



# Curriculum Overload in Primary Schools

An overview of national and international experiences

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## 1. Introduction

To date, the NCCA has gathered information on the curriculum in primary schools from two phases of review (NCCA 2005; 2008a). In both reviews teachers and principals identified *time* as one of their greatest challenges in implementing the curriculum. Findings in Phase 2 shed further light by highlighting two separate dimensions of this time issue, namely the scale and size of the curriculum and the challenge of meeting children's individual needs particularly in multi-grade and large classes.

Teachers reported that they had insufficient time to fully implement curriculum subjects or to address all of the objectives within each of these subjects (NCCA 2005; 2008a). For example, they explained that *it can be difficult to plan for so much in so short a time scale* (NCCA, 2005, p. 122). Teachers also reported that they had insufficient time to meet the needs of all learners. Both teachers and principals noted the challenges of meeting the growing range of children's learning needs in large classes.

As the NCCA report on Phase 2 notes, it is perhaps not surprising that teachers are concerned about curriculum overload, given the sheer volume of curriculum documentation. The *Primary School Curriculum* comprises 23 books. In addition, since 1999, the Council has produced a number of guidelines which are intended to provide practical support to schools on specific aspects of curriculum and assessment. In addition, before and subsequent to the launch of the curriculum, many other organisations and agencies also issued resource and information packs to schools on subjects, topics and initiatives ranging from child protection to *Green Schools* and the promotion of various fitness programmes and sports. Given these developments, it is not surprising that some teachers feel overwhelmed both by the volume of documentation and the perceived pressure of external expectations. This sense of intensification, widely reported in international research into the contemporary teaching experience, is generally reported as *the overcrowded curriculum*.

This review of literature is intended to inform our understanding of the curriculum overload issue. Following initial efforts to define the terminology, it situates the discussion in Ireland where teachers have reported acutely experiencing the overload issue and where there has been an unprecedented level of activity in legislative and

policy development in recent years regarding children's primary education. Three key factors are identified which contribute to the overload issue in primary schools in Ireland. International experiences of curriculum overload are described and different responses to the overload issue which may be relevant to Council's work in reviewing and improving the *Primary School Curriculum* (1999) are highlighted. The last section explores the relevance of the overload issue for children themselves and the world they live in today.

## 2. Defining curriculum overload

Overload has been defined as *too great a load* (Webster, 2000, p.1027), *an excessive load* (Collins, 1994, p.1113, Random House, 2009). A mismatch between *capacity* and *load* is inherent in this definition. It follows that the phrase, *curriculum overload* suggests some imbalance or incongruity between our capacity to *enact* or *activate* a curriculum which itself is perceived as overloaded. If we imagine the relationship between children and teachers as critical to children's learning, the issue of curriculum overload affects not just teachers (who feel it most acutely) but also children, who are subject to it.

Much of what we know about curriculum overload comes from teachers. Some observers may question the extent to which the overload phenomenon is imagined, perceived or real. This paper draws on national and international experience and evidence which suggests that the overload issue is very much a reality for teachers, and paradoxically, is often an unintended consequence of education reform. From our own shores, to the UK, Australia and beyond, the issue of curriculum overload has gained currency.

The recently published Cambridge Primary Review's enquiry into the condition and future of primary education in England has described what was expected to be a *broad, balanced and rich curriculum as overcrowded and unmanageable* (Cambridge Primary Review, 2009a, p.3). The Review argued that as teachers endeavoured to attain high standards in 'the basics' there was little time for thinking, reflecting, problem-solving or exploration and the time for subjects such as Art, Music, Drama, History and Geography was often diminished.

There is a sense from the literature, that overload is caused by *important* subjects competing for space with one another and also competing with what some consider to be *less important* subjects. Of note are the Review's findings concerning the lack of space for *reflective and interactive* classroom pedagogy in the context of a curriculum that was simply too broad (Cambridge Primary Review, 2009a).

The Cambridge Primary Review has drawn attention to what the reviewers perceived as the negative impact of decades of continuous, unrelenting, piecemeal reform in contributing to these dimensions of overload in England. It seems that the rate and pace of change expected of schools also contributes to overload. For example, a recent case study of Northern Ireland's curriculum review has shown that teachers felt overwhelmed by the demand to respond to too much change too quickly (Gallagher, 2009).

Some observers have noted that the sheer breadth of change required is often a feature of the political process—in which governments endeavour to represent the views of multiple interest groups concerning the form and content of the curriculum. The Australian Primary Principals Association (2008) has argued that this ultimately leads to overcrowding of the curriculum. The Association has noted that, in this context, their teachers believe there is simply too much to teach within the available instructional time (APPA, 2008).

A study of capacity for education reform has shown that the trend toward overload is common to many countries. UNESCO (2003) attributed the overload trend to increases in the size of a new/revised curriculum and the limited time provided for implementing it fully. For example, in the Philippines, an overcrowded curriculum was blamed for low levels of achievement among students and delays in the development of critical competences; research showed that the coverage of an extensive subject matter tended to take priority over in-depth learning, given the relatively little time provided for implementing the curriculum (UNESCO, 2003).

This short section has shown that the issue of curriculum overload, defined in terms of the relationship between system/teacher capacity and curriculum, is not unique to primary schools in Ireland. The fourth section explores the issue of curriculum overload in other jurisdictions in more detail. But first, the curriculum overload issue is interrogated using evidence and experience from Primary Schools in Ireland. The next section of this paper identifies a range of factors which seem to contribute to, or to define, the overload phenomenon in the Irish context.



### 3. Factors contributing to overload

Three broad and inter-related factors can be identified as contributing to curriculum overload in primary schools, namely, the physical face (size) of the *Primary School Curriculum* (1999), the expansion of the curriculum in recent years and hurried schools and classrooms at the site of curriculum implementation. For each of these three factors, Table 1 identifies further dimensions of curriculum overload:

**Table 1: Factors contributing to curriculum overload**

Factor	Dimension	Focus
<b>Physical face of the <i>Primary School Curriculum</i> (1999)</b>	Development and implementation of PSC	Process
	Curriculum organisation	Curriculum integration
	Subject hierarchy and timeframe	Presentation of subjects/timetable
	Textbooks	Challenge of using the curriculum documents to support teacher planning
<b>The expanding curriculum</b>	Assessment	Impact of assessment requirements
	Guidelines for teachers/schools and additional support material	NCCA documents to primary schools since 1999
	Initiatives and programmes for schools	Primary schools as the site of local and national initiatives
<b>Hurried schools and hurried classrooms</b>	School space, facilities and resources	Local school environment
	Lack of time/opportunity for teacher planning	Time for teachers
	Lack of time to communicate with parents	Challenges of communication between teachers and parents
	Policy and legislation	Impact of legislation on school policy

The following discussion focuses on each of these three factors in turn, beginning with the physical face of the *Primary School Curriculum* (1999).

#### The physical face of the *Primary School Curriculum* (1999)

As described above, the volume of curriculum documentation in Ireland is very large. This is not unique to Ireland. The Cambridge Review report describes the issue of large amounts of books and materials as *the physical face of curriculum overload* (Cambridge Primary Review, 2009a, p.6).

## Development of the Primary School Curriculum

Findings from two reviews of the curriculum in primary schools showed that for many teachers the main challenge in implementing the curriculum was that there was *just too much in it* (NCCA 2005; 2008a). Looking back at the process of curriculum development and the involvement of many specialist subject committees, this is perhaps not surprising. Council initially convened junior and senior curriculum committees (junior infants to second class, third to sixth class) for curriculum area and subject committees. Thus, there were two curriculum area committees (Social, Environmental and Science Education [SESE] including History, Geography and Science; and Arts Education including Visual arts, Music and Drama) and there were five subject committees (Gaeilge, English, Mathematics, Physical Education and Social Personal and Health Education [SPHE]). When the junior and senior committees merged, the number of subject committees was reduced from 14 to 7. One further committee, the Primary Curriculum Coordinating Committee, was charged with managing the development of the 'revised' primary curriculum via these 7 committees.

The Cambridge Primary Review (2009b) recently critiqued a similar process of curriculum development in England as follows:

*The problem arose not so much from the original 10-subject specification as from the way each programme of study was independently devised for the National Curriculum Council by a group of specialists eager to take advantage of the opportunity to secure the strongest possible foothold for their subject by spelling out content in irrefutable detail. Whether in combination the 10 programmes of study would be logistically feasible appeared not to matter. The subject-by-subject ring binders of the first national curriculum rapidly acquired totemic status as the physical face of curriculum overload (p.6).*

Closer to home, Sugrue (2004) has also described the sheer size of the *Primary School Curriculum* (1999) as a direct output of the process of developing it:

*One of the consequences of the committee structure has been a proliferation of documentation as part of the revised curriculum – 23 texts in all. This results in a significant and unnecessary amount of repetition and redundancy, and this is particularly the case in relation to assessment. Each set of guidelines deals with this issue with some relatively minor variations tailored to the specifics of the subject matter being discussed, but repetition is no substitute for a more in-depth treatment of an element of the curriculum that is accepted as critically important (p.200).*

The above quotation also suggests that despite its size, the *Primary School Curriculum* (1999) emerged somewhat incomplete. Two reviews of the curriculum in schools (NCCA 2005; 2008a) bear out this assertion noting, *the emphasis on a theoretical rather than practical framework* (NCCA, 2008a, p.198) and the need for additional practical support for teachers in using a range of teaching methodologies to support learning. Of note is the need to develop practical support for teachers in effectively using different teaching and learning resources, organisational settings and strategies for differentiation as well as promoting the development of children's higher-order thinking skills (NCCA, 2005; 2008a).

(The need to add to the curriculum both to fill gaps apparent at the time of its completion and to provide updates to see it through its first ten years is the focus of the next key factor which focuses on *the expanding curriculum*, beginning on page 16.)

### **Implementation of the Primary School Curriculum**

The *Primary School Curriculum* was first presented to teachers in 1999 beginning with a general overview and a focus on the *English Curriculum* in English medium schools and *Curaclam na Gaeilge* in Irish medium schools. In-career development support was organised at a national level by the then Primary Curriculum Support Programme (PCSP) and the School Development Planning Support, Primary (SDPS). The pace of the in-career development support for subjects was rapid. Two days of seminar presentations were provided for each subject and this was followed by one additional planning day based in school. A commissioned evaluation of the PCSP (Murchan et al, 2005), noted that while the quality of the in-service provided was regarded by teachers as satisfactory, the seminars themselves, *were quite rushed, with little time for the type of critical reflection known to enhance teacher learning* (p.7). The evaluation also explained that because trainers had little contextual information about the schools in advance of seminars, their ability to provide differentiated support to schools was limited thus contributing to the sheer amount of information being presented to teachers at the seminar days.

The phased implementation of the curriculum in schools meant that for all teachers, subject implementation began in the year following seminar support provided by the PCSP. However, approximately mid-way in the phased implementation of subjects, the sense of 'overload' was such that, with the agreement of the partners, the then Minister for Education and Science, Noel Dempsey TD, announced a one-year pause noting that, *there is recognition of the need for a period of consolidation ... There will be no in-service seminars for new subjects during this school year* (Department of Education and Science, Circular M26/03). In the words of one primary school teacher:

*I am sick of all these ideas being thrown at me. I am still trying to cope with understanding the new curriculum and the huge shift in emphasis in teaching methods – this, coupled with new subjects being added each year, plus changing classes.* (De Paor, 2007, p.150)

It seems likely that the decision to phase in curriculum implementation over 6-7 years contributed to teachers' sense of being involved in, and subject to, constant change. The PCSP evaluation has suggested that the implementation timescale was a compromise between those who wanted it done more quickly (3-4 years) and those who wished to see it phased in over a longer period. The evaluation noted that despite a request from the education Minister at the time to implement the curriculum over 3 years, it seems that in the end, the decision makers met somewhere in the middle and teachers became part of a change process which would last almost a decade. Most significant in this context, was the decision to implement the *Primary School Curriculum*, described and defined as a *holistic construct*, as a series of subjects over many years:

*The approach chosen, subject-by-subject support involving seminars and school-based curriculum planning days with subsequent on-site support... seems to have had an influence on the extent to which the curriculum is regarded and worked as an integrated construct in schools. The evidence for integration in practice is thin and there is not much evidence from system planners that ensuring that the curriculum be seen as integrated by teachers was a priority of the in-service process* (Murchan et al, 2005, p.77).

## **Curriculum organisation**

It is fair to say that the rollout of the curriculum in this way served to reinforce the notion of the value of each subject as a discrete entity. It is interesting that the introduction to

the curriculum notes that *the strands are not discrete areas of learning, as they overlap and interact to form a holistic learning experience for the child* (DES, 1999 p.42). However, Council's two reviews have shown that teachers struggle to see and implement it as such (NCCA 2005; 2008a). Beyond the curriculum introduction (book) and the consistency of design across curriculum content and guidelines (books), there is little evidence of curriculum integration in theory, yet it is repeatedly advocated in practice.

It is clear that the design of the curriculum as a series of separate subjects, by separate committees, and the subsequent design and operation of the in-service programme have overshadowed the notion of the curriculum as a holistic construct.

### **Subject hierarchy and the presentation of curriculum subjects**

The significance of all 11 curriculum subjects is repeatedly acknowledged in the introduction to the *Primary School Curriculum* (1999). The word 'importance' is used no less than 33 times in the Introduction book. It serves to reinforce the critical value of each individual subject. While it would seem that all subjects are regarded as equal, the curriculum notes that *the particular educational goals associated with literacy and numeracy are a priority of the curriculum* (Introduction, p.26). The *suggested minimum weekly time framework* for all curriculum subjects provided in the introduction bears out the prioritisation of literacy and numeracy. Fifty-two percent of total teaching time (10.5 of 20 hours weekly) is afforded to Language and Mathematics. Thus, while three subjects (English, Gaeilge, Mathematics) are accorded 52% of secular instruction teaching time, eight subjects (History, Geography, Science, Physical Education, Visual Arts, Music, Drama and Social, Personal and Health Education) compete for the remaining 48% of teaching time (9.5 hours weekly)<sup>1</sup>. It is of note that this remaining 9.5 hours weekly for eight subjects includes the two hours accorded for discretionary curriculum time. When these two hours are removed, just 7.5 weekly hours are provided for eight subjects, weekly. Perhaps it is no wonder that teachers have identified lack of time as their greatest curriculum challenge. These allocations highlight the particular difficulty of dividing (time) and conquering (all subjects). In addition, the issue of where subjects are placed in the school day can send *a powerful message*

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<sup>1</sup> Religious Education is accorded a further two and a half-hours of 'instruction time' per week.

about the value teachers place on different subjects (BBC News, 2008) with literacy and numeracy generally the focus of the beginning of the school day.

In this context, it is interesting that the Cambridge Primary Review (2009b) has advocated teaching all subjects in equal balance in order to preserve the breadth and richness of the curriculum. The Review has argued that education for the 21<sup>st</sup> century requires that all subject areas be given the equal status they deserve and that the curriculum be grounded in different ways of knowing and understanding through which humans make sense of themselves and the world (Cambridge Primary Review, 2009b, p.49).

It seems that perhaps an imbalance in subject status, or confusion concerning the *real priorities*, or simply the sheer depth and breadth of the totality of subjects all contribute to curriculum overload. Reviews have shown that primary teachers in Ireland struggle to implement the curriculum within one school day, week, year which has remained the same length, despite the increased specification of curriculum content (NCCA 2005; 2008a). It is of note here that primary schools in Ireland have one of the shortest school years when compared with our counterparts in other countries (INCA, 2008).

## **Textbooks**

In recent years, the role of textbooks in primary schools has come under increasing scrutiny. In Council's first review of the curriculum in schools (NCCA, 2005) teachers reported that textbooks varied in the extent to which they were aligned with the content and methods of the curriculum and they reported that many textbooks provided children with a poor stimulus for learning. Teachers themselves noted that textbooks could be insufficiently challenging for children (p.236). In the same year, the Inspectorate's evaluation of the curriculum in schools reported that textbooks exerted a *dominant influence on teaching and learning in a significant number of classrooms* (DES, 2005, p.49). The evaluation described the negative impact in classrooms where there was an over-reliance on textbooks as follows:

*...the teaching tended to be didactic and undemanding and repetitive learning tasks were provided for the pupils. There was little emphasis on the development of higher-order thinking skills, on nurturing pupils' creativity, or on encouraging pupils to respond emotionally and imaginatively. Teaching*

*methodologies were restricted, and the essential emphases of the curriculum were not accorded due prominence. The quality of pupils' learning was found to have significant scope for development in these instances, and the pupils were not sufficiently interested or engaged in their learning (p.49).*

The Inspectorate's evaluation of *Irish in the Classroom* (DES, 2007) also reported significant reliance on textbooks particularly with regard to curriculum planning. The report noted that in half of the classes involved in the evaluation, teachers' planning was based on the content of the textbooks and in most classes, reading activities were based on the textbooks. The report also highlighted negative effects of the use of textbooks on teachers' practice suggesting that sometimes *teachers did not reflect sufficiently on the suitability of the content for the class and the pupils did not therefore perform as well as expected... no provision was made for the specific learning needs of pupils (p.31).*

So why do teachers use textbooks, which by their own admission may be of poor quality and may provide limited support for learning? Council's second review of the curriculum in schools (NCCA, 2008a) sheds further light on the relationship between the curriculum, teachers and textbooks. It provides two answers to the above question. In the first instance, teachers reported that children's textbooks/workbooks were *more helpful* than the curriculum for classroom planning. This is an important finding. Teachers were critical of the sheer breadth and depth of the curriculum. They reported finding it difficult to navigate and to access across subjects and levels. The second answer from the review concerns teachers' expectations... of parents' expectations. Teachers highlighted parental expectations as a critical factor in their selection of textbooks and their efforts to complete them. One teacher described the dilemma as follows:

*With the textbook you feel that the parent has spent twenty euro on this book and that's a lot for just one book or one subject. And if you haven't got it done by the end of the year, you think, 'Oh my goodness, I have ten pages left in this book!' There's the pressure to finish it. But that isn't giving independent thinking to the children. It is not giving active learning. It is just using the book for the sake of the book (NCCA, 2008a, p 82).*

Findings suggest that creating a more user-friendly, accessible curriculum for teachers may well be one key to reducing the reported over-reliance on textbooks, and in turn the overload which teachers experience. It is of interest in this context that in one school where teachers restricted their use of textbooks, their decision was welcomed

by parents; it resulted in less financial expense for them, and they saw improved outcomes for their children. Teachers in turn reported their experience as 'exciting and empowering' and noted that children were more motivated and involved in their own learning (NCCA, 2009).

It is of note that while members of the Executive meet annually with publishers and provide curriculum and assessment updates, Council has no role in controlling or managing the quality of textbooks published for schools. It may be reasonable to note that perhaps no agency has a role in this process, beyond the market itself.

## The expanding curriculum

A number of *issues* were identified and discussed in the introduction to the *Primary School Curriculum* (1999). Many of these became the focus of additional guidelines which were developed by Council to support the work of primary school teachers in the decade following publication of the curriculum.

### **Assessment**

Assessment is an integral part of the curriculum; it is difficult to explore curriculum issues, teaching approaches and classroom practice without also considering the assessment of children's learning. In Council's reviews (NCCA, 2005; 2008a), teachers who referred to curriculum overload particularly highlighted lack of time and difficulties in assessing individual pupils' progress (NCCA, 2008a). Findings indicated that teachers were unsure about how to measure the standards children were attaining and were unclear on the criteria to be used and the benchmarks to be aspired to. Some teachers said they lacked expertise in devising alternative assessment measures, had difficulties assessing oral language, practical investigations and group work. The findings also highlighted the complex nature of classroom assessment in the affective domain and in a subject like SPHE (NCCA, 2008a).

In response to teachers' requests for practical support in using assessment, NCCA developed *Assessment in the Primary School Curriculum: Guidelines for Schools* (2007). The guidelines outline a continuum of assessment methods ranging from self-assessment to standardised testing and show how teachers can use the range of



assessment methods to gather information about children's learning in order to provide feedback to them and also to plan the next steps in teaching and learning. In addition to these guidelines, standardised testing of English and Mathematics is now required at two points in primary schools (DES, Circular 0138/2006).

Research on the impact of this standardised testing requirement for primary schools in Ireland has yet to be published. While evidence from the United Kingdom (U.K.) shows that an over-emphasis on standardised testing can cause teachers to focus on the basics of literacy and numeracy (thus reducing the time for other subjects/areas which become regarded as lower priority), it is important to remember that the stakes attached to these tests have been higher than in the Irish context.

### **Guidelines and additional support materials**

In addition to the 23 books which form the *Primary School Curriculum*, the NCCA has developed a series of guidelines which are intended to provide practical support for teachers/schools on specific aspects of curriculum and assessment. Most recently, this includes the publication of *Aistear: the Early Childhood Curriculum Framework* (2009) as well as the following:

- *Assessment in the Primary School Curriculum: Guidelines for Schools* (2007)
- *Exceptionally Able Students: Draft Guidelines for Teachers* (2007)
- *Guidelines for Teachers of Students with General Learning Disabilities* (2007)
- *Intercultural Education in the Primary School: Guidelines for Schools* (2005)
- *English Curriculum: Additional Support Material* (2005)
- *English as an Additional Language: Guidelines for Teachers* (2005)
- *Information and Communications Technology (ICT) in the Primary School Curriculum: Guidelines for Teachers* (2004).

Curriculum guidelines for modern languages in primary schools (*Pilot project for modern languages in the primary school: Draft curriculum guidelines*, NCCA, 1999) and *Modern Languages in Primary Schools: Teacher guidelines* (NCCA, 2001) were also developed for schools participating in the Modern Languages in Primary Schools Initiative.

## Initiatives and programmes for schools

Many other organisations and agencies have also issued resource and information packs to schools on subjects, topics and initiatives ranging from dental health, healthy eating, child protection, substance misuse, Tree Week, Discover Science/Young Scientist, Green Schools, Write-a-Book/Scríobh Leabhar, Writers in Schools, Heritage in Schools, Safety on the Farm, Greenwave, Gleo, craft in classrooms and the promotion of various fitness programmes and particular sports.

As well as books and support materials, many additional initiatives and programmes have been introduced in the system that make demands on schools and teachers. These include school development planning and Delivering Opportunity of Education in Schools (DEIS). For instance, within the DEIS initiative, schools involved have been asked to adopt *Reading Recovery*<sup>2</sup> and *First Steps*<sup>3</sup> in support of literacy and *Maths Recovery*<sup>4</sup> and *Ready, Set, Go-Maths*<sup>5</sup> in support of numeracy (Ref: PPDS website).

## Hurried schools and hurried classrooms

Schools and classrooms are busy places. There are many distractions and happenings during a normal school day that impinge on direct instruction time.

## School space, facilities and resources

Many primary schools have limited play areas for children and many are without multi-purpose rooms for indoor play. Older school buildings tend to have smaller physical classrooms which militate against the use of play, active learning and hands-on

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<sup>2</sup> More information on *Reading Recovery* in the Irish primary school context to be found at the Monaghan Education Centre website at <http://www.metc.ie/National-Programmes/Reading-Recovery/What-is-Reading-Recovery>

<sup>3</sup> More information on *First Steps* in the Irish primary school context to be found at the PPDS website at [http://ppds.ie/index.php?option=com\\_content&task=view&id=210&Itemid=312](http://ppds.ie/index.php?option=com_content&task=view&id=210&Itemid=312)

<sup>4</sup> More information on *Maths Recovery* in the Irish primary context to be found at <http://www.mata.ie/>

<sup>5</sup> More information on *Ready, Set, Go-Maths* in the Irish primary context to be found at the PPDS website at [http://ppds.ie/index.php?option=com\\_content&task=view&id=211&Itemid=313](http://ppds.ie/index.php?option=com_content&task=view&id=211&Itemid=313)

experiments.<sup>6</sup> Schools also struggle to fund the purchase of the many resources, materials and consumables required for subjects such as Visual Arts and Science as well as for the purchase of ICT hardware and software.

Findings from two phases of review (NCCA, 2005; 2008a) also highlight the fact that schools are challenged to find storage space for the resources where they do have them. In one school teachers referred to the visual arts curriculum as *very idealistic in general given the difficulties of implementing a curriculum with limitations of time and space* (NCCA, 2005, p.84).

More recently, commissioned research on children's experience of science in primary schools (NCCA, 2008b) showed that while children were enthusiastic about primary school science, some pupils were not afforded regular opportunities to engage in hands-on science. In particular, child-led investigations appear to be used infrequently. The research found few instances of children engaging in designing-and-making activities and concluded that some children may be experiencing teacher demonstration and teacher explanation as dominant features of their primary science learning. When teachers were asked what their greatest challenge was in teaching the strand Energy and Forces, (NCCA, 2008a, p.177) a majority (53%) of respondents identified *lack of resources* as the greatest challenge. While we cannot conclude that the availability of more resources would result in greater engagement in hands-on science for children, it is reasonable to assume that lack of equipment and materials must be a key impediment to engaging in the hands-on, practical work advocated in the curriculum.

### **Lack of time and opportunity for teacher planning**

Principals and teachers within their own schools are required to draw up a range of school policies and subject plans. These plans should show evidence of how the school is adapting the curriculum to match the needs of their own context and the needs of their own pupil cohort.

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<sup>6</sup> More information on school buildings and the INTO school modernisation agenda is at <http://www.into.ie/ROI/SchoolAdministrationPolicies/SchoolAccommodation/SchoolAccommodationFunding/>

Individual class teachers are also expected to plan individually for their own classes. The content objectives and skills for every subject are currently presented according to four class levels (with the exception of Mathematics, where it is presented according to the eight distinct primary classes). Teachers of single classes must extract the relevant content for their particular class group while teachers of multi-grade classes must do so for their various class groupings.

The DES currently provides one school development planning day per year for school planning.

### **Lack of time to communicate with parents**

Parental involvement in children's education is a relatively new feature of the Irish education system. Parents, as the primary educators of their children, are now recognised as a key stakeholder, sharing in the development of the school plan and in the decision-making in their child's education as supportive education partners. The Introduction to the *Primary School Curriculum* (1999) states that:

*Parents are the child's primary educators, and the life of the home is the most potent factor in his or her development during the primary school years. .... Close co-operation between the home and the school is essential, therefore, if children are to receive the maximum benefit from the curriculum.*

Schools are expected to provide parents with important information on their children's education. While this is a welcome development it has added to the demands of work for teachers and principal teachers. Schools generally have clear procedures for reporting to parents through report cards and parent/teacher meetings and many teachers are keen to report to parents and have very clear understandings of the purpose of reporting. However, while many parents are positive about their experiences of school reports and meetings others have reported they are *less satisfied and do not experience their schools as quite as accessible as the schools describe and perceive themselves to be* (NCCA, 2008c, p.124).

It is perhaps ironic that the relationship with parents adds to teachers' workload and experience of curriculum overload, given the possibilities of collaborating with parents in ways that support both parents and teachers in their respective roles and ultimately, support children's learning.

## Policy and legislation

In recent years, a significant amount of legislation has been introduced with more and more responsibilities and functions devolved from the Department of Education and Science (DES) to schools. Since 1975 more than a dozen acts of legislation have impacted on primary education.

Table 2, below, identifies the relevant pieces of legislation since 1998 and some of their main implications for schools.

**Table 2: Recent legislation and implications for schools**

Legislation	Implications for schools
<b>Education for Persons with Special Education Needs Act 2004</b>	Schools are required to take all practicable measures to meet the educational needs of the student
<b>Data Protection (Amendment) Act 2003</b>	Access to information held by schools
<b>Education Welfare Act 2000</b>	Schools are required to record attendances and report certain absences
Section 23(2)	Admissions and Enrolment Policy required
Section 22	Code of Behaviour/discipline required
<b>Equal Status Acts 2000 to 2004</b>	Schools are required to promote inclusion across all nine grounds of discrimination identified in the equality legislation
<b>Safety, Health and Welfare at Work Act 2005</b>	Health and Safety policy required. Anti-bullying/sexual harassment policy required
<b>Education Act 1998</b>	Schools are required to have:
Section 9(d)	Health and Safety policy

<b>Legislation</b>	<b>Implications for schools</b>
Section 9(g)	Children's records must be retained and safely stored in schools
Section 9(j)	Health Education Policy
Section 15 2(d)	Management and deployment of staff policy
Section 21	School plan
Section 21 15(d), 15(g)	Policy on integration of children with special and educational needs
Section 29	Appeals procedure

Compliance with this legislation has added new responsibilities to the role of principal. In addition, the number of circulars published by the Department of Education and Science has increased from one per month at the beginning of the new millennium to more than one per week in 2006. This impacts on the role of the principal teacher as curriculum and instructional leader in the school. Perhaps not surprisingly, it has been reported that school leaders in Ireland are experiencing overload due to changing and expanding roles, responsibilities and expectations (IPPN, 2007).

This section explored factors contributing to the curriculum overload issue, nationally. The next section examines the experiences of overload in other jurisdictions.

## 4. The international experience of curriculum overload

In Section 2 of this paper we suggested that the phenomenon of curriculum overload was neither unique to primary schools nor to Ireland. Here we examine the experience of overload in other countries and efforts to respond to it.

Information in this section has been sourced for a number of places including China, England, France, Indonesia, Japan, Korea, the Netherlands, New Zealand, Northern Ireland, Norway, Ontario, Philippines, Scotland, Singapore, Spain, Sweden and Vietnam. A number of these featured in Le Metais' Thematic Study for the International Review of Curriculum and Assessment Frameworks (INCA, 2003). Le Metais' 2003 study, while now somewhat dated, provides interesting and valuable data on the nature of curriculum development over the previous 15 years in the countries and regions concerned. Pepper's study for the Qualifications and Curriculum Authority (QCA) provided more recent evidence from ten countries (Pepper, for QCA, 2008) including an update on the situation in three of these countries (Spain, France and New Zealand), as well as data from seven additional jurisdictions, referring to the 2003-2008 period. Additional information was obtained from the websites of education authorities in Scotland and New Zealand, while INCA Thematic Probes yielded further data on Korea and Singapore. Also of interest is the Primary Review Research Report 3/1 (Hall and Øzerk, 2008) which compared curriculum and assessment policies for primary education in England with those in other parts of the UK, as well as in France, Norway and Japan.

### The experience of overload

#### **Overload and education reform**

In the 1990s and early 2000s the frequency and scope of education reform increased across countries (INCA, 2003 and Pepper, 2008). It seems that curriculum overload has perhaps become infamous as both the catalyst for, and often the consequence of, revision and reform of the primary curriculum. A range of agendas for changing the curriculum in primary schools have been identified over the last decade. These have included pressure on education systems to *meet a wider range of needs, to reflect*

*social and technological changes* (INCA, 2003, p.103), to emphasise *broader learning outcomes that seek to prepare pupils to be lifelong learners and active participants in society, to raise standards, particularly in literacy and numeracy and to simplify the curriculum and its assessment and/or to make the curriculum more manageable* (Pepper, 2008, p.2). We can imagine this phenomenon of curriculum expansion (described as a key factor contributing to curriculum overload in the last section) perhaps in terms of one-way traffic entering a long-term, multi-storey car-park; more vehicles enter the building while further floors are being added to it. We could observe that few, if any, vehicles leave. As early as 2003, Le Metais noted as problematic the process of continually adding to the curriculum, *without a willingness to formally withdraw other areas or topics* (INCA, 2003, p.104).

In INCA (2003), Le Metais suggested that even the newly revised curricula in England, the Netherlands and Wales were perceived as overloaded. Some other countries and regions in which crowding of the curriculum has more recently emerged as an issue include Ontario, Australia, New Zealand, China, Japan, Vietnam and the Philippines. Announcing a review of Ontario's primary curriculum, the province's Education Minister Wynne (The Canadian Press, 2009) recently commented on complaints by teachers and others:

*For many respondents, 'overcrowding' was not only about the amount of academic content that needed to be covered, but also about the need to address social, physical, emotional, cultural and developmental aspects of learning.*

One teacher respondent was quoted as follows:

*When I taught in the regular classroom, I felt like I was rushing the children through the curriculum, just to get through everything. I would have liked to have taught things in more depth. The curriculum as it is now, is a mile wide and an inch deep.*

Primary teachers in New Zealand expressed similar frustrations when questioned about their implementation of the Technology Curriculum (International Journal of Technology and Design Education, 2004). Their responses, noted in the abstract to this paper, indicated that, *most primary school teachers are aiming for curriculum coverage, have moderate levels of confidence but are concerned about curriculum overcrowding.*



For some countries, overload remains a hot topic. For example, plans to introduce a nationwide primary curriculum in Australia's states and territories from 2011 have prompted significant warnings from school principals about overcrowding of the curriculum as more subjects are gradually added to the core.

The negative consequences of a crowded curriculum in Asian countries were also documented by UNESCO (2003) in a report which noted that *most countries have a curriculum that is overloaded*. It recounted evidence from China, where content was said to be overloaded and *too difficult for pupils to complete*; from the Philippines, where *overcrowded curricula hinder or delay the development of critical competencies*; from Vietnam, where *a lot of content is heavy on theory, but lacks applicable knowledge*; and from Indonesia, where there was *too much detail that needs to be memorised and not enough focus on understanding and analysis*. The same report discussed how social change has led to the expansion of the curriculum and the introduction of new subjects, and it quotes from a Japanese study highlighting how this 'aggravates' the [already] overcrowded curriculum: *Adding some new items into a subject matter may not be very difficult but reducing some items is rather difficult* (UNESCO, 2003, p.42).

## Efforts to alleviate overload

### **The size issue**

How different countries and regions respond to curriculum overload depends to some degree on what those countries determine to be the causes of the overload. The size of the curriculum is often at issue. Arguments for downsizing include claims that there are too many subjects or too much content detail; children are asked to learn/memorise too much; some material is too difficult for children to master and/or there are too many discrete objectives. Overlap and/or duplication are also identified as key causes.

Interestingly, returning to the issue of mismatch between capacity and curriculum discussed in Section 2, we did not find any literature to suggest that children's time in school should be extended in order to provide time to learn a greater amount of content. Where time is deemed insufficient to allow for 'coverage' of content, the

response has focused on examining how content can be reduced or can *appear reduced*, rather than to increase school hours. Curriculum content is perhaps the most complex aspect of curriculum overload and perhaps also the most contentious when solutions are considered. Any review of the structure of the curriculum and its content is likely to encounter contestation from those keen to defend the status of particular disciplines and subjects.

### **Competing subjects and assessment**

In Section 3 of this paper, we noted that the hierarchical status of some subjects leads to a distortion of the curriculum, as a result of timetabling decisions, both in the quantity of time allocated and the time of day when that subject is taught. The core subjects of language and mathematics are often the beneficiaries, on both counts. Many countries (including Ireland) have felt the need to stress the foundational importance of these subjects, not least in their crucial role of skilling a literate and numerate society, and the requirement for language as a mediator for many domains of learning. The Cambridge Primary Review (2009c) is critical of the distortion of England's National Curriculum by over-emphasis on nationally tested content, yet the Review also insists on *the centrality of language, oracy and literacy, both in their own right and as enabling learning across a curriculum in which breadth and standards go hand in hand* (p.2).

In most countries and regions reported on here, assessment is largely diagnostic in function although greater emphasis on *assessment for learning* in recent years has shifted the balance towards formative assessment. The assessment of competences is also carried out in a number of countries (e.g. Spain, Norway) but is not deemed to be high-stakes. It is of note that where testing in primary schools is perceived to be high-stakes, as has been the case in England for instance, the curriculum is reported to be distorted, as teachers 'teach to the test'. The problem then is that subjects not tested are crowded out by those that are (Cambridge Primary Review, 2009a). When substantial time is required for the administration and recording of results, even greater imbalance is likely to result. Interestingly, in INCA 2003, New Zealand is cited as an example of a country where standards had not been compromised by an absence of standardised assessments:

*. . . curriculum outcomes are expressed in terms of achievement outcome levels, with less formal expectations of a child's achievement at different stages of their development. The lack of national targets and universal standardised assessment has not proved to be an obstacle to effective learning (p.65).*

The guidelines for assessment set out in Scotland's *Curriculum for Excellence* also aim to *support the purposes of learning and reflect the principles of Curriculum for Excellence* (LTS, 2009b). An emphasis on *assessment for learning* pervades the curriculum. This emphasis clearly aims to protect balance within the curriculum and to avoid the potentially distorting effects of high-stakes assessment.

## **Curriculum reorganisation**

While there is some evidence of countries scaling back or shrinking the curriculum (e.g., the Netherlands, Japan, Singapore) in response to the overload issue, there is further evidence of countries and regions reorganising and perhaps refocusing the curriculum to make the content more manageable. The following paragraphs examine a range of curriculum reorganisation efforts which include re-packaging subjects, integrating subjects, embedding a skills focus and balancing depth and breadth as key strategies to reduce overload.

### **Re-packaging subjects**

The strategies most frequently reported which reflect some effort at 'curriculum contraction' focus on the re-organisation of subjects into new groupings (as happened in recent years in Vietnam, Italy, the Philippines, Scotland and Northern Ireland) with 'groups' being formed from subjects seen as conceptually related, and thus more amenable to integrated studies. This happens most readily in sciences, languages, arts and civic/personal education. However, the validity of such mergers or combinations and their epistemological foundations are often contested, as are the re-named new groupings. Terms such as *themes*, *blocks*, *domains* and *areas* are used internationally but with different interpretations. Observers of these practices have noted that such re-naming of components of the curriculum *does not necessarily make the curriculum more manageable in practice* (Cambridge Primary Review, 2009c).

It has been suggested that in curricula which are organised by subjects (rather than areas), the learning content is presented in relatively narrow 'domains' (e.g. *history* and

*geography*), whereas organisation by areas tends to present content in broader, more conceptually related 'domains of experience' such as Spain's *knowledge of the natural, social and cultural environment* or France's *autonomy and initiative* (Pepper, 2008 p.2). Rationales for using broad areas to organise the curriculum have included: curriculum integration to optimise learning; attaching new importance to cross-curricular competences; and a need to simplify the curriculum and its assessment. Eight of the ten countries in Pepper's survey were organising the curriculum by areas, with just two (Slovenia and Norway) organising by subjects. However, in INCA 2003, it is noted that even where the curriculum was organised by subjects, an integrated approach was *formally encouraged* (p.7).

### **Integrating subjects**

It is interesting that the revised Northern Ireland primary curriculum (CCEA, 2007) sets out six curriculum areas, as the subject-based curriculum *had come to be seen as a barrier to cross-curricular learning* (Pepper, 2008, p.5). Scotland's Curriculum for Excellence now has eight areas, extending and revising its previous five (LTS, 2009). New Zealand expanded its seven learning areas to eight in 2007. These changes are quite recent, only the passage of time will show whether they result in a more manageable or less crowded curriculum for teachers.

UNESCO (2003) highlighted *integration of learning content* as the strategy used by most of the Asian countries surveyed at that time *in order to decongest the curriculum* (p.42). Examples quoted were Cambodia, China, Laos, the Philippines and Korea. However, perhaps because of the many forms which integration can take, no single common approach was employed. It is of note that some of these countries have since resorted to scaling back content, e.g., by up to 20% in China and Singapore.

'Cross-curricular learning' is often referred to in curriculum documents, in place of or alongside 'integrated learning', but as the Cambridge Primary Review noted, there is little conceptual clarity and consistency in the use of such terms internationally. An additional consideration is the character of the primary teacher's work. INCA (2003) observes: *as most primary teachers are generalists, there has always been a degree of overlap between subject areas* (p.7). The primary teacher is urged to think across subject boundaries, and while this may promote greater integration, it almost inevitably results also in some overlap or duplication.

**Embedding skills/competences**

Closely related to attempts to integrate or rationalise curriculum content is the representation of the curriculum in terms of skills or competences to be developed in learners (some countries call them 'competencies'). In Scotland, for instance, the Curriculum for Excellence states that children should be enabled to 'use literacy, communication and numeracy skills', 'use technology for learning', 'apply critical thinking in new contexts', 'create and develop' and 'solve problems' (LTS, 2009a). In Korea, the 7<sup>th</sup> National Curriculum placed a high priority on fostering creativity in children, and on developing their higher-order thinking and problem-solving skills. 'Thinking and processing skills' were embraced by Singapore's 'Centre for Teaching Thinking' set up at the end of the 1990s. The Northern Ireland Curriculum defines eight skills, including 'being creative', 'working with others', 'self management' and 'using ICT' (CCEA, 2007, p.5). Other countries emphasising competences in their curricula include Germany, France, Italy and Norway (Pepper, 2008). Yet, in Pepper's words: *areas and subjects continue to provide the basic unit of curriculum organisation, and tend to form the basis of assessments* (p.3). As is the case with other changes to curriculum, each jurisdiction will need to monitor changes such as the foregoing to determine whether newly-defined learning outcomes can be achieved without adding to the issue of overload.

**Balancing breadth and depth**

The relationship between the breadth of the curriculum and its depth has been identified in the literature as a further focus of efforts to respond to curriculum overload. The issue, as described by teachers and others, is identified in terms of excessive curriculum content leading to superficial 'coverage' or 'treatment' of material. An opposing argument might consider that excessive time and priority is given to the basics at the expense of a broad curriculum experience. The earlier-quoted comment of the Ontario teacher who described that province's curriculum as *a mile wide and an inch deep* may not apply in all instances, but the tension between curriculum breadth and depth is evident across countries. The Cambridge Primary Review (2009c) strongly argues for the *entitlement* of children to a broad curriculum, and declares that such breadth is not incompatible with the attainment of high standards. The Review further argues that 'the basics' are traditionally protected, while 'the rest of the curriculum' is often seen as optional or 'dispensable' (Cambridge Primary Review,

2009c). The argument is made for *an entitlement curriculum* in which all domains are essential and protected. A number of countries are presented in the INCA 2003 study as attempting to achieve a breadth/depth balance. Japan, New Zealand, Singapore are quoted as examples, although in each case, literacy and numeracy are still recognised as the 'core subjects'. Ireland is mentioned as a country in which *all subjects are explicitly given equal standing* (p.41).

## **Curriculum prescription and control**

This literature review has identified centralised/decentralised measures of curriculum control as significant for some countries in responding to the challenge of overload. These efforts to alleviate curriculum overload focus on reducing the extent to which curriculum content is centrally prescribed, and increasing opportunities for curriculum interpretation and implementation at local level according to the judgement of districts or schools.

INCA (2003), reporting on 20 jurisdictions, noted that *all countries (except Scotland) have a statutory curriculum, prescribed by national or sub-national authorities*. Evidence at the beginning of this century suggests a continuum of control across jurisdictions. The INCA study goes on to point out that

*. . . in countries with a tradition of centrally determined curricula, there is a strong trend towards increasing local flexibility within prescribed time allocations. Four countries that have introduced a statutory curriculum within the past 15 years – England, the Netherlands, New Zealand and Wales – have recently reduced the level of prescription in favour of frameworks, within which schools devise a curriculum to suit local circumstances* (p.6).

Similarly, the UNESCO's study of Asian countries (UNESCO, 2003), noted *a shift from central control of curricula towards a sharing of decision making and the involvement of management at lower levels of the education system* (p.39).

However, while some countries in the INCA study (2003) were reducing the level of prescription in their curriculum, others were tightening control. More recently, the Cambridge Primary Review (2010) reported that:

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*The curriculum is subject to excessive prescription and micro-management from the Department for Children, Schools and Families (DCSF), the national strategies and the Qualifications and Curriculum Authority (QCA), and this level of control from the centre has been, on balance, counter-productive (p.237).*

However, across countries we can see that active support for local innovation has become more widely established as noted in the paper, *Innovation and Identity: Ideas for a new Junior Cycle* (NCCA, 2010).

Perhaps the trend to increase local autonomy in some countries while at the same time reducing it in others, suggests that measures of curriculum control are cyclical and highly responsive to social change, economic needs, or the prevailing political culture. It is of note, for example, that the outcomes of recent international studies in countries' performances in literacy and numeracy—especially if performances are below average—can serve as a spur to adjust control and prescription.

## **Supporting teachers**

This section gives the final word to teachers. One key response to the overload issue across countries has been, simply, to support teachers in their work. Scotland, Singapore, Korea and New Zealand are presented as examples of countries which have attempted to provide a range of supportive measures to schools and teachers. (Details of curriculum implementation and review processes in these countries are provided in Appendix 1.) Broadly speaking, these supportive measures attempt to

- promote professional development among teachers – provide time for teachers to talk and share good practice, and to disseminate teacher knowledge and expertise (e.g. through creation of *learning communities* as in Scotland and New Zealand)
- allow time for teachers to adopt new ideas and practices, and to identify with the aims of the curriculum (Teachers in Northern Ireland complained that they were forced to respond to too much change too quickly (Gallagher, 2009)). One useful strategy here is to present the curriculum in an easily comprehended visual form, as in Scotland's Curriculum for Excellence.

- expand the range of teaching methodologies and assessment tools (e.g. through *curriculum in action* websites, or the development of a 'Thinking Skills Programme' as in Singapore)
- improve the resourcing of teaching and learning materials (e.g. Scotland's intranet for education - 'Glow', or Singapore's *Master Plan for Information Technology in Education*)
- encourage teachers to reduce reliance on textbook learning (e.g. through greater use of ICT, or by making materials available in a range of media, such as in Korea's Education Broadcasting System)
- give greater autonomy to schools and teachers in planning learning for their own schools, taking local needs into account (e.g. allowing local timetabling decisions, as in Sweden, or in giving schools more curriculum control, as in Korea).

The next section of this literature review focuses on children and the issue of curriculum overload.



## 5. Children today and curriculum overload

### Children and their parents

The idea of *the hurried child* seems to have become part of our thinking about children and their world today. Elkind (2001) has described our modern-day conception of a child as a *superkid*. He has noted that in this fast-paced world, parents feel the need to fast-track their children by perhaps over-scheduling their time and urging them to be experts in academics, sports, music etc. Thus children become the reluctant victims of upheaval and change. Elkind and others have argued that the phenomenon of *the hurried child* is created not just by mass media, but also by adults themselves so that instead of enjoying and languishing in the early childhood years, parents urge and encourage their children to learn to read quickly, to play competitive sport and to be great at everything.

At the other end of the scale however, are children who, for a variety of reasons, are not so 'hurried,' to use Elkind's term. Their families and communities may feel less connected to the formal schooling system. The traditional response of schools has been to try to make up the 'deficit', to 'close the gap' through a series of programmes and interventions. The latter can also add to the feeling of overload.

### Children and their curriculum

In two phases of review, children reported that they like school (NCCA, 2005; 2008a). More recently, the *Growing Up in Ireland* study reported that *nine-year olds were generally positive about their schooling* (Williams et al, 2009, p.150).

This is something of which we can be proud, but not complacent. The learning and growing experiences of children and concerns for their wellbeing have gained increased attention in Council's strategic plans and ultimately in the work of Council in recent years.

*Anxieties about the lives of children extend beyond consumerism. Given the range of choices young people now face, the variety of messages that bombard them, the range and speed of information to which they have access, many adults are concerned about how choices are and will be made, on what basis, and informed by what values (NCCA, 2006, p.16).*

A curriculum which espouses a child-centred theory and pedagogy, as the *Primary School Curriculum* (1999) does, would seem to be well-positioned to support children's learning and development in the increasingly complex world in which they live. It seems that the aims of primary education in the present century have quite rightly been *inspired by recognition of the child as a complex human being with physical, intellectual, emotional and spiritual needs* (O'Connor, 1988, p.51). However, there appears to be a tension between the child-centred focus of the curriculum and the overcrowded nature of it. Our schools seem to be struggling to keep the child central to the learning process.

Perhaps our child-centred curriculum has been somewhat overshadowed by the extensive presentation of content objectives in the curriculum and expected output, so *that the rhetoric of child-centredness is to be retained, but a more conservative and less extravagant version of it that will have greater evidence of subjects and more structured teaching* (Sugrue, 2004 p.193). It can be argued that the physical face of the curriculum coupled with additional teacher guidelines and the range of school-based initiatives and programmes in their totality, render the child-centred nature of the curriculum questionable in practice. It is of note that in Council's first review of the curriculum in schools, teachers reported that they had strong ownership of the child-centred ideals in the curriculum but that they found it hard to put these into practice (NCCA, 2005).

These findings contrasted with the voices of children who told us that the way they learned a subject was critical – even determining how much they liked that subject. Council's report on the first phase of curriculum review noted that activities that involved collaborative learning, active learning, inquiry-based learning, differentiated learning and authentic learning were those reported as most enjoyable and interesting for children, regardless of the subject (NCCA, 2005). The report goes on to suggest that:

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*Greater use of these learning methods by teachers would also alleviate the pressures of time in implementing the Primary School Curriculum. For example, greater use of project-based learning and authentic resources would enable teachers to address concepts and skills in a number of subjects simultaneously, and alleviate to some extent, the burden of teaching 11 different curriculum subjects (p. 247).*

Perhaps the child-centred approach has become submerged under the weight of curriculum documents and developments which were, ironically, designed to support teachers and ultimately to benefit children.

## Children and their world

Following from the third section of this paper it seems that the curriculum may also become crowded for children when teachers are trying to meet too many needs in their classrooms. Many of these are 'new', in the sense that society has come to expect schools, teachers and ultimately, children, to play a significant role in responding to local, national and even global changes and challenges in our society and culture.

For example, the expansion of the agenda of 'citizenship education', has added new content and objectives to the curriculum of many jurisdictions. Developments in technology would suggest that the complex world in which children are growing up has never been as 'accessible' to them, as it is now. Speaking about the need to transform education for the twenty-first century, Dede (2007) has observed that,

*...the capabilities of computers and related technologies have repeatedly expanded since these devices were first developed in the 1940s: from numerical calculators to data processors to productivity enhancers, to information managers, to communications channels, to pervasive media for individual and collective expression, experience, and interpretation... (p.6).*

How do primary school children manage this 'connectivity' and their place in a multi-media world? To what extent should these concerns shape their primary curriculum, and how, in turn, does their curriculum support them in this world? These are vital concerns in any discussion of curriculum overload when questions concerning what we value in education—what's in and what's out—become paramount. Some observers have argued that the world, in which children live, creates a need for balance and a

yearning for a more emotionally satisfying existence (Naisbitt, 1999). Most observers might argue that whatever the solutions, children's time in primary schools provides the one period of stability and positive values in a world where so much is uncertain. Questions about how children spend their time in primary schools—what their curriculum espouses for them—become highly relevant and perhaps even contested when we begin to think about responding to the challenge of curriculum overload.

## 6. Conclusion

This paper has been developed to inform our understanding of the issue of curriculum overload in primary schools today, in order to begin to respond.

Section 3 of the paper has described the curriculum overload issue in the Irish primary school context. It has reflected to some extent on the points at which overload is/has been generated in the various stages of curriculum development (from conceptualisation to consultation, design, development, presentation, publication, dissemination, implementation and review) and has suggested that perhaps different and new strategies of revising and improving the curriculum are necessary.

Section 4 has examined recent and ongoing experiences of, and responses to, the complex issue of curriculum overload in other countries and regions. It has noted that curriculum revision and reorganisation can be fraught with difficulty as the quest for appropriate breadth and depth, and the balance between these, proves elusive, or at best, results in a temporary settlement. It is of note that while the balance between centrally prescribed and controlled curriculum is key, the curriculum autonomy and flexibility allowed to schools while alleviating the overload issue, can ironically, also contribute to it.

Section 5 of the paper has outlined some of the many social, economic and technological changes, and changing and competing expectations of schools and of children that further contribute to the overload issue.

In exploring practical measures to reduce curriculum overload in our primary schools, it would be worthwhile—and may in any case be necessary—to return to the key questions about what we want of our primary schools today, and what kind of curriculum is most likely to achieve those aims. In considering how best to respond, it is clear that an integrated response to the overload issue rather than a single strategy is warranted.

The Early Childhood and Primary Committee will continue to have a strategic role in advising on Council's response to the issue of curriculum overload in primary schools. Our practical work with schools to explore the impact of different re-presentations of curriculum subjects will also inform our next steps.

## 7. References

- Australian Primary Principals Association (APPA), (2008). Position Paper, *APPA's Expectations of the National Curriculum*. Available online at: <http://www.appa.asn.au/images/drivers/expectations200809.pdf>
- BBC News (2008). *How Crowded is the Curriculum?* BBC News, UK, Education. Available online at: [http://news.bbc.co.uk/2/hi/uk\\_news/education/7243556.stm](http://news.bbc.co.uk/2/hi/uk_news/education/7243556.stm)
- Cambridge Primary Review (2009a). *Towards a new Primary Curriculum. Part 1: Past and Present*. The University of Cambridge. Available online at: [http://www.primaryreview.org.uk/Downloads/Curriculum\\_report/CPR\\_Curric\\_rep\\_Pt\\_1\\_Past\\_Present.pdf](http://www.primaryreview.org.uk/Downloads/Curriculum_report/CPR_Curric_rep_Pt_1_Past_Present.pdf)
- Cambridge Primary Review (2009b). *Towards a new Primary Curriculum. Part 2: The Future*. The University of Cambridge. Available online at: [http://www.primaryreview.org.uk/Downloads/Curriculum\\_report/CPR\\_Curric\\_rep\\_Pt\\_2\\_Future.pdf](http://www.primaryreview.org.uk/Downloads/Curriculum_report/CPR_Curric_rep_Pt_2_Future.pdf)
- Cambridge Primary Review (2009c). Primary Review Briefings: *Towards a new primary curriculum*. Available online at: [http://www.primaryreview.org.uk/Downloads/Curriculum\\_report/CPR\\_Curriculum\\_report\\_briefing.pdf](http://www.primaryreview.org.uk/Downloads/Curriculum_report/CPR_Curriculum_report_briefing.pdf)
- Cambridge Primary Review (2010). *Children, their World, their Education: Final report and recommendations of the Cambridge Primary Review*. The University of Cambridge. Oxon: Routledge.
- Collins (1995). *Collins English Dictionary*. Glasgow: Harper Collins Publishers.
- Council for Curriculum, Examinations and Assessment (CCEA), (2007). (Northern Ireland Curriculum, Primary. Available online at: [http://www.nicurriculum.org.uk/docs/key\\_stages\\_1\\_and\\_2/northern\\_ireland\\_curriculum\\_primary.pdf](http://www.nicurriculum.org.uk/docs/key_stages_1_and_2/northern_ireland_curriculum_primary.pdf)
- Dede, C. (2007). *Transforming education for the 21<sup>st</sup> Century: New pedagogies that help all students attain sophisticated learning outcomes*. Harvard University: Commissioned by the NCSU Friday Institute.
- De Paor, C. (2007). *An evaluation of the Regional Curriculum Support Service (Cuiditheoireacht)*. Commissioned by the Department of Education and Science (DES). Dublin: Government of Ireland.
- Department of Education and Science (DES), (1999). *Primary School Curriculum*. Dublin: Government Publications.
- DES Inspectorate (2005). *An Evaluation of Curriculum Implementation in Primary Schools*. Dublin: Government Publications.
- DES Inspectorate (2007). *Irish in the Classroom*. Dublin: Government Publications.

- Elkind, D. (2001). *The Hurried Child*. Perseus Publishing; 3rd edition.
- Gallagher, C. (2009). *Designing a Curriculum for the 21<sup>st</sup> Century: A Case Study of Northern Ireland's Curriculum Review*. Qualifications and Curriculum Authority. Available online at: [http://www.qcda.gov.uk/libraryAssets/media/11465\\_gallagher\\_designing\\_21st\\_century\\_curr.pdf](http://www.qcda.gov.uk/libraryAssets/media/11465_gallagher_designing_21st_century_curr.pdf)
- Hall, K. and Øzerk, K. (2008). Primary Review Research Report 3/1. Available online at: [http://www.primaryreview.org.uk/Downloads/Int\\_Reps/6.Curriculum-assessment/Primary\\_Review\\_RS\\_3-1\\_briefing\\_Primary\\_curriculum\\_assessment\\_080208.pdf](http://www.primaryreview.org.uk/Downloads/Int_Reps/6.Curriculum-assessment/Primary_Review_RS_3-1_briefing_Primary_curriculum_assessment_080208.pdf)
- INCA (2003) International Trends in Primary Education, INCA Thematic Study No. 9, Available online at: [http://www.inca.org.uk/pdf/thematic\\_study\\_9.pdf](http://www.inca.org.uk/pdf/thematic_study_9.pdf)
- INCA (2008). INCA, International Review of Curriculum and Assessment Frameworks Internet Archive. *Comparative Tables*. Available online at: [www.inca.org.uk](http://www.inca.org.uk)
- International Journal of Technology and Design Education (2004). V14 n2 p101-119 May 2004.
- Irish Primary Principals Network (IPPN), (2007). *Investing in School Leadership*.
- The Age (2009), *Move to Widen National Curriculum*  
<http://www.theage.com.au/national/education/move-to-widen-national-curriculum-20090531-brpv.html>
- Learning and Teaching Scotland (LTS). LTS Online Service (2009a). *Curriculum for Excellence. Homepage*. Last updated 09/11/09. Available online at: <http://www.ltscotland.org.uk/curriculumforexcellence/index.asp>
- Learning and Teaching Scotland, (LTS). LTS Online Service (2009b). *Assessment as part of teaching and learning*. Last updated 24/11/09. Available online at: <http://www.ltscotland.org.uk/curriculumforexcellence/assessmentandachievement/acrosslearning/index.asp>
- Murchan, D., Loxley, A., Johnson, K. Quinn, M. & Fitzgerald, H (2005). *Evaluation of the Primary Curriculum Support Programme (PCSP)*. Education Department, University of Dublin, Trinity College.
- Naisbitt, J. (1999). *High Tech High Touch: Technology and Our Accelerated Search for Meaning*. Nicholas Brealey Publishing.
- National Council for Curriculum and Assessment (NCCA), (1999). *Pilot project for modern languages in the primary school: Draft curriculum guidelines*. Available online at: <http://www.ncca.ie/uploadedfiles/publications/curricglinesmod%20lang.pdf>



- National Council for Curriculum and Assessment (NCCA), (2001). *Modern Languages in Primary Schools: Teacher guidelines*. Available online at:  
<http://www.ncca.ie/uploadedfiles/publications/modlang%20guidelines.pdf>
- National Council for Curriculum and Assessment (NCCA), (2005). *Primary Curriculum Review: Phase 1* (English, Visual Arts, Mathematics). Available online at:  
<http://www.ncca.ie/uploadedfiles/Publications/PrimaryCurriculumReview.pdf>
- National Council for Curriculum and Assessment (NCCA), (2006). *Strategic Plan, 2006-2008*. Available online at:  
<http://www.ncca.ie/uploadedfiles/publications/strat%20plan%20EN%2006-08.pdf>
- National Council for Curriculum and Assessment (NCCA), (2007). *Assessment in the Primary School Curriculum: Guidelines for Schools*. Available online at:  
<http://www.ncca.biz/>
- National Council for Curriculum and Assessment (NCCA), (2007). *Exceptionally Able Students: Draft Guidelines for Teachers*. Available online at:  
[http://www.ncca.ie/en/Curriculum\\_and\\_Assessment/Inclusion/Special\\_Educational\\_Needs/Exceptionally\\_Able\\_Students/](http://www.ncca.ie/en/Curriculum_and_Assessment/Inclusion/Special_Educational_Needs/Exceptionally_Able_Students/)
- National Council for Curriculum and Assessment (NCCA), (2008a). *Primary Curriculum Review: Phase 2* (Gaeilge, Science, SPHE). Available online at:  
[http://www.ncca.ie/en/Curriculum\\_and\\_Assessment/Early\\_Childhood\\_and\\_Primary\\_Education/Primary\\_School\\_Curriculum/Primary\\_Curriculum\\_Review\\_PCR\\_Phase\\_2\\_Gaeilge\\_Science\\_and\\_SPHE/PCR2\\_finalreport.pdf](http://www.ncca.ie/en/Curriculum_and_Assessment/Early_Childhood_and_Primary_Education/Primary_School_Curriculum/Primary_Curriculum_Review_PCR_Phase_2_Gaeilge_Science_and_SPHE/PCR2_finalreport.pdf)
- National Council for Curriculum and Assessment (NCCA), (2008b). *Science in Primary Schools: Phase 1* (Commissioned research). Available online at:  
<http://www.ncca.ie/uploadedfiles/primary/Binder1.pdf>
- National Council for Curriculum and Assessment (NCCA), (2008c). *Reporting to Parents in Primary School: Communication, Meaning and Learning*: (Commissioned Research). Available online at:  
[http://www.ncca.ie/uploadedfiles/Primary/UCC\\_researchReporting.pdf](http://www.ncca.ie/uploadedfiles/Primary/UCC_researchReporting.pdf)
- National Council for Curriculum and Assessment (NCCA), (2009). Article *Ditching the Textbook*, info@ncca magazine. Issue 12, April 2009. Available online at:  
[http://www.ncca.ie/en/News\\_Press/Newsletter/Newsletter\\_Issue\\_12\\_April\\_2009.pdf](http://www.ncca.ie/en/News_Press/Newsletter/Newsletter_Issue_12_April_2009.pdf)
- National Council for Curriculum and Assessment (NCCA), (2010). *Innovation and Identity: Ideas for a new Junior Cycle*. Available online at  
[http://www.ncca.ie/en/Curriculum\\_and\\_Assessment/Post-Primary\\_Education/Junior\\_Cycle/Junior\\_cycle\\_developments/Innovation\\_and\\_Identity\\_Ideas\\_for\\_a\\_new\\_junior\\_cycle1.pdf](http://www.ncca.ie/en/Curriculum_and_Assessment/Post-Primary_Education/Junior_Cycle/Junior_cycle_developments/Innovation_and_Identity_Ideas_for_a_new_junior_cycle1.pdf)
- O'Connor, M. (1988). *The Growth and Development of Infant Education in Ireland 1838-1900*. Oideas 32, pp.51-64.

O'Donnell (2001). Curriculum review: An International Perspective, *International review of curriculum and assessment frameworks*. Thematic Probe.

Pepper, D. (2008), *Primary Curriculum Change: direction of travel in 10 countries*. Qualifications and Curriculum Authority, International Unit. Available online at: [http://www.inca.org.uk/Primary\\_curriculum\\_change\\_INCA\\_probe.pdf](http://www.inca.org.uk/Primary_curriculum_change_INCA_probe.pdf)

Random House Dictionary (2009). Available online at: <http://www.dictionary.com>

Sugrue, C. (2004). *Whose curriculum is it anyway? Power, politics and possibilities in the construction of the revised primary curriculum*. In C. Sugrue (Ed.), *Curriculum and Ideology: Irish experiences, international perspectives*, p. 167-208. Dublin: The Liffey Press.

Sugrue, C (2008). *Epilogue: the future of educational change?* In: C. Sugrue (Ed.) *The future of Educational Change*. London: New York: Routledge.

The Canadian Press (2009). Ontario reviews curriculum for grades 1-8. Last updated: 01/12/09. Available online at: <http://www.cbc.ca/canada/ottawa/story/2009/12/01/ontario-curriculum-schools934.html>

Tomazin, H. and Harrison, D. (2009). Move to widen national curriculum, *The Age News*, 01/06/09. Available online at: <http://www.theage.com.au/national/education/move-to-widen-national-curriculum-20090531-brpv.html>

UNESCO (2003). *Building the Capacities of Curriculum Specialists for Education Reform*. Asia and Pacific Regional Bureau for Education. Available online at: <http://unesdoc.unesco.org/images/0013/001324/132494e.pdf>

Webster (2000). *Webster's New World. College Dictionary*. Fourth edition. Cleveland, Ohio: IDG books worldwide Inc.

Williams, J., Greene, S., Doyle, E., Haris, E., Layte, R., McCoy, S., McCrory, C., Murray, A., Nixon, E., O' Dowd, D., O' Moore, M., Quali, A., Smyth, E., Swords, L., Thornton, M. (2009). *Growing up in Ireland: National Longitudinal Study of Children: the lives of 9-year-olds*. Dublin: Government of Ireland publications. Available online at: [www.growingup.ie](http://www.growingup.ie)

## 8. Appendix

### Appendix 1: Table of Actions

#### Curriculum initiatives in responding to overload

**Table 3: Actions, Initiatives and objectives across four countries**

<b>Country</b>	<b>Action</b>	<b>Initiative</b>	<b>Objective</b>
<b>A. New Zealand</b>	Creation of Website	NZ Curriculum Online: A 'one-stop-shop'	To promote best practice and transmit ideas
	Creation of Presentations	<i>From NZ curriculum to School curriculum</i>	To show how overall principles and values underlying the curriculum transmit into teaching
	Intensive Evaluation Project	Monitoring and Evaluating Curriculum Implementation (MECI)	To monitor curriculum implementation
	Implementation and Exploratory Studies Projects	Documents school experiences. Builds a picture of school approaches and themes	To share themes and experiences
	Online space for educators	School stories School snapshots Curriculum in Action Video of ideas	To enable schools to work together towards curriculum implementation
	Creation of Learning Communities	Formed from 100 school leaders	To enable schools to collaborate towards generation of new ideas
<b>B. Scotland</b>	Creation of Website	Curriculum for Excellence	To promote Scotland's new curriculum
	Presentations Workshop tasks	Building Your Curriculum	To develop curriculum implementation

Country	Action	Initiative	Objective
	Schematic Guides	The curriculum at a glance: schematic guide which presents a summary of the components	To show curriculum visually
	Self-evaluation section	Improving through self-evaluation	To allow educators to evaluate their curriculum and outcomes for learners
	Assessment area	Supporting Learning	To encourage greater autonomy in learning
	Early Insights	Collaborative work in Learning Communities	To share expectations and agreed standards and understanding of the work
	Sharing Practice section	A bank of good ideas based on case studies	To share experiences and outcomes
	World's first national intranet for education	Glow	To provide a core element of support
<b>C. Singapore</b> Vision: <i>Thinking schools, Learning Nation</i>	Centre to provide high quality teaching, research, consultancy services and resources to schools and other educational institutions	Singapore Centre for Teaching Thinking (SCTT)	To promote the teaching of thinking skills and creativity
	An information technology programme	Masterplan for IT in Education	To promote an IT enriched school environment
	Responsible citizenship	A National Education (NE) programme	To engender a shared sense of nationhood, an understanding of how our past is relevant to our present and future, to appeal to both heart and mind
	Character development programme	Leadership, Citizenship, Personal and Social Development	To ensure that holistic education of the whole child amid the knowledge explosion
	Seminars to Colleges of Education	Elements of National Education IT initiatives	To sensitise trainee teachers to the challenges Singapore faces

Country	Action	Initiative	Objective
	Web-based school administrative system	School Cockpit System	To provide an integrated IT environment to help school staff in their planning
	Integrated learning activities	Project Work (PW)	To provide children with opportunities to explore inter-connectedness of subject-specific knowledge
	National Multimedia Network, 998	Singapore ONE Programme	To give children access to a range of information sources, local TV and video programmes
	National Education resource website	Information about events Bank of ideas Seminars Monthly videos	To provide information for teachers
<b>D. Korea</b>	Decentralisation of curriculum control	More autonomy to schools	To be able to modify the curriculum based on the needs of the school
	Decreased the number of compulsory subjects	Subject content reduced by 30%	To concentrate on fostering creativity and high order thinking
	Difficulty 'levels' in subjects	10 levels of Mathematics offered	To differentiate according to academic ability rather than year
	Development of ICT	10% of subject activity should be using computers	To increase the use of ICT in classrooms
	Textbooks	Teachers can choose from a range of textbooks	To broaden resources and increase curriculum flexibility
	Use of television and radio	Education Broadcasting System	To support school education and expand opportunities

## Appendix 2: Country Notes

### Curriculum initiatives in responding to overload

#### A. Country Note: New Zealand

##### **Learning from Curriculum Implementation in New Zealand**

In 1991 the New Zealand Ministry of Education began a *stocktake* of the curriculum reform process. This stocktake paid particular attention to concerns regarding curriculum overload and processes were put in place to monitor the development of the National Curriculum.

Information technology is used in New Zealand as a forum to promote best practice and transmit ideas between educators and to support curriculum implementation. The New Zealand Curriculum Online is described as a 'one-stop-shop' offering information, resources, advice and guidance, practical ideas and research relating to the New Zealand Curriculum" (<http://nzcurriculum.tki.org.nz/>).

A presentation entitled *From the New Zealand Curriculum to School Curriculum* outlines the overall principles and values underlying the curriculum and shows how this transmits into teaching, learning and assessment in the classroom. This curriculum is based on themes for 21<sup>st</sup> century learning where everyone is a learner including the teacher.

An intensive project called MECI (Monitoring and Evaluating Curriculum Implementation) has been set up to evaluate the implementation of the New Zealand Curriculum. This project looks at how the curriculum is being implemented in schools and classrooms, and how educators understand curriculum requirements and the changes that might be needed. It also looks at how confident educators are in implementing the curriculum and what supports they are encountering.

An Implementation Exploratory Studies Project was created to examine and document schools' experiences as they worked towards implementing the revised curriculum. One of the aims of this ongoing research is to build a picture of school approaches and common themes in implementing the curriculum. Themes shared between schools are broad, as schools evaluate the 'big picture' underpinning the curriculum. Ideas about 21<sup>st</sup> century learning or integrated learning and how to connect these approaches with the learning areas are discussed and documented. This contrasts with the Irish situation where the debate centres on the various individual subject areas and the problem of overload.

New Zealand Curriculum Online provides a space for educators to share their stories and resources around curriculum implementation. The *School stories* section shows videos of ideas and approaches some schools are using. *School snapshots* is a space where schools share useful ideas in introducing curriculum change. *Curriculum in Action* shows how schools have translated curriculum into action. *Research stories* and

*Regional learning communities* outline findings from curriculum research projects and highlight ideas emerging as schools work together to support curriculum change.

Learning communities have been set up to explore ways of implementing the New Zealand Curriculum. Over 100 school leaders have been selected to form this group. This allows schools to collaborate and generate new ideas and practices around curriculum implementation. This group strengthens the learning network and gives leaders time to share their insights and expertise. *Think Aloud Sessions* (which aim to investigate areas of professional practice associated with curriculum implementation) and *Touching Base Sessions* (which aim to gather responses from educators outside the main centres) have been set up.

## B. Country Note: Scotland

### Learning from Curriculum Implementation in Scotland

In Scotland, a website dedicated to the promotion of Scotland's new curriculum has been developed ([www.ltscotland.org.uk](http://www.ltscotland.org.uk)) The content of the website is proactive and uplifting and the language used to encourage and stimulate educators is inviting.

The website talks about *Curriculum for Excellence*, building the curriculum, inspiring and engaging education, understanding the framework and improving through self-evaluation. It highlights the fact that curriculum implementation is an ongoing process. The website provides the following resources which school leaders and teachers can use to develop curriculum implementation:

- PowerPoint Presentations on *Building your curriculum*
- PowerPoint Presentation on workshop tasks
- *Curriculum at a glance*: a schematic guide which presents a summary of the components of the curriculum with the learner at the centre.
- A self-evaluation section: *Improving through self-evaluation*
- An area dedicated to assessment for supporting learning and encouraging greater learner autonomy.

A section dedicated to *Early Insights* highlights the importance of working collaboratively in learning communities to plan, and put the curriculum into practice, as well as the need for professional development. Dialogue within and across establishments and a sharing of expectations and agreed standards is promoted. This section also emphasises the need for the whole school community to have a clear understanding of the work, and it recommends further action to develop coherence in learning and teaching approaches.

A *Sharing practice* section presents a bank of good ideas from schools in Scotland. These case studies describe pilot projects and provide feedback on the experiences and outcomes. Integrated projects show that connections between subject areas have to be strong and relevant, and provide a meaningful context for learning. Success with these pilot projects was mainly attributed to the commitment by the school to prioritise time for professional dialogue and staff collaboration.

Another interesting feature of the Scottish education system is the development of the world's first national intranet for education called Glow. Glow is for the benefit of all educators and is regarded as a core element of support.

## C. Country Note: Singapore

### **Learning from Curriculum Implementation in Singapore**

In Singapore, although the education programme for the whole country is determined by the national Ministry of Education (MOE) autonomy is devolved to schools to take control of the planning and delivery of instructional programmes. The curriculum review process has been reduced from an eight- to ten- to six-year-cycle.

In 1997 the President, when summing up the Government's educational thinking, speaking at the first session of the Ninth Parliament in Singapore, stated that they would revise the school curriculum to stretch but not overload students and that they would reduce the amount of factual knowledge children must acquire and do more to build thinking and processing skills. In Singapore, three new educational initiatives were introduced:

- A Thinking Skills Programme
- An Information Technology (IT) Programme
- A national Education (NE) Programme

The National Institute of Education has set up the Singapore Centre for Teaching Thinking (SCTT), with the aim of undertaking research to help schools promote critical and creative thinking.

The Information Technology IT Masterplan aims to produce an ICT-enriched school environment and the National Education (NE) programme emphasised the need for responsible citizenship. NE is not a formal subject in its own right but is integrated into subjects across the curriculum, especially social studies, civics and moral education at primary level.

It is interesting to note that Singapore introduced a 'character development programme' in 2001 which contained three domains: leadership, citizenship and personal and social development. This programme was introduced to ensure the holistic education of the whole child amid technological advancements and the knowledge explosions. Singapore believe that globalisation provides opportunities for uprooting and while acknowledging the good and the bad effects of easy access to ideas and influences, this programme was an attempt to counteract any negative influences.

Singapore has introduced elements of the NE and IT programmes into Colleges of Education in the form of talks and seminars. This initiative was developed to ensure that trainee teachers would be sensitised to the issues and challenges facing Singapore and that they would be enabled to develop core skills in teaching with ICT resources.



The *School Cockpit System* is a web-based administration system, developed for all schools to provide an integrated IT environment to help school staff in their planning.

*Project Work* (PW) was launched in 2000 to provide children with opportunities for integrated learning. Through PW children are enabled to develop self-directed inquiry and lifelong learning skills.

The Singapore ONE programme (1998) aims to give every child access to the national multimedia network which provides a range of information sources and local television and video programmes.

A website has been set up to house information about events and programmes and to provide a bank of good ideas for teachers to draw on. NE seminars are organised and monthly videos are produced to keep teachers up-to-date.

## D. Country Note: Korea

### **Learning from Curriculum Implementation in Korea**

In Korea the Seventh National Curriculum has put more emphasis on the decentralisation of curriculum control and has given more autonomy to schools. It is hoped that schools will be able to modify the curriculum based on the needs, circumstances and interests of the school community. In Korea reviews are undertaken to reflect the changing demands on the education system.

The Seventh National Curriculum has prioritised developing creativity in children. The review decreased the number of compulsory subjects in the curriculum and increased the importance of optional subjects. The amount of subject content children had to cover each year was reduced by 30 per cent. The focus is on transforming education from rote learning and fragmentary knowledge to fostering creativity, developing higher order thinking skills and problem-solving.

In Korea, some subjects in the curriculum are differentiated on the basis of academic ability rather than by year. For example Maths is organised according to levels of difficulty and there are ten levels of Mathematics courses offered to children aged from six to 16 years.

The Korean curriculum advocates the increased use of information and communication technology (ICT) in classrooms and recommends that, for every subject, more than 10 per cent of classroom activity should use computers.

Integration of subject areas is promoted through areas of learning:

- Disciplined life (moral education)
- Intelligent life (social studies and science)
- Pleasant life (P.E., Music and fine arts)

Numerous initiatives have been introduced to improve the standards in, and the quality of, life in the teaching profession. In order to protect teachers from overload an optimum number of teaching classes per week is stipulated.

Prior to the curriculum review only one textbook was authorised for each subject of the curriculum. Now teachers and schools can choose from a range of textbooks as resource materials.

In 1990 The Educational Broadcasting System (EBS), which consists of radio and television channels, was opened. The EBS supports school education, expands the opportunity for education, and provides educational programmes in foreign language conversation, environment education, culture, music, art and Korean unification.