulties as problems that could be prevented, or at least ameliorated, by early and appropriate intervention (INTO, 1994:4). The word 'remedial' was quickly falling into disuse. Moreover, learning support was beginning to be seen as the responsibility of all teachers, not just of a 'remedial' teacher. In order to reflect this changed understanding and changing conditions, in 1997, the association changed its name from the Association of Remedial Teachers to the Irish Learning Support Association (ILSA).

ILSA 2014

Circumstances have greatly changed in all aspects of special education and learning support in Ireland since the beginnings of ILSA. In the nineteen-seventies, the whole area of 'remedial' education was new. There was a vacuum, in the sense that policy and practice at that time were a long way behind the needs of students with learning difficulties. There was no official policy on remedial teaching from 1963 to 1987. It took twenty-five years from the appointment of the first remedial teacher in 1963 to the publication of the first formal guidelines, the *Guidelines on Remedial Education* (1988). 'Remedial teachers supported each other by organising seminars and courses throughout Ireland, and the service evolved informally. The current learning

support/resource system owes much to these pioneering teachers' (INTO, 2012/2013:1). The immeasurable contribution of the members of successive committees of APPRT, ARTI and of ILSA, whose enthusiastic, voluntary work in organising meetings, seminars and conferences, in managing membership, in producing newsletters and in editing *Learn,* provided the foundations and the framework for the very effective peer support acknowledged by INTO and quoted above.

At the time of the appointment of Dymphna Mulligan, the first remedial teacher, there were huge difficulties to overcome because of the extent of the needs of the students, the lack of resources, the very large size of some classes, the lack of formal frameworks and guidelines, and the general lack of understanding of the learning needs of many students who were having difficulties. The educational context within which the foundations of ILSA began was, in retrospect and particularly through the prism of *IIE,* a very difficult one for students with learning disabilities and for the teachers who supported them. One can perhaps imagine, for example, the difficulties that a pupil with dyslexia in a class of fifty students may have experienced at that time, particularly where the teacher may not have been aware that there was a specific condition that made it difficult for the student to learn to read, write, spell or to self-organise. Anecdotal evidence from adults in a *Return to Education* programme revealed that many of these pupils left school early, and with very poor literacy skills (personal communications: 2000). Many such children were certainly among the fifty-three percent of children who were revealed by *IIE* to have left school before the age of thirteen years.

The rapid expansion of the appointment of remedial teachers corresponded with a world-wide impetus towards the integration of students with disabilities into mainstream classrooms. The report of the Special Education Review Committee in 1993, was followed swiftly by the 1996 report of the Commission on the Status of People with Disabilities. This report highlighted the lack of supports for children with special needs. The response to this report has been described as a 'major breakthrough...for students with disabilities' when the Department of Education and Science (DES) in 1998 provided supports automatically for pupils with disabilities in mainstream primary schools (National Council for Special Education, 2006).

The conditions no longer exist that obtained in the nineteen-seventies. There are now government agencies to advise and support teachers, parents and their children about every kind of special need. The Special Education Support Service (SESS) provides training and support for all teachers who work with students with special educational needs or learning difficulties. The National Educational Psychological Service (NEPS) provides information and support directly to the child, the teacher, the parent and the school, and there are several other services

that similarly provide support and advice to child, school, parent and teacher. The HSE through its services supports young people in education through its visiting teacher service for the deaf/hard of hearing (VTHI) and for the blind/visually impaired (VTVI). They also provide services for young people with speech and language difficulties, with autistic spectrum disorder and for those with mental or emotional illnesses. Many of these services did not exist at the time that ILSA was founded. So, is the Irish Learning Support Association redundant, now that there are government agencies and services that can support teachers in all aspects of their roles in special education and learning support? Does ILSA have a role to play today in circumstances so very different to those of the early nineteen-seventies?

Adapting to the Future

ILSA benefited from the establishment of the Education Centres in 1998. The centres provided home bases for ILSA and many directors were, and are, extremely supportive of the association. During the years since the passing of the EPSEN Act in 2004 and its partial implementation in the years following, there has been considerable progress made in the provision of professional development for all teachers in the area of special education. The Special Education Support Service (SESS), which was established in 2003, rapidly developed a wide-ranging programme for continual professional development (CPD) in all aspects of special education. Teachers are now provided with these courses at their local education centres as both day and evening courses, and SESS also provides whole-day, in-service CPD and in-school seminars. While ILSA and SESS enjoy an excellent, and mutually beneficial, working relationship, SESS now occupies much of the space that ILSA once filled. Furthermore, high-quality professional development opportunities are also available online from many indigenous providers, including the Institute of Child Education and Psychology Europe (ICEPE), INTO and SESS.

It seems clear that provision through ILSA regional groups of on-going professional development, by experts in various aspects of special education, is no longer a priority. That is not to say that regular meetings and peer support groups are no longer required, but that perhaps the emphasis might be more usefully focussed on what members can offer to each other in terms of support and resources that they might share. Meetings might also provide a forum to share views and to air issues that are causing concern. However, in some rural areas of the country, travelling to evening meetings may be difficult. It is possibly unrealistic to expect busy teachers to drive for an hour or more, after a full school day, to get to their local education centre to join a peer support group. The solution to that might possibly be a series of small, local cluster groups, comprising both primary and post-primary teachers. Such groups would reflect and support the seamless continuum of education from primary through second-level that is so much to be desired. It is not impossible that such professional

groups might be facilitated to meet locally during time allocated in school to professional development, when they might discuss issues of concern such as, for example, transfer from primary to post-primary school. Such collaboration at time of transfer is strongly recommended and is extremely valuable. These small cluster groups might also facilitate the sharing of local information and expertise, as well as a sharing of concerns. They might provide a space too, for objective self-assessment and they might even provide a space for collaborative research into aspects of special education that are of mutual interest.

Social communication media may provide alternative ways to organise meetings. A virtual cluster group, for example, might meet through video-conference calls, or a different kind of support group could be developed in a 'members only' forum for dialogue on the ILSA website. Alternatively members may communicate directly with each other through the ILSA Facebook page on practical issues related to their teaching or other aspects of their work. Resources too might be shared on the website. One way that this is frequently done, is where members are allowed access to online resources only when they have contributed a designated number of resources to the site. This would assist in developing a varied and vibrant collection of resources, and it would reflect the collaborative, interactive ethos of ILSA.

Finally, one of the most powerful aspects of the early years of ILSA was the energetic way in which the association consistently engaged with the Department of Education, and with third level institutions, in robust dialogue that was directed towards promoting the well-being and educational development of young people with learning difficulties, through the support and professional development of their teacher-members. ILSA is an independent, non-government, voluntary organisation and so it has always been able to be rigorous in its representations to the Department of Education (DES) in pursuing the aims of the association. Great changes in the provision of support for students with difficulties are in the process of being introduced into schools. Some cohorts of students, particularly those with dual-exceptionality, may be detrimentally affected as a result of these changes. There may also be issues concerning the professional status of special education teachers, who are now to be named 'support teachers' (NCSE, 2014). This is questionable nomenclature, as it suggests a subsidiary role for highly-trained, specialist teachers. The introduction of the year-long, combined Learning Support and Special Education courses and diplomas in 2005 means that all teachers who have completed these courses are specialists in those aspects of education. Teachers who attended earlier courses and obtained diplomas in other specialist areas of Learning Support or Special Education are, likewise, specialist teachers. Naming is important and often affects the way in which professional status is viewed and, as a consequence, it may affect interactions with professional colleagues. ILSA should be alert to the concerns of members in relation to these or to any other

such issues arising from the new provisions, and should be prepared to vigorously address these issues on behalf of its members.

It is clear that ILSA has much to offer its members in the twenty-first century, particularly in the promotion of professional collaboration between its members in ways that suit the recent rapid changes in modes of communication. In order to support its members most effectively, ILSA should, and does, endeavour to collaborate closely with its members in adapting to meet the challenges of the future.

REFERENCES

Coolahan, John (1981) *Irish Education: Its History and Structure*. Dublin, IPA.

Department of Education (1947) *Report of the Department of Education, 1946-7*. Dublin, Stationery Office.

Duffy, Kaye (2010) '*A Good Days Work for the Country': A unique vocational school in Virginia, County Cavan*. Unpublished M.A.Thesis Dublin, UCD.

Garvin, Tom (2004) *Preventing the Future*. Dublin, Gill and MacMillan.

Government of Ireland (1965) *Report of the Commission of Inquiry on Mental Handicap*. Stationery Office.

Hyland, Áine and Milne, K (1992) Irish Educational Documents Volume II. Dublin, CICE.

Irish National Teachers Organisation (2012) *A Brief History of the Development of Learning –Support/Resource Provision in Ireland*. A Moodle online course: http//:moodle.intolearning.ie/webdav/INTOCourses/TermTime20122013/LSRT/Modules/Module 1/background_to_learning_supportresource_support.html Accessed:14/05/2014.

Irish National Teachers Organisation (2003)*Supporting Special Education in Mainstream School*. Dublin, INTO.

Irish National Teachers Organisation (1994) *Remedial Education: A Review.*Dublin, INTO.

Kellagher, T., Weir, S., Ó hUallacháin, S. and Morgan, M.(1995) *Educational Disadvantage in Ireland*. Dublin, Department of Education: Combat Poverty Agency: Educational Research Centre.

National Council for Special Education (2014) *Delivery for Students with Special Educational Needs* Available at: www.ncse.ie Accessed on 28/07/2014.

National Council for Special Education (2006) *Implementation Report: Plan for the phased implementation of the EPSEN Act 2004*. Dublin, NCSE.

O'Connor, Sean (1986) *A Troubled Sky.* Dublin, ERC.

Walsh, Tom (2004) *A Historical Overview of Our Conceptualisation of Childhood in Ireland in the Twentieth Century*, Centre for Early Childhood Development and Education. http://www.cecde.ie/english/conference_papers.php Accessed 25/05/2014.

This article was completed and edited, at the request of Sister Thomasina, by Jean Johnston. Any errors or omissions are entirely the responsibility of the latter writer.

From Remedial To Learning Support: 50 Years A-Growing

Denis Burns and Dr Dan O'Sullivan

Introduction

In 1963 the first Remedial Teacher was appointed to a primary school in Ireland. Fifty years later there are 4,685 such posts now identified as Learning Support or General Allocation Model/English as Additional Language (GAM/EAL) teachers in primary schools. Learning Support Teachers work in primary and post primary schools with 5,265 resource teachers, 10,459 Special Needs Assistants and other professionals in a support system with an annual spend of €1.3 billion (NCSE 2013).

This article aims to chronicle the development of the remedial service into learning support at primary level over the past 50 years. References will be made to learning support at post primary level, resource teaching, special classes and special schools, but they are not the main emphases in this study. The distinguishing feature of learning support is that all mainstream schools within the educational system in Ireland have been allocated learning support provision.

Milestones

1963

First Remedial Teacher, Dympna Mulligan, appointed as a special class teacher in St. Louise de Marillac Senior Girls' National School, Ballyfermot, Dublin.

1964

Carmel Young and Sr. Imelda Lawlor appointed as Remedial Teachers in North Presentation and South Presentation Girls' Convent Schools, Cork, as part of a group teaching initiative. Research into reading standards initiated by 'Teachers' Study Group' in Dublin (McGee and Kelly, 1967) and a further study by Macnamara (1966) reported low standards of reading achievement compared to U.K.

1965

The *Report of Commission of Inquiry on Mental Handicap* reported that 8-10% of school children may be so backward that they need special teaching. It encouraged the establishment of special needs classes in primary schools. The Report also acknowledged the existence of three recently appointed Remedial Teachers. Further Reports considered the needs of children with *Impaired*

Hearing (1972), *Physical Handicap* (1982) and *Severe and Profound Mental Handicap* (1983).

1965
Investment in Education surveyed the education system and linked education with potential for future economic improvements.

1967
Free second level education introduced. Primary certificate abolished. Twelve years promoted as the age of entry to post primary schools. First course for Remedial Teachers organised in the St. John of God Child Guidance Clinic, Orwell Road, Dublin. Further courses organised in Cork (1972), in Mary Immaculate and St. Patrick's Training Colleges (1973), and in Galway (1974).

1969
Founding of the Irish Association of Teachers in Special Education (IATSE). 3rd Programme for Economic Expansion promised that additional *ex quota* teachers will be appointed for 'slow learners' (p.193).

1969
Rutland St. Project established. Experience gained would be important for future 'Early Start' and schemes dealing with disadvantage.

1970
Seventy-six remedial teachers appointed to date in primary schools, the majority in bigger schools of 500+ pupils.

1971
Post Primary Courses for Remedial Teachers leads to the establishment of the Association of Remedial Teachers of Ireland (ARTI), in 1974. The new Association organised its first conference (1975), issued first journal (1977) and in 1997 changed its name to the Irish Learning Support Association (ILSA).

1972
Department of Education initiated national assessments of reading attainment in primary schools. These assessments continued periodically and later involved researching literacy levels in disadvantaged schools (2004). *The Slow Learner in Irish Schools* (Mac Gleannáin), was published in *Oideas* 1972. It contained 'rule of thumb' advice for Remedial Teachers.

1974
Visiting Teacher Service for children with impaired hearing established, followed by Visiting Teacher Service for blind or partially sighted (1979) and Visiting Teacher Service for children of Traveller families (1980).

1975
Sr. Immaculata, North Presentation Convent, Cork, published *Phonics Made Easy,* the first dedicated publication for remedial teachers in Ireland.

1977
An assessment of national standards in primary school mathematics was undertaken by Department of Education. Studies continue at 3-5year intervals. Ireland would participate in International Assessments that included mathematics and literacy from 1980s (TIMMS, PIRLS, PISA).

1977
Department of Education issues guidelines for establishment of classes for pupils with mild general learning disabilities in mainstream schools.

1979
Circular 33/79 established remedial teaching posts at second level.

1980
The number of remedial appointments in primary schools reached 650. Government White Paper on *Educational Development* committed the Government to appointing additional Remedial Teachers.

1982-86
Four surveys reported on the Remedial Service: Lynch and O'Sullivan (1982), Shiel and Clark (1983), INTO District 15 (1984) and INTO (1986). Results indicated that the majority of Remedial Teachers interpreted their role as the teacher of the 'weaker groups'.

1983
Government proposal to confine remedial appointments to schools of 300+ pupils was reversed in January following strong teacher and parental opposition.

1984
Programme for Action in Education (1984-1987) made proposals for the future development of the remedial service including alternatives to the withdrawal of pupils from class.

1987
INTO and Psychological Society of Ireland established a working group to consider an Educational Psychological Service for National Schools. A pilot psychological project was established in South Tipperary and West Dublin (1990).

1988
Guidelines on Remedial Education issued by the Department of Education. It emphasised a whole-school, preventative approach to remedial education.

1990
Council of Ministers Charter on Integration was adopted by the European Union (EU) and promoted by Ireland during its presidency of the EU. Ireland signed the *U.N. Convention on the Rights of the Child* in 1992, including the right to an appropriate education. The number of Remedial Teachers in primary schools totalled eight hundred and sixty-seven.

1990
The Home-School-Community Liaison Scheme (HSCL) was introduced. Other schemes to support the educationally and socially disadvantaged introduced during the decade included Early Start (1994), Teacher Counsellor Service (1995), Breaking the Cycle (1996) and Early School Leavers (1998).

1993
Report of the Special Education Review Committee (SERC), was published. It recommended a continuum of services, an inclusion threshold of the 10th percentile on standardised tests for remedial teaching and a caseload of forty for each Remedial Teacher. It was now possible to estimate full provision in relation to the appointment of Remedial Teachers nationwide. The *Report* also recommended an in-depth study of the remedial service and established seven principles to govern policy in relation to special education. It encouraged 'as much integration as is feasible with as little segregation as is necessary' (p.22). Follow on reports included *Status of People with Disabilities* (1996), *Task Force Report on Autism* (2001) and *Task Force Report on Dyslexia* (2001).

The SERC Report also introduced the title Special Needs Assistant (SNA). Duties for this post were later outlined in Circular 05/01(post-primary) and 07/02 (primary). Further Circulars relating to SNAs followed, 24/03, 12/05, 15/05, 0006/2011, 71/11 and 72/11. The number of SNAs would be capped at 10,575 in 2011.

1993
O'Donoghue v Minister for Health (High Court) and Supreme Court (1996) and the later Sinnott v Minister for Education (2001), established an obligation on the state to provide elementary education for all children, and to do so until the age of 18 years.

1994
Salamanca Statement and Framework for Action on SEN (UNESCO), an international agreement signed by Ireland and ninety-one other countries 'to adopt as a matter of law or policy the principle of inclusive education, enrolling

all children in regular schools, unless there are compelling reasons for doing otherwise' (Article 3). Other international agreements promoting inclusion in education and influencing education policy in Ireland included *Council of Europe Political Declaration (2003), Council of Europe Action Plan to Improve the Quality of Life of People with Disabilities (2006), and World Health Organisation (WHO) Report on Disability (2011*).

1994
The National Education Convention Report emphasised the need for supported integration (p.124).

1994
The INTO published *Remedial Education - A Review.*
Circular M10/94 outlined conditions for exemption from study of Irish.

1995
The Government White Paper, *Charting Our Education Future* committed to the principles of the *SERC Report* (1993) and included an aspiration to improve national literacy and numeracy standards (p.20). Commitments to improve educational outcomes, especially for pupils experiencing difficulties, were now becoming a feature of Social Partnership Agreements which commenced in 1987 (*Programme for National Recovery*). This was followed by six further agreements. The seventh agreement, 'Towards 2016', was negotiated in 2006.

1996
A Strategy for Equality: Report of Committee on Status of People with Disabilities noted the separateness between special and mainstream schools.

1998
Education Act confirms inclusivity and equality of access as principles of our education system and obliged schools to incorporate such policies in their 'School Plans' and 'Admission's Policy'. It identified the needs of pupils with SEN and the needs of exceptionally able students. The Act completed a process that included the issuing of a Green Paper (1992) and a White Paper (1995). Both committed the government to a continuing expansion of the remedial service. The Minister for Education announced 'Automatic Entitlement' for pupils with learning disabilities ('*Major Initiatives in Special Education Services*' 5/11/1998). Psychological assessments were required for entitlements to resource teaching hours. Resource Teachers grew significantly in numbers from seven in 1992, forty-six in 1997 to over two thousand posts by the year 2004.

1998
Study of Remedial Education in Irish Primary Schools (Shiel *et al.)* issued in response to the SERC Report. One of its recommendations was to update the *Guidelines on Remedial Education*, issued in 1988.

1999
The Minister for Education announced that learning support was now available to all schools, although this involved some large clusters of smaller schools. National Educational Psychological Service (NEPS) established, and issued a Model of Service (2001), encouraging a staged approach leading to psychological assessment.

Three important circulars issued:
Circular 7/99 dealt with the allocation of Resource Teachers for Travellers (RTTs). By 2006 there were five hundred and twenty RTTs working in primary schools.
Circular 8/99 concerned with the conditions for the allocation of resource teaching posts and *Circular 9/99* related to the establishment of 'special classes'.

1999
The *National Disability Authority Act*: established the National Disability Authority to ensure that legislation relating to people with disabilities was implemented appropriately.

2000
Learning Support Guidelines for Primary Schools (2000) issued in response to the recommendations of the '*Study of Remedial Education in Irish Primary Schools*' (Shiel *et al.*1998). The number of learning Support Teachers reached 1,465
Following the Education Act 1998 and the National Disability Authority Act 1999, the early 2000s was characterised by the passing into law of a 'raft of legislation', incremental in nature. The rapid developments in policy were also reflected in the number and frequency of Circulars issued in the area of Special Needs and Learning Support.

Legislation
2000
Equal Status Act: Nine areas of named discrimination were identified, including No. 7 disability and No. 9 membership of travelling community **and** together with *2004 Equality Act* obliged schools to make reasonable accommodations to meet the needs of pupils with disabilities and to ensure access to services in schools.

2000
Education Welfare Act: Established National Education Welfare Board to record and examine reasons for poor attendance for pupils in compulsory education and oversee minimum standards of education.

2001
Children's Act: Relates to the legal rights of children.

2001
Teaching Council Act: Oversees professional development and standards in the teaching profession.

2004
Education for Persons with Special Education Needs Act (EPSEN): Defined Special Educational Needs (SEN), promoted inclusive education, rights of provision for pupils with Special Educational Needs and established National Council for Special Education (2005). This involved the appointment of eighty Special Education Needs Organisers (SENOs).

2005
Disabilities Act: Defined disability as '….*enduring physical, sensory, mental health or intellectual impairment'.*

Circulars
2000
Circular 70/00: Reasonable Accommodation in State Exams (RACE). By 2012 the number of pupils granted reasonable accommodations were 7435 in Junior Certificate and 7198 in Leaving Certificate (SEC 2012.)

2002
Circular SP.Ed. 08/02: Superseded Circular *08/99* and outlined how resource teaching hours were to be allocated to various categories of learning disability in accordance with their level of assessed need.

Circular letter SP.Ed 24/03: Proposed a weighted model of allocating learning support posts and a 'three staged approach' to provision. It advocated a flexible deployment of resources and the formation of special education support teams. It maintained that the exclusive use of individual tuition in relation to resource hours was contrary to the principle of integration and wherever possible schools should provide teaching support in the mainstream classroom or in small groups.

2004
Circular letter Sp.Ed: 09/04. Proposed numbers for weighting system for the allocation of learning support posts and defined Higher Incidence, (HI) and Lower Incidence (LI) categories of Learning Disability.

2005
Circular Sp.Ed.01/05, in addition to a letter to Boards of Management (18th June): Proposed a General Allocation Model (GAM)

Circular Sp.Ed 02/05: Identified measures to make possible the development of 'truly inclusive schools' (p.3). Major emphases were on the staged approach and

details of the General Allocation Model for primary schools. Provision was to be governed by the general philosophy that pupils with the highest level of need would have the highest level of support. It outlined six steps for planning of resources in schools (p.8-9)*, explained the staged approach (p.22-23)* and described how the General Allocation Model could be worked in various settings (p.25-40)*. The role of Learning Support Teacher (primary) under the General Allocation Model (GAM) was identified as supporting pupils:
1. Scoring at or below 10th percentile in standardised tests of reading and mathematics. 2. With learning difficulties including mild speech and language difficulties, mild social or emotional difficulties and pupils with mild co-ordination or attention control difficulties associated with Dyspraxia, ADD, ADHD 3. Pupils with high incidence disabilities arising from Borderline Mild and Mild General Learning Disabilities and Specific Learning Disability. The number of Learning Support Teachers under GAM now determined by school type and enrolment numbers.
Circular 14/05: Relating to grants for purchase of assistive technology.
*Note: * page numbers refer to original circular and not to the booklet issued later.*

2002
Draft *Guidelines for Teachers of Students with General Learning Disabilities* (NCCA) published. The final edition was published in 2007 in digital format. Also published were *Guidelines on Traveller Education in Second Level Schools* (DES).

2003
Special Education Support Service (SESS) established with a remit to 'enhance the quality of learning and teaching in relation to special educational provision'.

2005
National Council for Special Education (NCSE) established. Its functions were identified by the EPSEN Act (2004) and involved the appointment of eighty Special Education Needs Organisers (SENOs). In 2006, the NCSE published the *Implementation Report: Plan for the phased implementation of the EPSEN Act 2004*. The Department of Education and Science initiated a survey of children receiving resource teaching hours.

2005
Delivering Equality of Educational Opportunity in Schools – a DEIS initiative introduced to tackle underachievement among pupils aged 3-18 years in disadvantaged communities. DEIS provided a standardised system for identifying levels of disadvantage and an integrated School Support Programme (SSP). In September 2009 the services in the SSP, including the Home School Community Liaison Scheme, School Completion Programme and Visiting Teacher Service for Travellers were integrated into the National Educational Welfare Board (NEWB).

2005
Reading Recovery, based on early intervention programme for literacy, was included in the DEIS Action Plan. Tutors had been receiving reading recovery training since the late 1990s in selected Teacher Education Centres and 'Lift off to Literacy' programmes have been developed in many schools based on selected practice from Reading Recovery. A corresponding programme for numeracy, *Mata*, the Maths Recovery programme, also formed part of the DEIS programme.

2006
'*Report and Recommendations for a Traveller Education Strategy' (DES*). Recommended that future provision should focus on 'individual education need' rather than 'Traveller identity'. This mainstreaming of provision for Traveller pupils would eventually result in the termination of over five hundred 'Resource Teacher for Traveller' (RTT) teaching posts in first and second level schools.

2006
Teaching Council established under terms of Teaching Council Act 2001.

2006
National Behaviour Support Service (NBSS) established to develop school wide models of positive behaviour in second level schools as a result of recommendations contained in *School Matters: Task Force on Student Behaviour in Second Level Schools,* chaired by Dr Maeve Martin.

2007
Publication of '*Inclusion of Pupils with SEN-Post Primary Guidelines'* (DES) and *Exceptionally Able Students: Draft Guidelines for Students* (NCCA).

2007
National Educational Psychological Service (NEPS) published *Guidelines* and a *Resource Pack* for primary teachers entitled *Special Educational Needs – A Continuum of Support* to complement the Learning Support Guidelines and SPED 02/05. In 2010 equivalent *Guidelines* and *Resource Pack* were issued for teachers in post primary settings. Additionally, in 2010, NEPS published *Behavioural, Emotional and Social Difficulties: A Continuum of Support – Guidelines for Teachers*.

2009
Budget 2009 announced a deferral of the EPSEN Act as part of cost-cutting measures

2009
English as Additional Language (EAL) posts generally reduced to a maximum of two teachers per school, (Circular 0015/2009).

2009
The National Economic and Social Council (NESC) issued *Child Literacy and Social Inclusion: Implementation Issues,* identifying a percentage of 30% of pupils in areas of disadvantage leaving school with literacy difficulties, and noting the lack of a national policy on literacy.

2010
December Budget announced that Resource Teachers for Travellers (RTTs) and the Visiting Teacher for Travellers Services were to be discontinued. Circular 0017/2011 suggested that support should be offered on 'individual need' rather than on 'Traveller identity' and the educational support needs of Travellers would be transferred to Learning Support/General Allocation Model.

2011
Launch of *Literacy and Numeracy for Learning and Life* (DES), establishing targets, reporting procedures and standards of attainment in literacy and mathematics to be achieved by 2020.

2011
A Study on the Prevalence of Special Educational Needs (NCSE and ESRI) identified a figure of 25% of pupils with a special educational need as defined by EPSEN Act. The study also recommended the establishment of a national SEN database.

2011
Regulatory Framework for School Enrolment (DES 2011): a discussion paper on creating a new regulatory framework for the content of enrolment policies and the processes operated by schools when enrolling pupils.

2012
A revised General Allocation Model (GAM) introduced (*Circular 07/2012*) that included EAL responsibilities. Existing GAM (3,800) and EAL (300) posts combined. Each post (25 hours), allocated in line with the number of mainstream class teachers for 2011/2012 in each school. Mixed and boys' schools allocated 0.2 (5 hours) of a post for each class teacher while the equivalent allocation in a girls' school was 0.16 (4 hours). DEIS Band 1 Schools qualified for additional allocation. The Circular also contained changes in the allocation of resource posts to base schools.

2013
Supporting Students with Special Educational Needs in Schools – Policy Advice Paper No. 4 (NCSE 2013) contained the most comprehensive review of SEN in 20 years.

It involved a consultation process over one year. It listed 28 recommendations to move the educational system towards EPSEN Act's principles and intent,

pending its full implementation, and refining where and how supports are targeted to ensure all children with SEN have fair and equitable access to supports. While acknowledging that students with SEN are well supported and making good progress, it recommended improvements to the current system to ensure additional supports are allocated in line with profile of educational need in each school.

Key Recommendations:
- Commence EPSEN Act as soon as possible
- Adopt a robust regulatory enrolment framework
- Allocate resources equitably in line with educational profile of need
- Develop a framework to improve teachers' knowledge of educating pupils with SEN
- Ensure additional supports derive improved educational outcomes through individual planning
- Provide additional funding to special schools to purchase/replace equipment

2014

A proposed new model for allocating teaching resources for students with special educational needs is contained in *'Delivery for Students with Special Educational Needs – A better and more equitable way'*, an NCSE Working Group Report published in June 2014 (NCSE 2014).

Conclusion

Currently, a new model of resource allocation is being formulated, one allowing for more flexibility of deployment at school level. It is timely, therefore, to identify the main 'milestones' which have characterised the development of remedial teaching into learning support provision during the half century from 1963 to 2013.

Representing a 'bare bones' outline of a 50 year developmental process, this article charts the principal 'developments' marking the evolution of the system of 'learning support' in mainstream schools, particularly with respect to the primary school system. To develop an appreciation of the complexities and dilemmas characterising the education of students with special educational needs/learning support, readers are encouraged to consult the growing body of work which addresses these issues in an Irish context.

In this regard, the following sources are recommended: Barry (2009); Bell *et al.* (2011); Burns (2004); Carey (2005); Casserly (2011); Flatman Watson (2009); Griffin and Shevlin (2011); Kerins (2014); King (2006); MacGiolla Phádraig (2007); McCoy *et al.* (2012); McPhillips and Shevlin (2009); Meaney *et al.* (2005); Meegan and MacPhail (2006); NCSE (2013); (NCSE 2014); O'Gorman (2009); O'Gorman and Drudy (2010); Rose *et al.* (2010); Rose *et al.* (2012); Shevlin *et al.* (2008); Shevlin and Flynn (2011); Stevens and O'Moore (2009).

REFERENCES

Note: All publications listed in the narrative are available on the Internet. The following are suggested further reading.

Barry, M. (2009) Inclusion in Primary school: experience in Ireland and the United States of America, in Drudy, S. (Ed.) *Education in Ireland - Challenge and Change,* Dublin: Gill and Macmillan, 104-117.

Bell, S., McPhillips, T. and Doveston, M. (2011) How do teachers in Ireland and England conceptualise dyslexia?, *Journal of Research in Reading*, *34*(2), 171-192.

Burns, D. (2004) Learning Support: Development in the Irish Educational System to 2000. Unpublished M.Ed. Thesis. U.C.C.

Carey, D.J. (2005) *The Essential Guide to Special Education in Ireland*, Dublin: Primary ABC.

Casserly, A.M. (2011) Children's experiences of reading classes and reading schools in Ireland, *Support for Learning*, *26*(1), 17-24.

Flatman Watson, S. (2009) Barriers to inclusive education in Ireland: the case for pupils with a diagnosis of intellectual and/or pervasive developmental disabilities, *British Journal of Learning Disabilities*, *37*(4), 277-284.

Griffin, S. and Shevlin, M. (2011) *Responding to Special Educational Needs - An Irish Perspective,* 2nd ed., Dublin: Gill and Macmillan.

Kerins, P. (2014) Dilemmas of difference and educational provision for pupils with mild general learning disabilities in the Republic of Ireland, *European Journal of Special Needs Education*, 29(1), 47-58.

King, F. (2006) *Special Education in Irish Classrooms: A Practical Guide*, Dublin: Primary ABC.

MacGiolla Phádraig, B. (2007) Towards inclusion: the development of provision for children with special educational needs in Ireland from 1991 to 2004, *Irish Educational Studies*, *26*(3), 289-300.

McCoy, S., Banks, J. and Shevlin, M. (2012) School matters: how context influences the identification of different types of special educational needs, *Irish Educational Studies,* 31(2), 119-138.

McPhillips, T. and Shevlin, M. (2009) Evaluating the teaching and learning experience for the child with dyslexia in special and mainstream settings in Ireland, *Support for Learning*, 24(2), 63-72.

Meaney, M., Kiernan, N. and Monahan, K. (2005) *Special educational needs and the law*, Dublin: Thomson Round Hall.

Meegan, S. and MacPhail, A. (2006) Inclusive education: Ireland's education provision for children with special educational needs, *Irish Educational Studies*, *25*(1), 53-62.

NCSE – National Council for Special Education (2013) *Supporting Students with Special Educational Needs in Schools – Policy Advice Paper No. 4* [online], available: www.ncse.ie/uploads/1/Supporting_14_05_13_web.pdf

NCSE – National Council for Special Education (2014) *Delivery for Students with Special Educational Needs – A better and more equitable way* [online], available: www.ncse.ie/uploads/1/Allocating_resources_1_5_14_Web_accessible_version_FINAL.pdf

O'Gorman, E. (2009) Progressing Towards Inclusion in Ireland: Professional Development for Learning Support/Resource Teachers, in Drudy, S. (Ed.) *Education in Ireland – Challenge and Change,* Dublin: Gill and Macmillan, 208-225.

O'Gorman, E. and Drudy, S. (2010) Addressing the professional development needs of teachers working in the area of special education/inclusion in mainstream schools in Ireland, *Journal of Research in Special Educational Needs*, 10(s1), 157-167.

Rose, R., Shevlin, M., Winter, E. and O'Raw, P. (2010) Special and inclusive education in the Republic of Ireland: reviewing the literature from 2000 to 2009, *European Journal of Special Needs Education,* 25(4), 359-373.

Rose, R., Shevlin, M., Winter, E., O'Raw, P. and Zhao, Y. (2012) Individual Education Plans in the Republic of Ireland: an emerging system, *British Journal of Special Education*, 39(3), 110-116.

Shevlin, M., Kenny, M. and Loxley, A. (2008) A time of transition: exploring special educational provision in the Republic of Ireland, *Journal of Research in Special Educational Needs,* 8(3), 141-152.

Shevlin, M. and Flynn, P. (2011) School Leadership for Special Educational Needs, in O'Sullivan, H. and West-Burnham, J. (Eds.) *Leading and Managing Schools,* London: Sage, 126-140.

Stevens, P. and O'Moore, M. (2009) *Inclusion or illusion? Educational provision for primary school children with mild general learning disabilities*, Dublin: Blackhall.

DENIS BURNS and DR DAN O'SULLIVAN

Denis Burns and Dr Dan O'Sullivan are lecturers at the School of Education, University College Cork, where they jointly co-ordinate the Postgraduate Diploma in Special Educational Needs Programme.

Concerns-Based Adoption Model (CBAM): A useful tool in a time of change?

Finn Ó Murchú

1.0 Introduction

Education is about change, yet we are so involved in change we rarely seem to have the opportunity to study change itself. Those of us engaged in the promotion of inclusive learning are acutely aware of our role in improving the learning and life-chances of all the children and young people in our educational system. In such a context, change is a constant where improvements for some can be of benefit for all (Hargreaves & Braun, 2012). We 'do change' so that learners are nurtured and allowed to develop and learn. We constantly seek the best way and are therefore both open to, and wary of, change. Such change or innovative ideas can emerge from self-generated private reflection/research, collective engagement among some or all colleagues, and/or from national policy directives.

Irrespective of whether at a national or classroom level, whether perceived as internally composed or externally imposed, implementing change can be delightfully simple, deceptively dangerous and everything in between. Depending on our contexts and current dispositions, both personal and professional, change can churn up a raft of emotions that need to be acknowledged if the desired change is to occur. Successful innovation in education takes account of the three-way interplay of personal, professional and pedagogical considerations (Miles & Huberman, 1984). Change can excite but may also leave us vulnerable across these interconnected domains. Vulnerable in regard to what is about to happen, but also vulnerable as to whether what we are currently practicing is good enough (now that it is deemed worthy of change).

However in our rush to respond and to implement change we understandably seem to focus more on 'what do we need to change so that improvement occurs?' and less on 'what do we need to know about change so that improvement occurs?' The emphasis on the former is understandable given the considerable change occurring across our educational system, but I contend such efforts will be enhanced if we also purposely keep an eye to the latter. In this article I draw in particular on the Concerns-Based Adoption Model (Hall & Hord, 2014) and hope to briefly outline the possible uses, but also some additional requirements, associated with this model.

2.0 Concerns-Based Adoption Model (CBAM)

The Concerns-Based Adoption Model (CBAM) was first developed in the 1970s and 1980s by a team of researchers at the Research and Development Center for Teacher Education at the University of Texas at Austin. Today, CBAM continues to evolve and to be applied in a range of school, organisational, and research settings. The tools are commonly used to help teachers, students, parents, leaders, evaluators, and researchers understand, monitor, and guide the complex process of implementing new and innovative practices. The fundamentals of CBAM are based on the evolving work of Susan Loucks-Horsley, Gene Hall and Shirley Hord as described in Hall and Hord's *Implementing Change: Patterns, Principles and Potholes* (2014, 4th Edition). Their work involves three interconnected concepts: Levels of Use, Stages of Concern and Innovation Configurations. Within these concepts the authors also attend to the promotion of professional learning communities, the role of leadership and leadership styles, understanding data and understanding organizational and systemic change.

In the context of the change agenda, I particularly like the way CBAM provides a degree of certainty where uncertainty can be the very stumbling block that prevents the desired implementation of an innovation in the first place. Put another way, CBAM helps me sleep by giving me confidence in my own and others' pursuit of improvement, as I engage in innovative practices with others.

2.1 Levels of Use

Levels of Use relates to the effective implementation of an innovation by a teacher or teachers. An innovation can be any aspect of teaching, learning and assessment that a teacher or groups of teachers take responsibility for and wish to implement for the benefit of the learners in their classroom.

Table 1: CBAM: Teachers' Levels of Use of an Innovation

Non-user	Not using the innovation, may have heard about it
Orienting	Interested and looking for more information
Preparing	Getting ready to apply the innovation
Mechanical	Applying the innovation in the classroom but not very smoothly
Routine	Has applied innovation frequently enough to be working smoothly
Refined	Extending the application of the innovation into new areas
Integrative	Connecting the innovation to other innovations
Refocusing	Searching for other innovations

Hall and Hord's research (2014) indicates that benefit to student achievement will only occur when teachers have advanced beyond the mechanical level of use and are at, or above, the routine level of implementation. This is a significant finding around the process of change and if accurate raises a number of questions: How long should we allow before we begin to assess the impact of an innovation on learners? How best can we get to the level of routine user and beyond? How can teachers support each other to move beyond mechanical use

of an innovation? Is there a role for learners in understanding and advancing the level of use in a classroom at both an individual and collective level? Are there implications regarding our view of an innovation, i.e. maybe we were too hasty in dismissing it or too long stuck at the level of mechanical user?

At the very least this basic rubric of Levels of Use assists us in being wiser around implementing change and determining what is reasonable to expect at different moments in time. It also highlights the challenge for others, such as students, as they pass from one year to the next and from one sector to the other. For example, what is the quality of learning for students who are integrative users of graphic organisers, such as mindmaps, as they transition to another school or to another teacher within their school; where that other teacher maybe at best a mechanical user or at worst a non-user of this particular innovation in learning? Has it application across the continuum of special needs?

2.2 Stages of Concern

Increasingly those within and outside our educational system recognise teachers as agents of change. Similarly, the additional resources and how we use them, are seen as central to achieving improvement for all (National Council for Special Education, 2013/14 (see additional reference in reference section re Delivery for Students...); European Agency for Developments in Special Education, 2013). However, such change doesn't happen easily or uniformly. It is important to remain sensitive to diverse contexts of both a personal and professional nature, from that of the individual to that of the state itself. Attention to the interplay between the personal and professional is highlighted by what Hall and Hord describe as Stages of Concern. They contend:

> For a new programme to succeed, it is critical to address the concerns of the people charged with implementing it. Staff may respond to change in many ways, from stress and anxiety to cynicism and burnout. Through the Stages of Concern process, leaders can identify staff concerns and provide targeted support to help individuals cope and focus on the task at hand. (p. 327)

Table 2: CBAM: Teachers' Stages of Concern and some typical statements

Unconcerned	"I think I heard something about it, but I'm too busy right now with other priorities to be concerned about it."
Informational	"This seems interesting, and I would like to know more about it."
Personal	"I'm concerned about the changes I'll need to make in my routines. Will I look foolish?"
Management	"I'm concerned about how much time it takes to get ready to teach with this new approach…will it slow me up, will it get me in trouble"
Consequence	"How will this new approach affect my students? Am I doing it correctly? What exactly are the benefits for my students, how will I know?"
Collaboration	"I'm looking forward to sharing some ideas about it with other teachers."
Reforming	"I have some ideas about something that would work even better."

These stages of concern can assist in mapping and navigating change, with particular reference to the emotions and perceptions involved. Once elicited the stages offer an understanding of where teachers are 'at' and where they wish to 'go'. This dimension of CBAM raises a number of questions including: How and whether teacher concerns are listened to and acted upon? How might concerns be best collated and shared? Can the stages of concern framework assist with adopting collective responses such as whole-school approaches? Could students', parents' and others' concerns be captured by a similar process? Does such a model offer opportunities for more open and frank discussion around implementing or ignoring certain innovations?

Of course we should not simply adopt a negative view of change. The useful Stages of Concern Questionnaire does much to capture the sense of excitement, hope and other positive emotions that travel in tandem with the change process. For example, I particularly like the statement "I would like to use feedback from students to change the programme" (p. 312).

2.3 Innovation Configuration Mapping

Innovation Configuration (IC) Mapping is used as a differentiated means of implementing changes. In this context the differentiation is determined by teacher-related, as well as by student-related, factors.

> The primary product of the Innovation Configuration analysis process is an Innovation Configuration Map. An IC Map describes different ways that someone might implement an innovation. It includes components of the innovation and their variations (p. 59, 2014).

In the example in Table 3 the authors provide an IC Map for a new science programme. They include materials used, teacher behaviours, and student activities. The ideal, acceptable, and less desirable variations of implementation are described below.

Table 3: CBAM: Science programme innovation configuration map

Component 1:Teacher groups students for learning				
(a) Assigns students to groups that vary over time based on instructional objectives and students' ability.	(b) Assigns students to small permanent groups for lab assignments and other group work.	(c) Assigns students to groups during lab activities only	(d) Provides whole group instruction exclusively.	(e) Emphasizes recall of science facts from previous science textbook.

Notwithstanding the absence of a detailed instructional dimension and a pedagogical language, the concept of differentiating implementation of an

innovation merits consideration. Such an approach offers schools an opportunity to consider: Should certain classes (based on age for example) adopt a differentiated approach in the context of implementing the innovation? Can collaborative implementation and review of actions be supported by such mapping? Does the mapping offer data-driven conversations at whole-school or subject/thematic level?

While in my view, the weakest of the component parts of CBAM, I think Innovation Configuration has potential to assist with the significant challenge of introducing systemic change. Configuration mapping can assist in charting the desired change and acquired fidelity of implementation. It can also promote effective teamwork while recognising differentiated implementation; support practices associated with classroom observation (including a clear focus on what the students are doing/learning) and support self-evaluation at both a personal and collective level.

3.0 Aligning principles of improvement and inclusion

Promoting inclusive learning requires a deep understanding of change wisdom. Used properly CBAM adds to our store of knowledge and I believe enhances our chances of succeeding with the changes we wish to implement, or indeed with retaining the good practices we already have instigated and hope to sustain and further develop. It positions each of us on a continuum of improvement, which is useful, but I suggest that we need more. This is not a criticism of CBAM but more a recognition of the interplay such a practical theoretical framework can have when set against other aspects of change wisdom that we have learned over time. This point will be elaborated upon in the next section of this article. For now, I think it is useful to briefly focus on the architecture of change and see the alignment of the principles of CBAM as set against the interplay of inclusion/improvement as exemplified by research by Hargreaves and Braun, *Essential for Some Good for All* (2012).

Table 4: Principles of Change that promote Inclusive Learning

HALL AND HORD 2014 Principles[1]	**HARGREAVES AND BRAUN 2012 Principles**
Change is Learning It's as simple and complicated as that.	*Inspiring Beliefs* that motivate widespread participation.
Change is a process, *not an event*, where school personnel gradually learn, come to understand, and become skilled and competent in the use of new ways.	A *Moral Economy* that seeks to be prudent about individual placement yet is also persistent about classroom and curriculum inclusion.
District and school leadership is essential to long-term change success.	*Leadership* including leading from the middle.
The school, while not an island, is the primary organizational unit of change where organisations adopt change but individuals implement change.	*Subsidiarity*[2] and flexibility that allows and insists on local responsiveness.

[1] Hall and Hord (2014) have 12 principles in total while Hargreaves and Braun have 7.
[2] Hargreaves and Braun use the phrase Local Authority, which I have altered lest it be confused with local government.

Appropriate Interventions Reduce Resistance to Change and mandates can work with effective external supports	An *Integrated Strategy* that dovetails with existing high priority policy strategies;
Facilitating Change is a Team Effort where collaboration among those within and outside the school is essential; and finally	*Collective Responsibility* for all students' learning at the school and school board levels – especially between special education staff and their colleagues with curriculum and classroom responsibilities; and
Focus, Focus, Focus with constant attention to the goals and intended results of the change initiative.	*Intensive Interaction* that connects everyone and creates coherence among all policy elements by constant monitoring, mentoring and cross-pollination of insights, ideas and activities.

Clearly both sets of authors understand the interplay between classroom, school and system. Representatives from each setting need to be continuous lifelong learners, open to learning from and with one another (teacher, principal, researcher, teacher educator, inspector etc.). Both sets of principles also highlight the importance of a deep understanding of how change works. That said, both sets of authors shy away from a detailed engagement with teaching, learning and assessment. I contend that an additional requirement in understanding change, which impacts upon learning in educational settings, is the need for a shared language of pedagogy. I will return to this point in the final section, but for now it is fair to say that CBAM can assist in promoting effective teaching, learning and assessment practices in a practical way.

3.1. CBAM in action; practical application.

Drawing on Bruce Joyce's observation, in the preface to the 2014 edition, that CBAM is actually about supporting cooperative learning among teachers (p. xxxi), I would like to illustrate the use of CBAM through the lens of cooperative action by both teachers and students. In so doing I hope to highlight some of the benefits of CBAM but also indicate how it can be even more beneficial when linked to other component parts of what we understand by professional learning and by teachers acting as resource to one another - where schools are places of learning for the teachers as well as for the students.

In promoting team-teaching (Ó Murchú, 2011) CBAM offered a support which I think can continue to be applied. Linked to teacher cooperative practices is the promotion of learning, and positive learning experiences among students in the form of cooperative learning.

In Tables 5 and 6 below I track how Levels of Use and Stages of Concern might be applied to both teachers and students under the collective title of collaborative practice in the classroom.

Table 5: Levels of Use: Collaborative Practices in the Classroom

Teachers and team-teaching	**LEVELS OF USE**	**Students and cooperative learning**
Teacher hasn't heard of team-teaching or has chosen to ignore up to now	Non-user	Student hasn't heard of cooperative learning or desists from such practice
Encountering team-teaching in conversation and reading, becoming a little curious	Orienting	Beginning to understand there might be something in this way of learning
Team-teaching presentation by colleagues and invitation from principal to consider potential regarding supporting inclusive learning	Preparing	Acquiring and intentionally practicing basic social skills required for cooperative learning to occur
Paired with a colleague and progress is slow as each gets to know each others' ways	Mechanical	Learning through cooperation can be slow, cause conflict and draw on patience
More relaxed, students seem to be benefiting and issues such as that of teacher compatibility fading	Routine	Moving more quickly now where group work is smooth and effective
Adopting a range of team-teaching configurations and not confined to just lead and support or just station teaching	Refined	Cooperating with different peers for a range of different purposes
Implementing new or anew, instructional practices that are supported by team-teaching	Integration	Adopting cooperative practices to the point where the atmosphere in class is instinctively more cooperative
Examining the benefits of team-teaching in the context of initial teacher education and newly qualified teachers	Refocusing	Applying the principles of cooperative learning to engage in cross-age peer tutoring

Table 5 above outlines the Levels of Use that might be encountered by teachers and students as they engage in new or relatively new practices. Irrespective of the innovation, CBAM offers a means to legitimise individuals' positions and dispositions in relation to the change that is taking place in their classroom. Similarly, Stages of Concern can offer those who occupy classrooms a frame of reference where meaning can be given to both teacher and student voice, teacher and student diversity, and where 'it's ok' to have concerns but it is equally acceptable to challenge such concerns/perceptions in a supportive manner.

Table 6: Stages of Concern: Collaborative Practices in the Classroom

Teacher Concerns and team-teaching	**Stages of Concern**	**Student Concerns and cooperative learning**
It's not in my world and I have other things on my mind	Unconcerned	It's not in my world and I have other things on my mind
Met a teacher and chatted a little about this and I would like to know more	Informational	I would like to know more about it and how it might impact my learning
How will team-teaching affect me, will I get caught out, am I compatible? Who am I being asked to team-teach with? Have I a choice? Is there an ulterior motive behind all this? What will students, other colleagues and parents think of me?	Personal	How will this affect me, what is it asking of me, am I comfortable with this? Have I the skills to achieve what is being asked of me? Will I be made to look foolish in front of my friends? How will I work with peers who are lazy, disruptive and who might leave me with all the work?
The planning and preparation for team-teaching seems so long	Management	With whom am I cooperating, for how long and is it every class every day?
Will this actually work for my students? Is withdrawal model better for them than this?	Consequence	Will this slow up our covering the course and will I score less in my tests?
For this to work I need to be able to team-teach with colleagues I may not necessarily know or who have different expertise. It's worth it because my students are benefitting enormously.	Collaboration	This requires that I cannot only cooperate with my friends. This is good for me as I am learning to work with others, something I will have to do when I leave school anyway.
Team-teaching needs a range of configurations to maximise its potential for ALL my students. I need to keep alive the question of 'why I am doing it' if I hope to evaluate it properly.	Reforming	I think I can see this working for another part of my course of studies. Maybe some project tasks done at home could be shared among a group of us.

It should be noted in studying the Stages of Concern that these are iterative and not linear in design. Teachers or students enacting change can find themselves, at different times, at different points along the stages, sometimes even within the context of a single lesson.

Hall and Hord suggest that the latter stages, 'consequence', 'collaboration' and 'refocusing' are the winning enclosure, because at that point teachers and students are focused on the impact upon learning and not so much focused on the actual process or on themselves.

4.0 Additional thoughts

Although there are clearly many advantages to engaging with CBAM when implementing change, I suggest two caveats. While CBAM addresses questions relating to change, such as where one is at and how one is feeling along the change continuum, it can be of further benefit when combined with two other dimensions of education. One dimension relates to aspects of social capital and the second dimension refers to reflection through a pedagogical language. This is not a criticism of CBAM merely a suggestion to add to the conversation regarding the ongoing evolution of this very useful theoretical and practical tool in implementing change.

4.1 Caveat 1: 'Trust' in teacher professional development

If we agree that change is about learning and that promoting inclusive practices requires schools to be seen as sites of learning for not only students but also for teachers (and also policymakers, teacher educators, researchers…), then we need to look at school culture and how it promotes or mitigates against such learning.

Concluding comments by Hall and Hord remind us of the ethics of the practices associated with CBAM and the importance of protecting teachers from the misuse of CBAM for motives that are less than honourable. This is an important point and I wish to add that teacher voice and ownership of change is important if implementation is to occur.

Increasingly school culture is seen as central to efforts at school improvement. This is why renewed attention is focused on leadership and upon the application of Social Capital Theory in educational settings (Coburn & Russell, 2008; Penuel *et al*, 2009; Leana, 2011: Hattie 2012 & 14). Of note is the importance being associated with trust and trustworthiness, when trying to implement improvements in education. Indeed, Gwande (2011) and Ó Ruairc (2013) remind us that, in part, learning is about trust and about being vulnerable, for to learn you must reveal what you don't know or can't do.

Initiation of a new innovation usually does not occur in isolation. Of late we are aware that many innovations can occur simultaneously. Therefore there are a range of settings where relational trust is important for the success of any innovation including; trust in the innovation itself: trust in the promoters of such an innovation: trust in oneself and other colleagues: trust in students and their trust (and their family's) in teachers to successfully attend to the innovation, and trust in the reactions of others in positions of power inside and outside of the school. Put another way we need to be able to anticipate the answer to the question 'Where do I go when what I/we initiate is a success?' and 'Where do I go when what I/we initiate is not as successful as wished'?

However, irrespective of how much trust is both required and generated by implementing change, it is not as important as having a pedagogical language to

determine where practitioners are along the continuum of improvement and, crucially, how they can further advance along such a continuum.

4.2 Caveat 2: Language of reflection and inflection

Drawing upon CBAM, I contend that a language of use is central if the Levels of Use, Stages of Concern, Innovation Configuration Mapping and other aspects of the model are to translate into maximizing teacher and student learning. For example, we know that cooperative learning has the potential to positively influence student learning in our classrooms. In the context of CBAM teachers can self-evaluate, where they are and wish to move to, through the Levels of Use of effective group work. They can also use Stages of Concern as they, individually or in team-teaching dyads, organize students to work in groups. Once initiated, they can map progress across the IC Maps.

In the context of cooperative learning, Johnson and Johnson (1994) identify 5 basic elements of effective group work; (i) individual accountability, (ii) positive interdependence, (iii) collaborative skills (iv) face-to-face interaction, and (v) group self-evaluation of academic and social effort. Now we can see, not only where we are on the continuum of improvement, but we can also begin to examine what aspects of engaging with cooperative learning require attention. The power of language in this context should not be confined to teachers only. The acquisition of a pedagogical language offers students opportunities to determine their progress, to self-evaluate, measure improvement and have a greater sense of control/responsibility regarding their learning and that of their classmates. The importance of such language for teacher reflection is further revealed by the complexity of teaching. In the example above, no mention was made of other variables also potentially influencing effective group work and cooperative learning, such as quality of teacher questioning, student responses, wait time, classroom atmosphere, quality of teacher and peer feedback and much, much more.

In returning to Table 6 above, the interplay between Hall and Hord's example of implementing group work and Johnson and Johnsons' 5 basic elements allow for a deeper understanding of change. It also allows for not only nuanced interpretations of implementing change, but a reflective language to determine the subtle inflections between successful and unsuccessful implementation of, in this case, effective group work. The interplay between CBAM and a pedagogical language introduce a range of possibilities that allow teachers, individually and/or collectively, to interrogate their practices and determine their relative positions, dispositions and options.

Change in practice, whether self-generated and confined to one class or as part of a national initiative, relies in part on what we know about change wisdom. Sometimes teachers instigate change, other times change is a collective decision within a school, and change may also have an external source. Irrespective of the

origin of the decision to change, the impact of such change is ultimately determined by what happens in our classrooms.

5.0 Conclusion

It is becoming increasingly apparent that we need to pay close attention to how change occurs, is implemented and is sustained. Wherever the change agenda emerges from, be it within or outside the school, on an individual or collective basis, it brings with it a mixture of contradictory thoughts and emotions where hope and uncertainty align side by side with maintaining good practice while striving to improve learning and learning experiences in our schools and classrooms. The interplay between emotions and actions is very much to the fore among teachers who seek to promote inclusive learning in our schools and classrooms. In seeking to implement change we must attend continuously to the personal, professional and pedagogical dimensions of such change.

This paper began by saying that education is about change and I pursued the point to highlight that change *is* learning, including teachers learning as they teach, and on occasions learning as they teach together. How that change occurs is assisted by CBAM in that it maps emotions and actions at both a personal and professional level. In response to the question, 'Is CBAM a useful tool in a time of change?' the answer is 'Yes'.

Used properly CBAM adds to our store of knowledge and I believe enhances our chances of succeeding with the changes we wish to implement, or indeed with retaining the good practices we already have instigated and hope to sustain and further develop. It positions each of us on a continuum of improvement. Combined with a recognition of concepts such as relational trust and in particular a clear focus on pedagogy, and a pedagogical language, CBAM can indeed prove a useful tool.

Change and the use of CBAM will be maximized in a culture that is willing to take responsible professional risks, where not only open minds but also open classrooms can prevail. After all the classroom is where change stands or falls or, as is more often the case, gets refracted in the swirling waters that is daily classroom life.

REFERENCES

Coburn, C.E., & Russell, J.L. (2008). District policy and teachers' social networks. *Educational Evaluation and Policy Analysis, 30,* 203-235.

European Agency for Development in Special Needs Education. (2012). *Raising achievement for all*. Brussels: EADSNE.

Gawande, A. (2011). Personal best. *The New Yorker*, *3*.

Hargreaves, A. & Braun, H. (2012). *Leading For All: Final Report of the Review of the Development of Essential for Some, Good for All—Ontario's Strategy for Special Education Reform Devised by the Council of Directors of Education*. Toronto: Council of Directors of Education.

Hall, G.E. & Hord, S.M. (2014). *Implementing change: Patterns, principles and potholes, (4th Ed.)*. Boston: Pearson.

Hattie, J.A. (2012). *Visible learning for teachers*. Oxford: Routledge.

Hattie, J.A., & Yates, G. (2014) *Visible learning and the science of how we learn*. Oxford: Routledge.

Johnson, D., & Johnson, R. (1989) *Cooperation and competition; Theory and research*. Edina, MI: Interaction Book Company.

Leana, C. (2011). An open letter to Bill and Melinda Gates on the value of social capital in school reform. *Standard Social Innovation Review (Draft, 28 February, 2011)*.

Miles, M.B., & Hubermann, A.M. (1984). *Innovation up close; how school improvement works.* New York: Plenum Press.

National Council for Special Education (2013). *Supporting students with special educational needs*. Trim: NCSE.

National Council for Special Education (2014). *Delivery for students with special educational needs: A better and more equitable way.* Trim: NCSE.

Ó Murchú, F. (2011). *Team-teaching for inclusive learning; Purposes, practices and perceptions of a team-teaching initiative in Irish post-primary schools*. Unpublished doctoral thesis: http://cora.ucc.ie/handle/10468/549.

Ó Murchú, F., Russell. J., & Bennett, B. (2013). *Instructional leadership programme, a 'system' learning: Five years into a systemic change project with a focus on classroom practice in Irish secondary schools*. Paper presented at the School Leadership Symposium, Zug Switzerland, September 2013.

Ó Ruairc, T. (2013). *Talking about learning: Leading teaching throughout the continuum*. Paper presented at the National Conference of the Instructional Leadership Programme, Carlow, Ireland, October 2013.

Penuel, W.R., Riel, M., Krause, A.E., & Frank K.A. (2009). Analysing teacher professional interaction in schools as social capital: A social network approach. *Teachers College Record, 111*, 124-163.

FINN Ó MURCHÚ

Finn Ó Murchú is a Department of Education and Skill's Senior Inspector for Special Education. The views expressed here are his own and are formed, in part, by his research on team-teaching.

In-class Support: Investigating the Impact of Station Teaching on Reading Attainment

Martina Horkan and Bairbre Tiernan

Introduction

The provision of inclusive in-class support through co-teaching has excited educational discussion in recent times. In response to the government's policy of inclusion (Government of Ireland, 2004), educators have sought in-class alternatives to the withdrawal model of support, dominant in many Irish schools (Eivers *et al*., 2010), for addressing special educational needs (SEN). Co-teaching is being increasingly advocated to provide this in-class support (Day, 2005; King, 2007; Saloviita and Takala, 2010; Gurgur and Uzuner, 2011).

With the increasing popularity of implementing station teaching as in-class support in the junior classes in Irish primary schools, there is need for more research evidence to verify the effectiveness of this co-teaching model. This paper seeks to add to the research data currently available. It details a recent study which investigated an in-class support model of station teaching for the teaching of reading in a consecutive-grade class of nineteen first and second class pupils. Relevant literature pertaining to reading, co-teaching and station teaching is considered and the intervention is briefly summarised. While there are many wider benefits (Salend, 2001; Day, 2005; Long, 2005; King, 2007; Villa *et al*., 2008; Ó Murchú, 2009; McNamara and Day, 2010; Saloviita and Takala, 2010) other than the academic attainments of pupils to be considered when discussing an inclusive in-class support model, this paper focuses on the findings of the research in relation to the impact on the pupils' reading attainment.

Literature Review

The ability to independently engage with and derive meaning from text is one of the most important skills any child can acquire in primary school. Most children learn this skill of reading without difficulty (Brooks and the National Foundation for Educational Research, 2007). However, some children, as Pressley (2006, p.15) describes, find learning to read "painfully difficult". These pupils struggle to achieve the primary goal of reading, which is to become skilled independent readers who can understand what is communicated in the text (Pressley, 2006; Cunningham *et al*., 2011). Effective research-based instruction

is essential for fostering reading skills in primary school (McCardle and Chhabra, 2004).

The importance of enhancing reading skills has commanded renewed emphasis with the publication of *The National Strategy to Improve Literacy and Numeracy among Children and Young People 2011-2020* (Department of Education and Skills, 2011). Early identification and intervention is vital in addressing reading difficulties and is a priority for the learning support / resource teacher (LS/RT) (Department of Education and Science (DES), 2000). Additionally, numerous documents and guidelines emphasise the need for classroom-based interventions within a continuum of support to meet the continuum of needs (DES, 2000; DES, 2003; DES, 2005; National Council for Special Education, 2006).

One way to implement the in-class support recommended by the DES is through co-operative teaching or co-teaching. The term co-teaching, in this case, describes a mainstream and special education teacher working alongside each other to teach all pupils within the mainstream class setting (Bauwens *et al*., 1989). Numerous models of co-teaching as a form of in-class support have been outlined in the literature. Murawski and Swanson (2001) identified four characteristics of in-class support models that classify them as co-teaching: class teacher and special education teacher working together; both teachers teaching simultaneously in the same classroom; co-planning by the teachers; and a heterogeneous group of pupils, both with and without SEN, being taught. The most popular co-teaching models are outlined in Table 1.

Table 1: Models of co-teaching

Models of in-class co-teaching	**Description**	**Suggested use(s)**
One teaches, one supports	One teacher instructs the whole class while the other circulates, supporting and monitoring (Salend, 2001; Long, 2005; King, 2006; Scruggs *et al*., 2007; Villa *et al*., 2008; Ó Murchú, 2009; Saloviita and Takala, 2010). Termed "supportive co-teaching" by Villa *et al.* (2008, p.20) or "one teach, one assist" by Ó Murchú (2009, p.92).	• Where one of the co-teachers has a unique expertise in a particular area (Salend, 2001; Day, 2005). • Often preferred by teachers new to co-teaching (Villa *et al*., 2008).
Parallel teaching	Each teacher takes half the class, with both teaching the same lesson using similar texts and materials (Cook and Friend, 1995; Salend, 2001; Day, 2005; Long, 2005; King, 2006; Villa *et al*., 2008; Ó Murchú, 2009). Salend's (2001) description, however, is more similar to that of station teaching.	• Preparing for a debate (Day, 2005) • In a consecutive-grade class situation to allow each co-teacher to instruct one of the grade groups at an appropriate level (King, 2006).

Team-teaching	Two co-teachers sharing responsibility for a class, jointly planning, teaching and assessing all the pupils (Bauwens and Hourcade, 1997; Long, 2005; Scruggs *et al*., 2007; Villa *et al*., 2008; Saloviita and Takala, 2010), allowing co-teachers to alternately take the lead for various portions of the lesson determined by their interests and talents (Villa *et al*., 2008).	• Modelling of conversation and debating skills (Cook and Friend, 1995) • To facilitate a blending and complementing of individual co-teachers' strengths and expertise (Villa *et al*., 2008).
Peer-tutoring	Pupils working in pairs in role of tutor and tutee, with teachers circulating, monitoring and supporting (King, 2006).	As a reading intervention (King, 2006; King, 2007; King and Gilliland, 2009) • For science instruction (McDuffie *et al*., 2009)
Co-operative learning	Pupils work co-operatively in small mixed ability groups, while teachers observe, monitor and support.	• To foster self-esteem, social skills and peer relationships (Day, 2005; King, 2006)
Station teaching	Pupils work in groups at different activities at various stations (Salend, 2001; King, 2006; Cook and Friend, 1995; Gurgur and Uzuner, 2011). One or two teachers teach at teaching stations, with second / third teacher or Special Needs Assistant (SNA) supervising independent stations.	• For content that is difficult and non-sequential (Salend, 2001; Day, 2005) • For early intervention in literacy (King, 2007)

Much of the literature available on co-teaching is descriptive in nature, detailing the why and how. Research into its effectiveness, however, is limited (Murawski and Swanson, 2001; Gurgur and Uzuner, 2011) and few of these are subject-specific. From the co-teaching research analysed by Murawski and Swanson (2001), they concluded that co-teaching was most effective for reading and language arts (an effect size of 1.59), compared to a moderate effect size (0.45) for mathematics. They also reported large effect sizes (of 0.87 to 3.67) for the US equivalent of the Irish infants to second class.

Research reported by Ó Murchú (2009) into co-teaching (which he termed 'team-teaching') for both English and Mathematics lessons in an Irish post-primary context neither differentiated between the two subject areas nor objectively assessed achievement. Rather, they sought to investigate participants' views on team-teaching and concluded that team-teaching has significant potential as an inclusive teaching methodology for both subjects.

Welch (2000) also investigated team-teaching. He implemented the team-teaching model for the teaching of reading and spelling in two elementary school classrooms in the USA, yielding positive results. Comparison of pre- and post-intervention curriculum-based assessments illustrated academic gains in reading and spelling for all pupils, both with and without SEN.

More recent research in an Irish primary level context also provides an indication of the effectiveness of co-teaching as a model of in-class support. Research into using peer-tutoring for reading fluency and accuracy by King (2004) and King and Gilliland (2009) yielded very positive results. King's (2004) study yielded an average improvement of 74.1% for pupils with dyslexia and 85% for other pupils, while data collected by King and Gilliland (2009) provided evidence of a 12.7-month gain in terms of reading age for reading accuracy. King (2007) also advocates station teaching for literacy, in addition to maintaining that co-teaching is ideal for delivering the early intervention in literacy that is a priority for the LS/RT (DES, 2000).

The in-class support model utilised in this research study was station teaching. Station teaching involves the pupils working in small groups at various activity stations around the classroom (Cook and Friend, 1995; King, 2006; King, 2007; Scruggs *et al*., 2007; Ó Murchú, 2009; Gurgur and Uzuner, 2011; Solis *et al*., 2012). Each group spends 15 or 20 minutes at an activity and then rotates to the next station. In some models, both co-teachers teach at individual teaching stations (Salend, 2001; Day, 2005; Ó Murchú, 2009; Solis *et al*., 2012), while in others one or more independent stations are set up (Cook and Friend, 1995; King, 2006), supervised by one of the co-teachers or an SNA, if available (King, 2006). King (2006) also recommends an alternating of teaching and supervisory roles by the co-teachers each week, in addition to flexible groupings, while acknowledging that same-ability grouping facilitates stations to challenge the exceptionally able or address the needs of pupils with SEN. Solis *et al.* (2012) agree that grouping should be flexible, with some heterogeneous groups and some same ability groups based on needs. Salend (2001) and Day (2005) propose station teaching as ideal for the teaching of content that is difficult and non-sequential, while King (2007) endorses it for providing early intervention in literacy.

Methodology

The aim of this action research study was to design, implement, review and evaluate an in-class support intervention using the station-teaching model. A mixed method design, with quantitative and qualitative data collected from pre- and post-intervention assessments, interviews with teachers and SNA, pupil questionnaires, document analysis, field notes, running records and reflective journal, was employed to allow for triangulation (Hart, 2005) and, consequently, to 'enhance the validity of findings' (Punch, 2005, p.241). The quantitative data was analysed using descriptive statistics, while a framework analysis (Richie and Spencer, 1994) was used to analyse the qualitative data.

Participants

A convenience sample of a class of nineteen first and second class pupils in a consecutive-grade, co-educational setting was purposely chosen for this research

as a high proportion of the pupils were presenting with SEN and they were in the cohort for whom early intervention is recommended (DES, 2000). The profile of the class group is detailed in Table 2.

Table 2: Pupil Sample Group

Class	Number of pupils	Number of pupils with SEN	Nature of SEN
First class	9	3	Literacy difficulties EBD Language difficulties (having a first language other than English or Irish)
Second class	10	5	Literacy difficulties EBD Language difficulties (having a first language other than English or Irish)
Totals	19	8	

Research Intervention

In an effort to meet the challenge of addressing the varying needs of the pupil participants using an inclusive approach, station teaching was chosen as an in-class support model. Before the commencement of the intervention, the MICRA-T (Wall and Burke, 2004) standardised norm-referenced screening test was administered to all pupils. For the five pupils achieving at or below the 20th percentile in this test, the QUEST (Robertson *et al*., 1995) criterion-referenced diagnostic assessment was administered. A checklist of the 220 Dolch high-frequency sight words (Dolch, 1948) was also administered to all pupils. The results of these assessments were analysed and priority areas of need to be addressed during the intervention were identified: sight vocabulary; auditory discrimination; auditory sequential memory; visual discrimination; visuo-motor skills; visual sequential memory; and simple blends.

As a result of the assessments administered, the pupils were grouped according to class level and reading attainment. Activities were designed to address the pupils' needs and were differentiated accordingly. The station-teaching intervention was timetabled for 45 minutes, four days per week, for eight weeks. The activities were explained to the pupils, together with the routine of spending fifteen minutes at one station before moving on to the next, with each of the six groups doing three of the stations one day and the other three the next. This routine enabled all groups to do each activity twice per week. The six activity stations are outlined in Table 3.

Table 3: Summary of Stations

Station	Target area	Independent / taught	Staff member responsible
Phonics	*Group A*:* Initial letter sounds and simple blends. *Groups B - F*: Consonant blends, digraphs and silent e rule.	Taught	Class teacher
Games	Auditory discrimination skills; Visual sequencing skills.	Independent	SNA and LS/RT
Reading	Reading accuracy, fluency and comprehension.	Taught	EAL teacher
Computers	Sight vocabulary; Phonics; Visual processing skills.	Independent	SNA and LS/RT
Listening	*Group A*:* Auditory and visual processing skills. *Groups B - F:* Auditory sequential memory skills.	Taught	LS/RT
Audio books	Listening to and reading audio books	Independent	SNA and LS/RT

** (Pupils identified with reading difficulties)*

The need for careful planning underpinned the station-teaching intervention. Planning meetings were held with the participating teachers (class teacher, teacher of English as an additional language (EAL) and LS/RT) prior to and at various intervals during the intervention. Issues discussed at these meetings included strategies and station activities to address target areas, timetabling, grouping and roles and responsibilities of each teacher involved.

During week 4 of the intervention, a mid-intervention small-group interview with the class teacher and EAL teacher enabled a review of the intervention's targets, activities and routine. Resultant changes included more frequent changing of the games station activities, an additional laptop at the computer station and a slight rearranging of groupings due to two new pupils joining the class. At the end of the eight weeks, the intervention was evaluated using post-intervention pupil questionnaires and post-tests of the MICRA-T (Wall and Burke, 2004), QUEST (Robertson *et al*., 1995), and Dolch checklist (Dolch, 1948), together with individual interviews with the class teacher, EAL teacher and SNA.

Research Findings

This research intervention investigating station teaching as an inclusive in-class model for the teaching of reading produced some very interesting results in terms of the pupils' reading attainment. It was found that station teaching did support the reading attainment of the pupils in first and second classes. Results from the pre- and post-tests of the MICRA-T (Wall and Burke, 2004) and Dolch

checklist (Dolch, 1948) provided a quantitative measurement of the pupils' reading attainment pre- and post-intervention and comparison allowed a measurement of progress over the course of the intervention. The MICRA-T reading ages obtained in the pre- and post-tests show an average increase of approximately four months for first class and six months for second class. The majority of pupils achieved an increase in terms of reading age from greater than one month to two years, as detailed in Table 4.

Table 4: Pre- and Post-test Chronological Ages (C.A.) and Reading Ages (R.A.) (Pupils identified with reading difficulties highlighted)

	Pupil	Pre-test		Post-test		Difference in
		C.A.	R.A.	C.A.	R.A.	Reading Age
First Class	1	07:06	<5:06	08:01	05:06	+ >1 month
	2	07:09	05:06	08:02	06:05	+ 11 months
	3	07:01	06:08	07:08	06:11	+ 3 months
	4	06:08	07:05	07:02	08:02	+ 9 months
	5	07:01	07:08	07:08	08:01	+ 5 months
	6	06:09	07:11	07:04	>8:03	+ >4 months
	7	07:08	08:01	08:02	08:01	No change
	8	07:08	>8:03	08:02	>8:03	No change
	9	06:08	>8:03	07:02	>8:03	No change
Second Class	10	08:07	<6:06	09:02	06:08	+ >2 months
	11	07:06	<6:07	08:00	<6:06	- > 1 month
	12	08:01	06:07	08:07	07:00	+ 5 months
	13	07:06	06:10	08:01	08:10	+ 24 months
	14	07:08	06:10	08:02	07:03	+ 5 months
	15	07:06	07:02	08:00	08:00	+ 10 months
	16	07:02	07:04	07:09	08:00	+ 8 months
	17	08:01	07:07	08:08	08:03	+ 8 months
	18	07:06	07:09	08:01	08:00	+ 3 months
	19	07:05	09:05	07:11	09:02	- 3 months

However, analysis of the percentile rankings of the MICRA-T results suggests an overall lack of progress in reading attainment for the majority of pupils, with the only mean percentile ranking to increase being the mean class-based score of the second-class pupils. The results for the MICRA-T assessments are presented in Figures 1 and 2, with a comparison illustrated in Figure 3.

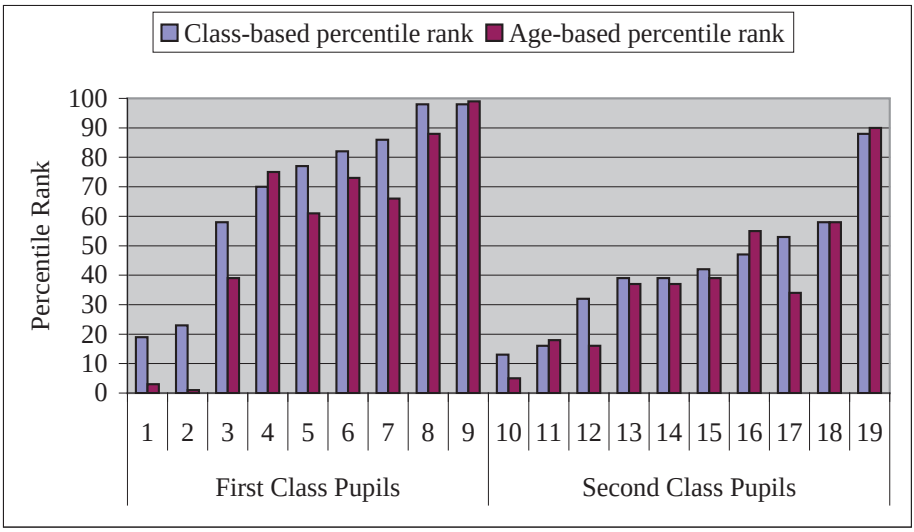


Figure 1: MICRA-T Pre-test Scores

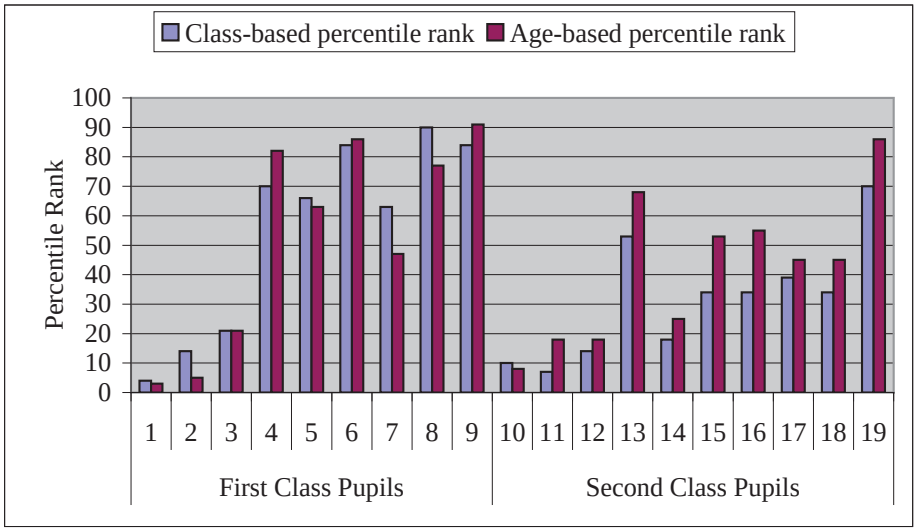


Figure 2: MICRA-T Post-test Scores

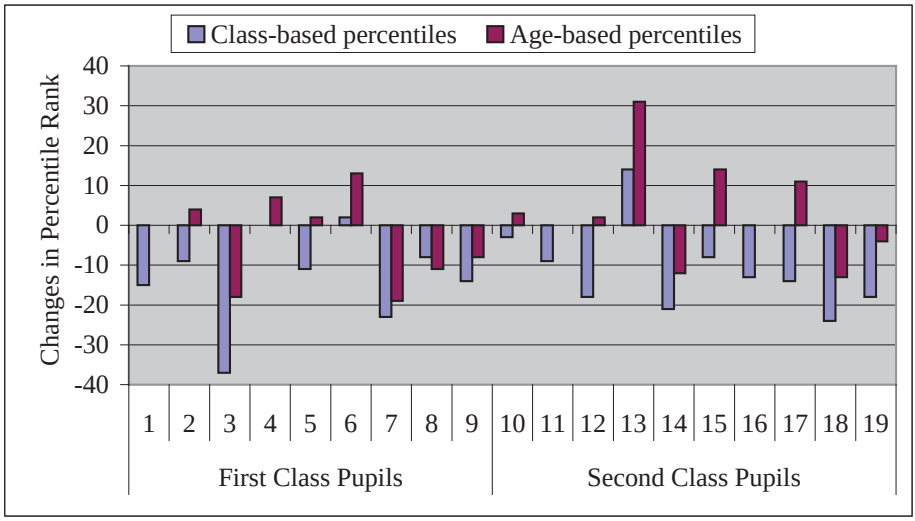


Figure 3: Comparison Between Pre- and Post-test MICRA-T Scores

An evaluation of the pre- and post-test scores for the pupils of first and second class on the Dolch sight vocabulary checklist reveals an average increase in sight vocabulary of 16.8 words or 24%. Figures 4 and 5 display how the pupils performed on the pre- and post-tests of the Dolch checklist. As would be expected, individual pupils attained differently on this measure of sight words.

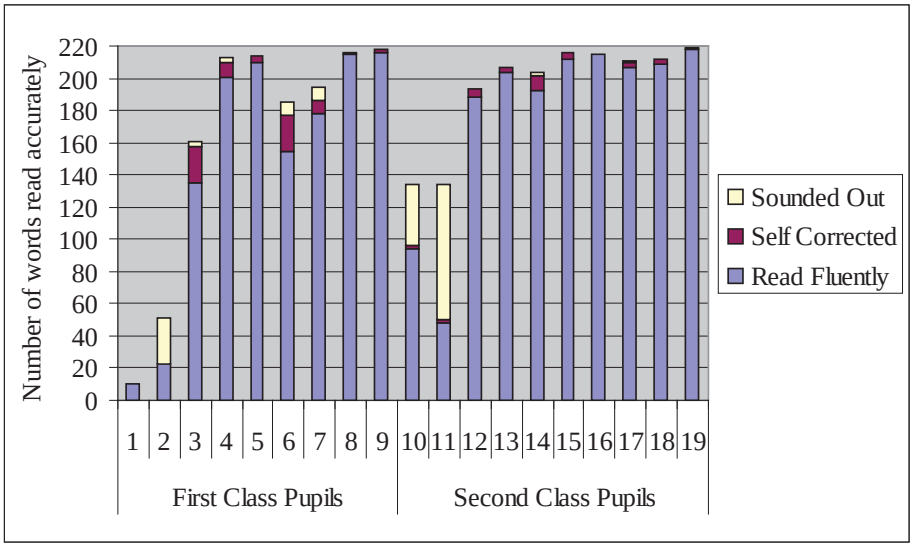


Figure 4: Dolch Sight Vocabulary Pre-test Scores

The greatest increase in words read fluently in terms of number of words was 44, achieved by Pupils 3 and 10 (see Figure 6), and in terms of percentage increase was 117%, achieved by Pupil 2. The mean score for words read fluently was 164.7 pre-intervention and 181.6 post-intervention.

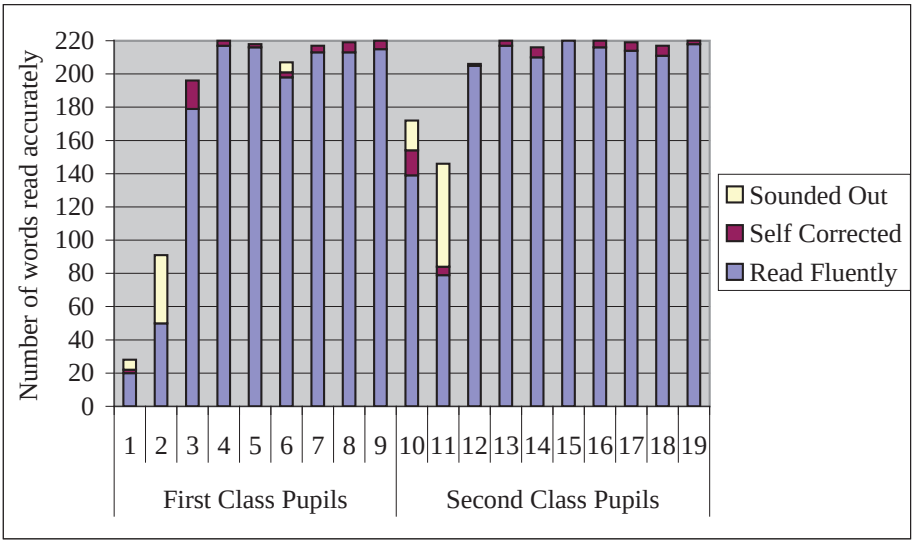


Figure 5: Dolch Sight Vocabulary Post-test Scores

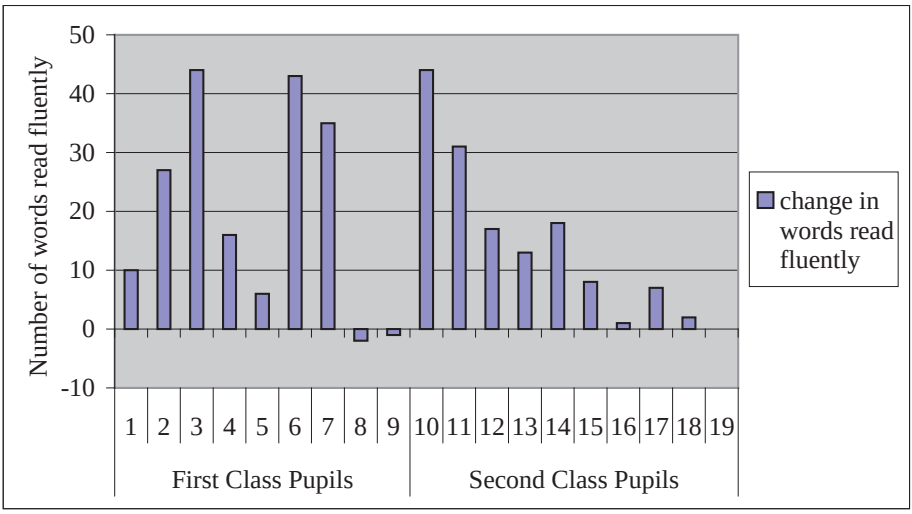


Figure 6: Dolch Sight Vocabulary: A Comparison Between the Pre- and Post-tests

In terms of whether or not the station-teaching intervention addressed the reading needs of pupils identified as having reading difficulties, it is necessary to briefly outline the results of the QUEST (Robertson *et al.*, 1995) post-intervention assessment. Results from diagnostic testing informed the stations in terms of activities, content and level of difficulty for pupils identified with reading difficulties, as discussed earlier. Sub-skills where the pupils had some or great difficulty pre-intervention became their individual target areas for the intervention. The QUEST post-intervention assessment provided evidence of improvements, especially in the areas of auditory discrimination, sight vocabulary, letter recognition, simple blends and word beginnings and endings, with some progress also recorded for the majority of pupils in the areas of auditory sequential memory, visual sequencing, visual-motor skills, word building and multisyllabic words. These gains additionally provided social and emotional benefits, with increased confidence in and enjoyment of reading noted in the research journal, particularly for Pupil 2.

Discussion And Conclusions

The findings of the research presented above reveal a complex picture reflective of the diverse profile of the class in question, as outlined in Table 2. Analysis of the reading ages did reveal benefits from this intervention for most pupils involved, a conclusion which echoes Salend (2001), Day (2005), Long (2005), King (2006) and Saloviita and Takala (2010). However, comparison of the pre- and post-intervention MICRA-T (Wall and Burke, 2004) assessments disappointingly appears to provide minimal data supporting the assertion that this intervention improved student academic achievement. This finding contradicts studies like Welch (2000), King (2004) and King and Gilliland (2009), which reported significant academic outcomes from co-teaching interventions. Research by Murawski and Swanson (2001), however, concurs with the finding of minimal data-based evidence.

Interestingly, examination of the distribution of the first and second class MICRA-T (Wall and Burke, 2004) scores reveals that first class had similar bell curve representations pre- and post-intervention. The second class distribution, however, while being the same in terms of age-based scores in the pre- and post-tests, skewed slightly to the left in terms of class-based scores post-intervention. This may suggest that the intervention was more successful at first class than second class level. This points to the importance, and success, of early intervention, as recommended in the literature (Shiel and Larney, 1999; DES, 2000; National Institute of Child Health and Human Development, 2000) and suggests that it occurs before the second class grade level. However, this suggestion needs to be considered in light of the profile of this particular second class.

Closer examination also suggests that the intervention was more successful for pupils in the average range, while pupils in the high average, high or extremely

high ranges appeared to make smaller, if any, gains. This indicates that additional differentiation of activities would be necessary in any future co-teaching intervention to ensure that higher achieving pupils benefit sufficiently. The highest achieving pupil, Pupil 19, in particular, appeared to regress, both in terms of percentile ranking and reading age. This corresponds with a post-intervention interview comment from the class teacher, which stated that her high level of reading attainment made it difficult to accommodate her within the intervention. Interestingly, however, this pupil was also recorded in the research journal saying: 'I love stations. Are we doing it again next year?'

In contrast to research by Gurgur and Uzuner (2011), who concluded that pupils with SEN did not benefit from their station-teaching intervention, examination of the findings of this study has demonstrated that station teaching can successfully be implemented to address reading difficulties. The findings revealed positive outcomes, both academic and otherwise, for the pupils identified. The QUEST (Robertson *et al*., 1995) and Dolch (1948) assessments confirmed progress in the various sub-skill areas. The outcomes for individual pupils varied, however, with some pupils experiencing greater gains than others. However, the co-teaching model of in-class support utilised for the intervention proved effective in facilitating a flexibility to extend the cut-off point for the identification of pupils with reading difficulties from the 12th to the 20th percentile, ensuring the needs of more pupils were identified and addressed.

The two pupils with EBD, as noted in Table 2, Pupils 3 and 13, warrant some discussion. Pupil 3 demonstrated the greatest regression in percentile rankings. This finding is supported by Paratore *et al*. (2011), who highlighted the negative effect that social and behavioural difficulties can have on a child's attainment, and McNamara and Day (2010), who concluded that co-teaching may not be the most effective instructional model for meeting the needs of pupils with EBD. Two research journal entries, however, indicated improved behaviour and co-operation from this pupil during co-teaching compared to whole-class activities, demonstrating that the pupil did benefit from the small-group structure of the station teaching. Conversely to Pupil 3, Pupil 13 achieved the greatest gain in terms of percentile rankings and reading age, highlighting the differing responses among pupils to the intervention and indicating that the results cannot be generalised for pupils with an EBD diagnosis.

The Dolch (1948) informal checklist assessment assessed a skill directly addressed in the intervention, and, conversely to the MICRA-T (Wall and Burke, 2004), had very positive results both pre- and post-intervention. The pre-test results revealed a strong basis re sight vocabulary and this was acknowledged in the planning and activities. Tan and Nicholson (1997) concluded that developing word-recognition fluency enhances comprehension. The results of the MICRA-T assessments, however, appear to refute this and indicate that greater emphasis be placed on comprehension skills in any future intervention,

in line with Pressley (2006) who maintains that implicit teaching of comprehension skills needs to be part of a balanced intervention.

It must be acknowledged that the small sample size and convenient sampling technique used limit the generalisability of this research. Other limitations include the absence of experimental control, ethical considerations and the availability of resources, such as standardised and diagnostic assessments, ICT and personnel available within the school.

In conclusion, station teaching as an inclusive co-teaching model of in-class support has an important role to play in facilitating the development of reading skills. Pupils benefit socially and emotionally, as well as academically. Findings from this research indicate, however, that it is not the only support model that should be utilised in promoting reading attainment in Irish primary schools. The varying responses to the intervention highlight that supporting all pupils as they learn to read requires consideration of a number of teaching models in order to ensure that the diverse range of ability in any class is catered for. Although co-teaching removes the need for the withdrawal model of support for many pupils with SEN, the characteristics and needs of individual pupils must guide any decision regarding the most appropriate model of support for addressing individual reading difficulties.

REFERENCES

Bauwens, J., Hourcade, J. J. and Friend, M. (1989) Cooperative teaching: A model for general and special education integration. *Remedial and Special Education*. 10 (2), pp. 17-22.

Bauwens, J. and Hourcade, J. J. (1997) Cooperative teaching: Pictures of possibilities. *Intervention in School and Clinic*. 33 (2), pp. 81-85. Available at: http://content.ebscohost.com.libgate.library.nuigalway.ie/pdf23_24/pdf/1997/IIS/01Nov97/1303022.pdf?T=P&P=AN&K=1303022&S=R&D=a9h&EbscoContent=dGJyMMvl7ESeqLQ4zOX0OLCmr0qep7NSsqe4Ta%2BWxWXS&ContentCustomer=dGJyMPGsr0%2BwqbFIuePfgeyx34vu (Accessed: November 26th, 2012).

Brooks, G. and National Foundation for Educational Research (NFER) (2007) *What Works for Pupils with Literacy Difficulties? The Effectiveness of Intervention Schemes.* (3rd Edition). London: Department for Children, Schools and Families. Available at: http://catchup.org.uk/Portals/3/CU%20research/What%20works%20for%20pupils%20with%20literacy%20difficulties%202007.pdf (Accessed: August 22nd, 2012).

Cook, L. and Friend, M. (1995) Co-teaching: Guidelines for creating effective practices. *Focus on Exceptional Children*. 28 (3), pp. 1-16.

Cunningham, A. E., Nathan, R. G. and Schmidt Raher, K. (2011) Orthographic Processing in Models of Word Recognition. IN: Kamil, M. L., Pearson, P. D., Birr Moje, E. and Afflerbach, P. P. (Editors.) *The Handbook of Reading Research. Volume IV.* New York: Routledge.

Day, T. (2005) In-class support for children with special needs in mainstream schools. *Reach*. 18 (2), pp. 78-87.

Department of Education and Science (DES) (2000) *Learning Support Guidelines*. Dublin: Stationery Office.

Department of Education and Science (DES) (2003) *Allocation of Resources for Pupils with Special Educational Needs in National Schools.* Dublin: Stationery Office. Circular SP ED 24/03.

Department of Education and Science (DES) (2005) *Organisation of Teaching Resources for Pupils who need Additional Support in Mainstream Primary Schools.* Dublin: Stationery Office. Circular SP ED 02/05.

Department of Education and Skills (2011) *Literacy and Numeracy for Learning and Life: The National Strategy to Improve Literacy and Numeracy among Children and Young People 2011-2020.* Dublin: The Stationery Office.

Dolch, E. W. (1948) *Problems in Reading*. Champain, IL: The Garrard Press.

Eivers, E., Close, S., Shiel, G., Millar, D., Clerkin, A., Gilleece, L. and Kiniry, J. (2010) *The 2009 National Assessments of Mathematics and English Reading*. Dublin: The Stationery Office. Available at: http://www.erc.ie/documents/na2009_report.pdf. (Accessed: August 22nd, 2012).

Government of Ireland (2004) *Education for Persons with Special Educational Needs Act (EPSEN)*. Dublin: Stationery Office.

Gurgur, H. and Uzuner, Y. (2011) Examining the implementation of two co-teaching models: team teaching and station teaching. *International Journal of Inclusive Education*. 15 (6), pp. 589-610.

Hart, C. (2005) *Doing Your Masters Dissertation.* London: Sage.

King, F. (2004) *Successful Strategies for Enhancing Reading Accuracy and Reading Fluency for Primary School Mainstream Pupils and Pupils with Dyslexia: A Whole Class Approach*. St. Angela's College, Sligo. Unpublished M.Ed Dissertation.

King, F. (2006) *Special Education in Irish Schools: A Practical Guide*. Dublin: Primary ABC.

King, F. (2007) Co-teaching: Why and how? *Learn.* 29, pp. 33-44.

King, F. and Gilliland, A. (2009) Peer tutoring: An inclusive approach to supporting reading: Case study in five disadvantaged schools. *Learn.* 31, pp. 50-61.

Long, S. (2005) The collaborative role of the resource teacher in Irish primary schools. *Learn*. 27, pp. 116-122.

McCardle, P. and Chhabra, V. (2004) *The Voice of Evidence in Reading Research.* Maryland: Paul H. Brookes Publishing Company.

McDuffie, K. A., Mastropieri, M. A. and Scruggs, T. E. (2009) Differential effects of peer tutoring in co-taught and non-co-taught classes: Results for content learning and student-teacher interactions. *Exceptional Children*. 75 (4), pp. 493-510.

McNamara, S. and Day, T. (2010) Students' experiences of co-teaching in a post-primary school in Ireland. *Learn.* 32, pp. 137-148.

Murawski, W. W. and Swanson, H. L. (2001) A meta-analysis of co-teaching research. *Remedial and Special Education*. 22 (5), pp. 258-267.

National Council For Special Education (NCSE) (2006) *Guidelines on the Individual Education Plan Process.* Dublin: Stationery Office.

National Institute of Child Health and Human Development (NICHD) (2000) *Report of the National Reading Panel. Teaching Children to Read: An Evidence-based Assessment of the Scientific Research Literature on Reading and its Implications for Reading Instruction. Reports of the Subgroups*. (NIH Publication No. 00-4769). Washington, DC: U.S. Government Printing Office.

Ó Murchú, F. (2009) Team-teaching: Supporting student and teacher learning in post-primary classrooms. *Learn.* 31, pp. 88-106.

Paratore, J. R., Cassano, C. M. and Schickedanz, J. A. (2011) Supporting Early (and Later) Literacy Development at Home and at School: The Long View. IN: Kamil, M. L., Pearson, P. D., Birr Moje, E. and Afflerbach, P. P. (Editors.) *The Handbook of Reading Research. Volume IV.* New York: Routledge.

Pressley, M. (2006) *Reading Instruction that Works: The Case for Balanced Teaching*. (3rd Edition). New York: The Guilford Press.

Punch, K. F. (2005) *Introduction to Social Research, Quantitative and Qualitative Approaches.* (2nd Edition). London: Sage.

Richie, J. and Spencer, L. (1994) Qualitative Data Analysis for Applied Policy Research. IN: Bryman, A. and Burgess, R. G. (1994) *Analyzing Qualitative Data*. Abingdon, Oxon: Routledge.

Robertson, A., Robertson, A., Fisher, J., Henderson, A. and Gibson, M. (1995) *QUEST Screening, Diagnostic and Support Kit.* (2nd Edition). Windsor: nferNelson Publishing Company Ltd.

Salend, S. J. (2001) *Creating Inclusive Classrooms: Effective and Reflective Practices.* (4th Edition). New Jersey: Merrill Prentice-Hall.

Saloviita, T. and Takala, M. (2010) Frequency of co-teaching in different teacher categories. *European Journal of Special Needs Education.* 25 (4), pp. 389-396.

Scruggs, T. E, Mastropieri, M. A. and McDuffie, K. A. (2007) Co- teaching in inclusive classrooms: A metasynthesis of qualitative research. *Exceptional Children*. 73 (4), pp. 392-416.

Shiel, G. and Larney, R. (1999) Preventing reading failure: Intensive early intervention programmes. *Learn.* 21, pp. 10-19.

Solis, M., Vaughn, S., Swanson, E. and McCulley, L. (2012) Collaborative models of instruction: The empirical foundations of inclusion and co-teaching. *Psychology in the Schools*. 49 (5), pp. 498-510.

Tan, A. and Nicholson, T. (1997) Flashcards revisited: Training poor readers to read words faster improves their comprehension of text. *Journal of Educational Psychology.* 89, pp. 276-288.

Villa, R. A., Thousand, J. S. and Nevin, A. I. (2008) *A Guide to Co-Teaching: Practical Tips for Facilitating Student Learning.* (2nd Edition). California: Corwin Press and the Council for Exceptional Children.

Wall, E. and Burke, K. (2004) *MICRA-T, Level 1*. Dublin: CJ Fallon.

Welch, M. (2000) Descriptive analysis of team teaching in two elementary classrooms: A formative experimental approach. *Remedial and Special Education.* 21, pp. 366-376.

MARTINA HORKAN and BAIRBRE TIERNAN

Martina Horkan is a primary school teacher who has recently completed the Master of Arts in Special Educational Needs in St. Angela's College, Sligo.

Bairbre Tiernan is a lecturer in the Centre for Educational Needs, Inclusion and Diversity (CSENID), St. Angela's College, Sligo.

Exploring the Macro Thesis of School-Wide Numeracy Development

Jerry McCarthy

"In school education, numeracy is a fundamental component of learning, discourse and critique across all areas of the curriculum" (Stephens, 2009)

"Maths learned in isolation, remains in isolation" (Cockcroft, 1982)

The focus of this investigative essay is to provide some insights into the thinking and tenets that script the thesis of school-wide numeracy development and to offer suggestions and possibilities on how school-wide numeracy development can be nurtured and realised in the context of the second level school.

Any systematic investigation of contemporary educational and mathematical policy literature will confirm that the thesis of school-wide numeracy development has become elevated to priority status, not only in our indigenous policy constructs, but also across much of the international educational policy landscape. Without doubt, the policy mutation and momentum towards the prioritising of school-wide numeracy development in schools will have been significantly influenced by emergent and seminal insights from the epistemological and mathematical research domains – which re-conceptualised and re-framed numeracy as a multilayered and dynamic matrix of numerical cognition, knowledge, processes and skills, which have the potential to significantly enhance and extend a student's generic capacity and disposition to learn, comprehend and engage in analytic thinking in every subject area across the curriculum. Because of this epistemological re-framing, numeracy is now described in most contemporary research narratives as having a fundamental impact and application in a diversification of learning sites across the curriculum. By deduction and extension, this seminal and holistic re-conceptualisation of numeracy proposes and concludes that to be an effective learner, in most curricular, generic or after-school contexts, requires the learner to be numerate!

In addition to this extended re-framing of numeracy and the identification of its pervasive and holistic impact on learning and capacity to learn, other seminal findings, from research undertaken by Brynner and Parsons (1999), clearly established an intrinsic and profound linkage between possessing numerical

capacities and proficiencies and employability prospects, earning power and subsequent life chances. Because of the identification of this inter-connectivity between being numerate, employability and income generation, Stephens (2000) extrapolates and concludes that the real drivers behind the contemporary international prioritisation of the issue of students' numeracy, and school wide numeracy development at second level, are found in the economic and political sectors and in their understanding of the importance of society possessing a numerate populace and workforce. Stephens contends that the current prioritisation of students' numeracy, in schools, is not being fuelled by any innovative insights from the educational or mathematical research domains, but rather because students' numeracy is now deemed to be an "economic, political and social issue".

The primordial and substantive focus of the emergent thesis of school-wide numeracy development is the systematic prioritisation, consolidation, acceleration, enhancement and improvement, where required, of students' numeracy learning and outcomes. The thesis also encapsulates a systematic, collaborative and iterative on-site inquiry, by individual teachers and by subject departments, into how numeracy is effectively taught in their subjects and to determine if current successes can be extended or enhanced. School-wide numeracy development may be planned, configured and organised, within the school context, as a flexible and multi-layered framework of pedagogies, approaches, resources, supports and interventions. In order to attain maximum impact, longevity and optimum outcomes, the thesis of school-wide numeracy development must be firmly anchored in the core and formal process and endeavour of the second level school, namely it needs to become firmly embedded within the regular rhythms of daily subject teaching and learning. Kemp and Hogan (2000) contend that there now appears to be international consensus and acknowledgement, in educational policy constructs, that numeracy needs to be firmly positioned as a primary focus of schooling, 'because numerate students are better able to learn at school and are better equipped for their everyday lives and their lives post schooling'. Insights and findings from research into school change and improvement (Fullan, 2007) categorically contend that, if any inward change or innovation is not intrinsically linked to and grounded in, the daily cycles and core processes of teaching and learning, there is every likelihood that their impact will be destined to be superficial, transient, peripheral and bounded. This flexible framework of numeracy provision and resource scaffolding, that is advocated within the thesis of school-wide numeracy development, should also encapsulate and embrace the parallel planning and development of any additional teaching, interventions, cross-curricular projects resources and ancillary provision that are required to ensure that no student is left behind in numeracy learning and that every student is provided with multiple opportunities and adequate supports to achieve his or her best learning performance and outcomes in numeracy, relative to his or her capacity. We can conclude that the thesis of school-wide numeracy development is underpinned

and scripted by the principles of inclusion and equality. Schools should always ensure that they provide additional support and resources for the cohort of students who are at risk of underachievement in numeracy learning.

In essence, this macro thesis of school-wide numeracy development is scripted by a hypothesis that suggests that strategically-planned teaching and learning together with a suite of parallel approaches and interventions that are integrated, consistent, coordinated, progressive, sustained, inclusive, collaborative and cross-curricular can create the optimum and most effective teaching and learning environment for students' numeracy learning to blossom. By extension, this thesis also identifies its ideal agency of delivery, namely each subject teacher operating independently as individual practitioners or, as a collective, within their subject departments. Additional activities can involve the entire staff collaborating on some numeracy issue. Within the tenets of the thesis, numeracy is now deemed to be 'every teacher's responsibility and business'. Every subject teacher has a critical, even extended, role to play in the consolidation and enhancement of their students' numeracy learning. We may justifiably conclude that students' numeracy enhancement has been identified as a core priority of schooling and of all subject teaching and learning.

Morony and Brinkworth (2002) declared that numeracy involves four core dynamics and orientations, and they provided the following concise and atomistic definition of numeracy: *'Using ... some mathematics ... to achieve some purpose ... in a particular context'*. Ab initio, the emphasis was placed on the 'some mathematics' dimension and domain of numeracy and, consequently, most teacher action was exclusively focused on the development of students' mathematical competencies, knowledge and skills. In this one-dimensional focus on 'some mathematics', numeracy development was almost universally equated to mathematical development! Other numerical applications, challenges and opportunities, that presented in multiple subject-specific contexts and sites across the curriculum were systematically ignored, not prioritised or rarely crystallised into a focus for alternative or additional action or intervention into students' numeracy development. Consequently, the subject department that traditionally assumed exclusive responsibility for students' numeracy learning, in the second level school was the school's Mathematics Department. The Mathematics Departments in second level schools have always been highly successful, as the primary agency of delivery, in scaffolding students' numeracy learning and in producing highly numerate students on completion of second level schooling. I happily take this opportunity to acknowledge and affirm their substantive role, legacy, dedication and impact in the successful teaching and learning of numeracy in second level schools, across multiple student cohorts and across many years of endeavour. Going forward, numeracy development in the second level school needs to become more expansive, collaborative, inclusive and integrated across a broader contextualised and subject department landscape. Schools need to develop an enhanced understanding and awareness of the

existence of the multiplicities of diverse and contextualised 'numeracy moments', numeracy opportunities and numeracy demands that are embedded in many themes of the prescribed or 'intended' syllabus across the second level curriculum. Even on cursory analysis, teachers in many subject departments can easily identify arrays of explicit 'numeracy moments' that populate its prescribed syllabus and the teacher's annual teaching planner. Teachers of Science, History, Geography, Art, Woodwork, Metalwork, Music, Religion, Business Studies and Physical Education have little difficulty in identifying and grounding 'numeracy moments' in the regular rhythms of their subject teaching. Some subject departments – particularly the language departments of the second level school – have to be given time and opportunities to come to a shared understanding of the potential and opportunities that arise in their language teaching to scaffold, support and enhance the teaching of the 'communication', language and 'numerical literacy' strands of numeracy. These language departments can also support numeracy development by providing opportunities for the explicit teaching of the keywords and language of numeracy in their classrooms and by providing opportunities for the reinforcement and practice in those generic skills-sets and dispositions that can significantly scaffold a student's numeracy learning and advancement.

These generic skills and dispositions include: innovative practice, creativity, persuasion, teamwork, cooperative learning, socio-constructivism, resilience, curiosity, reciprocity, trial and error, judgement formulation, meta-learning, reflectiveness and reflection in action. In summary, within the stipulations and tenets of the thesis of school-wide numeracy development, every subject department has a distinct role and function to perform; the Mathematics Department performs a primary role, but this role is not all consuming or exclusionary. Other subject departments also perform critically-important roles that are secondary, recapitulative or reinforcing. However, on occasions, these subject departments may also assume primary responsibility for teaching the specific and contextualised 'numeracy moments' that arise specifically in their subject area. Also, extended phases of cross-department collaboration, discussion and inquiry could see combinations of subject departments clarifying and agreeing best practice for the teaching and learning of those 'shared numeracy moments' which over-arch several syllabi. Subject departments may also collaborate in order to plan, organise and implement short-term cross curricular and thematic numeracy projects. On occasions, the focus on numeracy development may involve the entire teaching staff opting to act collectively and harmoniously in response to some identified or over-arching numeracy issue or inquiry.

Tanner *et al.*(2002) provided the following four-dimensional typology which identifies and articulates the following essential strands and components that need to be planned, scaffolded and successfully implemented to ensure that school-wide numeracy development becomes a reality in a second level school context:

- the teaching and learning of mathematical knowledge, skills and attitudes in mathematics lessons
- the further development of mathematical knowledge, skills and attitudes in other subjects across the curriculum
- the use and application of mathematical knowledge and skills in other subjects, forging links between subjects
- the development of the necessary skills, knowledge and attitudes in mathematics to support effective teaching and learning in all areas of the curriculum.

When this typology is further dissected, using a deeper investigative scalpel, we can acquire additional clarity into the key dynamics and inter-relationships that need to be nurtured and implemented between the Mathematics Department and other subject departments, within the school context, together with insights into the specific role-sets that the Mathematics Department and other subject departments provide and fulfil. These differentiated role-sets can be described and summarised as follows:

- The Mathematics Department: has the primary responsibility for the substantive and explicit teaching and learning of numeracy in mathematics lessons
- The Mathematics Department: when requested, provides support and advice to other subject departments on how to teach 'numeracy moments' effectively
- Other subject departments: teach the contextualised 'numeracy moments' that are embedded within their subject syllabi
- Other subject departments: provide opportunities for students to practice the use and application of numeracy skills and competencies that had been acquired in the mathematics classes
- Other subject departments: provide opportunities for the consolidation, reinforcement and further development of numeracy
- Other subject departments: seek opportunities to use the language of mathematics, concisely and accurately, in their subject teaching.

These webs of inter-departmental conversations, sharing and inquiries into practice, that are collaboratively undertaken by the Mathematics Department and other subject departments within the school, are the pivotal and foundational scaffolds on which the construct of the thesis of school-wide numeracy development is erected. Every subject department is requested to prioritise, 'fore-court', make explicit, document and take responsibility for the successful teaching and learning of the web of 'numeracy moments' that arise in their subject teaching and learning.

The macro thesis of school-wide numeracy development is also firmly grounded in, and is framed by, the philosophy and hypothesis that the practice of numeracy teaching can be continuously and incrementally enhanced, tweaked and

improved by on-site collaborative and iterative inquiry, action research and piloting. Schools are encouraged to develop and nurture a culture and language of enquiry which will empower them to collaboratively interrogate their own numeracy teaching and learning. These systematic, progressive and collaborative on-site investigations and interrogations of numeracy practice and provision will enable the school to identify what is working well and what areas and domains need to receive additional attention and be improved. Every school should encourage and seek to develop competencies in its cohort of teachers to systematically inquire into their numeracy practices, and into the multiplicity of ways that they support students' numeracy within the rhythms of their daily subject or thematic teaching. Schools are encouraged to employ collective insights and evidence from these systematic, progressive and iterative inquiries to script and inform subsequent numeracy planning and re-alignment of whole-school numeracy practice and provision. Schools report that when a culture and infrastructure of inter- and intra-departmental collaboration and numeracy inquiry has evolved within the school, a whole-staff dimension and trans-school discourse is easier to nurture and facilitate. In this desirable reality and scenario, school-wide conversations and agreements about numeracy practice, or about the implementation of additional numeracy interventions, are more likely to evolve naturally from the reservoir of prior experience that has been forged and framed through subject departmental collaborative inquiry, and through the piloting and planning of subject-specific numeracy practice. School-wide discussion and collaboration can be also be initiated and nurtured by the pursuit of consensus and collective action on those operational issues which have a direct relevance for numeracy teaching and learning within every classroom across the school, for example:

- developing a school policy on the students' usage of calculators to support students' learning and meta-learning in class
- developing a school policy on the most effective usage of homework to support numeracy teaching and learning
- planning an intervention to respond to a perceived or detected difficulty in some First Year students' ability to read the time correctly
- organising a showcasing of numeracy activities in the school.

Some school departments report that these regular professional conversations, inquiries and investigations have been critical arteries which enabled subject departments to 'document explicitly' the many key nuances and aspects of their numeracy practice, which heretofore had been 'implicitly' undertaken and, consequently, had never been elevated to priority status within the maelstrom and intensity of their classroom interactions. David Wray (2004) describes a 'win-win' reality that flows from on-site professional conversations which became the catalysts for action-oriented, collaborative, inclusive and integrated school-wide numeracy development. He claims that when subject teachers are provided with opportunities to engage in professional conversations on students'

literacy and numeracy learning, two positive outcomes are most likely to be realised: at one level, students' numeracy and literacy learning can be improved exponentially on foot of collaborative action that was nurtured and planned within these professional conversations and, secondly, subject specific learning can also be significantly enhanced.

This matrix of professional and multi-layered discussions and investigations can also be directed towards the systematic identification and investigation of common numerical misunderstandings and repeated numerical errors in students' work and which are detected by the subject practitioner. Teaching strategies and resources, which have proven to be effective in assisting students to overcome numerical misunderstandings or repeated errors, can be identified, shared and discussed within these professional discussions. Consistent and collective approaches to the remediation of repeated and frequent student difficulties in numeracy can be agreed and implemented as a direct consequence of these professional conversations.

When required, these on-site professional conversations and numeracy inquiries and investigations can also be extended across subject departments, to script, encapsulate and initiate some collaboratively-agreed, short-term action research project in numeracy or the piloting of some innovative numeracy intervention. Once teachers' competencies and confidence, in performing numeracy inquiry and investigation, are nurtured and developed within subject departments, numeracy enquiry and strategic planning can now move to an integrated phase of inter-departmental conversations, sharing, planning and documentation. Initial inter-departmental conversations can be stimulated by focusing on sharing best practice on the teaching of the 'shared numeracy moments' that co-exist in themes that over-arch and transcend curricular boundaries.

While acknowledging and affirming the regular success that contemporary second level schools have in supporting and enhancing students' numeracy, in ensuring that 'no student is left behind in numeracy' and in producing cohorts of highly numerate students at the completion of senior cycle schooling, many of these same schools would acknowledge that they have not simultaneously prioritised the development of a culture of teacher inquiry as a means of further professionalising existing numeracy practices.

Studies undertaken by various researchers (Thompson *et al*., 2005; Stephens, 2009; Lamb *et al*., 2004; Hiebert and Grouws, 2007; Slavin and Lake, 2007 and Busatto, 2001) have identified the following on-site dynamics, supports and developments as key and significant contributors to the implementation of effective school-wide numeracy development and the attainment of improved outcomes in students' numeracy:

- The principal and key 'link' teachers provide strong numeracy leadership in the school.
- There is a shared vision, clarity of purpose, sense of urgency and selection of achievable goals for the teaching and learning of numeracy within the school.
- There is a primary focus on the teaching and learning of numeracy and on students' numeracy outcomes. Numeracy teaching is prioritised, purposeful and differentiated.
- There are high expectations for each student's numeracy learning and outcomes.
- The school provides a secure and stimulating numeracy learning environment. Students are encouraged to be innovators and risk takers in their numeracy learning. Students' voices are included in the decision making process.
- There is a school-wide commitment to continuous consolidation and enhancement in students' numeracy.
- The alignment between teaching, learning, formative assessment and formative feedback to students is collaboratively investigated, prioritised and emphasised in conversations when numeracy planning is undertaken.
- An inclusive community of numeracy practice is nurtured and developed in the school.
- Diagnostic assessment is used as a conduit for the early identification of students at-risk in numeracy learning.
- Teachers are encouraged to develop a good sense of where students are coming from and what they can do in numeracy.
- If required, the effective school allocates a significant block of time each day to the teaching of numeracy to underachieving students.
- The purpose of the learning task in numeracy, the desired standard of result and the effort that is required to succeed are consistently made clear to each student.
- Regular, rich and formative assessment tasks are consistently used to ensure the accurate matching of the teaching lesson to the student's numeracy abilities.
- Parents are encouraged to support and become actively involved in their students' numeracy learning.
- Subject teachers' interrogations and investigations of practice are scripted by the philosophy of continuous improvement and a belief that there is always room for improvement in numeracy practise.
- There is a focus on collective inquiry, evidence gathering to inform decision making and collaborative problem solving. The principal and teachers together interrogate students' numeracy achievement data, hypothesise about the reasons for some students learning, or not learning, to their potential; gather data to test their hypotheses; develop and implement strategies and innovations to improve these students' numeracy, and discard those strategies that do not lead to improvement.
- Teachers are encouraged to participate in a range of on-site numeracy CPD

opportunities and activities, including: peer observation, lesson study, action research, case studies and study groups.
- Students' numeracy learning is consolidated and accelerated through the provision of multiple opportunities for students to engage in co-operative learning.
- Teaching resources are re-aligned, sourced or developed to support the teaching of numeracy.
- Numeracy monitoring and accountability practices are planned, timely and integrated.
- The potential of clustering with primary schools and with other second level schools (and universities) is encouraged and investigated.

Feedback that I received from some second level schools, that have embarked on the initiation and implementation of school-wide numeracy development, suggest that there are certain 'health warnings' that need to be flagged, interrogated, parsed and assimilated into the planning of school-wide numeracy development. The following advice and 'health warnings' were articulated by practitioners in these schools:

- Clarify and identify the core dynamics of school-wide numeracy development. Don't confuse maintenance catalysts with the core dynamics. Essentially, the core focus of the thesis of school-wide numeracy development is the effective and successful teaching and learning of numeracy across the curriculum. The mere and insular positioning of a spurious numeracy poster on the students' notice-board or in the school foyer – without any introductory explanation or rationale being given to students, or without any connection being forged between the poster and its content, and the corpus of in-class numeracy activities or interventions – will do little to advance school-wide numeracy development in that school. At most, this poster or graphic may attract initial curiosity and interest in some students, but its appeal is certainly likely to be short-lived and transient
- Emphasise and prioritise the participatory, inclusive, expansive and school-wide dimension of whole-school numeracy development. The nurturing and establishment of a culture of shared ownership and shared responsibilities for students' numeracy, across all subject departments, can be personified and embedded in the creation of a community of numeracy practice where a 'link teacher' from each subject department participates. In this collective and inclusive reality, the school's numeracy coordinator or 'overall link teacher' is supported collegially and does not have to undertake strategic numeracy planning in isolation.
- Use a rich, extended and eclectic assessment template for monitoring and evaluating students' performance in numeracy. Employ principles from the research undertaken into 'Assessment for Learning' to script numeracy assessment practices. (Gardner, 2005).

- Dovetail, synchronise and align the thesis of school-wide numeracy development with other concurrent strands of change. The era of having to assimilate and accommodate only one singular change and innovation in the second level school firmament at any one time, is long gone! In the contemporary reality of schools, management and teachers have to manage, synchronise and make sense of the various strands of policy priorities and curricular change that simultaneously impact on the planning landscape of their contemporary second level school. Fortunately, the thesis of school-wide numeracy development is compatible with all of the current host of macro change orientations and change blueprints, for example:

    - SSE (acquiring evidence to inform planning and decision making)
    - Project Maths (emphasis on context in the teaching and learning of mathematics)
    - Junior Cycle Reform (placing an intrinsic emphasis on numeracy within subject specifications and within key skills development together with the option to assimilate and prioritise students' numeracy development into the design of short courses)
    - National Literacy and Numeracy Strategy (the seminal – and on-going and parallel – prioritisation of students' numeracy learning and numeracy outcomes).

When a second level school has fully demystified, assimilated, initiated, implemented and 'institutionalised' the culture of school-wide numeracy development – with roles and responsibilities for students' numeracy learning and outcomes being clarified and shared across the entire teaching spectrum - then that school can begin to tell an extended and more comprehensive story of its care for all its students as exemplified and evidenced by its continuous pursuit of optimum outcomes in students' numeracy and its parallel search for excellence in its integrated school-wide numeracy teaching.

Insights from research literature on school development planning and effective organisational change advise that the journey and pathways to school wide numeracy development need to be strategically and systematically planned, coordinated, monitored and managed. The pathways and journey to the establishment and realisation of successful school-wide numeracy development can be meandering and protracted. Schools need to be patient, determined and resilient in this endeavour. We should never forget the stark contention of Brynner and Parsons (1999) – researchers with the National Numeracy Strategy (UK) – who categorically claim that *'poor numeracy skills are a greater impediment to life chances than poor literacy skills'.* For all our students' sake, effective school-wide numeracy development is well worth striving for in our second-level schools.

REFERENCES

Busatto, S. (2001) What's making the difference? Numeracy Research in New South Wales Primary Schools Project. Department of Education and Training, New South Wales, (unpublished).

Brynner, J. and Parsons, S. (1999) Does Numeracy Matter? Lincoln, The Basic Skills Agency.

Cockcroft, W.H. (1982) Mathematics Counts: A Report into the Teaching of Mathematics in Schools. London, HMSO.

Fullan, M. (2007) The New Meaning of Educational Change. New York, Teachers College Press.

Hiebert, J. and Grouws, D. A. (2007) The Advantages and disadvantages of Statewide and/or National Tests. 9th Roundtable Conference, Sydney.

Kemp, M. and Hogan, J. (2000) Planning for an Emphasis on Numeracy in the Curriculum. Adelaide, Australian Association of Mathematics Teachers Incorporated.

Lamb, S., Rumberger, R., Jesson, D. and Teese, R. (2004) school performance in Australia: results from analyses of school effectiveness. University of Melbourne, Centre for Post-compulsory Education and Lifelong Learning.

Morony, W. and Brinkworth, P. (Eds.) (2002) Springboards into Numeracy: Proceedings of the National Numeracy Conference 4-5 October 2002. Adelaide.

Slavin, R. and Lake, C. (2007) Effective programmes in middle and high school mathematics: a best evidence synthesis. Maryland, John Hopkins University.

Stephens, M. (2000) Identification and evaluation of teaching practices that enhance numeracy achievement. Sydney, Australian Association of Mathematics Teachers.

Stephens, M. (2009) Numeracy in practice: teaching, learning and using mathematics. Paper 18, June, Victoria, Department of Education.

Tanner, H., Jones, S. And Davies, A. (2002) Developing Numeracy in the Secondary School: a Practical Guide for Students and Teachers. London, David Fulton Publishers.

The National Strategy to Improve Literacy and Numeracy among Children and Young People 2011-2020 (2011). Dublin, Department of Education and Skills.

Thompson, S., Rowe, K., Underwood, C. and Peck, R. (2005) Numeracy in the early years: Project Good Start, Final Report. Camberwell, Victoria, Australian Council for Educational Research.

Wray, D. (2004) "Literacy: a cross-curricular skill" in Learn 2004, Volume 26, pp. 62-69. Dublin, ILSA.

JERRY McCARTHY

Jerry McCarthy is a former chairperson of ILSA and former editor of *Learn*. He has been involved in mathematics and numeracy education for over forty years. He is an experienced and well-known provider of numeracy CPD to second level schools and on third level courses.

Teaching Comprehension to Pupils with Learning Difficulties

Aoife Brennan

Introduction

Reading is an essential skill to acquire in order to succeed in the education system and in the wider world. The purpose of any text is to convey a message, from the simple "STOP" road sign to the newspaper article. Without the skill of reading, access to meaning and messages is inhibited and life can present as a constant challenge. Reading is the first of the traditional "three R's" and many teachers and indeed children see it as the most important skill to be mastered in primary school (Wray and Medell, 1991). There is a constant stream of research around the teaching of reading and much debate over the most effective teaching strategies. What emerges time and again is that reading is a multi-layered activity. It is not simply decoding words on a page; it also involves comprehension of the text. In fact, it could be argued that "reading is comprehension" (Rasinki *et al.*, 2003, p.1). However, comprehension is not a simple process. No two individuals comprehend in the same way and effective comprehension requires the development of a wide range of skills and strategies over time (Rasinki *et al.*, 2003). In this paper, the composition and the teaching of comprehension will be examined. The barriers to comprehension for pupils with learning difficulties will be explored and finally, effective strategies for the teaching of comprehension will be discussed.

The Essence of Reading

Reading involves "extracting and constructing meaning from text" (Collins Block, Gambrell, Pressley, 2002, p.25). In the constructivist context, learners make meaning through connecting what they learn to what they already know. Similarly, when good readers comprehend a text, they make meaning by using their prior knowledge. In other words, the reader draws on background or prior knowledge to relate to the text. By practising the teaching of effective comprehension strategies the principle of Vygotsky's zone of proximal development is engaged. The teacher uses discussion or social interaction to scaffold the student to extend his or her thinking and to share ideas about the text. Comprehension therefore, "is a social constructivist process" (McLaughlin, 2003, p.3).

Comprehension was once seen as something that evolved naturally after oral language and decoding instruction, rather than a skill that had to be taught.

However, it is now acknowledged that comprehension is a complex process involving inferential and evaluative thinking (Fielding and Pearson, 1994). In other words comprehension is a process of developing understanding and interpretation or as Durkin put it "the essence of reading" (cited in NRP, 2000, p.13). Keene (2007) discusses her personal experience of learning to read. She remembers being taught to identify the main ideas in the text and answering comprehension questions at the end of the story, but the possibility of looking at layers of meaning in a text was not considered. Text on a page was a "literal, finite truth that wasn't challenged by the reader" (Keene and Zimmerman, 2007, p3). Keene's experience is not uncommon. Students are often not challenged to use higher-order thinking skills when responding to text (King, 2006).

Westwood (2003) identifies four levels of comprehension: literal comprehension, which is understanding the factual information in the text; inferential, which requires reading between the lines of the text; critical reading, that is making judgments about the text and creative reading which involves producing new ideas or insights about the text. However, many comprehension activities in classrooms often do not require responses beyond the literal level or the recall of facts (Westwood, 2003). When discussing comprehension it is often asked, "What do good readers do?" Keene and Zimmerman (1997) point out that skilled readers comprehend what they are reading as they read. They know their purpose for reading and can identify what text requires of them. The effective reader is metacognitive. S/he uses a range of skills to comprehend the text and to further understand it. Such skills include: using prior knowledge, determining the most important ideas in the text, asking questions, visualising the material, drawing inferences, synthesising, and evaluating the text (Keene and Zimmerman, 1997).

The *Primary School Curriculum English Teacher Guidelines* (NCCA, 1999) promotes the development of comprehension skills such as analysis, prediction, summarisation, deduction, synthesis and evaluation as necessary to determine the full meaning from text. In fact the *Primary School Curriculum* identifies ten comprehension skills though only five of these correlate with international research – prediction, summarisation, inference, synthesis and evaluation (RAI, 2011). In addition to using effective comprehension strategies, good readers display other important characteristics as outlined in the research of the National Assessment of Educational Progress (NAEP) in the United States. The NAEP and later the RAND Reading Study Group identified six attributes of good readers which directly correlate with comprehension. Good readers display positive attitudes in relation to reading. They have a good level of reading fluency which allows for concentration on the meaning of the text, and they use prior knowledge to make meaning of the text. They comprehend by "extending, elaborating and critically evaluating the meaning of the text", they use a range of strategies to gain meaning from what they are reading and they also read many different types of text for many different purposes (Collins Block *et al.,* 2002,

p.4). When considering the vast range of skills and attributes of a proficient reader, it becomes apparent that teaching these skills to all pupils, especially pupils with a learning difficulty, is a daunting and complex task.

A Balanced Approach to the Teaching of Comprehension Strategies

Since Dolores Durkin's research on comprehension instruction in the United States in 1978, there has been a wealth of international research on the teaching of comprehension. In the course of her research, Durkin discovered that there was very little comprehension instruction in upper-elementary grades and, rather than teaching strategies for comprehension, teachers asked comprehension questions at the end of the text to test the pupils (Collins Block *et al.,* 2002). Considering the lack of research in this area at the time, this may not be surprising. However, despite the volume of current research in this area, a similar deficiency is still apparent in current practice (Pressley, 2000, RAI, 2011).

The *Primary School Curriculum English Teacher Guidelines* (NCCA, 1999) acknowledges that there has been a tradition of teaching comprehension through written exercises in middle and senior classes. However, the curriculum states that comprehension can be much more effectively developed through discussion under the guidance and prompting of the class teacher (NCCA, 1999). Despite this recommendation, comprehension strategy instruction has been identified as one of the weakest areas in the teaching of reading in Ireland (RAI, 2011). Textbooks present pupils with comprehension questions at the end of the text, but often pupils are not taught how to answer these questions effectively (King, 2006). Under the National Literacy and Numeracy Strategy (DES, 2011), primary schools must now use standardised testing to assess pupils' performance in literacy in 2nd, 4th and 6th class. However, while beneficial for screening, standardised tests do not provide detail about the types of difficulty a pupil may have which could inform teachers' instruction in the classroom (RAI, 2011). It is important that a continuum of assessment is used to inform the teaching of comprehension as outlined in the assessment guidelines for schools (NCCA, 2007). International research promotes a balanced approach to literacy instruction (RAI, 2011). The *Primary School Curriculum* (NCCA, 1999) also highlights the value of using a wide range of approaches in the teaching of reading. However, prediction is the only comprehension strategy recommended for use from junior infants to second class in the curriculum. The *Primary School Curriculum* advocates the development of the higher order comprehension strategies from the middle classes onwards, while reading accuracy and fluency is prioritised by the curriculum in the early years. Yet current research suggests that the teaching of comprehension strategies is also essential from the start of reading instruction (Pressley, 2000, Westwood, 2003).

Barriers to Comprehension for Pupils with Learning Difficulties

The National Reading Panel (2000, p.13) identifies comprehension as being "critically important to the development of children's reading skills and therefore

to the ability to obtain an education." Yet for many children with learning difficulties, reading comprehension is a constant challenge for various reasons. Collins Block *et al.* (2002) identify that lack of attention to developing oral language ability may impede reading comprehension development. Learning to read is a developmental process rooted in oral language development. The *Primary School Curriculum* (NCCA, 1999) identifies that competence in oral language needs to be developed before formal reading instruction begins. In order to succeed in reading and written comprehension, oral and aural comprehension must firstly be developed. A student may be able to decode the text, but not understand what it means. In this case instruction may need to focus on vocabulary building and pre-teaching difficult vocabulary before reading. In its report, *Teaching Children to Read,* the National Reading Panel found that the teaching of vocabulary greatly benefits reading comprehension and that a variety of methods is more effective than any single teaching method (NRP, 2000).

Westwood (2003) identifies a number of problems that may affect comprehension, one of which is readability of the text. It is important that the text is matched to the pupil's own reading level in order to increase comprehension. Pupils may also have problems with decoding or reading fluency, which can result in loss of meaning. Work on word-identificiation skills may be necessary to improve decoding and reading fluency. The reading rate of the pupil may also cause problems, as reading very slowly or too quickly may also affect comprehension levels. Very slow reading can result in the reader not retaining information for long enough to be understood, while the comprehension of the reader who reads very quickly may be impeded as the reader may overlook important detail. Sequencing may also be a problem area for pupils with comprehension difficulties. Students need to be taught how to sequence through appropriate comprehension activities such as sequencing poems, familiar stories, recipes and so on. Visualisation of the text is a crucial comprehension strategy. However, often students with poor comprehension need to be taught how to visualise. Some students may have difficulty recalling information from the text. Recall can be improved when the text is connected to the reader's own experience, for example through the language experience approach (Westwood, 2003).

Overcoming the Barriers to Comprehension

Improving language skills

In congruence with international research around reading comprehension, King (2006) and Westwood (2003) emphasise the importance of teaching comprehension skills and strategies in an explicit and direct way. King (2006) identifies developing language as an essential skill for reading comprehension. In some cases there may be a discrepancy between the language of the pupil and the language of the text. One method of overcoming a language barrier is to use the language experience approach. This involves using the child's own language to

create reading material for the child under the guidance of the teacher. The motivation to read is also a key factor in the development of comprehension skills. Research has shown that motivation and achievement are connected (Collins Block *et al*, 2002). With the language experience approach, it is possible to use the pupil's own interests to produce reading material and the teacher can work with the pupil at his or her level of competence (Westwood, 2003). Therefore, the pupil is more likely to be motivated and interested in the text. Teaching students how to generate their own questions about the text can also benefit language skills (Collins Block *et al*., 2002; Westwood, 2003; McLaughlin, 2003; and King 2006). To develop this skill, pupils could exchange Language Experience Approach (LEA) books and ask each other questions about what they have written. Some pupils may also have problems with understanding expressions and sayings, homophones, syntax and structure. These components need to be taught explicitly in order for pupils to access the meaning of text (King, 2006).

Teaching Cognitive strategies

In line with current research, RAI advocates using a strategic approach to the teaching of comprehension from the earliest stages of children's reading development based on the strategies of "prediction, visualisation, making connections, questioning, clarifying, determining importance, inference and synthesis" (RAI, 2011, p9). *Building Bridges of Understanding* is a comprehension programme, which has been specifically designed to develop these strategies with the aim of improving comprehension (MIC, 2011). It provides details of how each strategy can be taught in the classroom through teacher modelling and think aloud. Teacher modelling is a common thread throughout the research on the teaching of comprehension strategies (Pearson and Dole, 1998; Collins Block *et al.,* 2002; Westwood 2003). In order for pupils with learning difficulties to grasp how to use comprehension strategies, s/he needs to see the strategies in use. Westwood (2003) maintains that reading comprehension skills can be improved when teachers model and demonstrate effective reading strategies. PQRS is an example of a reading comprehension strategy. In PQRS the pupils preview the text, generate questions about the text, read the text carefully, read again if necessary and, finally, summarise the text by identifying the main ideas (Westwood, 2003).

Reciprocal teaching has proven to be a successful approach to teaching comprehension strategies to pupils with learning difficulties and indeed all pupils. In this approach teachers and students work together in small groups to develop cognitive strategies for comprehension. The teacher models effective comprehension skills with the aim that the pupils will eventually use these skills independently. This approach places emphasis on encouraging students to provide instructional support to each other (Rosenshine and Meister 1994). Duke and Pearson (2002) outline a similar model of comprehension instruction. Firstly, the pupil is taught explicitly what the strategy is and how and when it

should be used. The teacher models the strategy and then the teacher and pupil use the strategy together. The teacher continues to guide the pupil in the use of the strategy, gradually releasing responsibility to the pupil until the pupil can use the strategy independently.

Questioning is key

Successful comprehenders question what they are reading while they read (Owocki, 2003). In order for pupils to successfully engage in comprehension they must be taught how to move from the literal level of thinking to the inferential, critical and creative levels of comprehension (King, 2006). Questioning by the teacher must start at the literal level but, in order to foster effective comprehension strategies, the questioning needs to involve the inferential, critical and creative levels of comprehension. It is useful to consider Bloom's Taxonomy (1956) when composing questions to challenge higher-order thinking skills. By devising questions according to the levels of knowledge, comprehension, application, analysis, synthesis and evaluation, each level of comprehension is addressed. Research has shown that pupils need to participate in "high levels of questioning in an interactive setting to achieve high levels of comprehension" (Taylor *et al.,* 2002, cited by Concannon in Dwyer and Shiel, 2007). To facilitate this, pupils must have an understanding of the question and answer relationship. Question and Answer Relationship (QAR) instruction teaches pupils about "in the book questions" where the answer is found in the text and "in my head questions" which require the reader to think about the text and draw on prior knowledge and experience. It is a metacognitive strategy, which provides a shared language with which pupils can communicate to the teacher about their progress and ask for help if necessary (Raphael and Au, 2005). In their research into question and answer relationships, Raphael and Au (2005) discovered that pupils' reading and listening comprehension skills improved when engaged in QAR instruction on a consistent basis. Pupils developed confidence in answering questions effectively and in generating their own questions around the text. Training pupils to generate questions about the text is a key comprehension strategy, as it gives the reader control over the text. The pupil has to actively engage in processing the text, which in turn benefits the comprehension ability of the pupil (Concannon in Dwyer and Shiel, 2007).

Comprehension routines

Collins Block *et al.* (2000) recommend guided reading as an instructional method to teach comprehension effectively. In this method the teacher teaches comprehension strategies to small groups of students of a similar reading ability. Guided comprehension as outlined by McLaughlin (2003) is a similar method. In guided comprehension the teacher starts with whole-group instruction, moving to small group instruction and student-facilitated comprehension centres and routines where students work individually, in pairs or in small groups on activities that integrate reading, writing and discussion. The teacher then moves back to whole-group instruction where whole-group reflection is facilitated.

McLaughlin (2003) argues that the guided comprehension model is a dynamic framework that caters for pupils' individual needs.

Time for actual reading has been identified as crucial for developing comprehension (Fielding and Pearson, 1994; Duke and Pearson, 2002; Westwood, 2003). Without practicing the application of comprehension skills and strategies that have been learned, readers will not improve their literacy skills. Pupils need to experience reading real texts for real reasons, and to experience a range of genres. Pupils will not become successful comprehenders if they do not experience reading the different types of text that they will encounter in real life, from storybooks to how-to instructions. The classroom needs to provide an environment rich in vocabulary and development of ideas, through discussion and experience facilitated by the teacher. Pupils need to be taught how to decode accurately and also spend time writing texts for others to comprehend. Finally pupils should be actively involved in high-quality discussion about texts through pupil-to-pupil and teacher to pupil talk (Duke and Pearson, 2002).

Conclusion

Students with little knowledge of effective comprehension strategies experience less success in their reading compared to students who have substantial knowledge of these strategies, regardless of the type of reader the student is (PISA, 2009). King (2006) points out that skills taught by the learning support or resource teacher, are seldom transferred by the pupil to the classroom. According to King, it is imperative that class teachers teach the same comprehension strategies on a consistent basis. Collins Block *et al.* (2002) and Raphael and Au (2005) highlight the importance of in-depth professional development for teachers in the teaching of comprehension. They maintain that teacher learning which supports a whole-school approach to the teaching of comprehension strategies will increase literacy success for all pupils.

In this paper, strategies for teaching comprehension to pupils with learning difficulties have been discussed. What emerges from research in this area is that students with learning difficulties do not need different instruction from their peers. They learn to read and comprehend by learning the same strategies and using the same materials provided in regular classrooms. However, pupils with learning difficulties do need highly structured and intense instruction over many years (Block *et al.,* 2002). It is evident that effective comprehension instruction encompasses a variety of teaching methods and routines. The pupil needs to be provided with sufficient time for actual reading and explicit instruction in comprehension strategies. The pupil also needs to be engaged in collaborative learning and student-teacher sharing of reading responses (Fielding & Pearson, 1994). Reading comprehension should be the focus of any literacy programme from the beginning and not something that comes after learning how to read (Westwood, 2003, NCCA, 2012). Teaching comprehension strategies to the

average pupil is an arduous task. Teaching comprehension strategies to the pupil with learning difficulties is an even greater task. However, regardless of difficulties, most children can acquire skills in comprehension through the implementation of effective teaching strategies (Duke & Pearson, 2002; Westwood, 2003).

REFERENCES

Bloom, B. S., Engelhart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. R. (1956), *Taxonomy of Educational Objectives: The Classification of Educational Goals; Handbook I: Cognitive Domain,* New York, Longmans, Green.

Collins Block, C., Gambrell, Linda B. and Pressley M. (2002), I*mproving Comprehension Instruction Rethinking research, Theory, and Classroom Practice,* San Francisco: Jossey-Bass.

Courtney, Ann and Gleeson, Martin (2011), *Building Bridges of Understanding: Theory and Actual Classroom Practices in Multiple Comprehension Strategy Instruction,* Limerick; Mary Immaculate College.

Department of Education and Skills (2011), *National Literacy and Numeracy Strategy for Learning and Life, The National Strategy to Improve Literacy and Numeracy among Children and Young people* [Online], available from http://www.education.ie/en/Publications/Policy-Reports/lit_num_strat_summary.pdf [Accessed 3.11.12].

Duke, Nell K. and Pearson, P. David (2002), "Effective Practices for Developing Reading Comprehension" *What Research Has to Say About Reading, Third Edition*. International Reading Association, http://www.nationalgeographic.com/ngextreme explorer/pdf/effectivepractices.pdf [Accessed 22.10.12].

Dwyer, Bernadette and Shiel, Gerry (2007), *Literacy at the Crossroads: Moving Forward, Looking Back*, Reading Association of Ireland; Dublin.

Fielding, Linda G. and Pearson, P. David (1994), "Reading comprehension: What Works" *Educational Leadership* Vol. 51, No. 5, [Online], available from http://www.educationalleader.com/subtopicintro/read/ASCD/ASCD_341_1.pdf [Accessed 21.10.12].

Keene, Ellin Oliver and Zimmermann, Susan (1997), *Mosaic of Thought,* Portsmouth, NH: Heinemann.

King, Fiona (2006), *Special Education in Irish Classrooms: A Practical Guide*, Dublin; Primary ABC.

National reading Panel (2000), *Teaching Children to Read: An Evidence-Based Assessment of the Scientific research Literature on reading and its Implications for Reading Instruction,* [Online], available from http://www.nichd.nih.gov/publications/nrp/upload/smallbook_pdf.pdf [Accessed 24.10.12].

NCCA (1999), *Primary School Curriculum*, Dublin: Stationary Office.

NCCA (2010), *Curriculum Overload in Primary Schools An Overview of National and International Experiences,* [Online] available from http://www.ncca.ie/en/Curriculum_and_Assessment/Early_Childhood_and_Primary_Education/Primary_School_Curriculum/PSN_Curriculum_Overload/Overview_national_international_experiences.pdf [Accessed 27.10.12].

NCCA (2007), *Assessment in the Primary School Curriculum, Guidelines for Schools* [Online] available from http://www.ncca.ie/en/Curriculum_and_Assessment/Early_Childhood_and_Primary_Education/Primary_School_Curriculum/Assessment/Primary_assessment_gl.pdf [Accessed 3.11.12].

NCCA (2012), *Literacy in Early Childhood and Primary Education* (3-8 years), [Online], available from http://www.ncca.ie/en/Curriculum_and_Assessment/Early_Childhood_and_Primary_Education/Primary_School_Curriculum/Language_Curriculum_Research_Reports_/litreport.pdf [Accessed 20.10.12].

OECD (2009), *PISA 2009 Results: What Students Know and Can Do:Student Performance in reading, Mathematics and Science*, [Online], available from http://www.oecd.org/pisa/pisaproducts/48852548.pdf [Accessed 27.10.12].

Pressley, Michael (2000), *Comprehension Instruction: What Makes Sense Now, What Might Make Sense Soon*, [Online], available from http://www.readingonline.org/articles/handbook/pressley/ [Accessed 20.10.12].

Raphael, Taffy E. and Au H. Kathyrn (2005), QAR: *Enhancing comprehension and test taking across grades and content areas, The Reading Teacher Vol. 59, no. 3 pp. 206-220. www.jstor.org/stable/20204340* [Accessed 09/07/14].

Reading Association of Ireland (2011), *A Response by the Reading Association of Ireland to the Department of Education and Skills Document "Better literacy and Numeracy for Children and Young People: A Draft Plan to Improve Literacy and Numeracy in Schools* http://www.reading.ie/sites/default/files/documents/RAI_Response_to_Draft_National_Plan.pdf [Accessed 22.10.12]

Pearson, P. David and Dole, Janice, A. (1998), *Explicit Comprehension Instruction: A Review of research and a new Conceptualisation of Instruction*, [Online], available from https://www.ideals.illinois.edu/bitstream/handle/2142/17914/ctrstreadtechrepv01988i00427_opt.pdf?sequence=1 [Accessed 20.10.12].

Rasinski, Timothy V, Padak, Nancy D., Weible Church, Brenda, Fawcett, Gay, Hendershot, Judith, Henry, Justina M., Moss, Barabar G., Peck, Jacqueline K., Pryor, Elizabeth (Betsy), Roskos, Kathleen (2000), *Teaching Comprehension and Exploring Multiple Literacies: Strategies from the Reading Teacher*, International Reading Association; Delaware.

Rosenshine, Barak and Meister, Carla (1994), 'Reciprocal Teaching: A Review of the Research', *Review of Educational Research,* Vol. 64, No. 4, pp. 479–530.

Westwood, Peter (2003), *Commonsense methods for Children with Special Educational Needs*, 4th edition. London: Routledge Falmer.

Wray, David and Medwell, Jane (1991), *Literacy and Language in the Primary Years*, Routledge: London, New York.

AOIFE BRENNAN

Aoife Brennan is a learning support/resource teacher in Star of the Sea BNS, Sandymount, where she has taught since 2004. She graduated from St. Patrick's College, Drumcondrain 2004 and, since then has pursued postgraduate studies, including the Postgraduate Diploma in Leadership in Education (NUIM), the Postgraduate Diploma in Learning Support and Special Needs and the M.Ed. in Education (TCD). She is currently engaged in the Doctorate in Education programme in St Patrick's College, specialising in Special and Inclusive Education.

Words Matter: Learning Support for the Vocabulary of Struggling Readers

Ellen Reynor

Introduction

This article highlights the importance of vocabulary development and instruction for pupils with reading and learning difficulties throughout the primary school years. Instructional approaches to vocabulary building and strategies to encourage word awareness that may be applied across a range of school settings are outlined and discussed.

The Importance of Vocabulary

It has been argued that in the crowded modern curriculum, the focus of literacy is often on decoding skills (Biemiller, 2001), with phonics programmes dominating the time spent on literacy instruction, and language skills such as vocabulary building pushed down the list of priorities. But the importance of vocabulary cannot be overstated. Our ability to live and work with success in a complex modern world is largely influenced by our language skills and word knowledge (Pikulski & Templeton 2004). There are substantial differences in the vocabulary of children as early as preschool and these differences widen as the children progress through school. In fact by second class, the lowest 25% of English-speaking children with the lowest vocabulary are on average already two years behind their peers who have average vocabulary and four years behind the 25% of children who have the largest vocabulary (Biemiller, 2011). These differences are occurring *before* the child can really be influenced by their own reading ability or volume of reading, as the majority of children have not yet become 'unglued from print' (Chall, 1983). The largest source of these differences in vocabulary can be attributed to the language that is used around and with the child in the home environment (Hart & Risley, 1995). So an emphasis on oral language and vocabulary instruction and support from the early school years is vital.

There is also a strong relationship between vocabulary and reading ability. Vocabulary is an important component of effective reading comprehension (Anderson & Freebody, 1981; Nation & Snowling, 2004). In fact vocabulary knowledge supports the comprehension of a variety of texts which, in turn, aids vocabulary growth (Thompson, 1999). In addition, vocabulary is very predictive

of high levels of reading ability, and the National Reading Panel (NRP) (2000) go so far as to state that growth in reading ability relies on growth in word knowledge. Students with reading difficulties have been found to have difficulties inferring the meaning of new words from context (Bryant, Goodwin, Bryant, & Higgins, 2003), which further discourages these students from engaging with the reading process. Given the enduring link between vocabulary and reading comprehension, and the importance of reading comprehension to future success, it is imperative that children are given the instruction that helps them develop effective word-learning strategies. Research suggests that vocabulary is developed through wide, independent reading (Nagy & Anderson, 1984), but many students with reading difficulties find this process laborious and difficult with the result that they do not read, and therefore miss vital opportunities for vocabulary growth. In addition, it has been shown that in order to retain a new word, several encounters with that word are needed. These students experience limited word repetitions because of their limited reading, and so miss important opportunities for vocabulary building. These limitations result in what has been termed 'Matthew effects' (Stanovich, 1986), whereby avid readers develop broader and richer vocabularies, while struggling readers fall further behind, creating a cycle of disadvantage. This destructive cycle is of concern to teachers and parents alike, as inadequate vocabulary knowledge exacerbates the learning difficulties of those who are already disadvantaged as they progress through the education system (Manzo, Manzo, & Thomas, 2006).

As vocabulary is an unconstrained skill, unlike phonological awareness, it is more difficult for children with reading difficulties to acquire (Paris, 2005), and so opportunities for practice throughout their school years are essential. Children with impoverished vocabulary knowledge do not catch up with their peers under normal classroom instruction unless a strong vocabulary emphasis is added (Vadasy & Nelson, 2012). While there is no quick solution to these problems, an increase in time spent on quality vocabulary instruction each week seems like a worthy start. Stahl and Fairbanks (1986) conducted a review of studies of vocabulary instruction of children at various reading levels, and discovered that there was a statistically significant correlation between the increase in time spent teaching vocabulary (in minutes) and improvements in reading comprehension. This further validates the need for comprehensive vocabulary instruction in our schools.

Which Words to Teach?

With limits on vocabulary instruction time, it is essential that the words chosen for teaching and learning are decided upon in a principled way. How should words be selected for teaching and why? Should usefulness, importance, or familiarity be the principle used to sect words to teach? Are the words selected for writing or speaking? Should words be chosen because they appear in a wide variety of other texts? One useful lens for viewing words for instruction is the idea of tiers or levels of vocabulary (Beck, McKeown, & Kucan (2002). Beck and

her colleagues developed the notion that words have three different tiers of utility. In this classification:

> **Tier 1** consists of the most basic words in English such as *house, car, walk, live, funny, paper*. These words are used in everyday talk and rarely need instruction.
> **Tier 3** words consist of low frequency words which usually belong to specific content areas. These words are necessary for understanding the concepts of that particular area. Words in maths and science such as *nucleus*, *electron, cosmos, hypothesis, habitat*, and *photosynthesis* belong to this tier.
> **Tier 2** words occur across a variety of texts and contexts but are not likely to be used in everyday contexts. Tier 2 words are of high utility to the student and they are richer and more complex in meaning than Tier 1 or Tier 3 words. Tier Two words include words such as *product, intersection, society, maintain, merchant, robust,* and *absurd*. Consider the word *robust* for instance, which is similar to the more familiar word *strong* but goes further to incorporate meanings such as *vigorous, powerful, potent* and *sturdy,* depending on the context in which it is used. Tier Two and Tier Three words are obvious targets for rich vocabulary instruction.

There are no word lists available for any of the three Tiers. Additionally, Tier 1 and 3 words are easier to recognize than Tier 2 words. It is essential therefore for teachers to become familiar with Tier 2 words in class texts and stories. It is also important to point out that some textbooks and activity books, used in primary schools as part of literacy, identify important words for teaching (by underlining them for instance) in their stories or extracts, or in their workbook activities. While the problem of the teacher being directed by a textbook as to what words to consider for instruction is a discussion that is beyond the scope of this article, an important aspect of this is the awareness by the teacher of the type of words that are included in these textbooks, which Tier they belong to, and whether they are useful and important for vocabulary instruction. There can be various reasons why attention is drawn to certain words in textbooks. For instance words may be chosen because they are compound words, verbs, and adjectives, synonyms and antonyms, or words that contain useful letter strings. All of these words may be important for teaching, but are they important for vocabulary development? Words for vocabulary instruction, including the important Tier 2 words, need to be identified by the teacher in the texts being utilised.

Choosing Tier 2 Words for Teaching

A useful guide for choosing Tier 2 words for vocabulary development is to consider if the pupils already have ways to express the concepts represented by the word (Biemiller, 2005). Are the pupils able to explain the word by using words that are already in their vocabulary? If the answer is yes, then this word would be a useful addition to their vocabulary and will offer a more precise or

mature alternative to the known word and idea. Another consideration is the ability of a word to help the pupils describe a situation or person with greater specificity. These words should be more than merely synonyms for the known word, but they should add richness or complexity to the known word. A further consideration in choosing Tier 2 words is the usefulness of the word in supporting pupils' understanding of the text, extract, story, or concept being taught.

The number of words chosen for teaching in a lesson is really dependent on the ability of the pupils to process, manage, and retain these words (Biemiller, 2011), but because children with reading difficulties have particular difficulties in these areas, the number of words taught at one time should be small. Teaching should be organized into manageable chunks, and opportunities to revisit and discuss the new words should be provided regularly because children with reading difficulties may have difficulty generalizing these words to new contexts (Graves & Silverman, 2011).

There are many opportunities here for the class teacher and learning support teacher to work together on vocabulary instruction for pupils with learning difficulties. As students with learning and reading difficulties require more intensive and varied opportunities to interact with words and new vocabulary these learners will benefit from more individualized teaching and opportunities to work in small groups (Vadasy & Nelson, 2012). If certain words are being chosen in class for teaching, the learning support teacher can use these words to provide the deeper learning opportunities required by these learners (Bryant, Goodwin, Bryant, & Higgins, 2003). The learning support teacher can also source Tier 2 words for teaching. Some texts, however, may contain only Tier 1 words. If so, alternative Tier 2 words to the simple words, which are similar in meaning, may be chosen for teaching (Biemiller, 2005). For example if the word *sleepy* is in the text, the word *drowsy* may be chosen as an alternative for instruction. Likewise with words such as silly, *absurd* may be taught, or with the word *same*, *identical* may be chosen for teaching.

Encouraging Rich Verbal Learning Environments and Word Consciousness

Stahl (2005) maintains that traditional vocabulary instruction such as writing and learning definitions of words, does not teach children important word learning strategies and the appreciation of words. Nagy (2005) argues that the traditional method of definition-based vocabulary learning in certain teaching contexts is not a particularly effective approach to teaching vocabulary and improving comprehension. Furthermore, it has been found that attention to learning word meanings in our classrooms tends to be superficial and brief (Blachowicz, Fisher, Ogle, & Watts-Taffe, 2006). Research by Cunningham and Stanovich (1998) found that the oral language produced in everyday communication between adults for instance, and on popular T.V. programmes, contain less challenging vocabulary than that found in many children's books. So

it is important that vocabulary development should be nurtured at every opportunity in our classroom so that high quality verbal learning is encouraged and promoted (Kucan, 2012).

Verbal discussion may be the primary vocabulary-learning method for many struggling readers. Students need to hear and speak the intended target vocabulary through oral language activities such as discussion groups and verbal interactions between teacher and pupils. Sousa (2005) emphasizes that these types of activities encourage retention of vocabulary more effectively than listening passively. Beck *et al.* (2002) recommend that teachers integrate academic and sophisticated vocabulary into their everyday conversations with pupils. Greater depth of vocabulary knowledge for pupils with learning and reading difficulties results from interactive instruction that is repeated and varied. This type of class environment supports what is termed *word consciousness* and word awareness (Beck *et al.*, 2002; Nagy, 2005).

Teaching Word Roots and Morpheme Analysis

The majority of words in the English language are combinations of morphemes such as base or root words, prefixes, and suffixes. A morpheme is the smallest unit of meaning in in a language. Free morphemes can stand alone (*help*) and are often called root or base words, while bound morphemes *(-ful, -ed)* (affixes) need to be attached to another morpheme (*helpful, helped*). Two free morphemes can combine to form a compound word (*bedtime*). Encouraging pupils to examine words in this way, to recognize and analyse word parts such as roots, prefixes, and suffixes (morphemic analysis) can support pupils in expanding their knowledge and understanding of known and unknown words (Baumann, Edwards, Font, Tereshinski, Kame'enui, & Olejnik, 2002) because it allows pupils to make connections between semantically-related words and word families (Nagy, 2005). It is also an effective way to teach content vocabulary (Tier 3), which consists of many words of Greek and Latin origin. For example *micro* is a root which means *small*. Other words can be derived from this root word such as microbe, and microchip. Some other root words belonging to content-area vocabulary are: *poly-* (many), *agri-* (field), *aqua-* (water in Latin), *hydro- (*water in Greek*), photo-* (light). Through teacher modelling, pupils gradually learn to use this type of word examination independently to build and expand their vocabularies (Anderson & Freebody, 1981). Although not all words can be broken down into root, prefix and suffix, a conservative estimate of over half of all English words are derived from Latin and Greek roots (Padak. Newton, Rasinski, & Newton, 2008). There is an obvious connection also between morphemic analysis and spelling, and research suggests that proficient readers and spellers use morphological knowledge when they read and spell, whereas struggling readers lack specific knowledge of base words and affixes (Carlisle, 1987). Arnbak and Elbro (2000) found that morphemic analysis training with a group of fourth and fifth class pupils with dyslexia increased their comprehension and spelling of morphologically complex words, and Abbott and

Berninger (1999) concluded that older struggling readers benefitted from the study of syllable structure and morphemic analysis.

Manzo and Manzo (2008) recommend that teachers watch out for unfamiliar words that may have known word parts in class textbooks and use Incidental Morphemic Analysis to teach these new words. This procedure involves:

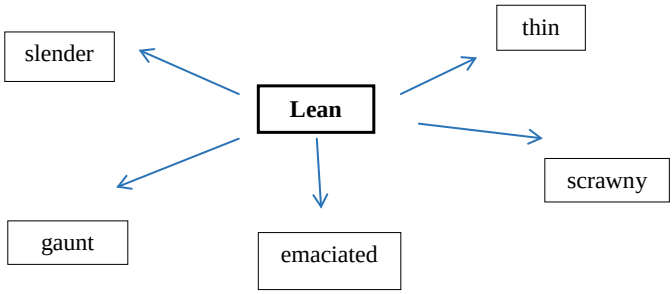
(a) Presenting the word and highlighting the word parts.
(b) Pupils discuss these morphemes and attempt to deduce the word meaning. If correctly predicted, do not tell the pupils yet.
(c) Teacher writes other 'level 1' clues under the word (easier words) and asks for predicted meanings.
(d) Teacher writes extra 'level 2' clues (word part meanings) underneath the level 1 clues and asks for further predicted meanings.

Blachowicz & Fisher (2006) recommend this method for use in remedial settings. Manzo & Manzo (2008) also identify this method as particularly appropriate for pupils who have not yet acquired a vocabulary-learning strategy. However pupils will need to have some formal teaching of popular affixes *before* teachers use this strategy. Popular prefixes, suffixes, and words accumulated by using this procedure may be put on posters, on Power Points or on the whiteboard and revisited on other occasions. Padek *et al.* (2008) compiled graded lists of the most useful roots and affixes and their meanings for teaching vocabulary at primary level and beyond. Level 1 consists of familiar vocabulary roots and affixes (*pre-, sub-, un-, -able,-less* etc.), level 2 consists of content-area words (*pro-, ad-, con-, multi-, mis- etc.*) and level 3 roots an affixes can be used for expanding word flexibility (*auto-, tele-, omni-, -phobe, -ologist,* etc.). Level 3 roots may be useful at post-primary level also. These lists may be a useful guide for teachers regarding which specific words and word parts to include in their vocabulary instruction.

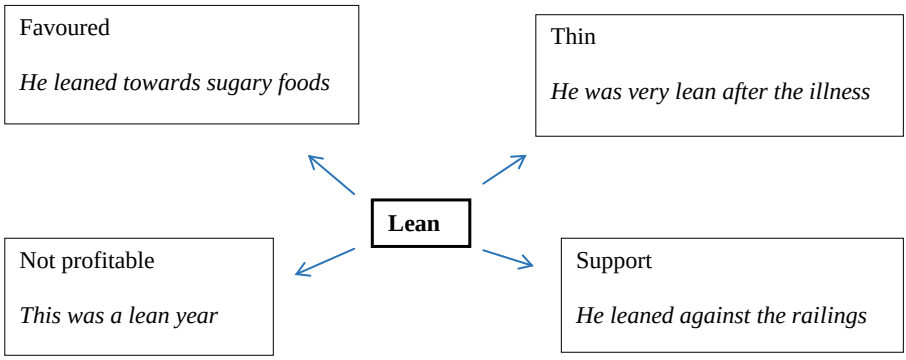
Some Useful Visual Methods for Teaching Vocabulary and Word Relationships

Semantic techniques such as semantic mapping are particularly useful for building depth of knowledge of word meanings and word concepts (Blachowicz & Fisher, 2006). They are very suitable for teaching more abstract words and ideas such as *equality* and *democracy* because these words cannot be described using one word. Semantic techniques can also be used to teach topic area words. Semantic mapping is a useful way to introduce the notion of *polysemy* (multiple word meanings) to pupils. Carlo *et al.* (2004) in their vocabulary intervention included instruction and discussion of multiple meanings which proved very effective not only for English speaking children but English language learners as well. Brainstorming and discussion as well as the use of a thesaurus are helpful in developing these word webs. Two examples of semantic mapping of the word *lean* are given below.

1. A Synonym Web



2. A Multiple Meanings Web



General Guidelines for Vocabulary Instruction

One of the most powerful approaches to vocabulary instruction is *Robust Vocabulary Instruction* (Beck *et al.* 2002). The basics of the approach are encompassed in the following sequence for teaching a new word:

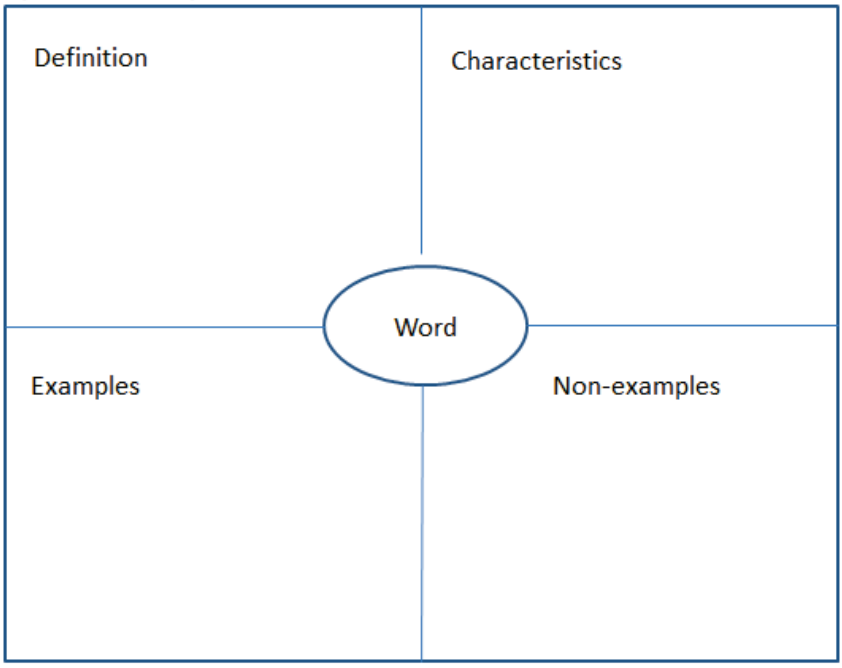
(a) Introduce a pupil-friendly definition of the word.
(b) Two or more teaching encounters of the word are essential.
(c) Provide evidence of the word in a few contexts (not necessarily at the same time)
(d) Engage pupils in activities in which they can explore the meanings of the word and relationships with other words.
(e) Have pupils create uses for the word.
(f) Encourage use of the word outside class.

Another approach is the *Frayer Method* (Frayer, Frederick, & Klausmeier, 1969). Although this is an older method and a time-consuming one, it is nevertheless a

powerful method to teach difficult words and concepts (Graves, 2008). The teaching includes the following steps:

(a) Define the attributions of the word or concept (illustrations are useful)
(b) Contrast with similar concepts or meanings which it may be mistaken for.
(c) Give examples of the concept and explain why they are examples.
(d) Give non-examples of the concept.
(e) Present both examples and non-examples to the pupils and ask them to distinguish between the two.
(f) Have the pupils present examples and non-examples of the concept and allow them explain why they are examples or non-examples. Give some feedback after this activity. Students can fill in a template for their new words like the one below.

The Frayer Model Template



Conclusion

Teaching vocabulary to pupils with reading and learning difficulties is not very different to teaching pupils without learning difficulties. Moreover, vocabulary instruction that is effective for English speakers is also effective for children who may not yet be proficient in the English language (Carlo *et al.* 2004).

Teachers need to be proactive and include a specific focus on relevant vocabulary rather than treating poor vocabulary as evidence of a particular disability (Biemiller, 2011). Some general principles for vocabulary instruction include (a) fostering active pupil discussion and engagement with words, (b) teaching word-learning strategies, (c) ensuring explicit and incidental teaching and learning of words, (d) providing repeated exposure to learned words and access to new words in different contexts (Blachowicz & Fisher, 2006), (e) selecting high-utility words for instruction using the Tier classification provided by Beck *et al.* (2002) as a guide.

In the context of the diverse group of learners teachers are very often faced with in their classrooms, consistent attention and investment in vocabulary instruction through a variety of approaches from the early years should be a priority for literacy development

REFERENCES

Abbott, S. & Berninger, V. (1999). It's never too late to remediate: A developmental approach to teaching word recognition. *Annals of Dyslexia, 49,* 223-250.

Anderson, R. C., & Freebody, P. (1981). Vocabulary knowledge. In J. Guthrie (Eds.), *Comprehension and teaching: Research reviews, 77*-117. Newark, D.E: International Reading Association.

Arnbak, E. & Elbro, C. (2000). The effects of morphological awareness training on the reading and spelling skills of of young dyslexics. *Scandinavian Journal of Educational Research, 44*(3), 229-251.

Baumann, J.F., Edwards, E. C., Font, G., Tereshinski, C., Kame'enui, E.J., & Olejnik, S. (2002). Teaching morphemic and contextual analysis to fifth grade students. *Reading Research Quarterly, 37*, 150-173.

Beck, I. L., McKeown, M. G., & Kucan, L. (2002). *Bringing Words to Life: Robust Vocabulary Instruction*. New York: Guildford Press.

Biemiller, A. (2001). Teaching vocabulary: Early, direct, and sequential. American Educator, 25(1), 24-28.

Biemiller, A. (2011). Vocabulary development and implications for reading problems. In A. McGill-Franzen & R.L. Allington (Eds.), *Handbook of reading disability research*. NewYork: Routledge.

Biemiller, A. (2005). Size and sequence in vocabulary development: Implications for choosing words for primary grade vocabulary instruction. In E.H. Hiebert & M. Kamil (Eds.), *Teaching and learning vocabulary: Bringing research to practice* (pp. 224-243). Mahwah, NJ: Erlbaum.

Blachowicz, C.L.Z., Fisher, P.J.L. (2006). *Teaching vocabulary in all classrooms* (3rd ed). Upper Saddle River, N.J: Prentice Hall.

Blachowicz, C.L.Z., Fisher, P.J.L., Ogle, D., & Watts-Taffe, S.M. (2006). Vocabulary: Questions from the classroom. *Reading Research Quarterly, 41*, 524-539.

Bryant, D.P., Goodwin, M., Bryant, B.R., & Higgins, K. (2003). Vocabulary instruction for students with learning disabilities: A review of the research. *Learning Disability Quarterly, 26*(2), 117-128.

Carlisle, J.F. (1987). The use of morphological knowledge in spelling derived forms by learning-disabled and normal students. *Annals of Dyslexia, 37*, 90-108.

Carlo, M. S., August, D., McLaughlin, B., Snow, C., Dressler, C., Lippman, D., Lively, T. J., & White, C. E. (2004). Closing the gap: Addressing the vocabulary needs of English-language learners in bilingual and mainstream classrooms. *Reading Research Quarterly*, *39*, 188-215.

Chall, J. (1983). *Stages of reading development*. New York: McGraw Hill.

Cunningham, A. E. & Stanovich, K.E. (1998).What reading does for the mind. *American Educator, 22,* 8-15.

Frayer, D.A., Frederick, W.D., & Klausmeier, H.J. (1969). *A schema for testing the level of concept mastery*. Madison: Wisconsin Research and Development Centre for Cognitive Learning.

Graves, M. F. (2008). Instruction on individual words: One size does not fit all. In E.H. Hiebert & M. Kamil (Eds.), *Teaching and learning vocabulary: Bringing research to practice* (pp.56-79). Mahwah, NJ: Erlbaum.

Graves, M.F., & Silverman, R. (2011). Interventions to enhance vocabulary development. In A. McGill-Franzen & R.L. Allington (Eds.), *Handbook of reading disability research*. NewYork: Routledge.

Hart, B. & Risley, T. (1995). *Meaningful differences in the everyday experiences of young American children*. Baltimore, MD: Brookes Publishing.

Kucan, L. (2012). What is most important to know about vocabulary? *The Reading Teacher, 65*(6), 360-366.

Manzo, U.C., & Manzo, A.V. (2008). Teaching vocabulary-learning strategies: Word consciousness, word connection, and word prediction. In A.E. Fairstrup & S.J. Samuels (Eds.), *What research has to say about vocabulary instruction* (pp. 80-05). Newark, DE: International Reading Association.

Manzo, A.V., Manzo, U. C., T Thomas, M.T. (2005). *Content-area literacy: Strategic teaching for strategic learning.* Hoboken, NJ: Wiley/Jossey-Bass.

Nagy, W.E. (2005). Why vocabulary instruction needs to be long-term and comprehensive. In E.H. Hiebert & M. Kamil (Eds.), *Teaching and learning vocabulary: Bringing research to practice* (pp.27-44). Mahwah, NJ: Erlbaum.

Nagy, W.E., & Anderson, R.C. (1984). How many words are there in printed school English? *Reading Research Quarterly, 19*, 304-330.

Nation, K., & Snowling, M.J. (2004). Beyond phonological skills: Broader language skills contribute to the development of reading. *Journal of Research on Reading, 27*, 342-356.

National Reading Panel (2000). *Report of the National Reading Panel: Teaching children to read.* Washington, D.C.: National Institute of Child Health and Development.

Padak, N., Newton, N., Rasinski, T., & Newton, R. (2008). Getting to the root of word study: Teaching Latin and Greek roots in elementary and middle grades. In A.E. Fairstrup & S.J. Samuels (Eds.), *What research has to say about vocabulary instruction* (pp. 6-31). Newark, DE: International Reading Association.

Paris, S. (2005). Reinterpreting the development of reading skills. *Reading Research Quarterly, 40*(2), 184-202.

Pikulski, J.J., & Templeton, S. (2004). *Teaching and developing vocabulary: Key to long-term reading success.* Boston, MA: Houghton Mifflin Company.

Scott, J. A. & Nagy, W.E (2004). Developing word consciousness. In J.F. Baumann & E.J. Kame'enui (Eds.), *Vocabulary instruction: Research to practice* (pp. 201-217). New York: Guilford.

Sousa, D.A. (2005). *How the brain learns to read.* Thousand Oaks, CA: Corwin Press.

Stahl, S.A. (2005). Four problems with teaching word meanngs (and what to do to make vocabulary an integral part of instruction. In E.H. Hiebert & M. Kamil (Eds.), *Teaching and learning vocabulary: Bringing research to practice* (pp.95-114). Mahwah, NJ: Erlbaum.

Stahl, S. A., & Farbanks, M.M. (1986). The effects of vocabulary instruction: A model-based meta-analysis. *Review of Educational Research, 56*, 72-110.

Stanovich, K.E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly, 21*(4), 360-407.

Thompson, R.A. (1999). Balancing vocabulary instruction with teacher-directed and student-centred activities. In S. Blair-Larson & K. Williams (Eds.), *The balanced reading program* (pp. 24-36). Newark, DE: International Reading Association.

Vadasy, P.F., & Nelson, J.R. (2012). *Vocabulary instruction for struggling readers.* New York: Guildford Press.

ELLEN REYNOR

Ellen Reynor is a lecturer in the Special Education Department in St. Patrick's College of Education, Drumcondra. She has taught in both mainstream and special school settings. She also taught for many years in a reading school in Dublin.

The Role of Drama in Supporting the Literacy Needs of Children with Dyslexia

Patti Roche

Introduction

The role and value of drama, both as a discrete subject, and as a learning tool, is ever evolving. No longer, 'the barnacle attached to the ship of serious learning' (Heathcote, 1998, 3,) it is now recognised both as a subject in its own right and as a support for other subject areas of the revised primary curriculum (Primary School Curriculum, 1999). It is hardly a coincidence that the same curriculum which assigns this new status to drama also places a major emphasis on language development. The connection between language acquisition and reading and writing is also given greater acknowledgement, and the interdependence of these skills is now at the core of literacy education (Lerner, 2000). However, it may be argued that the true pedagogical power of drama has yet to be fully acknowledged by departments of education, school boards, principals and individual teachers despite major acclamations by drama practitioners and theorists in its favour, as well as a large body of robust research which documents positive findings from using drama as a teaching tool in the field of literacy.

For children with special needs, who often fail to respond to traditional teaching methods it is crucial that we explore other models of instruction. Slavin (2009) makes the point that employing alternative teaching strategies is not just simply to make the lesson fun but to provide students with many sources of motivation to learn and remember.

The main focus of this article is on the role of drama in the instruction of children with dyslexia. It argues that drama is well placed to scaffold the literacy deficits of this cohort of students, using current literature on this subject while also making reference to the author's own classroom practice and research.

Supporting Reading Development

Many studies acknowledge that there is no quick fix for the myriad of difficulties which some children experience in learning to read, and the reciprocal effects which one deficit can have on another (Stanovich, 1986; Paris & Paris, 2003). These challenges include deficits in vocabulary (Quellette, 2006; Braze *et al.,*2007; Ricketts, Bishop & Nation, 2008), background knowledge (Miller &

Keenan, 2009), print exposure (Shany & Biemiller, 2010), phonological awareness (Lerner, 2000), comprehension (Dole, Brown & Trathen, 1996; Kendeou *et al*., 2006; Lynch *et al*., 2008) and working memory (Cain, Oakhill & Byrant, 2004; Kibby *et al*., 2004; Slavin, 2009). A snowball effect, sometimes referred to as a Matthew Effect (Stanovich, 1986) refers to a phenomenon whereby the performance difference of good, relative to poor readers, increases over time. Many factors that facilitate further growth in reading ability, including general knowledge, vocabulary, syntactic knowledge and comprehension, are developed by reading itself (Stanovich, 1986). Reluctant readers, lacking adequate print exposure due to their reading delay, must have their deficits supported in other ways in order to halt a further divergence between their reading and that of proficient readers of similar age group over time (Stanovich, 1986; Morgan, Farkas & Hibel, 2008; Cain & Oakhill, 2011).

While much emphasis has been placed on tackling deficits in phonological awareness and decoding for this group, there has been less focus on children's comprehension skills (RAND Reading Study Group, 2001 cited in Paris & Paris, 2003). Reading, however, involves more than decoding and the final goal of the reader must be active comprehension (Quelette, 2006). Furthermore, observations by this author, as well as those noted by independent studies, show the ineffectiveness of a strict bottom-up strategy only. Children struggling to read can often forget that the text holds meaning, and that decoding is not an end in itself. Therefore they need instruction in multiple comprehension strategies.

Drama and Comprehension

Many advocates of drama in education posit that it is an interactive, multi-sensory tool which is perfectly placed to develop comprehension, particularly narrative comprehension. Bowell and Heap (2001) argue that drama provides a unique medium, which blends listening, speaking, feeling, and knowing in a fantasy world, which is directly transferable to the real world. This, they say, allows children's feelings, fantasies and values to be incorporated into the lesson, so that knowledge becomes personalised, as advocated by the educationalist Jerome Bruner (cited in Bowell and Heap 2001). Children, through drama, create imaginary worlds which provide opportunities for first hand interactive learning experiences to take place. Within these fictional worlds, various possible avenues can be explored with a myriad of courses of action tried and tested, thus augmenting their comprehension skills. Booth (2005) a leading exponent of story-drama, calls this inner explorations of narrative through drama 'wandering in the story garden'. He posits that by drawing on the resources of the story, its situations, characters, problems, relationships, moods, texture and especially its concepts, the power of the drama can be found in the story. Thus the story stimulates the drama and the drama enlightens the story. Extracts from the class novel or short stories provide rich material for treatment such as this. Booth (1994) cautions against repeating the sequence of events in a story, and

highlights the importance of story issues rather than scenes. The children must be allowed to play with the story, reconstructing symbols, images and narrative sequences and, in doing so, come to an understanding of the story's possibilities. This improvisational approach develops 'an elaboration' of the story which allows children to go beyond the literal meaning of the text, and move forwards, sideways and backwards around the story (Booth, 1994). This allows their own experiences to come into play, helping them to understand the complexity and subtlety of meaning as they live through the drama experience.

Children with dyslexia need a multi-sensory approach to literature, in order that reading may become more than a purely decoding and ultimately frustrating exercise from them. Their motivation, comprehension and total experience of literacy is transformed by the three-dimensional approach that drama can offer. As one child, who was in the writer's own class and who had dyslexia and also had expressive and receptive language difficulties described, the dramatisation of story gave him 'pictures in his head'.

Drama and Oral Language

Lerner (2000) reminds us that a child with poor oral language may well have reading, writing and spelling difficulties. Listening, speaking, reading and writing are integrated in the process of learning language, she posits, and therefore the child's ability with oral language can be a determining factor in the speed and with which he/she makes progress in reading. This is an important connection for any literacy teacher to make, but is crucial information for the pedagogy of dyslexia. According to Lerner, their problems with language processing distinguish children and adults with dyslexia as a group. They have problems transferring language into thought, as in listening and reading, and thought into language, as in speaking and writing. Therefore, in order to alleviate their reading delay, we must simultaneously provide rich and varied contexts for oral language development.

Toye and Prendiville (2000) explain that drama puts language into an actual space and time and provides a context that demands a certain kind of language and behaviour. You may be using only two chairs to represent a doorway through which you enter to visit the queen, but once you physically move through them, a certain kind of language is demanded. For children with dyslexia, the scaffolding provided by the verbal and non-verbal clues, as well as the visual spatial contexts help them to decode verbal messages. These 'real-life' contexts are embedded with feeling, meaning and motivation which make learning easier for a child than a remote context which reflects the more abstract nature of thought processes (Andersen, 2004; Donaldson cited in Fleming, 2003).

Language theorists concur that child-adult communication is vital to children's language development. Tough (1985, p.53) cautions that 'unless children have

experience of interaction with adults who draw them into particular ways of thinking through talk, they may not fulfil their potential for thinking and using language'. It could be argued that drama, at the very least, is well placed to provide multiple opportunities for child-adult interaction in a variety of contexts. For Neelands (1997) language is a socially constructed system, highly situational and culturally determined. Speech events, as he calls them, vary according to who is speaking and to whom they are speaking. To be truly literate we must understand, use and control this register, matching the appropriate mode to the situation or context. Children with dyslexia can be very poor in recognising a variety of language registers, and can often seem rude, when in fact they are simply using an inappropriate register. This is sometimes coupled with a further disadvantage that their cultural background is one in which only a limited number of registers are used. In the writer's own experience of using drama to develop oral language in children with dyslexia, it has been seen that they can use language outside of their experience and register if their role demands it.

Drama and Written Language

Neelands (1997) provides an account of how drama can scaffold children's written language. He claims that just as working in drama can help students to turn abstract ideas from written language into concrete representations, so can it help students turn 'lived experience' into writing. Children are often asked to write on subjects plucked out of thin air. This is very difficult for the child who has dyslexia, who often has huge difficulty getting started and continuing a narrative. O'Sullivan (1998,51) suggests using a recording, a note for help, a map or anything that will stimulate the imagination and open up the mystery or the problem, where characters emerge and can be developed.

Cremin *et al* (2006) conducted a study to examine the connection between drama and writing for children. They cited other research in the field, including Pelligrini (1994), who noted that dramatic play prior to writing increased word frequency, and Caldwell (1990,1993) who found that dramatic activity was a more successful precursor than traditional planning and discussion. Their own study distinguished between 'genre specific' writing, where the teacher reminded the children of the specific genre they were to use beforehand and revised its main conventions, and the 'seize the moment' approach, where the children wrote spontaneously mid-drama without any specifications from the teacher. The study found that while both approaches motivated the children to write, the latter produced deeper, more significant writing: a clear point of view was established, the content was more relevant and the language was more adventurous and inventive. They describe the involvement of the children as being in a 'state of flow', in which they were sometimes unaware that they were writing. In my own experience choosing the right moment to encourage writing-in-role can be challenging, but if it comes from a moment of high tension in the drama, it has more of a chance of being a success. Diary entries and letters are two genres that lend themselves easily to responding to drama.

Drama and Differentiation

Another argument, that is very pertinent to anyone working with children of mixed abilities or with special needs, is that drama can differentiate by outcome rather than by planning and this gives every child a chance to contribute significantly at their own level. Often in improvisation, in this writer's experience, a child who has remained on the periphery of a lesson can suddenly surprise one with a very significant input. In one scenario, my class and I were in role as a housing committee, who were trying to persuade a resident to move out of her estate to a new one. One boy decided to draw a trend graph for her, which illustrated that people's happiness increased significantly in the new estate. Up to that point he had sat quietly and listened to the rest of us trying to persuade her, without success. What is significant is that this boy has an expressive language difficulty, but he invented his own concrete material, which he then very eloquently explained to her. He found his own way of contributing and of supporting his language deficit, through the dramatic context.

Drama and Motivation

Poor readers often need remedial attention in literacy throughout their whole primary education and on to secondary school. Therefore new evidence-based methods are crucial if they are expected to stay focused and engaged with a process that they have failed at for a long time. Deeds (1981) recommends that reluctant readers be provided with opportunities for success in areas that are of interest to them in order to improve their self-concept and as a result, their learning. He states that, 'If instruction in school cannot be assimilated into the world of children, if it cannot be comprehended from their vantage point, no learning can take place' (Deeds, 1981, p.81). Children and, in this writer's experience, children with dyslexia, enjoy drama immensely and it seems to fulfil a desire in them for a different way of working. Perhaps drama brings release from the tyranny that a printed page can represent to those who have dyslexia. The fact that, unlike other literate activity, it lacks the incessant assessment of skills, may also appeal to them.

Drama Strategies

Teacher-In-Role (T-I-R)

A teacher who plays a role within the drama can initiate, deepen and develop it and, most of all help the children to suspend disbelief (Baldwin, 2004). This will also help to heighten dramatic tension, manage class behaviour and inject content subtly into the drama without dominating it. The teacher's use of language, both inside and outside of the drama, plays a vital role in supporting, challenging and extending the children's internal and shared thinking, giving them unique collective opportunities to talk either as themselves or 'as-if' they are other people (Baldwin, 2004). Heathcote (cited in Wagner, 1976) used T-I-R as a means of deepening the drama and developing language. She used her role, not to dominate the drama, but to monitor and guide it. T-I-R develops a sense of partnership between teacher and pupils and may mean that their usual

relationship is set aside for the duration of the drama (Bowell & Heap, 2001). This can be difficult for some teachers who are often afraid to relinquish control inside the drama (Neelands, 1997). Story may provide an easier induction into role both for the teacher and the students (O'Sullivan, 1998). Studies with T-I-R had larger effect sizes than those with leader or facilitator in seven meta-analyses of eighty studies using drama to develop verbal skills (Podlozny, 2000).

Role on the Wall can be used as an aid to character analysis. It involves posting character traits on to a large drawn outline. Two characters can be compared and contrasted in this way. Children with dyslexia report losing track of characters in the middle of a story, or of confusing one with another. I have found that this technique is useful in holding the character's name and traits in place throughout the narrative.

Still-Image and Freeze Frame can be used to probe a character or group of characters' mental states. A still image from a scene is created and when requested, individuals can voice their inner thoughts. This provides children with dyslexia with a three-dimensional view of the story which really suits their learning style.

Hot-Seating is useful to explore character goals and build the action. A main character is asked to hold audience with the others and answer certain questions. A child with strong language ability or the teacher can be put on the hot seat to answer questions relating to a scene or story.

Conscience Alley helps to explore decision making or conflicting choices. The character walks through an alley or tunnel of voices offering conflicting advice. This is an excellent activity for helping to deepen and substantiate a character.

Improvisation can explore events around the story and highlight main events. Some constraints may be given to each character in order to keep the tension in place.

Forum Theatre invites individual audience members to replace the actors and attempt to solve a problem. This is excellent for highlighting the main problem within a story.

Meeting is a very useful and low anxiety technique which can involve a whole group discussing a problem together. (For example in the story of 'The Pied Piper' a council meeting is held to discuss the rat issue).

Conclusion

This essay has examined the role of drama as a valuable way of scaffolding the learning of children with dyslexia. It suggests that the multiple contexts provided by drama allows children access to a lived experience which scaffolds their oral

and written language. This makes the challenge of transferring thought to language and language to thought easier for them.

It also argues for the use of drama as an aid to deconstructing, and therefore better comprehending texts, and for its role in motivating and differentiating in favour of children with dyslexia. Finally it bemoans the fact that while drama can do all of this and more, it may still be under-utilised as a powerful pedagogical force, particularly with children experiencing difficulties in literacy. It calls on those responsible for both in-service and pre-service teacher training to build in the layers of support required, in order that teachers, particularly those working with children with literacy difficulties, might be comfortable teaching through this powerful and challenging medium.

REFERENCES

Andersen, C. (2004) 'Learning in "As-If" Worlds: Cognition in Drama in Education'. *Theory into Practice,* Vol. 43, No. 4, pp. 281-286.

Baldwin, P. (2004) *With Drama in Mind: Real Learning in Imagined Worlds.* Network Educational Press: Stafford.

Booth, D. (1994) *Story Drama - Reading, Writing, and Role-Play across the Curriculum.* Markam, Ontario: Pembroke Publishing.

Booth, D. (2005) *Story drama: Creating Stories through Role playing, Improvising and Reading Aloud*. 2nd edition, Markam, Ontario: Pembroke Publishing.

Bowell, Pamela and Heap, Brian S. (2001) *Planning Process Drama*. London: David Fulton Publishers.

Braze, D., Tabor, W., Shankweiler, D.P. & Menci, W.E. (2007) 'Speaking Up for Vocabulary: Reading Skill Differences in Young Adults'. *Journal of Learning Disabilities*, Vol. 40, No. 3, pp. 226-243.

Cain, K. & Oakhill, J. (2011) 'Matthew Effects in Young Readers: Reading Comprehension and Reading Experience Aid Vocabulary Development'. *Journal of Learning Disabilities,* Vol. 44, No. 5, pp. 431-443.

Cain, K., Oakhill, J., & Byrant, P. (2004) 'Children's Reading Comprehension Ability: Concurrent Prediction by Working Memory, Verbal Ability and component Skills'. *Journal of Educational Psychology*, Vol. 96, No. 1, pp. 31-42.

Cremin, T., Gooch, K., Blakemore, L., Goff, E. and MacDonald, R. (2006) 'Connecting drama and writing: seizing the moment to write.' *Research in Drama Education: The Journal of Applied Theatre and Performance,* 11:3 273- 291.

Deeds, B. (1981) Motivating Children to Read through Improved Self-Concept. In: Alfred C. Ciani (ed.) *Motivating Reluctant Readers.* International Reading Association, pp. 79-84.

Dole, J.A., Brown, K.J., & Trathen, W. (1996) The effects of Strategy Instruction on the Comprehension Performance of At- Risk Students. *Reading Research Quarterly*, Vol. 31, No. 1, pp. 62-88.

Fleming, Michael (2003) *Starting Drama Teaching*. London: David Fulton.

Grady, T. and O'Sullivan, C. (eds) (1998) *'A Head Taller': Developing a Humanising Curriculum Through Drama*. London: David Fulton Publishers.

Heathcote, D. (1998) 'Like Sisyphus We Keep Pushing at the Mountain'. Grady, T. and O'Sullivan, C. (eds) (1998) *'A Head Taller': Developing a Humanising Curriculum Through Drama*. London: David Fulton Publishers, pp. 1-13.

Kendeou, P., Lynch, J.S., van den Broek, P., Espin, C., White, M., & Kremer, K.E. (2006) 'Developing Successful Readers: Building Early Comprehension Skills through Television Viewing and Listening'. *Early Childhood Education Journal*, Vol. 33, pp. 91-98.

Kibby, M.Y., Marks, W., Morgan, S. & Long, S.J. (2004) 'Specific Impairment in Developmental Reading Disabilities'. *Journal of Learning Disabilities,* Vol. 37, No. 4, pp. 349-363.

Lerner, J.W. (2000) *Learning Disabilities: Theories, Diagnosis and Teaching Strategies*. 8th ed., Boston: Houghton Mifflin.

Lynch, J. S., Van Den Broek, P., Lorch, E., Kendeou, P., White, M. J. & Kremer, K. (2008) 'The Development of Narrative Comprehension And Its Relation To Other Early Reading Skills'. *Reading Psychology*, Vol. 29, No. 4, pp. 327-365.

Morgan, P.L., Farkas, G., & Hibel, J. (2008) 'Matthew Effects For Whom?' *Learning Disability Quarterly*, Vol. 31, No. 4, pp. 187-198.

Neelands, Jonathan (1997) *Beginning DRAMA 11- 14*. London: David Fulton Publishers.

O'Sullivan, C. (1998) 'Drama across the curriculum'. In Grady and O' Sullivan (eds.) (1998) *'A Head Taller': Developing a Humanising Curriculum Through Drama*. London: David Fulton Publishers, pp. 14-23.

Paris, A. H. & Paris, S. G. (2003) 'Assessing Narrative Comprehension in Young Children'. *Reading Research Quarterly, Vol. 38, No. 1, pp. 36-76.*

Podlozny, A. (2000) 'Strengthening Verbal Skills through the Use of Classroom Drama'. *Journal of Aesthetic Education*, Vol. 34, No. 3, pp. 239-275.

Primary School Curriculum (1999) *English language teacher guidelines*. Department of Education and Science, Dublin: Stationery Office.

Quellette, G. (2006) 'What's Meaning Got to Do with It: The Role of Vocabulary in Word Reading and Reading Comprehension'. *Journal of Educational Psychology*, Vol. 98, No. 3, pp. 554-566.

Ricketts, J., Bishop, D.V.M. & Nation, K. (2008) 'Investigating Orthographic and Semantic Aspects of Word Learning in Poor Comprehenders'. *Journal of Research in Reading,* Vol. 31, No. 1, pp. 117-135.

Shany, M. & Biemiller, A. (2010) 'Individual Differences in Reading Comprehension Gains from Assisted Reading Practice: Pre existing Conditions, Vocabulary Acquisition, and Amounts of Practice'. *Reading and Writing,* Vol. 23, No. 9, pp. 1071-1083.

Slavin, R. E. (2009) *Educational Psychology: Theory and Practice*. 9th edition. New Jersey: Pearson.

Stanovich, K. E. (1986) 'Matthews Effects in Reading: Some Consequences of Individual Differences in the Acquisition of Literacy'. *Reading Research Quarterly,* Vol. 21, No. 4, pp. 360-407.

Tough, J. (1985) *A Place for Talk*. London: Ward Lock Educational.

Toye, N. & Prendiville, F. (2000) *Drama and Traditional Story for the Early Years*. London: Routledge Falmer.

Wagner, Betty Jane, (1976) *Dorothy Heathcote: Drama as a Learning Medium*. Washington: National Education Association.

PATTI ROCHE

This research has been conducted as part of a Masters in Education in Trinity College, Dublin in 2013, specializing in Drama in Education. Patti Roche has taught children with dyslexia for over twenty years in Catherine McAuley School in Baggot Street, Dublin. Her thesis on Drama and Narrative Development was presented at the ILSA. conference last September and at the World Drama in Education conference in Paris in July 2013.

Social Media: Challenges for those working with children with SEN

Maureen Griffin

Abstract

The world of social media, while offering numerous advantages to adults and children alike, also presents a number of challenges. Given the ever-increasing mobile nature of technology, parents and those working with children often feel ill-equipped to manage their children's online worlds. This paper will outline a number of risk behaviour/activities to be considered when working with children, particularly those with special educational needs. These risk behaviours/activities are: online age, privacy setting and password, friends/followers and online content. Recommendations, based on these risk behaviours/activities will be offered, and the importance of parental involvement in children's online use, will be stressed.

Introduction

Social media is defined as a "*form of electronic communication through which users create online communities to share information, ideas, personal messages, and other content*" (Merriam Webster, 2014). Any website which enables users to interact is considered a social media site, including social networking sites (SNS) such as *Facebook* and *Twitter*; gaming sites and virtual worlds such as *Club Penguin*, *Moshi Monsters* and the *Sims*; social media sharing platforms such as *YouTube, Instagram* and *Flicker*; and blogging sites such as *Tumblr*.

The EU Kids Online Study has demonstrated that Irish children's use of the internet at home is somewhat above the European average, with 59% of all 9-16 year olds in Ireland admitting to having a social networking profile (O'Neill, Grehan and Ólafsson, 2011). Although *Facebook* still remains the most popular SNS used by Irish people, making up 63% of Irish social media activity (Eircom, 2013), the popular media sharing platform *Instagram*, is reported by 42% of 9-16 year olds as the platform they use most often (O'Neill and Dinh, 2014). Moreover, chatting and messaging applications such as *SnapChat*, *Viber*, *WhatsApp* and *KiK* are increasingly gaining popularity among younger age cohorts. Given the ease with which smartphones and other mobile devices can be used to create, capture and upload media content, and the every changing face of social media, parents often feel overwhelmed by the task of managing their child's online behaviour.

The terms '*digital natives*' and '*digital immigrants*', coined by Marc Prensky (2001), aptly describe the roles we play in the social media revolution. Children, those who have grown up with new media and display a confidence in terms of using it, are considered to be the native speakers of the digital world. Those of us who have not grown up with new media, but are now living in this world that young people inhabit, are referred to as the '*digital immigrants*'. For some digital immigrants there is a certain level of fear regarding technology which can assist in maintaining the digital divide (Dutton, Blank and Groselj, 2013; Selwyn, 2003). This fear can result from a lack of knowledge about new technology, in addition to over-exposure to media content focusing on the negative aspects of same.

Positive and Negative Aspects of Social Media

Previous research has documented the numerous benefits of social media for children and adolescents in general and particularly for those with special educational needs (SEN), including the opportunity to socialize and communicate (Bonetti, Campbell and Gilmore, 2010; Lee, 2009; Valkenburg and Peter, 2007); enhanced learning opportunities (O'Keeffe, Clarke-Pearson and Council on Communications and Media Research, 2011); better information and knowledge access (Tapscott, 2009); improved world awareness (Lenhart *et al.*, 2010); social support (Leung, 2011); reduced social anxiety through self-disclosure (Valkenburg and Peter, 2007) and increased self-esteem through receiving positive feedback (Valkenburg, Peter and Schouten, 2006). Furthermore, social media sites can offer an opportunity to engage in self-expression and explore identity (Valkenburg, Schouten and Peter, 2005), which are central needs in adolescent development. Children with SEN can often find online communication easier than face-to-face communication and, as such, social media can offer an easier experience in building relationships (Steward *et al.,* 2011).

Despite the numerous benefits, social media can also provide a number of risks for young people. These risks may be escalated for children with SEN due to social naivety, increased vulnerability or a tendency toward obsessive compulsive behaviours. Indeed research has consistently demonstrated that children with SEN may be significantly more likely than their peers to be victims of cyber-bullying. Cross *et al.* (2009), for example, demonstrated that children with SEN are 16 times more likely to be targeted online and O'Neill, Grehan and Ólafsson (2011) reported that those with SEN were 12% more likely to experience cyberbullying than those who do not have SEN.

The risks young people may face when using social media can be broadly categorised as follows:

- Peer-to-peer risks (e.g. bullying)
- Exposure to inappropriate content and/or contact (e.g. pornography, exploitation, flirting online, Valkenburg, Schouten and Peter, 2005)

- Lack of understanding of online privacy issues (e.g. disclosing personally identifying information)
- Health risks, for example: increased body image disturbance (Meier and Gray, 2014), obesity (Iannotti *et al.*, 2009); sleep disturbances and other related health issues (Strasburger, Jordan and Donnerstein, 2010; Case Western Reserve University, 2010)
- '*Facebook Depression*' and '*Facebook Envy*' where social media may play a role in triggering depressive symptoms (Krasnova *et al.,* 2013; Qiu *et al.,*2012) and can lead to lower psychological well-being for some girls (Devine and Lloyd, 2012)
- Lower self-esteem due to negative feedback (Valkenburg, Peter and Schouten, 2006), thus not assisting socially anxious children in communicating more effectively online (Bonetti, Campbell and Gilmore, 2010)
- Negative influence (i.e. tendency to conform to what is popular without considering the consequences, such as smoking behaviour (Huang *et al.,* 2012) and alcohol use (Moreno *et al.,* 2009)
- Outside influences of third-party advertising groups.

While acknowledging the above risk categories, this paper will introduce four online behaviours/activities that increase young people's level of risk online regardless of the specific site they are using. These risk behaviours/activities have been identified from addressing primary and secondary school students in over four hundred schools across Ireland.

Risk Behaviours/Activities

Online Age

The Children's Online Privacy Protection Act (COPPA), a U.S. federal law enforced by the Federal Trade Commission (FTC) is designed to protect the privacy of children when they go online. COPPA requires that commercial web sites and online services (including Apps) must obtain parental consent prior to the collection, use or disclosure of any personally identifiable information from children whom they know to be under 13 years-of-age. In addition, COPPA also requires that parents are notified of the privacy policy of the specific website; that they are provided with the ability to access and review their child's personal information and that they are given the ability to prevent further collection and/or use of their child's information.

Social networking sites, designed for children aged 6-14 years such as *Moshie Monsters*, Disney's *Club Penguin* and other similar sites are compliant with COPPA. However, due to the economic and social costs, in addition to the technical issues involved in verifying children's age and parental consent, many sites have chosen to avoid COPPA's regulatory framework by adopting age-based bans (e.g. *Facebook*, *Twitter*, *Instagram* etc.). Therefore, COPPA does not extend

to many of the online services that are popular with young children today. Although such sites restrict access to children, research has shown that many parents knowingly allow their children to lie about their age in order to gain access to age-restricted sites (Boyd *et al.,* 2011). Indeed recent research indicates that approximately 40% of 11 to 12 year-olds in Ireland have a social networking profile (O'Neill and Dinh, 2014). Irish anti-bullying services such as Bully4U, report an increased prevalence rate of 85% of children aged 9 to 12 years using *Facebook* and record that 33% of these were helped by their parents when opening their account (Rogers, 2013).

While some children may think that pretending to be older online may reduce their risk (e.g. "*Pretending to be older online will keep the creepy people away*"), lying about their age online can in fact increase the risks that children face (e.g. exposure to age inappropriate content such as advertisements, more publicly accessible information, friend recommendations from unknown and/or older individuals).

Privacy settings and Password

Social networking sites typically offer users 'public' or 'private' sharing options, with some sites, such as Facebook, offering additional privacy features. By default, information shared is publicly available on a number of SNSs (e.g. *Instagram*, *Twitter*) until users access and change their privacy setting. Sites such as *Facebook* offer additional protection for minors (U18) by preventing their sensitive information from appearing in searches, tuning location setting off by default, and reminding minors, with educational messages, about what it means to post publicly, and about the dangers of accepting strangers as friends online. However, if children are masquerading as adults, these protections do not apply. Moreover, research has shown that Irish children's digital skills are at the lower end of the European spectrum, with only 58% of children able to change privacy settings on a social networking profile and less than a quarter able to change filter preferences (O'Neill, Grehan, and Ólafsson, 2011).

Recent research by the Pew Research Center has indicated that the "*private*" (friends only) setting is the most popular setting amongst adults and children alike (Madden, 2012). This setting only allows friends to see the content that is shared. Although this research provides some promise in terms of children managing their privacy online, this setting will only serve to protect children if they know and trust their online friends.

In additional to the importance of appropriate privacy setting, the password/s used for online accounts also play/s a significant role in protecting children online. Children often share passwords with their friends or significant others as a sign of trust, friendship and/or intimacy. Research has demonstrated that approximately one in three online adolescents share their passwords with a friend, boyfriend, or girlfriend, with girls more likely to do so than boys

(Lenhart *et al.,* 2011). While this practice has been likened to sharing locker combinations (Boyd, 2012), difficulties can arise when friendships break down and/or relationships end, with personal details used to damage reputations.

It is important that children use strong passwords for their online account/s, consisting of capital and lowercase letters, symbols and numbers (where allowed). *SplashData*, a leading provider of password management applications, annually reports lists of the worst passwords used online. For 2013, the password "123456" made top of the list, followed by the word "password" (Doel, 2013). Children should be encouraged to avoid using common passwords, or passwords containing information that may be available on their SNS (e.g. birthday, pets name etc.). As the number of sites that children use online continues to grow, unfortunately the number of passwords they use does not. It is common for children to use the same password for numerous online accounts, thus increasing the ease with which multiple accounts can be hacked. Recent research from Australia, has shown that nearly two thirds (63%) of adults use the same password for more than one account online, with this figure increasing to 77% for the 18-24 year-old category (MacGibbon and Phair, 2011). Children should be encouraged to treat their password like their toothbrush –that is they should not share it with friends and should change it quite regularly.

Friends/Followers

Aside from *what* children post online, we also need to pay attention to *with whom* they share information. Although making friends is an important part of adolescent social development (Hartup, 1993), the amount of friends or followers young people have online is often seen as a status symbol or popularity contest. While children and young people typically add friends and acquaintances as friends or followers online, they also add people as friends because they feel that it would be socially awkward or insulting to say no to them; so as to appear cool; or simply out of curiosity (Boyd, 2007). While acknowledging the enormous potential of social media in terms of creating and maintaining friendships, two important risk aspects need to be considered.

Firstly, children and young people openly admit that they do not know all their online friends or followers in real life. O'Neill and Dinh (2014) report that one in five Irish children have made contact online with someone they have never met face to face. Contact with people who have been met online increases with age, ranging from 13% of children aged 9-10 years old, to 38% of teenagers aged 15-16 years of age. Fewer than 4% had gone to meet someone offline they first met online. The risk of engaging with strangers online and/or meeting them in real life has been shown to increase for vulnerable children (i.e. those who suffered previous abuse or neglect), with 30% reporting offline meeting with someone they did not know in real life (14 -17 years, $n=251$) (Noll *et al.,* 2014). Although previous research has shown that the risk of harm from face-to-face

contact with someone met online is low (Livingstone *et al*., 2011), low risk does not equate with no risk. For children with SEN, this risk may be increased due to a limited sense of danger and need for attention, friendships and/or affection (Cullen, Lawlor and MacIntyre, 1998). Furthermore, while the risk of stranger danger in the traditional sense may be low, the risk of accepting a cyber-bully, or a fake account set up for the purposes of cyber-bullying, is real.

Children and young people can also be negatively influenced by people they accept as friends online, as they are exposed to the content they share. This has been evidenced in recent times, by the number of young people imitating the actions/behaviours of others through epidemics such as '*selfies*', '*belfies*' and '*necknominations*'. In addition, the promotion of self-harming practices such as eating disorders, self-mutilation and suicide, through online blogs and communities (e.g. '*proana*', '*thinspo*', '*thinspiration*', '*purge*'), can serve to influence already vulnerable children and adolescents (e.g. Sharrock, 2013).

Furthermore, the practice of 'friending' or 'following' celebrities, musicians, organisations, clubs etc., which is a popular practice on social networks, can increase children's level of risk online as not all accounts are legitimate. On SNS such as *Facebook*, in line with their 'Terms of Service', businesses, organisations, clubs, etc. are prohibited from setting up personal accounts, being required instead to set up Pages. Any individual can then choose to connect with a page by 'liking' it, where the Page administrator can see that individual's basic public information. However, in some instances personal accounts have been created and when children accept the account as a friend, that account holder now has access to content that the child shares, including pictures and posts. It is important to remind young people that once they accept someone as a friend online, they are inviting that person into their life. To protect young people, they should be encouraged to only accept someone as a friend online if they know and trust that person with their information.

Online Content

Content children and young people are exposed to online

Research has shown that one of the most common risks children face online is exposure to potentially harmful user generated content (UGC) evidenced by 21% of Irish children. The most common types of negative content reported include: hate and discriminatory messages (15%); anorexic or bulimic content (14%); self-harm sites (9%); sites discussing suicide (8%); and sites where people share their experiences with drugs (7%). Exposure to negative content is seen to be more common amongst female students (35%, 13-16 years-of-age) and increases with age – 16% of children aged 11-12 years versus 23% of 13-16 years (O'Neill and Dinh, 2014).

These findings mirror those of the McAfee Digital Deception Study (2013), which reported that 48% of young people aged 10-23 years have seen sexual content online that disturbed them and/or made them feel uncomfortable. While accessing such material may be accidental in some circumstances, the McAfee Digital Deception Study (2013) also showed that 48% of young people intentionally accessed a website or video that their parents would disapprove of. Furthermore, over half (57%) of 13 to 23 year-olds reported using the internet to research sexual topics, like intercourse, pregnancy or sexually transmitted diseases without their parents knowledge, with this figure increasing to 67% for those aged 18 to 24 years.

Given the accessibility, affordability and anonymity of the internet (Cooper, 1998), it is no surprise that online pornography is a multibillion dollar industry. However, when such ease of access is coupled with children's natural curiosity and/or naivety, exposure to such age-inappropriate content can lead to negative consequences. Research has shown that adolescents exposed to sexual sites are more likely to have multiple lifetime sexual partners, more likely to have had more than one sexual partner in the last 3 months, and more likely to have used alcohol or other substances at their last sexual encounter (Braun-Courville and Rojas, 2009). The frequency with which young people (10-17 years) access pornography online is also significantly related to feelings of loneliness and major depression (Ybarra and Mitchell, 2005). Finally, when considering the long term implications of early exposure to age-inappropriate material, Mancini, Reckenwald and Beauregard (2012) have demonstrated that adolescent exposure to pornography is a significant predictor of elevated violence and victim humiliation among perpetrators of sex crimes.

Content children and young people share online

In addition to highlighting the range of age-inappropriate content children can be exposed to online, the McAfee Digital Deception Study (2013) also examined the kind of content children are sharing online. The report found that children and young people (aged 10-23 years, n=1,173) continue to share personal details online including: pictures of themselves (66%); the name of their school (49%); their email address (50%); intimate/personal details, for example, whom they date, etc. (32%); their phone number (32%); their online username/s (22%); their parents or guardian's name (17%); a description of what they look like (16%) and their home address (11%). A 2013 Child Line Poll of five hundred 13 -18 year olds, has also shown that 60% of children and young people online have been asked to share personal content including explicit pictures or videos of themselves (Martin, 2013).

The act of sending sexually explicit pictures or videos of oneself to other/s via digital means is known as *'sexting'* or *'sex texting'*. Primarily such sex texts or *'sexts'* are sent using mobile phones and/or chatting apps such as *Snapchat*. Young people engage in sexting for a number of reasons, including: to construct their

sexual identity online (when posted publicly on their own profile); due to pressure from a boyfriend/girlfriend –viewed as a 'relationship currency'; imitating famous people they may follow on sites such as *Twitter* or *Instagram*; to show off or get attention; to entice someone or flirt; to prove commitment to a boyfriend or girlfriend; or when they have been groomed by an adult to do so.

Research suggests that sexting may be a predictor of sexual behaviour, where students who have engaged in sexual intercourse are considered five times more likely than virgins to be involved in sexting (Schneider, 2011). In the first study to examine sexting's prevalence among at-risk students and its associations with a range of sexual behaviours, Houck *et al*. (2014) found that children who engaged in sexting reported higher intentions to engage in sexual behaviour, lower emotional awareness, and lower emotional self-esteem, suggesting that engagement in sexting may represent an indicator of sexual risk. Their results demonstrated that young people who engaged in sexting were between 4 and 7 times more likely to have engaged in a variety of sexual behaviours, including touching genitals, having a 'friend with benefits', oral sex, or vaginal sex. The *Child Line Poll* reported that 38% of 13 to 18 year-olds have created a sext, with 32% sending it to an online friend, not known in real life (Martin, 2013). Findings from *The Net Children Go Mobile Ireland Report*, highlight the role age plays in receiving sexts, with 4% of children aged 11-12 years reporting receiving messages of this kind, 10% of 13-14 year olds and 22% of 15-16 year olds (O'Neill and Dinh, 2014).

In terms of the consequences of sexting, the picture/video may be distributed beyond the intended recipients, either online or through mobile phones. This is particularly true in cases where friendships or relationships break down. Consequently, the young person's risk of victimization (i.e. cyber-bullying), may increase. Mental health issues associated with sexting such as anxiety, depression and in extreme cases, suicide, have been well documented in the national and international media (e.g. Jessica Logan, Cincinnati and Hope Witsell, Florida). Depending on the age of the individual/s depicted in the sext and the ages of the individuals involved in sending/receiving same, there may also be legal ramifications (i.e. Child Trafficking and Pornography Act 1998).

Adolescents are not neurologically equal to adults. Physiological research has shown that the prefrontal cortex of the brain, responsible for executive functions, continues to develop into the early twenties (Blakemore and Choudhury, 2006). Therefore, although logical reasoning skills may, for the most part, be fully developed by age fifteen, psychosocial capabilities such as emotion regulation; impulse control; delay of gratification; and resistance to peer influence continue to develop into early adulthood (Steinberg, 2007). In order to assist children and young people, whose impulse control skills have not fully developed, parents and those working with children should encourage them to *STOP* and *THINK*

before they share content online or through their phone by asking themselves the following questions:

- Could this image/video/information be used to make fun of me/ cause embarrassment or humiliation if it is sent to others?
- Could this image/video/information be used to get me into trouble at school or at home?
- Does this image/video/information give away too much personal information about me or my family?
- Can I trust the person with whom I am sharing this?

Recommendations

Based on the four main risk behaviours/activities introduced in this paper, the author offers the following recommendations:

1. Educational programmes for children should address the four main risk behaviours/activities outlined in this paper; *online age*, *privacy settings and password*, *friends/followers* and *online content*, highlighting the increased risk levels children can face when these aspects are overlooked
2. Parents should be informed that allowing their child to set up an account on age-restricted sites prior to reaching that age and/or encouraging their child to lie about their age online, can in fact increase the level of risk their child faces
3. As the world of social media becomes increasingly mobile, traditional safety precautions such as installing blocking software on the main PC are no longer sufficient, as children may use an array of devices to go online. As demonstrated by previous research (Noll *et al.*, 2009; 2013), parental involvement and monitoring can help in reducing the likelihood of inappropriate online behaviours (i.e. intentionally seeking adult content, provocative self-presentations on SNS and receiving sexual advances online). Parents should therefore establish internet safety rules at home, involving the child in this process, so as to ensure the rules fit the individual. As role models for their children, parents must also be cognizant of their own internet activities and strive to model good practices for their children.
4. In real life, we have done extremely well in terms of teaching our children about stranger danger and instilling in them personal safety skills (e.g. Stay Safe Programmes). As social media has become an extension of our children's day to day lives, parents, carers and educators need to break down the distance that technology creates and provide children with age-appropriate skills to deal with the situations they may find themselves in online.

Conclusions

The world of social media, while offering numerous advantages also presents a number of challenges. These challenges are often augmented for children with SEN, who are more vulnerable and therefore require more protection.

This article outlined some key areas that should be included in social media educational programmes for both children and adults. Focusing on the risks presented by specific SNS can quickly become outdated as new sites emerge, with new categories of risk (i.e. popularity of *Bebo* 2005-2008, *Facebook* 2009-2013, *Instagram*, 2013-?). However, addressing the issues that underlie a lot of our children's online use, whether through SNS or Apps, may serve to better protect them from the risks they face online, not only from strangers but also from their peers.

REFERENCES

Blakemore S.J., and Choudhury S. (2006), 'Development of the adolescent brain: Implications for executive function and social cognition', *Journal of Child Psychology and Psychiatry*, 47, pp. 296-312.

Bonetti, L., Campbell, M.A., and Gilmore, L. (2010), 'The relationship of loneliness and social anxiety with children's' and adolescents' online communication', *Journal of CyberPsychology, Behavior and Social Networking*, 13 (3), pp. 279-285.

Boyd, D. (2007), 'Why youth (heart) social network sites: The role of networked publics in teenage social life', *Youth, Identity and Digital Media*, 2007 (16). Cambridge: The Berkman Center for Internet and Society Research Publication Series. Available online: http://ssrn.com/abstract=1518924 [Accessed 2 March 2014].

Boyd, D. (2012), 'How parents normalized teen password sharing', *Danah Boyd, Apophenia*, 23 January. Available at: http://www.zephoria.org/thoughts/archives/2012/01/23/how-parents-normalized-teen-password-sharing.html [Accessed: 2 March 2014].

Boyd, D., Hargittai, E., Schultz, J., and Palfrey, J. (2011), "Why parents help their children lie to Facebook about age: Unintended consequences of the 'Children's Online Privacy Protection Act'", First Monday, 16 (11). Available at: http://firstmonday.org/ojs/index.php/fm/article/view/3850/3075 [Accessed 5 April 2014].

Braun-Courville, D.K. and Rojas, M. (2009), 'Exposure to sexually explicit Web sites and adolescent sexual attitudes and behaviors', Journal of Adolescent Health, 45 (2), pp. 156-162.

Case Western Reserve University. (2010), 'Hyper-texting and hyper-networking linked to health risks for teens', *Science Daily*. Available at: www.sciencedaily.com/releases/2010/11/101109113020.htm [Accessed 11 April 2014].

Cooper, A.L. (1998), 'Sexuality and the Internet: Surfing into the New Millennium', *CyberPsychology and Behaviour*, 1 (2), pp. 187-193.

Cross, E-J, Richardson, B., Douglas, T., and Vonkaenel-Flatt, J. (2009), '*Virtual Violence: Protecting Children from Cyber Bullying*'. London: Beat Bullying. Available at: http://www.beatbullying.org/static/cm/pdfs/virtual-violence-cprotecting-children-from-cyberbullying.pdf?335317101213 [Accessed 8 June 2013].

Cullen, R., Lawlor, M., and MacIntyre, D. (1998), '*User's Handbook: The Stay Safe Programme'*. Child Abuse Prevention Programme. Available at: http://www.staysafe.ie/PDFs/English/Users%20Handbook.pdf [Accessed 18 June 2010].

Devine, P., and Lloyd, K. (2012), 'Internet use and psychological well-being among 10-year-old and 11-year-old children', *Child Care in Practice*, 18 (1), pp. 5-22.

Doel, K. *(2013) "Password" unseated by "123456" on SplashData's annual "Worst Passwords" list.* Available at: http://splashdata.com/press/worstpasswords2013.htm [Accessed 5 May 2014].

Dutton, W.H., Blank, G., and Groselj, D. (2013), '*Cultures of the Internet: The Internet in Britain. Oxford Internet Survey 2013'*. University of Oxford: Oxford Internet Institute. Available at: http://oxis.oii.ox.ac.uk/sites/oxis.oii.ox.ac.uk/files/content/files/publications/OxIS_2013.pdf [Accessed 11 January 2014].

Eircom (2013) *'eHSS Eircom Home Sentiment Survey: A tech savvy nation that needs to be constantly connected'*. Dublin: Eircom. Available at: http://www.banda.ie/assets/files/eircom%20eHSS%20report%20April%202013.pdf [Accessed 5 April 2014].

Government of Ireland. *Child Trafficking and Pornography Act* (1998). Dublin: Government Publications. Available at: http://www.irishstatutebook.ie/1998/en/act/pub/0022/ [Accessed 12 May 2014].

Hartup, W. W. (1993), 'Adolescents and their friends'. *New Directions for Child and Adolescent Development*, 1993 (60), pp. 3-22.

Houck, C.D., Barker, D., Rizzo, C., Hancock, E., Norton, A., and Brown, L.K. (2014), 'Sexting and sexual behavior in at-risk adolescents', *Pediatrics*, 133 (2), pp. 276-282. Available at: http://pediatrics.aappublications.org/content/133/2/e276 [Accessed 12 May 2014].

Huang, G.C., Okamoto, J., Valente, T.W., Sun, P., Wei, Y., Johnson, C.A., and Unger, J.B. (2012), 'Effects of media and social standing on smoking behaviors among adolescent in China', *Journal of Children and Media*, 6 (1), pp. 100-118.

Iannotti, R. J., Kogan, M. D., Janssen, I., and Boyce, W.F. (2009), 'Patterns of adolescent physical activity, screen-based media use and positive and negative health indicators in the U.S. and Canada', *Journal of Adolescent Health*, 44 (5), pp. 493-499.

Krasnova, H., Wenninger, H., Widjaja, T., and Buxmann, P. (2013), 'Envy on Facebook: A Hidden Threat to Users' Life Satisfaction?' *International Conference on Wirtschaftsinformatik*. Leipzig, Germany, 27 February - 01 March 2013. Available at: http://karynemlira.com/wp-content/uploads/2013/01/Envy-on-Facebook A-Hidden-Threat-to-Users%E2%80%99-Life.pdf [Accessed 11 January 2014].

Lee, S. J. (2009), 'Online communication and adolescent social ties: Who benefits more from internet use?', *Journal of Computer-Mediated Communication*, 14 (3), pp. 509-531.

Lenhart, A., Madden, M., Smith, A., Purcell, K., Zickuhr, K., and Rainie, L. (2011), *'Teens, Kindness and Cruelty on Social Networking Sites'*. Washington, DC: Pew

Research Center. Available at: http://pewinternet.org/Reports/2011/Teens-and-social-media.aspx [Accessed: 5 April 2014].

Lenhart, A., Purcell, K., Smith, A., and Zickuhr, K. (2010), *'Social Media and Young Adults'*. Washington, DC: Pew Research Center. Available at: http://pewinternet.org/Reports/2010/Social-Media-and-Young-Adults.aspx [Accessed 5 April 2013].

Leung, L. (2011). 'Loneliness, social support, and preference for online social interaction: The mediating effects of identity experimentation online among children and adolescents'. *Chinese Journal of Communication*, 4 (4), pp. 381-399. Available at: http://www.com.cuhk.edu.hk/ccpos/en/pdf/Preference%20for%20Online%20(CJoC)%20(Final2).pdf [Accessed 10 January 2014].

Livingstone, S., Haddon, L., Görzig, A., and Ólafsson, K. (2011), *'Risks and safety on the internet: The perspective of European children. Full Findings'*. LSE, London: UK Kids Online. Available at: http://www.lse.ac.uk/media%40lse/research/EUKidsOnline/EU%20Kids%20II%20(2009-11)/EUKidsOnlineIIReports/D4FullFindings.pdf [Accessed 10 June 2012].

MacGibbon, A., and Phair, N. (2011), *'Password Security, A Survey of Australian Attitudes Toward Password use and management'*. University of Canberra: CIS, Centre for Internet Safety. Available at: http://www.canberra.edu.au/cis/storage/CIS_PayPal_Whitepaper_FINAL.pdf [Accessed 15 June 2013].

Madden, M. (2012), *'Privacy Management on Social Media Sites'*. Washington, DC: Pew Research Center. Available at: http://pewinternet.org/Reports/2012/Privacy-management-on-social-media.aspx [Accessed 5 April 2014].

Mancini, C., Reckenwald, A., and Beauregard, E. (2012), 'Pornographic exposure over the life course and the severity of sexual offenses: Imitation and cathartic effects', *Journal of Criminal Justice*, 40, pp. 21-30.

Martin, D. (2013), '60% of teens face 'sexting' pressure: More than half have been asked to take explicit self-portrait in practice that is now seen as 'pretty normal' by youngsters', *DailyMail* 16 Oct. Available at: http://www.dailymail.co.uk/news/article-2463751/Sexting-More-half-teens-asked-explicit-self-portraits.html [Accessed 17 March 2014].

McAfee Digital Deception Study (2013), *'Exploring the Online Disconnect between Parents & Pre-teens, Teens and Young Adults'*. United States: McAfee Inc. Available at: http://www.mcafee.com/au/resources/reports/rp-digital-deception-survey.pdf [Accessed 23 January 2014].

Meier, E.P., and Gray, J. (2014), 'Facebook photo activity associated with body image disturbance in adolescent girls', *CyberPsychology, Behaviour and Social Networking*, 17 (4), pp.199-206.

Merriam Webster (2014), Merriam-Webster *Online*: *Dictionary* and Thesaurus. Available at: http://www.merriam-webster.com/dictionary/social%20media [Accessed 1 April 2014].

Moreno, M. A., Briner, L.R., Williams, A., Walker, L., and Christakis, D.A. (2009), 'Real use or "real cool": Adolescents speak out about displayed alcohol references on social networking websites', *Journal of Adolescent Health*, 45 (4), pp. 420-422.

Noll, J.G., Shank, C.E., Barnes, J.E. and Haralson, K.J. (2013) 'Association of Maltreatment With High-Risk Internet Behaviors and Offline Encounters', *Pediatrics*, 131 (2) pp. 510-517. Available at: http://pediatrics.aappublications.org/content/131/2/e510.full.pdf+html [Accessed 5 April 2014].

Noll, J.G., Shenk, C.E., Barnes, J.E and Putnam, F.W. (2009), 'Childhood abuse, avatar choices, and other risk factors associated with internet-initiated victimization of adolescent girls', *Pediatrics*, 123 (6), pp. 1078-1083. Available at: http://europepmc.org/articles/PMC2966308/reload=0;jsessionid=Rtk9SATRontiopXOsT5v.24 [Accessed 5 April 2014].

O'Keeffe, G.S., Clarke-Pearson, K. and Council on Communications and Media (2011), 'The impact of social media on children, adolescents, and families – Clinical Report', *Pediatrics*, 127 (4), pp. 800-804. Available at: http://pediatrics.aappublications.org/content/early/2011/03/28/peds.2011-0054 [Accessed 10 May 2013].

O'Neill, B., and Dinh, T. (2014), *'Net Children Go Mobile: Initial findings from Ireland'* Dublin: Dublin Institute of Technology. Available at: http://www.internetsafety.ie/website/ois/oisweb.nsf/page/40CD0C787E7B966980257C7B005EE1CB/$File/NCGM_Ireland_initialfindingsreport_complete.pdf [Accessed 5 April 2014].

O'Neill, B., Grehan, S., and Ólafsson, K. (2011), *'Risks and Safety for Children on the Internet: The Ireland Report'*. LSE, London: EU Kids Online. Available at: http://arrow.dit.ie/cgi/viewcontent.cgi?article=1022&context=cserrep [Accessed 2 April 2014].

Prensky, M. (2001), 'Digital natives, digital immigrants', *On the Horizon*, 9 (5), pp.1-6. Available at: http://www.marcprensky.com/writing/Prensky%20-%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf [Accessed 11 January 2014].

Qiu, L., Lin, H., Leung, A.K., and Tov, W. (2012), 'Putting their best foot forward: Emotional disclosure on Facebook', *Journal of CyberPsychology, Behavior, and Social Networking*, 15 (10), pp. 569-572.

Rogers, S. (2013), '85% of children aged 9 to 12 using Facebook', *Irish Examiner*, 8 November. Available at: http://www.irishexaminer.com/ireland/85-of-children-aged-9-12-using-facebook-248995.html [Accessed 11 April 2014].

Schneider, S.K. (2010), *'MetroWest Adolescent Health Survey highlights on 'sexting' among high school students'*. Newton: Education Development Center. Available at: http://www.edc.org/sites/edc.org/files/pdfs/APHA_sexting_presentation_fact_sheet.pdf [Accessed 12 May 2014].

Selwyn, N. (2003), 'Apart from technology: Understanding people's non-use of information and communication technologies in everyday life', *Technology in Society*, 25 (1), pp. 99-116.

Sharrock, J. (2013), 'Meet the girl behind one of Tumblr's biggest self-harm blogs', *BuzzFeed*, 13 June. Available at: http://www.buzzfeed.com/justinesharrock/meet-the-girl-behind-one-of-tumblrs-biggest-cutting-suicide [Accessed 5 March 2014].

Steward, M., Barnfather, A., Magill-Evans, J., Ray, L., and Letourneau, N. (2011), 'Brief report: An online support intervention: Perceptions of adolescents with physical disabilities', *Journal of Adolescence*, 34 (4), pp. 795-800.

Strasburger, V. C., Jordan, A.B., and Donnerstein, E. (2010), 'Health effects of media on children and adolescents', *Pediatrics*, 125 (4), 756-767. Available at: http://pediatrics.aappublications.org/content/125/4/756.full.html [Accessed 11 April 2014].

Tapscott, D. (2009) *Grown Up Digital: How the Net Generation Is Changing Your World*. London: McGraw-Hill.

Valkenburg, P.M., and Peter, J. (2007), 'Preadolescents' and adolescents' online communication and their closeness to friends', *Journal of Developmental Psychology*, 43 (2), pp. 267-277.

Valkenburg, P.M., Schouten, A.P., and Peter, J. (2005), 'Adolescent identity experiments on the internet', *Journal of New Media and Society*, 7 (3), pp. 383-402.

Valkenburg, P.M., Peter, J., and Schouten, A.P. (2006), 'Friend networking sites and their relationship to adolescents' well-being and social self-esteem', *Journal of CyberPsychology and Behavior*, 9 (5), pp. 584-590.

Ybarra, M. L., and Mitchell, K.J. (2005), 'Exposure to internet pornography among children and adolescents: A national survey', *CyberPsychology and Behaviour*, 8, pp. 473-486.

DR. MAUREEN GRIFFIN

Dr. Maureen Griffin holds an honours degree in Applied Psychology, a Masters in Forensic Psychology and a Ph.D. in Applied (Forensic) Psychology (specifically in the area of Sex Offender Assessment). Maureen is Director of Internet Safety for Schools Ireland (a trading name of MGMS Training Limited) and has visited over 400 schools (primary & post primary) across Ireland speaking with students, staff, BOM members and parents regarding issues around social media. Maureen has also delivered presentations around social media for the HSE, Brothers of Charity, NEPS, Gardaí, NAPD, ILSA Conference, CESIT Conference and Youth Mental Health Conferences across Ireland.

This paper was presented at the 4th Biennial Child Protection & Welfare Social Work Conference, UCC, 25th October 2013.

Making Sense of Psychological Reports: Teacher and Parent Perspectives

Mary Nugent, Aideen Carey, Ciara De Loughry, Mary Sherwin and Antoinette Rush

Introduction

Educational Psychologists often produce written reports to support their consultation and assessment work. This study explored the report writing practices of educational psychologists working within the National Educational Psychological Service. The particular focus of this paper is on the perceptions of teachers and parents. Twenty-six teachers and 22 parents responded to structured questionnaires. Data was analysed both qualitatively and quantitatively. Ways in which report writing practices were developed in response to the research are outlined.

Literature Review

There has long been a concern that teachers and parents may not find psycho-educational reports to be accessible. Current difficulties with such reports, cited by Mastoras, Climie, McCrimmon, and Schwean (2011) are '*Poor readability, generic interpretation, test-by-test reporting, focus on client weakness, report length and poor links between referral questions and the results and recommendations*' (p.130).

Reports are often difficult to read. Harvey (2006) points out that most psychological reports are typically written at a reading level outside the comfort level of many parents. Additionally, Pelco, Ward, Coleman and Young (2009) in their study of 104 teachers, found that teachers rated the report style with the lowest reading age as being the most teacher-friendly. Teachers also prefer reports with low levels of jargon (Chermian, Goodman, Santos and Webb (2007).

The recommendations section appears to be central to teachers' valuation of psychological reports (see Chermain *et al,* 2007). Teachers state that they value more detailed, concrete recommendations for interventions in classroom settings (Roberts, Moar and Scott, 2011). Teachers prefer reasonably detailed recommendations with medium to high degrees of specificity, over briefer, less specific recommendations (Mallin, Beimick and Hopfner, 2012). Wiener and Costaris (2012) summarise the research and state that '*The consensus from studies across four decades of research is that effective psychological reports connect to the client's context; have clear links between the referral questions and the answers to these*

questions; have integrated interpretations; address client strengths and problem areas; have specific, concrete, and feasible recommendations; and are adapted to the language and literacy level of the reader' (p.119).

Within the National Educational Psychological Service (NEPS) psychologists were asking themselves: How useful are our reports? Do parents and teachers find them helpful? Is time spent preparing psychological reports the best use of our time? In what ways could we develop our practice to ensure our written communications reflect best practice? Brenner (2003) recommends that psychologists should use results of consumer satisfaction studies to improve the practice and, in this spirit, the following research study was conceived to help answer the above questions.

Methodology

Empirical evidence was collected from a number of sources:

- Questionnaires from NEPS psychologists
- Questionnaires from parents
- Questionnaires from teachers

The data gathered from psychologists is reported in a separate paper (see Nugent, Carey, de Loughry, Sherwin and Rush, in press).

Recruitment of parents and teacher participants

Questionnaires were sent to parents and teachers who had received a psychological report in the preceding 6 months. The sample was randomly selected from the NEPS database. Parents were written to directly, whereas the teacher questionnaire was sent to school principals, who were asked to pass it on to relevant teachers (class teachers, subject teachers, learning support/resource teachers). There may have been some selection bias in this approach, in that school principals may have been more likely to pass such a questionnaire to a teacher who had read/shown an interest in the psychological reports.

There were 26 teacher respondents, evenly split between primary and post-primary schools. Forty seven percent were learning support/resource teachers/ special education coordinators, 38% were classroom teachers, while 15% were both resource and subject teachers. The response rate was 50%.

All twenty-two parent respondents were parents of children in primary schools (despite our efforts to recruit post-primary parents). While all parent participants were sent postal questionnaires, non-respondents were followed up and offered the chance to complete the questionnaire by way of a telephone interview. Despite these efforts, the response rate was a modest 30%. It was clear to us that some parents did not have the literacy skills to read the questionnaire (and by implication, to read the report) and were therefore reluctant to engage with the research.

Structure of questionnaire

The questionnaires had 19 questions, the majority which were categorical multiple choice questions, such as:

> ***Was the report useful in helping you understand how to best support the student? Circle one response.***
>
> Very much so Probably Yes Probably No Not at all

There were four open-ended questions, including one that invited general comments. The teacher and parent questionnaires were almost identical, allowing for ready comparisons. The responses to each individual question are not all tabulated here, as there is some overlap, but instead questions are clustered together around research questions:

- *Do teachers and parents find psychological reports easy to understand?*
- *How do teachers and parents view psychological reports?*
- *Do psychological reports make a difference for children?*
- *What are the most useful elements of the report?*
- *How should educational psychologists use their time?*
- *Suggestions for Improvement*

In some cases, responses have been collapsed for ease of presentation (for example, amalgamating the categories *very helpful* and *somewhat helpful* into one category of *helpful*). Illustrative comments are set alongside the numerical data to bring the data to life. These illustrative comments generally come from the open-ended questions. In some cases, not all respondents answered questions, in which case the total responses reported below is less than 26 for teachers or 22 for parents.

Research Findings

Do teachers and parents find psychological reports easy to understand?

This is a fundamental question and the results are set out in Table 1.

Table 1. Responses to the Question: How easy was the report to understand?

	No. of Teachers	No. of Parents
Very easy	6 (24%)	6 (27%)
Somewhat easy	16 (64%)	11 (50%)
Difficult	3 (12%)	5 (23%)
Very difficult		
Totals	25 (100%)	22 (100%)

Of particular concern are the 23% of parents and 12% of teachers who find psychological reports difficult to understand. Qualitative data gave clues as to the difficulties people may have experienced.

> *Bullet points instead of paragraphs would be easier to read* (PQ).
> *Excess detail on complex, unfamiliar tests is not welcome* (PQ).

In the open-ended section of the questionnaire, 14% of teacher respondents mentioned that the language used was too difficult for parents and / or that reports were too detailed. Twenty-five percent of parents mentioned reports being difficult to understand.

How do Teachers and Parents view Psychological Reports?
To consider this question, data from a number of questions was considered:

In the last year you received a report from a NEPS psychologist about your child/ student. Do you recall reading the report? Circle one.

I read and considered it carefully.	I looked over it briefly.	I did not read it at all.

Can you remember the content of the report? Circle one.

Remember it in detail	Remember some of the report	Parts of it are vague	Remember it in detail

Do you feel the report adequately described your child / student? Circle one

Very Much	Probably Yes	Probably No	Not At All

Did you feel there was anything not captured or missing in the report? Please elaborate

- Teachers generally read our reports (73% read them carefully), but more than a quarter either look over it only briefly (23%) or do not read it at all (4%). Teachers generally find our reports adequately describe the student (88%) and the majority (65%) did not comment on anything not captured or missing.

In my opinion it was detailed and thorough (TQ16).

The report was comprehensive and addressed the concerns that had led to the initial referral (TQ3).

However, data indicated that 15% of teachers felt that reports did not capture the student or lacked a sense of the student's personality. Fifteen percent of teachers mentioned that were not enough or inappropriate recommendations.

Parents place a very high value on psychological reports. Parents:

- Read reports carefully (91%)
- Broadly remember the content (96%)
- Find reports comprehensive and make positive comments about them (75%)
- Believe the report adequately describes their child (88%)

I was very happy with the report and it covered everything I needed to know about my child (PQ3).

It helps you understand all about your child's needs (PQ10).

Do psychological reports make a difference for children?
Four questions explored this topic:

Do you believe the report was helpful to your child/ the student in getting the help they needed at school? Circle the response that applies to you.

Very helpful Some help Little Help No help at all

Did the report help your child/the student to access other help needed? Circle all that apply.

Resource hours H.S.E. support*

Did it help you to understand your child/ the student any better?

Very much so Probably Yes Probably No Not at all

Was the report useful in helping you understand how to best support your child / the student?

Very much so Probably Yes Probably No Not at all

*e.g. Counselling, Speech and Language therapy, Psychiatric services, Social Work support

Accessing resource hours in school and services from the HSE depends on local and national criteria which are outside of the control on the NEPS psychologist. Nonetheless, it is notable that only 5% of all respondents (parents and teachers) felt that the report was of little help or no help at all in getting the student help in school. Sixty percent of teachers and 78% of parents felt the report was very

helpful in this regard, with the remaining 36% of teachers and 17% of parents believing the report had been of some help.

In terms of understanding children and their needs, 85% of teachers and 76% of parents reported that the report helped them understand the student better. The data about the final question in this section is produced here, as it is of particular significance.

Table 2. Responses to Question:
Was the report useful in helping you understand how to best support your child / the student?

Comment	*No. of Teachers*	*No. of Parents*
Very much so	8 (33%)	11 (61%)
Probably yes	12 (50%)	3 (17%)
Probably no	4 (17%)	3 (17%)
Not at all		1 (5%)
Totals	24 (100%)	18 (100%)

It is notable that fully 78% of parents felt better equipped to support their child, as did 83% of teachers. This would suggest that, children for whom psychological reports have been prepared are enjoying more positive supports from parents and teachers as a result of this process.

What are the most useful elements of the report?
There was a clear finding that both parents and teachers place highest value on the summary and recommendations section. In a structured question, *'Please indicate your opinion about the various sections of the report',* respondents were asked to rate their views of four sections: background information, assessment, summary and recommendations and appendices. Ninety six percent of teachers considered the summary and recommendations to be helpful. They also rated the background information (88%) and the assessment information (85%) as helpful.

> *The background information is most useful, as parents aren't always willing to let the class teacher know what is going on* (TQ10).

For parents the background information is not so highly valued (presumably because it is already well known to them) although 59% still value it. However, it is the assessment information and the summary and recommendations section which are particularly valued, with 89% and 83% respectively saying they find these sections helpful.

In an open-ended question about what teachers and parents found most useful in a psychological report, responses could be clustered according to themes. In this case, it became apparent that it was the recommendations, more than the summary, which is most useful.

> *The recommendations and suggestions for supporting the student were practical and appropriate* (TQ3).
>
> *The report highlighted the student's problem and the recommendations were very helpful* (TQ6).

However, when asked for general comments, 24% of teachers noted that recommendations could be inappropriate or inadequate.

> *Sometimes the report recommends interventions which are unfeasible at secondary level* (TQ20).
>
> *Being a class teacher, I found that sometimes the recommendations weren't appropriate, insofar as there being 29 other kids to consider too* (TQ10).

How should educational psychologists use their time?

Respondents were asked: *What was most valuable to you: meeting the psychologist and getting verbal feedback or getting the written report?* Responses were categorical. This was followed up with an open ended question, as set out in Table 3 below.

Table 3. Responses to Question:
Given that psychologists' time is limited, NEPS is interested to know whether time spent report writing is a good use of time. In your opinion, what is the best use of NEPS psychologists' time?

Comments	*No. of Teachers*	*No. of Parents*
More time for meeting with parents / teachers / child	11	7
Value of having report to look over / record for teachers to see / refer on / essential	8	10
Both report and meeting with teachers / parents are important	6	2
Aspects that could be reduced *Shorter reports preferred, less detail needed*	6	3
Time spent doing assessment	2	2
Making recommendations for practical support	3	0
Other comments *School not implementing recommendations* *More time needed for counselling students*	1	1
No response		2

Parents value meeting the psychologist somewhat more than having a written report. While 50% said both were equally important, the other 50% stated that meeting the psychologist was more valuable. In the open-ended question 32% suggested that better use of psychologists' time would be to make time for meeting parents. A further 12% of parents mentioned wanting more time to meet psychologists in the final comments section.

Spending time with parents face to face is more beneficial (PQ19).

Parents (like teachers) value having a written report that they can look over and consider over time:

> *I think the report is important and though it may take time to produce, it gives a valuable point of reference* (PQ5).
>
> *I think the report is very useful. You will always forget something they told you in the consultation* (PQ13).

While teachers value meeting with psychologists, they put greater weight on the report than parents do, with 15% saying that the report was more valuable than meeting with the psychologist. Fifty-four percent see them as equally important and 31% feel meeting with the psychologist is more valuable.

I most definitely found that meeting the psychologist was far more valuable and I remember this far more clearly than the written report (TQ11).

When asked about best use of psychologists' time, teachers were mostly likely to recommend more time to meet psychologists (30%), but also mentioned:

- Value of the report to look over (22%)
- Preference for shorter, less detailed reports (16%)
- More time spent on recommendations for practical support (8%)

I feel that meeting the psychologist is very important, but the written report is essential for recapping what was found and for new teachers who are dealing with the child (TQ1).

A question related to the use of the psychologist's time, is whether shorter reports might be appreciated. This is also a question in its own right, in that some stakeholders might prefer briefer reports for other reasons. When asked this question, parents do not want shorter reports (83%), while 59% of teachers would prefer a shortened report.

Maybe the reports are overly-detailed (TQ11).

Qualitative data suggests that many respondents would be comfortable with shorter reports, particularly if there was more time to meet with the psychologist.

Time in school is more important - maybe the report could be page-simplified and specific (TQ22).

Suggestions for Improvement

Suggestions for improved practice emerged through some of the open-ended questions. Teachers made a number of suggestions for improvements. There were two themes emerging from teachers:

- 14% mentioned that there was not enough assessment done
- 9% mentioned errors relating to copy and paste in reports

Psychologists should be far more vigilant when using 'copy and paste'…parents find this very upsetting… (TQ8).

Our psychologist provides excellent reports which we find very useful, it would help if she could do 1-2 more each year (TQ16).

In the open comments section, teachers and parents reported a positive experience of the NEPS service. Of those who responded, 38% of teachers and 56% of parents made spontaneous positive comments.

I am very happy with the level of commitment and co-operation with our NEPS psychologist. We have an excellent working relationship (TQ1).

I appreciate that this service is available and am most grateful that we could have an expert opinion so quickly (PQ5).

Psychologist was lovely to meet. She was to the point. Very happy with process (PQ15).

Actions arising from this research

An internal working group developed an Action Plan in response to this research. A first step was to share the above findings with all NEPS psychologists, through research reports and a presentation at national conference.

Harvey (2006) notes that the models for reports used in training psychologists are written at a level that is difficult to understand. Therefore the educational psychology service developed new models, including a document containing suggested wordings to report on 20 psychometric tests, with low reading age language and jargon eliminated or explained.

Following the advice of Mastoras *et al* (2011), who suggested that services should '*Create a set of sample reports that have been edited specifically to improve readability*', a set of standard report templates were prepared, which had been edited to improve readability and kept short, where possible.

Given the demand for appropriate recommendations, it was decided to develop a suite of handouts and good practice guides. To date 30 handouts and seven good practice guidelines have been prepared, covering areas such as dyslexia, gifted students, anxiety, social skills and organisational skills.

Mastoras *et al.* (2011) noted, '*Allowing teachers and parents the opportunity to review and discuss the recommendations prior to finalising the report may provide an important avenue to ensure that specific concerns have been appropriately addressed.*' With this in mind, educational psychologists continue to work to see how best we can maximise time spent with teachers and parents.

Back in 2005, Michaels stated, '*As the final product, and often the only communication about an evaluation, the psychological report is a powerful tool for influencing change or making decisions about the individual being evaluated*.'(p.47). However, almost 15 years on, practice has changed: The concept of 'evaluation' as being central to the work of the psychologist has given way to a broader understanding of the psychologist's role. The psychologist is not undertaking a single-handed evaluation of a student, but engaged in collaborative data collection. The centrality of a 'final product' is diminished by the on-going relationship between the educational psychologist and the assigned school. A report is not the only communication about an 'evaluation'. Instead, there is typically an on-going dialogue with parents and teachers about identifying difficulties and planning and reviewing interventions.

Conclusion

Harvey (2006) argues that effective psychological reports are consumer-focused. She states, '*The purpose of psychological reports are to a) increase other's understanding of clients, b) communicate interventions in such a way that they are understood, appreciated and implemented and c) ultimately result in clients manifesting improved functioning*' (p.5). It is hoped that this research and the subsequent actions undertaken, contribute to the improved professional practice in this area.

REFERENCES

Brenner, E. (2003). Consumer-focused psychological assessment. *Professional Psychology: Research and Practice*, 34 (3) 240-247.

Cheramie, G., Goodman, B., Santos, V. and Webb, E. (2007). Teacher perceptions of psychological reports submitted for emotional disturbance eligibility. Journal of Education and Human Development, 1 (2) p1-8.

Harvey, V. (2006). Variables affecting the clarity of psychological reports. *Journal of Clinical Psychology*. 2 (1) 5-18.

Mallin, B., Beimcik, J. and Hopfner, L. (2012). Teacher ratings of three psychology report recommendation styles. *Canadian Journal of School Psychology.* 27 (3) 258-273.

Mastoras, S., Climie, E., McCrimmon, A. and Schwean, V. (2011). A C.L.E.A.R. approach to report writing: A framework for improving the efficacy of psychoeducational reports, Canadian Journal of School Psychology, 26 (2) 127-147.

Pelco, L., Ward, S., Coleman, L. and Young, J. (2009). Teacher ratings of three psychological report styles. Training and Education in Professional Psychology. 3 (1) 19-27.

Roberts, R., Moar, K. and Scott, R. (2011). Teachers' opinions of interdisciplinary reports: The Children's Assessment Team. *Australian Journal of Educational and Developmental Psychology.* Vol 11, p39-59.

Wiener, J. and Costaris, L. (2012). Teaching psychological report writing: Content and process. *Canadian Journal of School Psychology*. 27 (2) 119-135.

MARY NUGENT AND COLLEAGUES

Mary Nugent is an educational psychologist who is Regional Director of the National Educational Psychological Service (NEPS), working in the Waterford area. All Mary's co-authors are also with NEPS. Aideen Carey, Ciara De Loughry, and Mary Sherwin are also educational psychologists, while Antoinette Rush is an administrator. All have worked together on this research project.