The Response of St. Patrick’s College Drumcondra

to

Better Literacy and Numeracy for Children and Young People:

A Draft National Plan to Improve Literacy and Numeracy in Schools

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Executive Summary

This document is the response of St Patrick’s College to the recently published *Better Literacy and Numeracy for Children and Young People – A Draft National Plan to Improve Literacy and Numeracy in Schools*. It was drafted by a subcommittee of Academic Council and drew on a wide range of submissions from College staff.

Introduction – Chapter 1

St Patrick’s College, Drumcondra is pleased to respond to the *Draft National Plan to Improve Literacy and Numeracy in Schools*. With a long-standing tradition of teacher education both at pre-service and in-service levels, we welcome many of the suggestions made in the Plan while also identifying aspects which we feel require further consideration. We are in full agreement ‘that it is essential that every child leaving our school system is numerate and is able to speak, read, write and spell at a level that enables them to participate fully in education and in Irish life and society’ and we therefore look forward to working with the DES and other partners in ensuring the attainment of this goal.

Initial teacher education is a complex process and the College adopts a holistic approach in its programmes - in the Bachelor of Education with its combination of education and academic specialisation or the Graduate Diploma in Education which builds on previous academic study. The College is fully committed to quality improvement across all its programmes, to ensure that graduates are well-equipped to meet the needs of diverse classrooms and committed to lifelong learning.

Literacy – Chapter 2

One of our initial key contentions is that the development of an expanded definition of literacy is necessary in order to engage fully with the issue. This definition draws on a broader understanding of literacy to encompass cognitive, affective, socio-cultural, cultural-historical and creative dimensions of literacy and should form the theoretical and philosophical rationale for the curriculum. It includes the development of online literacies, new literacies, visual literacies, critical literacies and information literacies.

In addition to this, there is a clear need for adequate resources to upskill all teachers, through Continuing Professional Development (CPD), with the necessary wherewithal to engage with
these developing literacies. The notion of a ‘generic skills based programme’ is problematic, as a one-size fits all approach cannot meet the needs of all children. In fact, research shows that CPD is most effective and successful when customised to the needs of the teachers and the particular school context, and sustained over a period of time. Future approaches to the issue should be informed by research and should draw on international standards.

The commitment to review the English Curriculum (1999) is strongly welcomed. A high-quality literacy curriculum is pivotal to enhancing literacy teaching and learning. The curriculum should be revised to reflect the current emphasis on balanced literacy instruction in the international research base. It should clearly articulate key content and pedagogical content strategies with reference to the research on effective literacy instruction.

We welcome the priority to be given to Aistear: The Early Childhood Curriculum Framework, in developing teaching and learning for children in the age range from birth to six years. These are very important years in the child’s formative development and it is crucial that support for the development of literacy and numeracy at this early stage is provided in order to ensure that these strategies are implemented.

The commitment in the Draft Plan to continue to support DEIS schools as they work towards improving literacy achievement for their students is very much to be welcomed. However, equal consideration needs to be given to other groups of pupils such as exceptional pupils and pupils who experience special educational learning needs. There are significant challenges facing teachers in the linguistic diversity of contemporary classrooms and the complexities of providing for English language learners in a multicultural context require serious consideration. The Draft Plan should acknowledge the particular issues associated with the development of mother tongue literacy in the case of native speakers of Irish, as this is an issue which demands careful consideration and one which has not received the requisite attention in the past.

We also contend that the area of assessment requires a more measured appraisal. We welcome the recognition of both formative and summative assessment and firmly support much greater focus on assessment for learning which can aid teachers to plan effectively for and to differentiate teaching. There is a clear need for caution here, as an over-emphasis on assessment of learning may not be helpful in achieving the general aims of any future strategy regarding literacy and numeracy.
Numeracy - Chapter 3

We very much welcome the priority given to numeracy in the Draft Plan, but we are concerned that the term ‘numeracy’ might inadvertently lead to an emphasis on mathematical procedures. We therefore advocate a broad concept of mathematics, whereby its power as a means of communication, its importance and usefulness in many fields and also its inherent interest and appeal are recognised. Moreover, mathematics needs be taught and assessed in ways that are appropriate and respectful of individual children and of their cultures, experiences and dispositions – this has implications not only for early childhood education, students attending DEIS schools, EAL students, those in Youthreach programmes but for all learners of mathematics. We recommend that the need to develop mathematical thinking across the educational continuum and the opportunities offered by digital tools be recognised.

While the inclusion of both formal and informal evidence of achievement is welcome, an undue focus on standardised tests could detract significantly from teachers’ efforts to teach the full range of mathematical knowledge and dispositions in the curriculum. A cyclical rather than a linear approach to planning, teaching and assessing ensures that assessment informs teaching. This focus on students’ engagement with and understanding of mathematics should have the desired effect on scores in formal tests of attainment.

We agree that consideration be given to raising the entry requirement in mathematics for initial teacher education but we also feel it is important to enable and support student teachers in continually revisiting and interrogating their own personal knowledge of fundamental mathematics as a basis for good teaching. In the context of shifting emphasis from computational skills to developing mathematical thinking through problem solving, we welcome the recognition given in the Draft Plan to the importance of CPD for teachers. However, we feel that improvement in mathematics teaching is achieved by sustained, collaborative focus on developing children’s mathematical thinking, in a way that engages their preconceptions, builds understanding of factual knowledge and conceptual frameworks, and encourages a metacognitive approach to learning mathematics. In particular, the use of lesson study as a means of reflective professional development is recommended.
Wider Educational Considerations - Chapter 4

This chapter discusses a range of wider educational issues which are relevant to the Draft Plan including educational disadvantage, the place of the arts in education, issues relating to integration and second language learning.

The recognition of the need to continue the DEIS programme is welcomed as is the inclusion of a family and community literacy focus. We recommend recognition of the link between early school leaving and levels of achievement in literacy and numeracy in the context of an anti-poverty framework. A cause for concern is that the ‘Schools Like Ours’ proposal will serve to institutionalise deficit labelling and will lead to competition between schools; it may promote teaching to the test, and could influence the distribution of resources within schools in favour of those children most likely to succeed.

In relation to curriculum considerations, we fear that the proposals concerning the arts in education will result in differential access to the arts based on social class and/or economic status. In addition, undue narrowing and instrumentalisation of curriculum could be an unintended outcome of the Draft Plan. This should be recognised and addressed. While there are strong arguments for cross-curricular teaching in primary school it should be recognised that authentic integration is a complex practice. If teachers are to teach in an integrated way without compromising children’s learning, they must be supported through appropriate continuing professional development.

There should be greater recognition of children’s particular linguistic environment, their mother tongue development and the particular circumstances in which they are introduced to languages other than their mother tongue. The relationship between English language literacy and the teaching of the second language needs to be addressed in the Draft Plan taking into account the diverse pupil profiles in English-medium and Irish-medium schools. In the case of newcomer children the importance of mother-tongue literacy and plurilingual competencies should be acknowledged.

Initial Teacher Education - Chapter 5

We welcome the extension of the duration of initial teacher education programmes, both BEd and Graduate Diploma in Education. This will facilitate the College in ensuring that beginning teachers are prepared effectively to meet the challenges and opportunities of
contemporary Irish classrooms, and will allow for an enhanced focus on literacy and numeracy in the preparation of teachers.

The benefits associated with the inclusion of the academic specialisation in the BEd programme are discussed. All academic subjects contain modules directly relevant to the primary school and enrich the range of academic skills and competencies developed through the education elements of the degree. The study of the academic subject facilitates the provision of teachers who have a deep knowledge and understanding of a subject related to the primary classroom and allows for the further development of subject leaders in the primary school and future contributors to curriculum development at national level. The College is, as a matter of course, committed to the ongoing review of existing subjects and the introduction of new subjects.

**Conclusion - Chapter 6**

The response concludes by describing the reasons why the College is well placed to lead initiatives towards improving literacy and numeracy standards. These include its distinguished tradition of teacher education and of responding flexibly to areas of national need; its comprehensive structured suite of accredited continuing professional programmes; its highly qualified research-active staff; the work of the Educational Disadvantage Centre, and the commitment to widening diversity; the contribution of the Educational Research Centre to research at all levels of the education system; and the substantial research already done and in progress by staff and postgraduate students in relevant areas such as literacy, numeracy, assessment, early childhood education and educational disadvantage.

The College looks forward to working with the DES and through the National Implementation Group and National Forum in the development and implementation of the National Plan to achieve the goals of ensuring that all pupils are enabled to achieve the highest standards in their learning.
1 Introduction

St Patrick’s College, Drumcondra is pleased to have the opportunity to respond to the issues raised in the draft policy document published by the Department of Education and Skills in November 2010 entitled Better Literacy and Numeracy for Children and Young People: a Draft National Plan to Improve Literacy and Numeracy in Schools (hereafter Draft Plan). As a college which has a long-standing tradition of pre-service and in-service teacher education we welcome many of the suggestions made by the authors of the Draft Plan regarding the key issue of securing improvements in general levels of literacy and numeracy in our schools.

St Patrick’s College strongly endorses the view that ‘it is essential that every child leaving our school system is numerate and is able to speak, read, write and spell at a level that enables them to participate fully in education and in Irish life and society’ (Draft Plan, 2010: 9). It also supports the Teaching Council’s belief, articulated in the Teaching Council Draft Policy on the Continuum of Teacher Education published in December 2010 (hereafter Teaching Council Draft Policy) that ‘the time is now right for a thorough and fresh look at teacher education so as to ensure that tomorrow’s teachers are competent to meet the challenges that they face and are lifelong learners, continually adapting over the course of their careers to enable them to support their students’ learning’ (The Teaching Council, 2010).

In exploring the reasons for the current difficulties with literacy and numeracy within our primary school system it should be acknowledged that the problems must be addressed in a manner that pays close attention to the wider structures framing the issue. The various social and structural contexts which affect these problems will have to be taken into account when formulating an effective, equitable and positive plan of action. Aligned with these considerations is the need for a balanced approach to the professional preparation of our students in order to ensure that they are fully equipped to meet these challenges.

St Patrick’s College currently provides a three-year BEd programme that combines the study of education and humanities along with an eighteen-month Graduate Diploma which builds on previous academic study. We firmly believe that the provision of modules in literacy and numeracy, early childhood education, a full range of curriculum areas and the foundation disciplines of education, together with the pursuit of a humanities subject to degree level in the BEd, all contribute in vital ways to initial teacher education (hereafter ITE). Thus, the models of initial teacher education offered by St Patrick’s College facilitate the development
of teachers who are well-prepared for the cultural and educational challenges of the classroom.

As a college we are very conscious of the challenges posed by the current three-year duration of the BEd programme. The Kellaghan Report (2002), in foregrounding the concerns which pertain to the duration of this programme, recommended its extension to four years. The College fully endorsed this proposal and has been actively pursuing this goal in the interim period. For that reason, St Patrick’s College welcomes the recommendation in the Draft Plan to extend the BEd programme to four years and the Graduate Diploma in Education (Primary Teaching) programme to two years. The extension of these programmes in this manner will provide us with the scope to explore how best to build on our current models while seeking to address those areas of curricular and educational expertise which need to be reviewed and re-aligned to help enhance the professional and intellectual skills of our students.

The aforementioned recommendation will also ensure, *inter alia*, the provision of a more intensive focus on literacy and numeracy at pre-service level which will enhance literacy and numeracy learning more widely. However, it should be observed that there are considerations at stake here other than the fields of literacy and numeracy. Related to these is the recognition that increasing classroom contact time in the areas of literacy and numeracy will not in itself improve general standards unless that increase is combined with high-quality teaching and assessment practices within the school community. The authors of the Draft Plan should not neglect the importance of this point when they seek to develop a national strategy for implementing the goals outlined within that plan.

One of the key tenets of the mission of St Patrick’s College is the holistic development of all our students, which mirrors the underlying philosophical frame of the Primary School Curriculum (Government of Ireland, 1999). In addition to valuing holism in the learning experience of our primary school pupils, we also value it in the formation of our student teachers. We believe, therefore, that the cognitive and academic development of student teachers should not be seen as being in opposition to or distinct from their personal development. This is particularly important for newly qualified teachers who will be teaching increasingly more diverse cohorts of pupils in terms of class, ethnicity, language and general ability. They need to be helped and encouraged to develop beyond their ‘subject knowledge’ and to widen their formative emotional and attitudinal experience.
Any development of the content and delivery of our teacher education provision therefore needs to take cognisance of a holistic approach to teacher education. The BEd at St Patrick’s College endeavours to provide this approach through its education and humanities components. We firmly believe that the proposal in the Draft Plan to restrict the study of humanities subjects currently included within the BEd programme would significantly weaken our capacity to provide the breadth of holistic education currently available to our students. We also strongly feel that the current blended approach to teacher education will be further diluted if aspects of the creative and expressive arts are not fully protected, as we believe that there are close correlations between issues of literacy and the kinds of skills derived from the expressive arts in particular.

The Draft Plan appears to have adopted a monolingual approach to literacy education which does not take into account the increasingly multilingual nature of Irish society and the Irish educational system in particular. It is imperative that in implementing any future revised national strategy for literacy and numeracy greater recognition be given to children’s particular linguistic environment. Attention should be paid to their mother tongue development, the context of their exposure to second and third languages and, perhaps most importantly of all, the particular circumstances in which they are introduced to languages other than their mother tongue within the education system. The fact that literacy skills do transfer from one language to another requires clear acknowledgement, as does the fact that this transfer is already occurring in various ways within the Irish school system. Any national literacy strategy should also acknowledge the particular issues associated with the development of mother tongue literacy in the case of native speakers of Irish.

Aside from the extension of the ITE programmes already adverted to, there are several other elements of the Draft Plan that we readily endorse, including the recognition of the pivotal role literacy and numeracy play in the continuum of education, the emphasis on ongoing professional development for teachers and the acknowledgement of the centrality of family and community. The recognition of the fundamental importance of the acquisition of sufficient literacy and numeracy skills to ensure the development of empowered, competent and active citizens in a modern democratic society is also something with which we fully concur.

Recognising the change in standards of literacy and numeracy since 2000 (PISA, 2009 results) and the significant numbers of students with poor literacy skills in primary schools
designated as disadvantaged (Eivers, Shiel and Shortt, 2004), it is clear that there are significant challenges for literacy and numeracy in schools. Some factors contributing to this problem arise from the way literacy and numeracy are perceived, prioritised, taught and assessed. Chapters 2 and 3 of this response advocate a broader conceptualisation of the fields of literacy and numeracy and encourage a shift away from narrow understandings, which may largely promote a ‘skill and drill’ approach. For example, numeracy is only one key component of the much broader discipline that is mathematics. Key to effecting this shift from the narrow understanding to the broader conceptualisation of both literacy and numeracy is the importance of enhancing teacher expertise across the teacher education continuum. Therefore, careful thought needs to be given to reimagining Continuing Professional Development (hereafter, CPD). Given the underlying principle of holism which underpins our understanding of teacher education at each stage of the continuum, we recognise that other aspects of the programme contribute in many ways to both literacy and numeracy. Chapters 4 and 5 further highlight how the humanities, language and the expressive arts contribute to supporting the wider development of literacy and numeracy in schools. The conclusion to this response outlines our leadership in the fields of literacy and numeracy in areas of ITE, CPD and research. It argues that such a platform leaves us well positioned to support the Department of Education and Skills in its strategy for improving literacy and numeracy into the future.

St Patrick’s College is committed to further developing its efforts in these areas in order to help improve its provision for literacy and numeracy education within its pre-service programmes. We also hope to expand our delivery of initiatives relating to CPD and research. These efforts will not be without significant challenges as resources, both financial and human, continue to be put under pressure by current economic constraints. That the College is fully committed to quality improvement across all its programmes cannot be doubted, but if the improvements sought in literacy and numeracy standards, not to mention the other important areas of curriculum provision in primary schools, are to be fully realised, the question of the availability of appropriate and adequate financial and human resources will ultimately have to be addressed.

These are difficult times for education and for Irish society more generally. The current challenging economic climate has increased the pressures on an already stretched system. The staff in St Patrick’s College are fully seized of the need to meet head on the challenges facing the education system in addressing the weaknesses in literacy and numeracy provision. As a
College of Education, we are firmly committed to applying the full rigour of our academic, intellectual and institutional capabilities to bring about effective and constructive change, where necessary, in both pre-service and in-service provision for our current and future students. We will set about achieving this change as quickly and as thoroughly as we can within the limits of our current resources. We look forward to working with the Department of Education and Skills and with the Teaching Council to continue to develop appropriate programmes across the teacher education continuum. Most of all, we wish to enhance our models of teacher education for the good of our students, our schools, and our society and to do so in a way which will maintain the best traditions and standards in the programmes of study at St Patrick’s College.
2 Literacy

2.1 Introduction

In each of the following sections we begin by acknowledging the elements of the Draft Plan which we particularly welcome. We also address aspects of the plan which we feel require further elaboration, development and clarification.

2.2 Conceptualisation of Literacy

We welcome the expanded definition of literacy in the Draft Plan (p. 9), which includes traditional, online and multimodal texts. We see this as recognition of the need to promote deep learning, particularly in complex, ill-structured domains (Spiro et al., 2004) such as the Internet. However, the increasing prevalence of digital texts in our daily lives has led to calls in the literature for a reconceptualisation and expansion not only of a definition of literacy but also of what it means to be literate in the 21st century (Flood and Lapp, 1995; Reinking, 1998). As a result, literacy instruction needs to encompass facets of online literacies, new literacies, visual literacies, critical literacies and information literacy. The National Council of Technology in Education, (NCTE, 2008) position statement guidelines state that the literate person in the 21st century needs to:

- develop proficiency with the tools of technology;
- build relationships with others to pose and solve problems collaboratively and cross-culturally;
- design and share information for global communities to meet a variety of purposes;
- manage, analyse, and synthesise multiple streams of simultaneous information;
- create, critique, analyse, and evaluate multimedia texts;
- attend to the ethical responsibilities required by these complex environments.

As these new literacies are constantly changing and evolving, and are deictic in nature, we need to prepare students across the continuum of education provision for their multimodal, digital futures and ensure that they develop the metacognitive skills and strategies necessary to adapt to changing information technologies (Leu, 2000; Leu, et al., 2004).

Although reading and writing skills are crucially important to develop, we espouse a broad vision of literacy, which encompasses the cognitive, affective, socio-cultural, cultural-historical, creative and aesthetic dimensions of literacy. We see literacy as a tool for personal
empowerment enabling reflection, critique, and empathy leading to a sense of self-efficacy, identity and full participation in society.

We believe the conceptualisation of literacy from a philosophical point of view should be broad enough to encompass all of these aspects. We therefore recommend the broadening of the definition of literacy in the Draft Plan and argue that it should inform the review of the content and pedagogy of the literacy curriculum.

2.3 Effective Literacy Teaching and Learning

We endorse the commitment given in the Draft Plan to review the English Curriculum (1999). We feel this will contribute significantly to improved literacy teaching and learning, particularly if it is underpinned by a broad definition of literacy as outlined above; is informed by the international research base on effective literacy instruction discussed below; and if teachers are fully supported in its implementation.

The increase in the allocation of time for literacy and the recognition of the pivotal role that literacy plays across the curriculum is also to be welcomed. However, it should be recognised that more time in and of itself is unlikely to raise standards unless it is combined with high-quality teaching and assessment practices and based on a cognitively challenging and affectively engaging curriculum. This is more likely to occur when the kinds of high-quality research-based professional development outlined later in this chapter are provided to all those working with students across the education continuum. The Language and Literacy Unit, a centre for literacy studies at St Patrick’s College, welcomes the opportunity to work in conjunction with the National Council for Curriculum and Assessment (hereafter NCCA) and the Professional Development Service for Teachers (hereafter PDST) to support and develop further the ongoing prioritisation of literacy in all schools.

We are concerned that there is an over-emphasis on the ‘core skills’ (Draft Plan, 2010: 13) or ‘key literacy skills’ (Draft Plan, 2010: 29) of language in the Draft Plan. Over-focusing on skills is unlikely to yield the desired results. For example, research in the United States into the impact on literacy achievement of the No Child Left Behind Act which mandated scientifically-based literacy instruction, indicates that while the time spent teaching key skills increased on average, there was not a statistically significant increase in children’s reading comprehension nor an increase in the number of children performing at or above grade level (Gamse et al., 2008).
In addition, the notion of a ‘generic skills based programme’ (Draft Plan, 2010: 20) is problematic, as a one-size fits all approach cannot meet the needs of all children. It is also out of step with the international research base which suggests that there is no one method for teaching literacy and that what matters most is the level of teacher knowledge relating to literacy (International Reading Association, 2000). We believe the review of the English Curriculum should be informed by research base on effective literacy teachers and the research on components of effective balanced literacy frameworks.

2.3.1  Effective Literacy Teachers

Effective literacy teachers have a deep understanding of the foundations of literacy and of the theories and philosophies underpinning literacy development. They know both the ‘what’ and the ‘how’ of effective balanced literacy instruction, in terms of content knowledge and pedagogical content knowledge and they understand the interrelationships and interconnectedness between both (Pressley et al., 2002). A balanced literacy framework should also accommodate the new literacies and would involve drawing, for example, on the work of Mishra and Koehler (2006) as a theoretical framework. The Technological, Pedagogical and Content Knowledge (hereafter TPCK) framework encompasses the ability to draw flexibly from and integrate knowledge of technology, pedagogy and content into the literacy curriculum and instructional practices and could be used to inform the development of appropriate classroom frameworks.

Furthermore, exemplary literacy teachers possess the expertise to use their knowledge to tailor instruction to meet the needs and stages of development of particular children in particular classrooms in particular schools in ways that capitalise on children’s motivation, engagement, and interests.

2.3.2  An Effective Literacy Curriculum in the Classroom

A highly effective literacy curriculum includes attention to each of the essential elements of a balanced literacy framework: explicit and systematic attention to the skills and strategies (phonological/phonemic awareness, phonics, word-identification, fluency, vocabulary, comprehension and writing) within authentic contexts (shared, guided, independent reading and writing) for real purposes and varied audiences. This requires an understanding of the developmental nature of the acquisition of literacy (Alexander, 2006). It also requires a cognitively challenging curriculum which focuses attention on the higher-order skills and strategies for reading comprehension (e.g. retrieving, questioning, inferring, synthesising,
critically evaluating) and vocabulary development from the outset, with systematic attention in the early years to constrained (e.g. phonics/word level) skills. Similarly, in relation to writing development, simultaneous attention is paid to the development of lower-order (spelling, punctuation, grammar) and higher-order skills and strategies (choosing topics, generating and crafting ideas, revising, editing). Students develop their ‘voice’, style, imagination and thinking as they engage in the process of writing about self-selected topics across a range of genres and in a variety of forms within authentic classroom experiences such as the Writing Workshop (Graves, 1994; Grainger, Goouch and Lambirth, 2005). Writing, therefore, is seen primarily as a tool for personal empowerment and communication. This dual attention to reading and writing acknowledges the reciprocal nature of language, as development in one supports development in the other.

In the literature, the relationship between language and learning is characterised as the interaction between the acquisition of the language system and use of that system in constructing knowledge at increasing levels of complexity, including talking and thinking about abstract propositions (Halliday, 1993). It is recognised that educational knowledge requires understanding and use of complex and abstract forms of language including a wide and sophisticated vocabulary. We increase children’s levels of understanding by increasing the complexity of their oral language use.

The link between oral language competence in the early years of schooling and reading comprehension later in the primary school years has been well documented (Griffin et al., 2004). Research has also identified the need for schools to initiate children into the formal academic language of schooling; to enable children to develop a particular linguistic learning style where language is brought to deliberate and conscious awareness and children can both reflect on language and use it as a tool for reflection (McGough, 2008; Cregan, 2007; Snow et al., 2001).

A cognitively challenging curriculum embeds opportunities for this kind of teaching and development to occur as children engage in high-level discussion in authentic reading and writing experiences in the classroom. It cultivates the creativity, agency and independence of the child as a ‘code breaker’, ‘meaning maker’, ‘text analyst’ and ‘text critic’ both at an individual level and collaboratively when working with peers (Freebody and Luke, 1990). It can also help the child to develop key skills and strategies in self-regulation leading to high levels of metacognition.
Digital reading environments, and the instructional contexts we construct to make use of them, are redefining the relationship between reader, text, activity and socio-cultural context. The RAND Reading Study Group (RRSG, 2002) drew attention to the importance of reading comprehension as a social activity and asserted that the text, the activity and the reader are situated within a larger socio-cultural context of learning and that each element represents an important part of the literacy learning process. RRSG also drew attention to the fact that higher levels of reading and writing strategies are needed to fully exploit the potential of digital technologies and the Internet as sites for deep learning. Further, the assumption that most young people have highly developed technological and information seeking strategies is not supported by the research-based literature (University College London CIBER Group, 2008; Williams and Rowland, 2007). Therefore, we should ensure that all pupils, and particularly those from lower SES backgrounds, develop the skills, strategies and dispositions to fully exploit the potential of the Internet and other digital tools for reading, writing and communication (Dwyer, 2010). Children’s out-of-school literacy practices, in particular their digitally mediated practices, also need to be recognised and built upon as part of school literacy experiences (Alvermann et al., 2006).

In the Irish context an imbalance has been found to exist in the range of literacy skills taught to pupils in both specialist and mainstream classrooms with a tendency towards a ‘bottom up’ skills-based approach to the development of literacy skills (McPhillips, 2007; Concannon-Gibney and Murphy, 2010). In addition, a review of curriculum implementation (DES, 2005) indicated that teachers required further support in relation to the emotional and imaginative development of the child, the development of higher-order thinking skills within lessons, the critique of texts, the teaching of skills in a meaningful context and the teaching of writing as a process. Research also indicates that some teachers experience a considerable lack of confidence in their abilities to assess children’s competences in oral language and to plan for and teach oral language in the curriculum (Eivers, Shiel and Shortt, 2004). School-level factors requiring attention include the development of coherent, appropriate and detailed whole school literacy plans, and greater cohesion between the learning support and classroom literacy programme (DES, 2005).

We believe that the English Curriculum (1999) should be reconceptualised and reshaped in light of the national and international evidence outlined above. The essential elements of a research-based balanced literacy framework should be made transparent for teachers. The curriculum should clarify for teachers how to bring all of the elements together to create an
effective, cognitively challenging and engaging, balanced literacy framework suitable for a classroom context. Teachers should also be given guidance on how to translate the framework into a coherent whole school plan that systematically builds and develops children’s skills and strategies in ways that cultivate a positive disposition towards literacy while also fostering children’s creativity and agency. Given the changes brought about to literacy by the introduction of the Internet and other digital technologies, the review of the curriculum should also look specifically at developing technological, pedagogical content knowledge for teachers in the New Literacies and classroom pedagogies to enable children to develop the skills, strategies and dispositions necessary to exploit fully the Internet and other digital technologies for deep and engaged learning. The Language and Literacy Unit, a centre for literacy studies at St Patrick’s College, welcomes the opportunity to work in conjunction with the National Council for Curriculum and Assessment (hereafter NCCA) and the Professional Development Service for Teachers (hereafter PDST) to support curriculum renewal and develop further the ongoing prioritisation of literacy in all schools.

2.4 Literacy in Early Childhood Education

First we welcome the recognition given in the Draft Plan to early childhood education as a crucially important and distinct phase in the development of language and literacy. Second, we welcome the priority to be given to Aistear: The Early Childhood Curriculum Framework, in developing teaching and learning for children in the age range from birth to six years. Third, we support the identification of play as a central pedagogical approach in early childhood education in generating both abstract and creative thinking which is essential for the development of literacy skills. Fourth, the acknowledgment of the need for continued efforts towards the improvement of the oral language competence of all children across the continuum of education provision is most important, as is the recognition of the need for earlier intervention in the areas of oral language and early/emergent literacy skills through the provision of in-class support by the learning support teacher in junior infants. This clearly has implications for the teaching of language and literacy in early childhood education.

Exemplary early childhood educators should have a thorough knowledge of the foundations of early literacy. They should understand and be able to operationalise the links between play, oral language development and literacy development including the development of narrative skills and thinking skills. They should provide appropriate learning experiences such as play, storytelling and discussion as a basis for literacy development and should understand how to
embed essential early literacy skill development into these authentic experiences. They ought to recognise the importance, in the early years, of promoting the development of a positive disposition towards literacy. They should also recognise the role of oracy not just as talk, but as focused talk, emphasising and building on children’s emerging higher mental functions (Saracho and Spodek, 2002). Clearly, early childhood educators will require high levels of expertise to successfully promote and optimise children’s early literacy development. Therefore, we would suggest that the Draft Plan should consider the discrepancy that exists between the qualification levels of most educators working in preschools and teachers working in infant classrooms in primary schools. The Draft Plan should acknowledge that a degree level qualification for all early educators is essential.

Within the Draft Plan, early literacy skills are referred to as pre-literacy skills. It would be helpful to characterise these skills as early/emergent skills. In addition, the relationship between Aistear: the Early Childhood Curriculum Framework and the existing Primary Curriculum (1999) should be clarified. How the essential early literacy skills outlined earlier are to be embedded within the Aistear Framework also needs further elaboration in the Draft Plan.

2.5 Professional Development in Literacy

We welcome the acknowledgement in the Draft Plan of the level of expertise and professionalism required by classroom teachers to meet the literacy needs of all pupils, the emphasis on the teacher as a reflective practitioner who is capable of ongoing lifelong engagement with literacy research and the recognition of the need to expand professional development in literacy for all teachers across the continuum of education provision. We acknowledge the commitment to sustained professional development in literacy outlined in the Draft Plan and we would welcome the opportunity to contribute to this. The recognition given to the development of school principals’ leadership capacity in relation to literacy is also to be welcomed. Strong and determined internal leadership in schools is a key feature of effective schools in literacy research (Taylor et al., 2003; Lein, Johnson and Ragland, 1997).

In the last decade, the definition of professional development has evolved considerably. It is now considered to be a career-long process that should be planned systematically to promote growth and reflection (Villegas-Reimers, 2003). Traditional forms of professional development (short courses and once-off workshops) have had a poor history of success in changing practice on the ground. They do not take into consideration the individual needs or
existing knowledge base of attending teachers, often utilise a transmission approach and lack the kind of systematic follow-up necessary for sustainability (Strickland and Kamil, 2004). Therefore the twenty-hour mandatory courses advocated in the Draft Plan while they are a good start may not bring about the kind of change needed to increase achievement and ensure the high-quality literacy teaching envisaged in the Draft Plan. In addition, the requirement that all providers of professional development summer courses should include units on the teaching of literacy is problematic. First, it is not clear how much time this should constitute within courses. Therefore adding short units to all courses will not allow for deep learning and it would make it difficult for providers to determine content that would meet the needs of all participating teachers. Second, not all providers of summer courses would possess the expertise to develop high-quality professional development in literacy.

Research literature suggests that professional development is most successful when it incorporates a number of key principles. It should be customised to the needs of the teachers and school context, conducted primarily on-site and sustained over a period of time with change introduced gradually (Kennedy and Shiel, 2010). While research is not conclusive on the optimal length of time for professional development initiatives, it does suggest that a substantial number of years are required for real and lasting change to occur (Garet et al., 2001). Teachers need strong content knowledge and a variety of pedagogical strategies at their disposal (such as that outlined earlier) if they are to be successful in teaching children, so attention to both is critical in effective professional development (Shulman, 1987). Professional development should also be built on constructivist principles, track pupils’ strengths, needs and achievement and should encourage a collaborative inquiry-based approach to addressing these needs in ways that honour teachers’ creativity and autonomy (Cordingley et al., 2003; Kennedy, 2008). Collaborative continuing professional development partnerships can lead to the establishment of professional communities of practice within schools which in turn can help to create a shared vision and collective responsibility for ensuring all children reach their potential in both reading and writing. The potential of school-based professional learning communities is also recognised by the Teaching Council which argues that ‘school-based collaborative enquiry carried out by teachers in teams or groups and supported by teacher education departments, is a valuable model for CPD’ (The Teaching Council, 2010). How this can be supported and operationalised in the Irish context should be considered in the Draft Plan.
We believe an integral part of the professional development offered to primary and post-primary schools and those working with young adults in Youthreach Centres should be focused on building expertise in relation to research-based content knowledge, pedagogical content strategies, technological pedagogical content strategies, and a range of appropriate assessment practices. This would help all those working with students to implement the kind of coherent cognitively challenging curriculum outlined earlier in this chapter, so that all students can be enabled to develop high levels of literacy.

The professional development provided as part of any national strategy should be informed by the research and should draw on international standards for professional development in literacy such as those recently ratified by the International Reading Association (International Reading Association, 2010). We would strongly recommend that all professional development offered should be accredited, with opportunities for teachers to devise an individual professional development plan suitable to meet their own particular needs and interests whether on-site, or through blended and on-line environments. In addition it should also be recognised that while developing school principals’ capacity to lead the development and implementation of a high-quality balanced literacy framework in their schools is vital, leadership devolved to a teacher within the school with specific expertise in literacy e.g. masters qualification in literacy can also be effective.

2.6 Supporting Literacy in DEIS Schools

The commitment in the Draft Plan to continue to support DEIS schools as they work towards improving literacy achievement for their students is to be welcomed. However, there are a number of issues we would like to address.

In relation to DEIS schools, action plans and targets should be devised after professional development has occurred and some initial success has been realised in raising achievement (Guskey, 1986; Kennedy, 2009). Earlier in this document, components of an effective, research based, cognitively challenging literacy curriculum were outlined. Research suggests that this kind of approach to instruction is less likely to be encountered by children who struggle with literacy or who attend schools in disadvantaged communities, despite national and international evidence that a meaning-oriented approach has been found to be more effective in the latter (Pressley, 2001; Duke, 2001; Kennedy, 2008). DEIS schools should be supported in designing a cognitively challenging and engaging curriculum framework for their own particular school.
It is essential that professional developers working with DEIS schools possess a high level of expertise around literacy processes, stages of development, methodologies, development of motivation and engagement and assessment procedures, as well as knowledge of change processes. It is also essential that their workload allows them to engage with the school over a prolonged period and with sufficient levels of intensity to initiate and sustain change within schools. The Language and Literacy Unit: a centre for literacy studies at St. Patrick’s College would welcome the opportunity to work with all those operating within disadvantaged communities e.g. DEIS co-ordinators, JCSP co-ordinators, Youthreach instructors.

2.7 Supporting the Literacy Achievement of Diverse Groups of Learners

We welcome the attention given in the Draft Plan to the particular needs of children for whom English is an additional language and of children from disadvantaged communities. However, equal consideration needs to be given to other groups of pupils such as exceptional pupils and those who experience special educational learning needs. Effective practices outlined earlier, when differentiated appropriately, are also effective with these pupils.

There are significant challenges facing teachers in the linguistic diversity of contemporary classrooms and the complexities of providing for English language learners in a multicultural context needs serious consideration. We welcome reference to ‘improving the targeting of EAL resources’ (Draft Plan, 2010: 36). However, consideration must be given to supporting the cognitive academic language development (CALP) of these English language learners for all teachers across the primary curriculum, taking into account the range of levels of language proficiency among pupils and their need to develop both receptive and expressive language skills in order to be successful in accessing the primary school curriculum (Cummins, 1984). The work of Baker (1993) and Cummins (1980) has had a wide influence on understanding of how learners acquire language and addresses the issue of assessing learners’ language proficiency in today’s multicultural classroom.

In referring to children’s language and literacy education, the international convention of using L1 to refer to first language, L2 to second language, and so on, should be employed, in place of the formulation adopted in the Draft Plan where L1 is defined as the language of instruction in school, a formulation which serves to disguise the fact that up to 15% of primary school children in Irish schools are instructed through a language which is not their
mother tongue, for example, EAL pupils in English-medium schools and non-native Irish speakers in Gaeltacht schools and gaelscoileanna.

The Draft Plan should acknowledge the particular issues associated with the development of mother tongue literacy in the case of native speakers of Irish. The need for specific literacy programmes and language support for native speakers of Irish in Gaeltacht schools has been identified (Ó Laoire and Harris, 2006; Ó Giollagáin et al., 2007; Ní Mhianáin, 2003). The Draft Plan should include school-based literacy programmes that will develop L1 Irish-language oral language and literacy skills, as well as pre-school, family and community support structures to facilitate complete acquisition of Irish and socialisation of native-speaking children through the medium of Irish. The issue of language delay, the special educational needs of native speakers of Irish and the teaching and learning of English as a second language also need to be taken into account. Further treatment of these issues is presented in Chapter 4.

In the inclusive school and classroom, the range of needs of all children should be considered in the development of the literacy plan. Schools and teachers should be supported in meeting the needs of all learners (e.g. EAL, exceptional, special educational needs). This should form an integral part of any professional development in literacy.

2.8 Making Better Use of Assessment Evidence at Primary Level

We welcome the recognition of the central role afforded appropriate formative and summative assessment in teaching and learning across the continuum of educational provision from junior infants to the end of junior cycle. We support the requirement that all schools should report and explain assessment outcomes to parents and make students aware of their progress. We endorse the commitment given to participate in PIRLS at the primary level (International Association for the Evaluation of Educational Achievement, 2005) which will provide useful comparative data and allow for the benchmarking of Irish primary students’ achievement against international standards. The following are some of the issues we would like to highlight in relation to assessment.

First, while the Draft Plan recognises the need for both formative and summative assessment of literacy learning in classrooms, there appears to be an over-emphasis on the assessment of learning, particularly with regard to the use of standardised reading tests. This is even further
emphasised in the proposal to use comparative data in ‘Schools Like Ours’ (Draft Plan, 2010: 41). Although the spirit of the document suggests that this proposal does not intend to create a ‘league table’ approach to literacy, evidence from the experience of other countries in implementing such proposals would suggest otherwise. We are concerned that this proposal could have the effect of narrowing the curriculum and lead to a reductionist mechanistic approach to teaching literacy. Experience in other countries such as the UK and US has illustrated the dangers of target driven curricula where teachers are constrained, content is prescribed, and pedagogical approaches lack creativity, resulting in a reduction of teacher autonomy and professionalism (Hall, 2006). This has implications for children’s conceptions of literacy, their motivation and engagement in the literacy process, their enjoyment of reading and the cultivation of reading and writing as lifelong habits.

Second, a stronger focus on classroom-based literacy assessment practices is necessary to support the development of children as effective readers and writers and to plan for pupils’ learning. This requires that teachers have a deep understanding of the literacy process, the stages of literacy development and the difficulties that may arise for some learners. The phrase ‘formal and informal evidence of achievement’ (Draft Plan, 2010: 40) may be unhelpful and misleading. Classroom assessments or Assessment for Learning (AfL) can and should be considered as formal assessments. This is a crucially important point if AfL is to be taken seriously and given the importance it deserves.

Third, assessment as it relates to early learning has particular challenges associated with it. The plan should specifically recognise the key role of teacher observation and monitoring and how this can inform teaching and learning. It is important that the assessment of oral language in early childhood is conducted in ways that are appropriate and respectful of individual children and of their cultures, experiences and dispositions (Dunphy, 2008).

Fourth, while the proposal to introduce a pupil-created portfolio to provide evidence of learning as children transfer from primary to post-primary school is useful, we feel it could be extended throughout the primary school. It contributes to the development of children’s sense of agency in their own learning and their understanding of the literacy process and also provides evidence of progress over time to the children themselves, their teachers, and their parents. Sharing the learning intentions with children and involving them in creating success criteria helps to foster teachers’ close observation of children’s developing literacy skills and strategies. This provides useful information for future planning and assessment for learning.
Although portfolios are valuable, in our work in initial teacher education and our work in schools we promote the use of a wide range of assessment tools such as: observation and interaction frameworks for the appraisal of children’s narrative skills and their use of oral language; peer and self-assessment, discussion analysis, reading and writing conferences, running records/miscue analysis, rubrics, criterion based checklists, and diagnostic tests (NCCA, 2007). Teachers will require opportunities to learn about each of these strategies and how they can help in identifying and responding effectively to children’s specific needs. This will be best accomplished through the kinds of ongoing on-site professional development as outlined earlier. Given that formative assessment plays such a critical role in effective literacy teaching, we would strongly recommend that Chapter 6 in the Draft Plan should be expanded to include a strong focus on these kinds of classroom-based assessments.

2.9 Key Points in this Chapter

- We recommend a broad definition of literacy, which encompasses the cognitive, affective, socio-cultural, cultural-historical, creative and aesthetic dimensions of literacy.

- The review of the English Curriculum (1999) should consider how each of the essential elements of a research-based cognitively challenging balanced literacy framework can be made transparent for teachers.

- The review of the curriculum should address the development of teachers’ technological pedagogical content knowledge in the new literacies so that they may support children in developing the skills, strategies and dispositions necessary to fully exploit the Internet and other digital technologies for deep and engaged learning.

- There appears to be an over-emphasis on a mandatory one-size fits all approach to CPD. A research-based multi-faceted approach should be taken to the provision of professional development which should be customised to the needs of schools and teachers. We would strongly recommend that all courses offered should be accredited, with opportunities for teachers to devise an individual professional development plan suitable to meet their own particular needs and interests whether on-site, or through blended and on-line environments.

- Schools and teachers should be supported in meeting the needs of a diversity of learners (EAL, exceptional, special educational needs). Meeting the needs of all learners should form an integral part of any professional development in literacy.

- The proposal to use comparative data in relation to ‘Schools Like Ours’ is problematic and should be reconsidered. Given that formative assessment plays such a critical role in effective literacy teaching, we would strongly recommend that Chapter 6 in the Draft Plan should be expanded to include a strong focus on these kinds of classroom-based assessments.
3 Numeracy

3.1 Introduction

St Patrick’s College welcomes the fact that the Draft Plan emphasises the importance of mathematics, thus raising the public perception of a need for everyone to be mathematical. It recognises that teaching mathematics is a complex task and, by inviting widespread consultation, offers an opportunity to foreground the dynamic nature of mathematics teaching and the possibilities inherent in ‘negotiating norms’ of what constitutes good teaching (Krainer, 2005). The College looks forward to continuing participation in many of the proposed elements of teacher education and teacher professional development.

3.2 Conceptualising Mathematics Education

Although numeracy, as presented in the Draft Plan, is not conceived as ‘back to basics’ but rather as ‘the capacity, confidence and disposition to use mathematics to meet the demands of learning, school, home, work, community and civic life’ (Draft Plan, 2010: 9), a broader conceptualisation of the discipline is required in order to provide a basis for planning improvement in the practice of teaching mathematics. For example, in the Cockcroft Report, among the reasons given for teaching and learning mathematics are its power as a means of communication, its importance and usefulness in many fields and also its inherent interest and appeal (Cockcroft, 1982). While the utilitarian value of mathematics warrants careful attention, some consideration should be given to mathematics as a means of accessing and communicating powerful ideas and as a subject of intrinsic value and one from which aesthetic value can be derived by all. Furthermore, while the term ‘numeracy’ tends to have associations with the strand of number, the use of the term ‘mathematics’ might help to convey the breadth of the subject, i.e., one that involves the exploration of shape, space and patterns as well as quantities and change that helps to organise people’s insights and ideas about the world in systematic ways (Cross, Woods and Schweingruber, 2009).

There is yet another reason that the creative aspect of mathematics should not be overlooked in the Draft Plan. Boaler and Greeno (2000) suggest that an emphasis on ‘procedures-based’ mathematics positions learners of the subject as ‘received knowers’ (whereby they learn mathematics by carefully following teachers and textbook demonstrations) and eliminates creative, divergent thinkers from the subject. They also maintain that it has a critical effect on the number of students who want to study mathematics at advanced levels. This is evident in
the low uptake of higher level mathematics at Leaving Certificate (Draft Plan, 2010: 11). In a discussion document on post-primary mathematics in Ireland, it was noted that the ‘fear’ of mathematics is often linked with getting the ‘wrong’ answer, and that this may begin at primary school (NCCA, 2006). Exposure to the inherent creativity of mathematics would foster a positive disposition to the subject in primary and secondary students (Dooley, 2010). However, such a transformation in the conceptualisation of mathematics will require a resolute focus on the teaching and learning of the subject. In this regard, it is notable that several studies reporting on countries that perform well in international tests of mathematical achievement contend that a causal factor is the focus on teaching and learning of mathematics and not on assessment or other external matters (Sahlberg, 2007). For example, in Finland (Draft Plan, 2010: 10) pre-service primary teachers take a Bachelors and a Masters cycle during which they are given an opportunity to specialise in mathematics education. Furthermore, their teaching practice is provided in University practice schools where close supervision by mathematics education specialists is feasible. Secondary mathematics teachers hold a Masters degree in which mathematics is a major or a substantial minor subject (Burghes, 2008).

A number of mathematical practices constitute Irish society’s understanding of ‘school mathematics’. We therefore suggest that consideration be given to the notion of ‘mathematical proficiency’ rather than numeracy. Kilpatrick, Swafford and Findell (2001) argue that mathematical proficiency comprises the following five interwoven strands:

- conceptual understanding—comprehension of mathematical concepts, operations, and relations;
- procedural fluency—skill in carrying out procedures flexibly, accurately, efficiently, and appropriately;
- strategic competence—ability to formulate, represent, and solve mathematical problems;
- adaptive reasoning—capacity for logical thought, reflection, explanation, and justification;
- productive disposition—habitual inclination to see mathematics as sensible, useful, worthwhile, coupled with a belief in diligence and one’s own efficacy.

The Draft Plan would be strengthened by the incorporation of mathematical proficiency as a goal of mathematics education. It would be further strengthened by giving explicit recognition to early childhood as the period when children’s dispositions towards mathematics are
developed and the period when their metacognitive frameworks (their understandings of the meanings and purposes of numeracy/mathematics) are initiated.

3.3 Professional Development in Mathematics

The Draft Plan recognises that developing mathematical proficiency is a complex task, with implications for how students develop that proficiency, how teachers develop it in students, and how teachers are educated to achieve this goal. We contend that to teach mathematics with a focus on process skills requires that teachers teach it in a manner that is often qualitatively different from how they themselves learned mathematics. Since mathematics teaching is largely a matter of interpretation, the shift in emphasis from computational skills to developing mathematical thinking through problem solving can be difficult for teachers. One proposal made is that setting targets for pupil achievement and systematic testing of attainment is a means of improving standards in mathematics (Draft Plan, 2010: 12). However, we feel that this proposal is not helpful, since improvement in mathematics teaching is achieved by sustained, collaborative focus on developing children’s mathematical thinking, in a way that engages their preconceptions, builds understanding of factual knowledge and conceptual frameworks, and encourages a metacognitive approach to learning mathematics (Fuson, Kalchman and Bransford, 2005).

With respect to developing all five strands of mathematical proficiency successfully, it would be better to think in terms of ‘good practice’ rather than ‘best practice’ (Draft Plan, 2010: 20) and encourage ‘buy-in’ by teachers to studying their own practice, in tandem with detailed discussion and study of assessment data. At whole school level, a concerted effort must be made to fasten the link between assessment and planning for children’s learning by the proposed promotion of a culture of continuous improvement in learning. The complexity of this challenge is acknowledged in the Draft Plan (p. 40) and there is much to learn from school communities where such use of ‘high yield, low stakes’ assessment activities are integral to practice (Perry and Lewis, 2009). There is also a need to address the nature of the skills required of educators for the successful and optimal promotion of mathematical learning during the early childhood years.

3.3.1 Initial Teacher Education

While agreeing that ‘the potential raising of the minimum grades obtained in the mathematics’ merits consideration (Draft Plan, 2010: 18), it is important to recognise that high achievement
in Leaving Certificate mathematics is not necessarily a good predictor of successful teaching of mathematics (Corcoran, 2008). We note the proposal to raise the minimum grade in mathematics for entry to teacher education courses as a contribution towards achieving the aims set out in the Draft Plan. We welcome this focus on student teachers’ personal mathematics, but caution that raising the minimum entry requirement in mathematics may have implications in limiting access to the profession. In the UK, ITE providers are mandated to audit their students’ mathematics subject knowledge and to attempt to remedy any deficits (Department for Education and Employment, 1998). We have reservations about the suggestion that teachers be ‘rigorously assessed’ during and at the end of the ITE phase (Draft Plan, 2010: 15). Since only narrow constructs of mathematical knowledge for teaching can be measured by formal tests, we recommend that early in their course student teachers engage with a self-audit of mathematical knowledge for teaching as a mathematics awareness-raising exercise (Rowland et al., 2003). Moreover, the provision of a mathematics support centre where prospective teachers can access extra help in mathematics, peer-tutoring etc. would be helpful in enabling them to revisit and interrogate their personal knowledge of fundamental mathematics as a basis for good teaching. Both of these initiatives would also contribute to a ‘robust system to support NQTs’ (Draft Plan, 2010: 15).

In ITE, we welcome the proposal that greater time be dedicated to mathematics education workshops, with a strong focus on how children learn mathematics (Draft Plan, 2010: 18). We recommend that ways be found to create more ‘situated’ learning environments (video case studies, micro-teaching) where planning, teaching and assessment can be more successfully linked, such as models of learning of mathematics in and for teaching, which are successful on the mathematics education elective module in St Patrick’s College. We welcome the considerable potential for developing such models, which will be afforded by the proposed extensions of ITE programme (Draft Plan, 2010: 18).

With regard to ensuring that ‘teachers are required to demonstrate satisfactory skills in the teaching of … numeracy during the teaching practice component of their initial teacher education course’ (Draft Plan, 2010: 19), we recommend, as an initial step, that consideration be given to increasing the regularity with which student teachers teach and evaluate lessons in mathematics during Teaching Practice. In this context, opportunities for mathematical activity afforded by other subjects within the curriculum should be optimised. This presents a considerable challenge for student teachers. The integration of mathematics into other subject
areas needs to be operationalised in a meaningful way and warrants consultation, discussion and research. This is further discussed in Chapter 4.

3.3.2 Continuing Professional Development

While we welcome the proposal in the Draft Plan for enhanced CPD (p. 20), we suggest that any such initiative should not be over-regulative. Research into mathematics teacher development in the UK indicates that regulation can generate a superficial confidence in teachers, but may mask an absence of deep mathematical understanding on their part (Brown and McNamara, 2005). What is required is a coherent long-term programme for professional development of teachers. A focus on how teachers can be supported to engage in professional learning communities within their schools should be core.

We welcome the recognition of the pivotal leadership role which school principals play in achieving professional development. School leaders and school staffs can be supported to work together to improve performance and achievement of the pupils in their own schools or clusters of schools. Given encouragement and support it is possible to foster agency in individual teachers and staffs and an identity as a successful community of teachers who prioritise the teaching of mathematics (Corcoran, 2010: 23). By collaborative study of their own practice, whole staffs, with their disparate talents and expertise, can engage with continual improvement of practice. We recommend the use of Lesson Study as a means of developing mathematical knowledge in teaching (MKiT) because it is school-based, children- and mathematics-focused and belongs to the teachers and school communities (Corcoran and Pepperell, 2011). To facilitate this, cuiditheoirí working for the PDST should be required to hold a postgraduate qualification in mathematics education and be facilitated to act as ‘Knowledgeable Other’ in facilitating the Lesson Study process. While access to approved professional development courses of at least twenty hours in mathematics (alongside literacy and assessment) is a welcome feature of the report (Draft Plan, 2010: 20), we recommend that these courses be accredited.

3.4 Prioritising Numeracy in Early Childhood, Primary and Post-primary Education

We especially welcome the recognition given in the Draft Plan to the educational significance of early childhood education (ECE) as distinct, while also being part of the education continuum. However, it is essential that the plan be explicit in relation to the foundations of early mathematical concepts, skills and dispositions, and the links between play and
mathematical development across the various strands of mathematics (Clements, Sarama and DiBiase, 2004). An emphasis on the importance, in the early years, of children developing a good number sense based on the use of number in the world around them would enhance the Draft Plan, as would a recognition of current conceptions of good practice in relation to early mathematics teaching. For instance, classifying, ordering, comparing and matching are no longer considered as pre-requisites for children’s engagement with or understanding of counting and number-related learning. We also feel that it is important that, as has emerged in recent decades, the key role of counting as a central aspect of early mathematical development and learning form part of any new national plan to support and improve mathematical competence (Dunphy, 2006; Pound, 1999).

In relation to a problem-solving approach to the teaching of mathematics at primary and post-primary level (Draft Plan, 2010: 29) the most effective tasks for the mathematical activities of conjecturing, justifying, particularising and generalising are those with ‘high-level cognitive demands’ (Sohmer et al, 2009). Such tasks are characterised by multiple entry points, solution strategies and interpretive claims and allow different students to access them in a variety of ways. These tasks would help to address the ‘seven-year difference’ discussed in the Cockcroft report.¹ Moreover, the PISA 2009 findings in relation to the comparatively low performance in mathematics of higher-achieving students in Ireland further highlight the need for students to work on problems just out of cognitive reach i.e. tasks that are within their zone of proximal development (Vygotsky, 1978). In terms of the resource implications deriving from such an approach to the teaching and learning of mathematics, the ACTION website (available at www.ncca.ie) could be used to showcase real mathematics teaching situations and thus promote teachers’ collaborative investigation of practice. Furthermore, teachers should have a range of quality resources available, which are developed by people with a range of expertise - pedagogy, mathematics and mathematics education.

The use of digital technologies has a role here. By focusing on the learner, the role of technology can support new understandings and capabilities while also enabling reflection on understandings, beliefs and thinking processes. Accordingly these ‘mindtools’ can support cognitive and metacognitive processes. As they engage with digital technologies, learners function as designers, using the technologies as tools for analysing the world, accessing information, interpreting, organising and constructing their personal knowledge, and

¹ By this is meant that given a mathematical problem suited for an ‘average’ 11-year old, there are some 14-year olds who cannot do it and some 7-year olds who can.
representing what they know to others (Jonassen, Peck and Wilson, 1999: Jonassen and Reeves, 1996). Technological tools such as spreadsheets, databases, expert systems, video conferencing and others can ‘function as intellectual partners with the learners in order to engage and facilitate critical thinking and higher order learning’ (Jonassen, 1996: 9).

3.5 Targeting Learners at Risk of Failure in Numeracy

While focus on the needs of the most disadvantaged communities in society is a welcome feature of the Draft Plan, it is important to recognise that students attending DEIS schools have the same underlying potential as their non-DEIS counterparts. While performance in tests of mathematical attainment is substantially lower among students in DEIS schools, the reasons for this are complex. In particular, teachers’ beliefs about learners and learning are central to successful performance in mathematics (Zevenbergen et al., 2004). Indeed this might account for the ‘atypical’ performance patterns reported in the recently published 2009 National Assessments of Mathematics and English Reading where although characteristics of a school’s enrolment (such as pupils’ SES) were a good predictor of test scores, pupils in some schools did better or worse than would be predicted (Eivers et al., 2010). Malloy suggests that mathematics instruction, in order to be inclusive of all students, must exploit contexts that allow and encourage all students to be engaged in mathematics in a meaningful manner (Malloy, 1999). An implication of this is that teachers should draw on situations and pedagogies that allow students to use their own cultural, ethnic and gender preferences and approaches. Moreover, the varied and valid ways that students make sense of mathematics need to be respected (Dooley and Corcoran, 2007). This has implications for students attending DEIS schools, EAL students, Youthreach students and indeed all learners of mathematics.

Regarding EAL students, it must be remembered that their needs are not confined to language acquisition level. Competence on a basic and interpersonal communicative level does not guarantee that children can access the cognitive and academic language skills necessary for complete engagement with the curriculum (Cummins, 1976). This may also be an issue for children attending gaeilgeoireachta, particularly in the area of mathematical language or specific mathematical register (Ní Riain, 2010). While an emphasis on the role all teachers should play in the development of language skills is welcome, achieving this will require

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2 For example, Cassidy (2007) implemented a programme based on the principles of Realistic Mathematics Education in a 6th class DEIS Band1 school that fostered improvement in attitude towards and engagement in mathematical problem-solving.
considerable input in ITE and CPD. Care must be taken in the generation of standardised assessment data from EAL or L2 (Second Language) learners as testing in a second language may result in the formation of a false impression of the child’s capabilities (Baker, 2001).

### 3.6 Assessment in Mathematics

While the inclusion of both formal and informal evidence of achievement is welcome (Draft Plan, 2010: 40), an undue focus on standardised tests could detract significantly from teachers’ efforts to teach the full range of mathematical knowledge and dispositions in the curriculum. These tests may display a tendency to favour skills that are easily measured. They are representative of neither the breadth of mathematical thinking nor of the Primary School Mathematics Curriculum. A cyclical rather than a linear approach to planning, teaching and assessing ensures that assessment informs teaching (Zevenbergen et al., 2004). It is important, however, that teachers are given guidance on how to use formative assessment to improve classroom teaching practices so that students’ learning needs are best met. Methods of assessment that should be considered include observation, consultation, interviews, self- and peer-assessment, work samples and portfolios, rubrics etc. Care must be taken in the development of comprehensive assessment instruments that test a fuller range of mathematical powers including communication and group work. Furthermore, it is critical that early mathematical learning be assessed in ways that are appropriate and respectful of individual children and of their cultures, experiences and dispositions.

We welcome continued publication of outcomes of tests of mathematical achievement in *National Assessments of Mathematics and Reading*, as this raises awareness of issues related to the teaching and learning of primary mathematics at a national level (Draft Plan, 2010: 46). Likewise, ongoing participation in PISA and TIMSS is a means of benchmarking student achievement against international standards in primary and post-primary mathematics. However, we have reservations about the *Schools Like Ours* initiative, as it might promote the idea that pupils in certain schools should be served a limited mathematics curriculum (Draft Plan, 2010: 41). Although the collaborative approach inherent in the initiative is the cornerstone of improvement in students’ mathematical understanding, the emphasis should be on their engagement with mathematics rather than on improvement in assessment outcomes. Indeed such a focus has been found to have a positive effect on test scores (Boaler, 2002).

While initiatives such as *Maths Recovery* and *Ready Steady Go Maths* may have a positive influence on pupils’ achievement levels in mathematics, they are not in themselves a
substitute for the promotion of a culture of continuous improvement in learning. With regard to revision of curricula, some consideration might be given to the inclusion of teaching-learning paths or learning trajectories (Cross, Woods and Schweingruber, 2009). The developmental progressions – each more sophisticated than the last – are essential for high-quality teaching based on understanding both mathematics and learning. In fact much of the success of programmes such as Maths Recovery has been attributed to teaching-learning paths and related professional development programmes that ensure that teachers spend time teaching appropriate mathematics topics during the year (Cross, Woods and Schweingruber, 2009). In this regard, a focus on the development of key mathematical ideas, e.g., ‘algebraic thinking’, ‘quantity and change’ rather than mathematical strands might be considered for the bridging framework that is being designed to join the mathematics of fifth and sixth class to the mathematics of the junior cycle (Draft Plan, 2010: 30). The development of algebraic thinking, in particular, allows students access to powerful ideas (Blanton and Kaput, 2008). Unfortunately the strand of algebra as it is currently interpreted in some primary textbooks receives shallow treatment which ill prepares primary students for further study of mathematics at secondary level and beyond.

3.7 Key Points in this Chapter

- The Draft Plan emphasises the importance of mathematics, thus raising the public perception of a need for everyone to be mathematical.
- In order to encapsulate the breadth of mathematics, the notion of ‘mathematical proficiency’ rather than ‘numeracy’ should be considered. The opportunities offered by digital tools and the development of this proficiency across the educational continuum need to be recognised.
- Teaching mathematics is a complex task. The shift in emphasis from computational skills to developing mathematical proficiency can be difficult for teachers. We propose that it can be achieved by a sustained, collaborative focus on developing learners’ mathematical thinking.
- Mathematics needs to be taught and assessed in ways that are appropriate and respectful of individual children and of their cultures, experiences and dispositions – this has implications not only for Early Childhood Education, students attending DEIS schools, EAL students, those in Youthreach programmes but for all learners of mathematics.
- A focus on students’ engagement with mathematics has the potential to raise scores in tests of mathematical attainment.

3 In the 2009 National Assessments of Mathematics and English Reading, it is reported that the majority of second and sixth class pupils are in classrooms where the textbook is used on a daily basis.
4 Wider Educational Considerations

4.1 Introduction

St Patrick’s College has identified a range of wider educational issues that are relevant to the Draft Plan i.e. educational disadvantage, the place of the arts in education, the role of new subjects within the primary curriculum and issues relating to integration and second language learning. The response with regard to literacy and numeracy has already addressed some aspects of these areas. However, a number of points remain which deserve fuller attention.

4.2 Educational Disadvantage and the Draft Plan

The College is committed to addressing the systemic effects of disadvantage, poverty and other inequalities within education and in the wider society. The Educational Disadvantage Centre was established in the College in 2001 to realise this commitment. In addition, engagement with social and economic disadvantage and related areas is integrated across College faculties, programmes and courses.

Key strengths in this Draft Plan include its recognition of the need to continue DEIS; the inclusion of a family and community literacy focus; its emphasis on professional development of teachers and principals and focus on integration of literacy across the curriculum; its call for formative assessment and the development of teachers’ skills in providing feedback on literacy dimensions in class; its recognition of the need to address the disjunction between primary and post-primary; its acknowledgment of the need for more feedback to be given to parents, as well as its requirement of a more intensive focus on literacy and numeracy at pre-service education level.

We suggest that the Draft Plan would benefit from being situated not only in relation to the EU2020 targets on literacy and numeracy but also regarding the other EU2020 target of reducing early school leaving to 10% across the EU (Europe 2020, 2010). In doing so, it would bring to the fore the need for an anti-poverty focus as a central part of a literacy strategy in DEIS schools. Research by the Educational Disadvantage Centre has highlighted that on average 18% of pupils in DEIS schools in Dublin are either always, very often or often too hungry to concentrate on their work in school (Downes and Maunsell, 2007). Other dimensions needing recognition and support are stress related effects of living in poverty affecting sleep and mental health (Downes and Maunsell, 2007), as well as broader trauma
related issues affecting learning in school and early school leaving highlighted in the recent Oireachtas Joint Committee on Education report on early school leaving (Joint Oireachtas Committee on Education and Skills, 2010). Broader goals of DEIS such as nutrition and emotional supports need to be conceived of as key background supporting conditions for learning in DEIS schools. This applies even more against the backdrop of the current recession.

International research clearly highlights the drop in language and literacy performance after the summer holidays of children experiencing educational disadvantage (Mraz and Rasinski, 2007). This summertime effect is overlooked and needs to be addressed directly in this literacy strategy, for example, through summer camps, targeting children most in need. Any such initiative should take account of the need to ensure that literacy education draws on good practice and is under the guidance of literacy experts.

While the family literacy dimension is recognised in the Draft Plan, the NESF report (2009) goes further to highlight the comparative underfunding of this sector (NESF, 2009); serious commitment to this dimension requires a restructuring of funding to support family literacy interventions. While the parental involvement focus is welcome, it would benefit from being conceptualised as a dimension of Ireland’s lifelong learning strategy and from the EU Council and Commission’s recognition of key dimensions to lifelong learning such as active citizenship and personal fulfilment, as well as social cohesion (Department of Education and Science, 2000).

The key role of speech and language therapists in system level interventions, including at family and community level, is recognised in the NESF report (2009) through examples with proven gains including the Familiscope project in Ballyfermot, designed on the basis of a report by the Educational Disadvantage Centre (Downes, 2004). A role for speech and language therapists at a system level is also envisaged in DEIS. This key expertise bridging health and education will be an important role in any literacy strategy.

As noted earlier, the College and Educational Disadvantage Centre (EDC) have real concerns regarding the well-intentioned but highly problematic proposal to develop a focus on ‘Schools Like Ours’ in relation to the comparison of performance of pupils and schools. The goals of (a) providing external accountability of schools in relation to literacy and numeracy performance, (b) providing feedback to teachers and principals regarding their schools’ performance compared with other schools and (c) offering feedback to parents on their child,
and school’s performance are important. However, the proposed pathway to implement these goals through a ‘Schools Like Ours’ focus is inappropriate. While this has been addressed in previous chapters of this response, the arguments bear further elaboration.

First, it implies that it is appropriate to have children and schools in working class communities performing at levels below national norms but adequate for schools ‘like ours’. This is a patronising ambition for children, families, schools and communities. It accepts a ceiling upon acceptable performance. It implies a kind of natural order where middle-class schools perform better on literacy and numeracy. Whereas there has been much critique of a deficit labelling of children, schools and communities as ‘disadvantaged’ and a movement away from such negative labelling through a language of opportunity (DEIS), this ‘Schools Like Ours’ vision amounts to a retrograde vision and an institutional expression of deficit labelling (Spring, 2007). It enshrines a reference point of lower achievement than national norms. Moreover, it is in stark contrast with the whole tenor of the rest of the Draft Plan in that it is contrary to the goal of teachers adopting high standards and expectations of pupils – and of their own teaching.

Second, comparing ‘like’ schools with ‘like’ is a simplification of a more complex process. The illustrative example proposed for comparison between DEIS Band 2 schools with 25% of pupils where English is not their first language, ignores the fact that not all international and ‘new Irish’ pupils, families and communities experience similar cultural and socio-economic opportunities and barriers to education. It offers an undifferentiated approach not only to nationality but also to need. It will fuel competition between schools with the unintended consequences of teaching to the test; the phenomenon of educational triage is also to be expected if this were implemented, namely, the prioritisation of teachers’ time and energy towards those children who would be most expected to make gains (Booher-Jennings, 2005). The incentive for schools to filter admission of the most marginalised is another potential consequence of such a ‘Schools Like Ours’ outcomes focus (Downes, 2007). The ‘Matthew effect’ is well recognised in psychology and literacy, namely, that those with most capacity will respond best to interventions (Greene and McPhillips, 2010). A related concern here is that a competitive approach between schools ‘like ours’ will transfer also to the children in the schools. The demotivating effects of a failure identity through low (or ‘uncompetitive’) performance of a child is well recognised in Irish and international research (Kellaghan et al., 1995). A culture of fear of failure and a failure identity if thresholds of performance are not
reached by children is a realistic unintended consequence of a preoccupation with testing to compare ‘Schools Like Ours’.

A third concern is that this categorisation approach for comparison of DEIS schools goes against the recognition in the recent Joint Oireacthas Committee on Education Report that a continuum of supports for schools based on need is required, rather than a trichotomous classification of DEIS 1, 2 and non-DEIS schools (Joint Oireachtas Committee on Education and Skills, 2010).

A fourth concern, already observed in the NESF (2009) report, is that schools that perform extremely well will end up losing their DEIS status. What is required is system level rewards and not disincentives for good performance. It is also notable that this proposed micro comparison implied by ‘Schools like Ours’ is far removed from Finnish models, where collaboration rather than competition is emphasised.

The goals of external accountability and feedback would be better met through an ipsative assessment focus on the school’s performance in relation to their own previous performance (Kelly, 1999). This could be combined with a highlighting of those DEIS schools’ practice who achieve highest gains and performance in relation to literacy and numeracy.

### 4.3 Curriculum Considerations

Improving children’s access to literacy and mathematics should occur within the context of a broadly-based curriculum, such as the current primary curriculum. There is a danger that the Draft Plan, as currently conceptualised, could lead to diminished access to the arts and other areas of learning and experience for children in Irish primary schools. It will undoubtedly intensify notions of access to the arts as a form of ‘social distinction’, inasmuch as children’s engagement with the arts will be increasingly reliant on parents’ ability and willingness to invest in such ‘cultural capital’ (Bourdieu, 1984). The loss will not be confined to children’s experience of, and development in the arts per se, but also to their holistic educational development, a pattern which over time would ultimately inhibit the expression of innovation, creativity and entrepreneurship in the wider society and economy, and which would widen the gap in material conditions and socio-cultural experience among privileged and underprivileged communities.

While the College recognises the tension between curriculum overload and the need to provide teachers with sufficient time within which to implement balanced frameworks in
literacy and mathematics education which are sufficiently robust to address current needs, there are consequences inherent in the choices proposed that need to be acknowledged and addressed. Reduced time for music and the visual arts, for example, could result in considerably lower standards than those that currently prevail. Numerous reports relating to provision for music education in Ireland have consistently noted considerable deficiencies by comparison with most other European countries (Heneghan, 2001).

With regard to Drama in Education, the recommendation in the plan to ‘incorporate Drama activities and the time for this subject within the time for L1’ (Draft Plan 2010: 30) underestimates the nature and practice of the art form of drama and the particular way in which it effectively enriches and supports the wider curriculum. Children in process drama are not guided by a pre-determined script but by a complex interplay between their own emerging understanding of the world and their developing sense of the dramatic form. The development of such an awareness and sensitivity in the child involves a holistic engagement with ‘the elements of drama’ (Government of Ireland, 1999), alongside a developing ability to express and communicate through the conventions of drama. This awareness must be carefully scaffolded by the teacher within a particular scheme of work, and across the child’s experience of the art form throughout the primary years. Children must also be given time to experience and contribute to the safe environment of trust which is essential to process drama. This requires a consistent engagement with and practice of the art form over a sustained period of time in order for an authentically holistic response to emerge.

While Social, Personal and Health Education (hereafter SPHE) is identified as a new subject within the primary curriculum, most of the SPHE curriculum is a streamlining of content from the 1971 curriculum (including civics and health education), and of a range of programmes that were introduced into schools before the 1999 curriculum (e.g. Relationships and Sexuality Education, Stay Safe) specifically to respond to needs in the system and in society at large. As a subject, SPHE occupies 30 minutes per week on the school timetable but it is also implemented throughout the day naturally and normally when teachers are dealing with conflict issues, promoting cooperation and empathy, and encouraging children to take responsibility for their actions and learning. In order for this embedded approach to work, children need the time to engage with the age-appropriate information and to develop the understanding and skills necessary to inform their choices and actions. Children’s self-esteem, well-being and emotional literacy are promoted in the SPHE curriculum. While recognising the important contribution that successful learning in literacy and mathematics makes to
children’s general wellbeing, we need to be careful that in responding to the real needs of children in relation to literacy and mathematics, we do not compromise their social, emotional and physical wellbeing in general. Otherwise the learning in relation to children’s needs which resulted in the creation of the SPHE curriculum in the first place will have to occur all over again for a new generation of children.

4.4 Issues Relating to Integration

While there are strong epistemological and philosophical arguments for cross-curricular teaching in primary schools, meaningful integration is a highly complex practice. It requires teachers to have a deep understanding of each of the constituent areas and of the possibilities afforded by their dynamic interaction if the children are to experience authentic learning that goes beyond the superficial and expedient. Indeed, meaningful integration may take more time to implement than teaching the integrated subjects separately. This is not an argument against integration, but it does suggest that conceptualising it as a panacea for an overcrowded curriculum may be misplaced. It is important that in conveying the renewed priority of literacy and mathematics regarding curriculum time and emphasis, this vital strategic priority is nevertheless not interpreted as subordinating all other subjects and school activities to these goals in an instrumental fashion. It is equally important that in promoting the integration of literacy and mathematics education across the curriculum, care is taken to ensure that literacy and mathematics are not themselves reduced to basic skills and procedures. The welcome focus on integration of literacy and mathematics across the curriculum will require investment in the professional development of teachers. This needs explicit commitment from the DES.

Keeping in mind the qualifications above, the potential to integrate language, literacy and mathematics across the curriculum is evident. To take one example, the Primary School Curriculum notes the centrality of language to Physical Education (Government of Ireland, 1999), stating that:

It is in talking about experience in physical education …that the child clarifies ideas. The teacher uses language in the physical education lesson to question, to direct, to explain, to suggest, to prompt and to stimulate the child to think. In turn, the child is encouraged to respond by describing, discussing, speculating, explaining and expressing ideas and reactions. Language is important too in helping children to gain access to and retrieve information about physical activities. The extent, therefore, to which language is an integral part of the teaching and learning process should be a
consistent concern in the planning and implementation of the physical education programme (p.9).

A key objective of the Physical Education Curriculum (1999) is to ‘observe, discuss, analyse, interpret and enjoy the performance of movement’. Dance and gymnastics are identified as providing a rich context for language development while games, outdoor and adventure activities and athletics provide important contexts for the practical application of mathematical skills and concepts (Government of Ireland, 1999: 10). While the potential for integration is greater than is currently manifest within school practice, it is essential, however, that it is carried out in a meaningful way across all subjects, and in ways that allow children access to the different ways of knowing and engaging with the world which are characteristically human.

4.5  Literacy, Bilingualism and Plurilingualism

The Draft Plan appears to adopt a monolingual approach to literacy education. It is our view that a national literacy plan should take into account the bilingual and increasingly multilingual nature of Irish society and the Irish educational system, and should be mindful of the social, cultural and pedagogical principles articulated in the policy document Language Education Policy Profile: Ireland published by the Council of Europe/Department of Education and Science in 2008. We recommend that the Draft Plan give greater recognition to children’s particular linguistic environment, their mother tongue development, the context of their exposure to second and third languages, and the particular circumstances in which they are introduced to languages other than their mother tongue within the school system. In this context, there is a clear need to acknowledge the fact that literacy skills do transfer from one language to another, and that this is occurring in different ways within the Irish school system.

The relationship between English-language literacy and the teaching of a second language needs to be addressed directly in the National Plan, taking into account the diverse pupil profiles in English-medium and Irish-medium schools. Learning outcomes for Irish in the Primary School, for example, are a matter for concern and for the same underlying reasons identified in recent research on English-language literacy, including curriculum overload, lack of appropriate language and content integration, affective issues at pupil and teacher level, and teacher competency and confidence in teaching the subject (Harris et al., 2006; Harris, 2008). The need for more sustained language skill development and Content and Language
Integrated Learning (CLIL) in the teaching of Irish as a second language in English-medium schools has been identified in all the recent research on second language teaching and learning (Little, 2008). A CLIL approach has been shown to be successful in the Irish context and internationally, in developing linguistic competencies, higher levels of metalinguistic awareness and higher levels of oral and literacy proficiency in the target language (Marsh, 2002; Harris and Ó Duibhir, 2010). It has been most successful in the immersion education context of the gaelscoileanna, where high levels of second language competence are achieved without compromising standards of English-language literacy (Parsons and Lyddy, 2009). As cross-curricular integration is a central theme in the Draft Plan, the principle of CLIL should also be adopted as a core principle in the development of second language and plurilingual competencies. St Patrick’s College is well situated to become a centre of excellence in this area, by developing Irish-medium curricular modules based on the model introduced in recent years as part of the Graduate Diploma in Education programme, and commended by the Teaching Council in its recent review of that programme. The College is committed to developing its courses and research base in the areas of immersion education, second language acquisition and second language literacy (Ó Duibhir and Ní Bhaoill, 2004).

The Draft Plan should acknowledge the importance of mother tongue literacy and plurilingual competencies in the case of newcomer children of non-Anglophone background. While support for English as an Additional Language is important for successful integration, the potential of schools as sites for multilingualism and as rich resources for the development of plurilingual competencies also needs to be acknowledged and supported. The issues at stake here are newcomer children’s self-esteem and sense of identity and belonging (McDaid, 2007), the cognitive and social development of bilingual and plurilingual pupils (Cummins, 2000; Gallagher, Leahy and Simon, 2009), and the broader social and political issues associated with mobility, return migration, and contact with family networks and communities in migrants’ countries of origin. Multilingual education presents an exciting possibility to reconfigure issues of identity and the role of European and other languages in the Irish education system. For too long newcomer children have been defined in terms of language deficit. It is now time to valorise and to promote plurilingual diversity and to develop literacy assessment in a manner which gives recognition to such diversity. St Patrick’s College, with its plurilingual staff and its multilingual research activity in language pedagogy, should be at the forefront of such developments.
In relation to the assessment of literacy, it is important that assessment tools and processes be designed and applied in such a way that the full range of children’s bilingual and plurilingual linguistic competencies are acknowledged. Research and assessment methodologies that recognise and support bilingual and plurilingual linguistic competencies are also in need of development. It is proposed to conduct the National Assessments of Mathematics and English on a four-yearly basis. A sufficient sample of all-Irish and Gaeltacht schools should be included in this sample, which has not been the practice in the past. The National Assessments should also be extended to include Irish in Irish-medium schools.

We recommend that the National Literacy and Numeracy Implementation Group include experts with research profiles in the areas of acquisition of Irish as a first language, second-language teaching and learning from pre-school to third level, immersion education (at pre-school, primary and secondary level), and multilingual education.

### 4.6 Key Points in this Chapter

- St Patrick’s College welcomes the recognition of the link between early school leaving and levels of achievement in literacy and numeracy in the context of an anti-poverty framework.
- The ‘Schools Like Ours’ proposal will serve to institutionalise deficit labelling and will lead to competition between schools; it will promote teaching to the test, and could influence the distribution of resources within schools in favour of those children most likely to succeed.
- The proposals in relation to the arts in education will result in differential access to the arts based on social class and/or economic status.
- Undue narrowing and instrumentalisation of curriculum could be an unintended outcome of the Draft Plan. This should be recognised and addressed.
- Recognising that authentic integration is a complex practice and that if teachers are to teach in an integrated way without compromising children’s learning, they have to be supported through appropriate continuing professional development.
- Greater recognition of children’s particular linguistic environments is needed in order to plan effective strategies.
- The relationship between English language literacy and the teaching of the second language needs to be addressed. A Content and Language Integrated Learning Approach has been found to be successful in second language learning in Ireland and internationally.
- There should be an acknowledgement in any new policy of the importance of mother-tongue literacy and plurilingual competencies in the case of newcomer children.
5 Initial Teacher Education

5.1 Introduction

This chapter seeks to address two key recommendations in the Draft Plan, (i) the proposal to extend the duration of the BEd programme (currently a three-year course) and that of the Graduate Diploma in Education (currently an eighteen-month course) and (ii) the proposal ‘to discontinue the study of academic subjects currently within the BEd programme in favour of academic subjects more closely related to education…’ (Draft Plan, 2010: 19). These are issues which bear closely on Initial Teacher Education at St Patrick’s College and will have very significant implications for the future development of the BEd.

5.2 Extension of ITE Programmes

Reflecting the considerations outlined above, the College fully supports the introduction of the four-year Bachelor of Education and two-year Graduate Diploma in Education programmes of Initial Teacher Education. These have been strategic priorities for the College and we have pursued these goals for over a decade (St Patrick’s College, Drumcondra, 2006). Extending these programmes will bring us into line with international practice and should enhance Ireland’s international reputation for excellence in primary teacher education.

Initial Teacher Education, in common with teaching itself, is a complex process and the increased time being proposed will facilitate innovation and allow the College to prepare teachers more effectively for the challenges and opportunities of contemporary Irish classrooms. Extending the programmes will enhance the education of teachers as reflective practitioners. Moreover, it will broaden and deepen the range of competencies, attitudes and understanding required in the formation of professional and inspiring teachers.

The proposed extension will allow a more intensive focus on essential professional competencies such as literacy and mathematics education, while longer school placements will acquaint students with key areas of professional practice and provide an additional practical and reflective context for their education. The importance of these improvements cannot be underestimated and the students will emerge from the programmes equipped not merely in the necessary professional competencies, but with an enhanced understanding of their vital role and an appreciation of the necessity of their own continuing professional development.
5.3 Humanities Specialisation within the BEd

The St Patrick’s College Bachelor of Education programme has a number of clear advantages, all of which will advance the national literacy and numeracy strategy. A distinctive feature of the BEd programme is the diversity of student experience associated with the inclusion of an academic specialisation which provides schools with subject specialists equipped to champion and develop the primary curriculum. Moreover, a recent report published by the Higher Education Authority and the Irish Research Council for the Humanities and Social Sciences (IRCHSS) emphasised the benefits of such a diverse and multidisciplinary education when it concluded that:

The Arts, Humanities and Social Sciences also nurture a host of transferable skills that are valuable to employers beyond the specific qualification of an employee. These skills include cultural awareness, self-discipline, critical and analytical thinking, the ability to create and sustain complex argument and to identify contextual perspectives, creativity, self-confidence, international and multicultural perspectives, and oral and written communication skills. Such skills are flexible and adaptable (Bric, 2010: 16).

5.3.1 Graduate Flexibility

Specialisation in a humanities subject as part of the BEd is a key factor in broadening the skills base of the beginning teacher. The humanities component helps to enrich the range of academic skills and competencies developed through the education elements of the degree. The skills and competencies may vary from subject to subject, but they include in all instances the general and higher-order analytical and reflective skills necessary for the successful teaching of literacy and numeracy. Among the many skills and competencies with direct application in the primary school classroom are subject-specific linguistic, research, organisational and communication skills. These are evidenced in activities such as journal and report writing, data collection, record-keeping, document analysis, language portfolio self-assessment, field-work techniques, quantitative and qualitative research techniques, experimental science laboratory methods, creative performance skills and subject-specific ICT applications. Student teachers exposed to a range of these skills will benefit from that experience and will draw on it time and again throughout their career.

5.3.2 Subject Specialisation in Initial Teacher Education

The role of subject specialisation in Initial Teacher Education is the subject of ongoing research, and the complexities of the links between student teachers’ learning paths, subject knowledge and classroom practice are widely recognised (Bennett and Carre, 1993; Ofsted,
Research into a primary curriculum area such as second language teaching demonstrates a consistent correlation between subject knowledge and teacher competence (Department of Education and Science Inspectorate, 2007: 16-20; Council of Europe/DES 2008: 16; Ní Ghallachair, 2008: 196-9). Similar research concludes that primary teachers’ L2 classroom performance is closely related to levels of subject competence (Council of Europe/DES 2008: 29; Harris et al: 2006: 127-31).

If language as an academic specialisation is a particularly good illustration of the concept of situated cognition, where, as David Little has argued, knowing and doing are inseparable, (2008: 16), other subjects can be conceived of as communities of practice through which a student teacher participates in and identifies with a learning community that is broader than that of the primary school classroom. Mathematics education specialists have recognised the need for teachers to ‘know beyond what they teach’ (Figueiras, Deulofeu and Edo, 2008), while Geography students in the process of ‘becoming geographers’ are introduced to a whole range of literacy and numeracy skills and competencies of immediate application in the implementation of an integrated primary school curriculum (Hegarty, McManus and O’Reilly, 2009).

5.3.3 Relevance to the Primary Curriculum

The humanities subject areas in St Patrick’s College were developed and have evolved in the context of the BEd programme, and they include modules and thematic strands of particular relevance to the professional learning path of the BEd students. All the subjects ‘incorporate material relevant to the primary-school curriculum’, as the report Preparing Teachers for the 21st Century recommended they do (Kellaghan, 2002: 160). They include core modules that address issues of local, national and global significance from a particular disciplinary perspective, thus supporting knowledge and evidence-based pedagogical practice and informed reflection on cross-curricular issues. The Humanities subjects are committed to promoting high levels of literacy and numeracy among student teachers, encouraging self-directed learning, to developing multiple intelligences, creative thinking, and the cultural confidence to pose new questions and to stretch traditional disciplinary boundaries. Certain subject specialisations are of particular relevance in the context of the Irish school system and they provide rich and vital insights into both the cultural heritage of Ireland and the contemporary social, political, religious, cultural and environmental challenges facing the
country as part of a rapidly changing European and global economy. This important contribution, in the context of general cultural enrichment and economic and social well-being, has been recognised by bodies such as the Royal Irish Academy (RIA), the IRCHSS and others (Royal Irish Academy, 2007: 3-11; Bric, 1999; Arts and Humanities Research Council UK, 2009).

Subject specialisation has a vital role to play in Initial Teacher Education by shaping student teachers’ intellectual and academic formation, and producing reflective practitioners capable of ongoing engagement with research and emerging practice. Most importantly of all, it is often through subject specialisation that student teachers become aware of themselves as lifelong learners for whom ongoing personal, academic and professional development are interlinked.

5.4 Concerns

In light of the many benefits which accrue from the combination of the education and humanities elements of the BEd degree, we are extremely concerned about the prescriptive nature of some of the recommendations in the Draft Plan. We do not accept that there is any opposition between the ‘academic subject’ and the ‘professional studies’ aspects of the student teacher’s education. Indeed, we warmly endorse the Teaching Council’s aspiration that the ‘academic elective subject’ would not merely ‘contribute to students’ personal and cultural development, [but] should also be related to their future work as teachers, subject leaders’ within their schools and future contributors to curriculum development at national level (The Teaching Council, 2010: 7). At a philosophical level, too, the recommendation to discontinue the humanities subjects fails to appreciate the integrated character of the BEd programme and the ways in which the humanities subject not only enhances the student experience, but the teacher’s intellectual formation. Indeed, it advances the aspiration expressed in the Draft Plan ‘to produce reflective practitioners capable of ongoing engagement with research’ (Draft Plan, 2010: 18) and there is no doubt that the skills developed in the ‘academic’ component of the degree nurture this capacity among BEd graduates.

It should also be noted that from a methodological and evidential perspective there is no empirical evidence to suggest that the inclusion of the humanities subject in teacher education programmes impacts negatively on graduates’ ability to teach literacy and numeracy. The Draft Plan offers no such evidence or rationale for the proposal to discontinue or amend the
‘academic’ content of the degree programmes, other than that it would free up time for other activity. The entire issue demands a much more rigorous investigation and a more measured response than simply looking at issues of timetabling and the role of a humanities component of the ITE programme.

These issues relate closely to the quality of our teacher education programme and to the quality of the work which will be undertaken by the students on their entry into the profession. It is important to note that the National Strategy for Higher Education to 2030 (Hunt, 2011) has recommended an enhanced student voice in quality assurance and curricular assessment. We welcome such initiatives and are heartened by the consistently positive appraisal by student teachers of the ‘academic’ model (Morgan and O’Leary, 2004). It is a further source of encouragement that our BEd degree continues to attract candidates in the top thirteen percent of university applicants nationally, while our student retention rates are in excess of 97% – among the highest in the State (Mooney et al, 2010). This clearly suggests that the BEd programme is still seen by many of our entrants as a rewarding entry path to the profession. We have no doubt that the improvements sought in ITE, coupled with this capable and vibrant student cohort will go a long way to helping address the perceived problems associated with literacy and numeracy.

5.5 Conclusion

St Patrick’s College is fully committed to the retention of the humanities element of the BEd degree for the reasons outlined above although we acknowledge the need for an ongoing review of content, including the introduction of new subjects. In many cases, humanities departments in the College already include in their courses ‘material appropriate to the teaching of the subject’ (The Teaching Council, p.10). We consider that the type of material encountered by students in the courses being taught is closely related to their future work as teachers and their development as subject leaders.

The College’s BEd degree represents a valuable and rewarding model that has served the nation well and that continues to prepare and equip teachers to meet the challenges outlined in the Draft Plan. Reflecting on his experience at Carysfort College, Seamus Heaney, captured what he thought were key aims of the teacher educator: ‘… on the one hand, [it is to] help to prepare the students for their life as professionals in the classroom and, on the other, contribute to the students’ development as cultured and confident individuals’ (Heaney, 2002: xiii). St Patrick’s College recognises that the continued development of the BEd
(incorporating a suitably-balanced combination of education and a humanities subject) and the Graduate Diploma (where many of the students bring previous related knowledge from undergraduate courses) is highly important. We believe that nurturing and developing these programmes will ensure that we continue to produce confident and professional teachers, who will make a significant contribution to the education of the nation.

5.6 Key Points in this Chapter

- The proposal to extend the BEd programme from a three-year to a four-year course and the Graduate Diploma from an eighteen-month to a two-year course is very welcome.
- The humanities subjects are committed to promoting high levels of literacy and numeracy among student teachers, through encouraging self-directed learning and creative thinking, through developing multiple intelligences and through raising the students’ capacity to stretch traditional disciplinary boundaries.
- The College strongly recommends the retention of the humanities subject as part of the BEd programme.
- The College believes that the professional studies and humanities subject components of the student teacher’s formation complement each other.
- We contend that there is no empirical evidence to suggest that the inclusion of the humanities subject in teacher education programmes impacts negatively on graduates’ ability to teach literacy and numeracy.
- The humanities subjects currently part of the BEd programme and the related previous undergraduate work of many of the students on the Graduate Diploma in Education contribute to the professional development of teachers and provide input closely related to the fields of literacy and numeracy in many cases.
- The humanities subject along with education contribute to the development of student teachers as subject leaders in schools and contributors to curriculum development at national level.
6 Conclusion

The College has outlined above its responses to the various aspects of the Draft Plan and provided recommendations on how it can be developed and more effectively implemented. We have discussed the need for broad definitions of literacy and mathematics education, and the contribution that all areas of the primary curriculum make to developing literacy and numeracy in pupils. We have pointed to the desirability of sustained and meaningful continuing professional development for teachers if the goals set out are to be met. The importance of appropriate assessment of pupils is emphasised. We have discussed the particular needs of pupils in DEIS schools and the issues regarding literacy raised by the plurilingual dimension of many schools. The benefits of the humanities specialism in the College BEd programme have been restated, both its contribution to the holistic development of student teachers and the potential it offers to develop subject leaders in primary schools and in the educational system. The lengthening of ITE programmes is especially welcomed; this will inter alia allow for an increased focus on the areas of literacy and numeracy.

6.1 Current College Expertise

The College looks forward to working with the DES in developing and implementing this Draft Plan and is very well placed to do so for many reasons, including the following.

The College has a distinguished tradition in teacher education and in responding flexibly to emerging needs and to curriculum reform with focused initiatives that capitalise on its strengths, including course development and initiatives in early childhood education, Special Educational Needs digital technologies and learning, literacy and mathematics education, inter-cultural education and diversity, science education, access and disadvantage.

In addition to programmes of initial teacher education, the College has a well-developed suite of programmes at postgraduate level including Certificate/Diploma in Education, Master of Education, Graduate Certificate/Diploma in Special Educational Needs, Masters in Special Educational Needs, Doctorate in Education, MA in Humanities as well as research degrees at Masters and PhD level. Many are taught in a blended mode of face-to-face and online learning using the latest technologies. All programmes are accredited by Dublin City University. These postgraduate awards thus provide a comprehensive structure for accredited continuing professional development for teachers.
The College has been closely associated with the Induction programme for NQTs (primary) both in its initial pilot phase and currently as a national programme. A qualification in Mentoring Newly Qualified Teachers is provided through the CPD structure described above.

Academic staff of the College have high levels of qualification and extensive research profiles at national and international levels. They contribute to networks and associations in their respective fields and many are committee members of these national and international groups. They view the dissemination and public discussion of research and policy as crucial and organise national and international conferences. The expertise of College staff is widely acknowledged and several members act as external examiners for programmes in other institutions. Thus the importance of research informed teaching and learning which has been highlighted in recent national reports. (Hunt, 2011; The Teaching Council, 2010) has already been accepted in the College and is embedded in its programmes.

The Educational Research Centre (ERC) based in the College undertakes work at all levels of the educational system from pre-school to third level. Research is undertaken in many areas including evaluation of initiatives and new programmes, critical analysis of issues in education, and national and international assessments of educational attainment. The ERC is in a position to provide support to College staff in implementing research on improving teaching and learning in schools.

The College is committed to quality improvement and the high calibre of its programmes is widely recognised. This is endorsed for example by the recent Teaching Council review of the Graduate Diploma in Education (Primary Teaching) programme in which the review panel identified significant strengths, including the quality and commitment of its staff, the dominance of small-group interactive teaching approaches, good staff/student relationships and the development of College-school partnerships in the context of teaching practice.

6.2 College Leadership in Literacy and Numeracy

In relation to literacy and mathematics education, the College has recognised the need to refocus and reprioritise these areas given concerns raised nationally and internationally in relation to meeting the needs of students at all levels of ability. The College is currently addressing many of these concerns through a collaborative approach at a number of key levels across the continuum of teacher education, namely ITE, continuing professional development at postgraduate level, and research. The College has collaborative partnerships in a number of
areas including those with schools, and these can be further developed to advance research into effective practices in literacy and mathematics education. The following outlines some of the relevant focused work in the areas of literacy and numeracy that has been recently completed, or is ongoing in the College, to address the concerns foregrounded in the Draft Plan.

**Initial Teacher Education**
- Language and Literacy Unit, Mathematics Education Unit and Early Childhood Education Unit
- Increased time devoted in ITE to literacy and numeracy on both the B.Ed and PGDE programmes for all students
- Small group teaching for all students
- Cross curricular support for literacy and mathematics
- Specialised elective courses in both literacy and mathematics education and key related areas
- Specialist modules on teaching students with special educational needs.


**Continuing Professional Development**
- In-service - literacy and numeracy related summer courses; Certificate / Diploma programmes in Education
- MEd with special options in literacy, mathematics education, early childhood education and educational disadvantage
- Graduate Diploma/Masters in Special Educational Needs - with specific modules in mathematics communication, language and literacy
- EdD and PhD in which a number of students have chosen to complete their doctoral theses in the fields of literacy and numeracy
- MA in Humanities in which a number of options have particular relevance to literacy.

http://www.spd.dcu.ie/main/academic/inservice_education/

**Research**
- Student research at postgraduate level, where some thesis topics are selected with reference to specific needs and emerging trends in literacy and numeracy
- Staff with substantial research profiles at national and international levels in the areas of literacy and mathematics education.
- The expertise of the Educational Research Centre can be drawn on to support staff on research projects designed to enhance teaching and learning in schools.

http://www.spd.dcu.ie/main/research/
Educational Disadvantage and Partnerships with DEIS Schools

- Educational Disadvantage Centre in the College
- Provision of ITE electives with a focus on literacy and mathematics within DEIS schools
- MEd in Educational Disadvantage where approximately 25-33% of MEd students taking the option tend to focus on literacy or numeracy theme for their final year thesis
- Research into specific areas related to educational disadvantage.


6.3 Concluding Comments

In summary, the College contends that the platform of existing engagement positions us well to continue to provide leadership in the fields of literacy and mathematics education into the future and to engage with relevant bodies including the Department of Education and Skills, the Teaching Council and the NCCA in developing and responding to future policy initiatives in these areas.

We would be pleased to participate in the planned National Literacy and Numeracy Implementation Group and the National Literacy and Numeracy Forum and we look forward to engaging with the Department of Education and Skills regarding all aspects of the Draft Plan.
7 Bibliography


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