

An Evaluation of Curriculum Implementation in Primary Schools

ENGLISH, MATHEMATICS AND VISUAL ARTS



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DEPARTMENT OF
EDUCATION
AND SCIENCE

INSPECTORATE

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Foreword by the Chief Inspector



The introduction of the Primary School Curriculum (1999) marked a significant development in the history of primary education. Curriculum change presents teachers, schools and boards of management with a unique opportunity to engage in professional development, improve learning outcomes, and prepare children for the challenges and opportunities of the future. The task of curriculum implementation is complex: it requires in-school management teams, principals and boards of management to lead the implementation of change in the school as an organisation. Curriculum change takes place in the classroom and it involves teachers translating curriculum documents into practice, embracing new teaching programmes and methodologies, and providing a broader range of learning experiences for their pupils.

This is the first evaluation undertaken by the Inspectorate of the implementation of the Primary School Curriculum (1999). The evaluation focused on the effectiveness of curriculum implementation in English, Visual Arts and Mathematics in eighty-six primary schools. The findings suggest that the majority of schools and teachers are successfully implementing most aspects of the revised subjects and that the supports provided for curriculum implementation have assisted teachers in adopting new approaches to teaching. Many schools availed of the support services to further planning at classroom and school level. A few schools have begun to assign curricular responsibilities to post-holders.

This evaluation also highlights areas of concern that need to be addressed in the implementation of the curriculum. A significant minority of teachers are experiencing difficulties in implementing important aspects of the curriculum. Each teacher must gain ownership of the curriculum, develop an in-depth knowledge of the appropriate teaching methodologies and approaches and become familiar with the specific content objectives for each subject area. The responsibility for the quality of educational provision in individual schools rests with teachers, members of the in-school management team, the principal, and the board of management. Schools need to engage more systematically in curriculum review and plan for development and improvement.

The Inspectorate looks forward to engaging in discussion with teachers, principals and boards of management, the relevant support services, including the Primary Curriculum Support Programme and the School Development Planning Initiative, and statutory bodies such as the National Council for Curriculum and Assessment about the outcomes of this evaluation. This composite report is intended to inform future curriculum development, provide direction and guidance for in-service provision, and stimulate discussion about school improvement and the core activity of schools, which is to promote high-quality teaching and learning.

I would like to acknowledge the high level of co-operation the Inspectorate received from schools and teachers during the evaluation. I would also like to thank the Evaluation Support and Research Unit of the Inspectorate for co-ordinating the research.

Eamon Stack
Chief Inspector

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The Inspectorate of the Department of Education and Science would like to acknowledge the co-operation of school principals and teachers in the schools involved in the evaluation.

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An Evaluation of Curriculum Implementation

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1 Introduction



1.1 Curriculum design and development

The Primary School Curriculum was launched and circulated to primary teachers in September 1999. The introduction of the curriculum was a significant development in primary education and was the culmination of an extensive process of collaborative curriculum planning and design by the education partners, under the auspices of the National Council for Curriculum and Assessment (NCCA). Previously, the last revision of the curriculum for primary schools was *Curaclam na Bunscoile* (1971). The Primary School Curriculum (1999) encompasses the philosophical thrust of *Curaclam na Bunscoile* (1971), incorporates current educational thinking, and embraces contemporary teaching approaches and methodologies.

The curriculum is presented in six areas of learning, some of which are further subdivided into subjects. These are outlined in Fig. 1.1.

Language		
Gaeilge	English	
Mathematics		
Social, environmental and scientific education		
History	Geography	Science
Arts education		
Visual arts	Music	Drama
Physical education		
Social, personal and health education		
Religious education		

Figure 1.1: The structure of the Primary School Curriculum (1999)

Each subject area is presented in two booklets:

- A *curriculum statement*, which outlines a range of objectives and learning experiences that pupils will be enabled to undertake. The curriculum for each subject area is presented for four class levels: junior and senior infants, first and second classes, third and fourth classes, and fifth and sixth classes. The objectives are outlined in such a way that pupils will be enabled to develop progressively a wide range of concepts, skills and understandings appropriate to their age and stage of development.
- *Teacher guidelines*, which provide guidance to schools on school planning, organisational aspects associated with each subject area, and classroom planning. Exemplar lessons are provided to assist schools in the exploration of a variety of approaches and methodologies distinctive to each subject.

1.2 Curriculum dissemination and implementation

Educational change involves changing teachers' beliefs and understanding as a prerequisite to improving teaching practices. Research indicates that teachers require a thorough understanding of the meaning of educational change before there is an acceptance and adoption of new programmes

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and approaches. Curriculum change requires in-school management teams, principals and boards of management to lead the implementation of change in the school as an organisation. Effective curriculum change and implementation requires time, personal interaction, in-service training, and other forms of people-based support (Fullan, 1993). The Department of Education and Science devised a range of initiatives and programmes of professional development to support the phased implementation of change within primary schools nationally. These initiatives were designed to increase the capacity of schools to respond to change and to plan for and implement that change at individual school level.

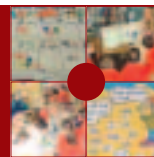
1.2.1 The Primary Curriculum Support Programme

The Primary Curriculum Support Programme (PCSP) was established prior to the launch of the curriculum. Its purpose was to mediate the curriculum for teachers and to enable them to implement it in their schools. The core task of the PCSP was to facilitate the professional development of whole-school staffs through in-service seminars and school-based planning days. The seminars provided an introduction to the content and methodologies of each curriculum area. During the seminars teachers were presented with opportunities to engage in activities that illustrated changes in teaching approaches. The Education Centre network supported the provision of the programme and facilitated the organisation of the seminar schedules.

As part of its dissemination and support strategy the PCSP developed a web site that provides teachers, parents and boards of management with details of the organisation of professional development support and the content of seminars. The web site also provides templates for planning and exemplars of methodologies that can be downloaded and used in school and classroom contexts. Newsletters informing schools of the in-service provision were circulated to schools nationally. PCSP personnel also responded to the requests of parents' associations and boards of management for information about the curriculum, and seminars for parents were organised.

1.2.2 The Regional Curriculum Support Service

The Regional Curriculum Support Service (or Cuiditheoirí Service) was established as a central component of the PCSP. The cuiditheoirí offer their services to schools in a variety of ways, including visiting schools and advising teachers on the implementation of particular areas of curriculum strands, providing teachers with useful sources of information in relation to resources and teaching materials, and facilitating networking between schools. They provide supports for whole-school and classroom planning and organise additional in-service courses for teachers through the Education Centre network. This service provides clarification, reinforcement and reiteration of many of the key messages delivered on the in-service days. Teachers are also encouraged to contact the Primary Curriculum

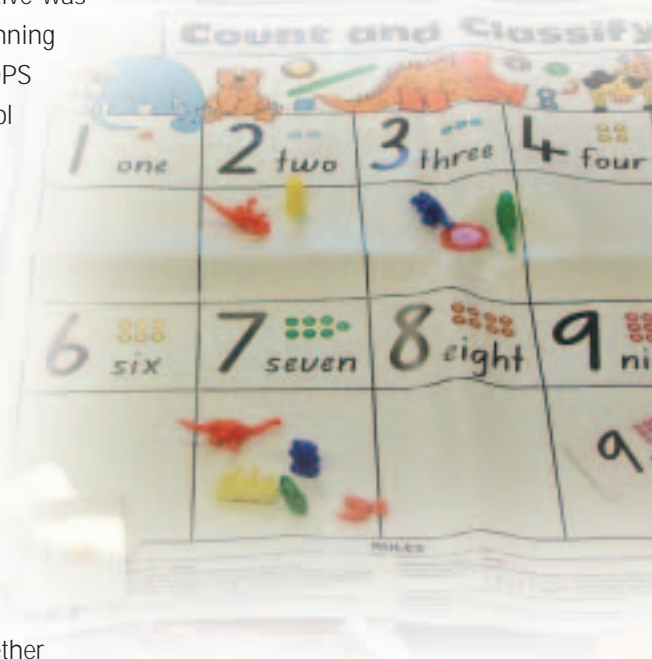


Support Programme directly by telephone, and a Curriculum Advisory Line was established to facilitate direct communication with curriculum support personnel on the implementation of the curriculum.

1.2.3 School Development Planning Support (Primary)

The School Development Planning Support (SDPS) initiative was established in 1999 to promote school development planning in primary and post-primary schools. At primary level, SDPS supports schools in the process of formulating a school plan that articulates the educational philosophy of the school, its aims, and how it proposes to achieve them. The promotion of school effectiveness and improvement is the essential purpose of school planning. SDPS facilitators assist principals and class teachers in working collaboratively to develop both organisational and curriculum policies. Facilitators hold meetings with school representatives to explore the schools' annual development planning programmes and also organise seminars in individual schools and in clusters of schools.

Planning prompts and templates for each subject area of the curriculum have been designed by the SDPS together with the PCSP, in consultation with the National Council for Curriculum and Assessment. These planning templates are provided to assist schools in recording curriculum planning decisions.



1.2.4 Additional supports

Additional grants for English, Mathematics and Visual Arts were provided to schools to enable them to purchase books and materials required for implementing the curriculum. Furthermore, teachers could attend summer courses and evening courses, join primary subject associations and avail of the services of national and local arts, heritage and cultural institutions to assist them in becoming familiar with the curriculum.

1.3 Time frame for implementation

1.3.1 Supporting whole-school planning for the phased introduction of the curriculum

Approximately 27.5 days of school closure were sanctioned to accommodate whole-staff attendance at seminars and to convene planning days for the phased introduction of the curriculum from 1999 to 2003. As part of this programme, ten school closures were sanctioned to facilitate teachers in

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attending seminars and engaging in whole-school planning for English, Visual Arts, and Mathematics. Further days were sanctioned to assist schools to engage in school development planning during this period.

The planning days were school-based and provided staff members with opportunities to develop whole-school plans, reflect on the changes in methodologies or structure of the curriculum, review resources, and plan for the implementation of the curricular area in the school. Table 1.1 outlines the programme of PCSP support for 2001/02 and illustrates the balance between facilitated seminars and school-based planning days provided to schools to support the dissemination and implementation of the curriculum.

Subject	PCSP support	Days
Gaeilge	Facilitated seminar day	1
	School-based planning day	1
Maths	Facilitated seminar days	2
	School based planning day	1
SPHE	Facilitated seminar day	1
Science	Developmental project for some schools	1
		6 or 7 days

Table 1.1: Primary Curriculum Support Programme for the year 2001/02

In general, the implementation of each curriculum area in schools began in the year following the completion of the familiarisation programme, and each new subject was phased in over a two-year cycle. Circular 40/03 (DES, 2003) outlines the schedule for the planning and implementation of the Primary School Curriculum (1999). It states: *“During the first year the focus will be on initial implementation and the advancement of planning which began during the period of preparation organised by PCSP. In the second year, the focus will be on substantially completing plans and consolidating implementation.”* Table 1.2 outlines the support programme devised for the continuing professional development of teachers in relation to familiarisation with the curriculum and provides information about the implementation dates for various subject areas. So far, teachers have received in-service support in English, Visual Arts, Mathematics, Gaeilge, Social, Personal and Health Education (SPHE), and Science.

Circular 30/04 (DES, 2004) sets out the Department's expectations in relation to schools' progress in curriculum implementation. It states that *“it is expected from the end of the 2002/2003 school year, all schools will be implementing English and Visual Arts and will have substantially completed plans in these two subjects. In relation to Gaeilge and Maths, 2003/2004 will be the second year of the cycle and accordingly, schools will advance their planning in these subject areas with a view to substantially completing plans and consolidating implementation by the end of the school year.”*

In the current school year, 2004/05, teachers are receiving input and support from the PCSP as the curricula in Music and Physical Education are introduced.



Curriculum Implementation - Overview

Year	Language in-service	Implement Language in schools	Maths in-service	Implement Maths in schools	SESE in-service	Implement SESE in schools	PE in-service	Implement PE in schools	Arts Education in-service	Implement Arts Education in schools	SPHE in-service	Implement SPHE in schools
1999-2000	English T1 Gaeilge T1											
2000-2001	English T2 Gaeilge T2	English T1 Gaeilge T1			Science Project	Science Project			Visual Arts			
2001-2002	Gaeilge T2	English T2	Maths		Science Project	Science Project				Visual Arts	SPHE	
2002-2003	Gaeilge T2	Gaeilge T2		Maths	Science						SPHE	
2003-2004						Science						SPHE
2004-2005							PE		Music			
2005-2006					History & Geography			PE	Drama	Music		
2006-2007						History & Geography				Drama		

Table 1.2: *Primary School Curriculum Newsletter, Vol. 2, Issue 2, June 2001*, amended to include the academic year 2003/04, which focused on curriculum consolidation and review

1.3.2 Review and consolidation year, 2003/04

The school year 2003/04 was designated by the Department of Education and Science as a year of consolidation and review in order to assist schools and teachers in the implementation process. It was designed to

- allow time for the bedding down of the primary curriculum and the teaching methodologies
- enable teachers to reflect on the progress of implementation so far, particularly in English, Mathematics and the Visual Arts curriculum
- assist schools in planning for the involvement of the school management, parents and the wider school community in the continuing implementation process
- assess the further professional development needs of teachers in order to facilitate future curriculum implementation.

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During the consolidation and review year, schools were permitted to close for a further 3.5 days to engage in review and planning for further implementation of curricula in English, Visual Arts, and Mathematics. Schools were encouraged to develop action plans for these subjects, monitor the progress achieved in relation to the targets set in their action plans and avail of the SDPS personnel to facilitate a review of planning issues identified by the school. During school planning meetings, cuiditheoirí were available to support schools in planning and refining content and methodologies in the three subject areas.

1.4 Reviewing and evaluating curriculum implementation

In the guideline circular to all primary schools, Circular 26/03 (DES, 2003), the DES outlined the strategy adopted, in conjunction with the National Council for Curriculum and Assessment, for reviewing the progress of curriculum implementation and setting targets for further implementation. The strategy included:

- a review and evaluation of the implementation of English, Visual Arts and Mathematics in a sample of schools by the DES Inspectorate in the context of conducting whole-school inspections (Tuairisci Scoile)
- an evaluation of the PSCP, commissioned by the DES and part-funded by the NCCA, undertaken by a research team from Trinity College, Dublin
- the collection and analysis by the NCCA of responses to the Review and Reflection Template for Teachers from a representative sample of schools in order to provide information on the progress of curriculum implementation in English, Visual Arts, and Mathematics.

This report, *An Evaluation of Curriculum Implementation in Primary Schools*, concerns the external review undertaken by the Inspectorate to evaluate the quality of curriculum implementation of English, Mathematics, and Visual Arts. The report details the extent of curriculum implementation and draws attention to both the good practice evident in our primary schools and areas where development is required.

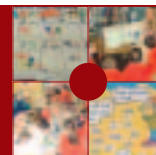


1.5 The report structure

Chapter 1 outlines the context and background to the evaluation undertaken by the Inspectorate. Chapter 2 describes the procedures and methodology employed to gather the data in schools and outlines the process of data analysis. Chapter 3 reflects on the quality of curriculum implementation in English. Chapters 4 and 5 discuss the quality of implementation with regard to Mathematics and Visual Arts. Important priorities and concerns with regard to the quality of implementation are presented in the concluding chapter.



2 Evaluation methodology



2.1 Evaluation objectives

The overall purpose of the evaluation was to report on the quality and extent of curriculum implementation in English, Mathematics and the Visual Arts in a sample of primary schools. The evaluation sought to identify strengths and challenges in the implementation process, both for teachers and for school communities, and to make recommendations aimed at supporting future curriculum implementation.

2.2 Selection of schools

Primary schools are inspected on a cyclical basis in line with annual inspection targets. A comprehensive report (often referred by the Irish term, *tuairisc scoile*) is issued to each school following inspection. The evaluation of the school examines teaching, learning and assessment, as well as school planning, the work of the board of management, and the school's accommodation and resources. This focused evaluation of curriculum implementation in Mathematics, English and Visual Arts was undertaken in conjunction with the annual cycle of school inspection.

Eighty-six schools, from the list of schools where it was proposed to furnish a school report, were selected for focused evaluation. These schools were informed that a review of curriculum implementation in English, Mathematics or Visual Arts would occur in tandem with the general school inspection in which all curriculum areas are evaluated. The sample included a variety of school types and locations and involved single-sex, co-educational, junior, senior and full vertical schools.

2.3 Development of the evaluation model

In September 2003 a steering group of inspectors, supported by the Evaluation Support and Research Unit (ESRU), developed an evaluation model that incorporated three main components of evaluation activity. These were:

- a focused, school-based evaluation of the implementation of the revised curricula of English, Mathematics or Visual Arts in a sample of mainstream classes in eighty-six schools
- semi-structured interviews with school principals and classroom teachers
- a review of whole-school planning documents, teachers' curriculum plans, assessment policy, information on pupils' engagement and achievement, and programme planning in relation to individual pupils.

An orientation seminar was organised for the team of thirty inspectors nominated to undertake the evaluation.

Evaluation methodology

2.4 Evaluation procedures

2.4.1 Scope of the evaluation

Inspectors focused on one curriculum area in each of the eighty-six schools. In schools with two to five teachers the inspectors evaluated the teaching and learning in the specified curriculum area in two classrooms; in schools with six or more teachers the evaluation was conducted in three classrooms. Class teachers were selected by means of a random procedure that ensured a proportionate number of all class levels, from infants to sixth class, was included in the sample. A total of 188 class settings were evaluated. Table 2.1 provides details of the number of schools and class settings that were involved in the evaluation.

Curricular Area	Number of schools involved in the focused inspection	Number of class settings evaluated
English	26 schools	59 class settings
Visual arts	32 schools	68 class settings
Mathematics	28 schools	61 class settings

Table 2.1: Numbers of schools and class settings evaluated in English, Visual arts and Mathematics

2.4.2 Framework for class-based inspection

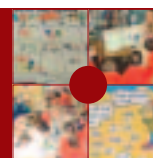
The framework for the class-based inspection activity incorporated observation and reporting templates to facilitate evidence-gathering. The inspectors reported on various aspects of practice, including the learning environment, the range of teaching approaches employed in the specific curriculum area, and differentiation of the curriculum. They reviewed a variety of documents, including class teachers' curriculum plans, pupils' work in the specific curriculum areas, and records of pupils' progress. Each evaluation visit took place as part of the overall evaluation of teaching for the school report and lasted for approximately half a school day. Following the class setting visits, the inspectors completed a detailed evaluative commentary in relation to each aspect of practice reviewed.

The following four-point rating scale was applied to each evaluation question to facilitate the collation and data analysis processes used in preparing the composite report.

Level	Approximate level of performance
1	Experiencing significant difficulty
2	Scope for development
3	Competent practice
4	Optimal level

Table 2.2: The four-point rating scale applied to the evaluation questions

In addition, the inspectors conducted semi-structured interviews with the class teachers. The interviews dealt with curriculum implementation, inquiring into what teachers felt was working well for them, what remained challenging, what supports had helped them in the implementation process so far, and what aspects of curriculum implementation were working particularly well for the pupils.



Aspects of each specific curriculum area evaluated	Methodology		
	Observation	Document Review	Interview
Quality of teaching and learning	●	●	●
Quality of classroom environment and support for curriculum implementation	●	review of material resources	●
Quality of classroom planning	●	●	●
Assessment and achievement	●	●	●

Table 2.3: Framework for evaluation

2.4.3 Structure of whole-school evaluation for each curriculum area

In addition to individual classroom evaluation, the inspectors carried out a review of the specific curriculum area in the whole-school context. They examined whole-school planning documents and assessment policy and analysed information on pupils' achievement. School principals were interviewed, and the themes for discussion included whole-school planning policy and practice, curriculum provision, assessment and achievement, and professional development support. The principals commented, where relevant, on the use by the school of external tutors (for example a visiting artist) to assist the class teachers with a specific area of the curriculum. The discussion provided an opportunity for principals to share their insights into what was working well and what remained challenging in the implementation process.

2.5 Feedback to schools and preparation of evaluation reports

Following the evaluation, a meeting was held with the school staff, and the contents of the School Report were discussed. The reporting inspector also provided feedback about the curriculum area that had been the focus of the curriculum implementation evaluation. A copy of the Report was sent to all schools.

2.6 Quantitative terms used in the report

A number of quantitative terms are used throughout the report. The following table provides a guide to the most frequently used terms:

Quantitative terms used in the report	Approximate percentage of occurrence
Almost all	More than 90%
Most	75-90%
Majority	50-74%
Fewer than half	25-49%
A small number	16-24%
A few	Up to 15%

Table 2.4: Quantitative terms used in the report



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3.1 Introduction to the English curriculum

3.1.1 The structure of the English curriculum

The *Primary School Curriculum – English (1999)* provides the framework for teaching and learning and describes pupils' expected performance and attainment at each class level. The content of the English curriculum is presented in four strands:

- *Receptiveness to language*
- *Competence and confidence in using language*
- *Developing cognitive abilities through language*
- *Emotional and imaginative development through language.*

The English curriculum emphasises the importance of children's acquisition of language and the development of their intellectual ability through language. The strands *receptiveness to language* and *competence and confidence in using language* are primarily concerned with language learning. The strands *developing cognitive abilities through language* and *emotional and imaginative development through language* are concerned with enabling the pupil to learn through language and with developing the ability to use language. Other crucial elements of pupils' intellectual and critical potential, such as the development of higher-order thinking skills and the ability to respond and to engage in critical analysis, are also cultivated.

The curriculum emphasises the fact that language learning is an integrated process, involving oral language, reading, and writing. Therefore each strand is divided into three strand units: *oral language*, *reading*, and *writing*. The strand units consist of detailed elements of content and are stated as specific objectives. It is intended that these specific objectives will be used by teachers to form the core of their teaching programmes.

3.1.2 Time allocation for English in the curriculum

The time allocation for English in the infant classes is 3 hours per week. In the junior, middle and senior classes this allocation is increased to 4 hours per week. Within this time allocation each class teacher determines the amount of time given to oral language, reading and writing activities.

3.1.3 Classroom planning for English

The curriculum advocates that the four strands be used as starting points in classroom planning. *The Primary School Curriculum – English: Teacher Guidelines (1999)* states: "In planning the English curriculum in the classroom the teacher needs to . . . [think] about the curriculum and planning its implementation not in terms of the three language forms, oral language, reading and writing but in terms of the four strands." The guidelines suggest that teachers can provide an integrated language learning experience for pupils through the "imaginative use of the content elements within the strand units." However, it is noted that exemplars on planning for the various strands are not provided in the guidelines.

3.1.4 Oral language in the English curriculum

The curriculum recommends that oral language in junior classes be developed through methodologies such as talk and discussion, play and games, story, improvisational drama, poetry, and rhyme. The curriculum recommends that pupils develop the skills of listening attentively, taking turns to speak, offering the information most essential to the listener, and making comments and responses that are appropriate.

Language teaching demands a variety of approaches and methodologies. In the infant and junior classes teachers are encouraged to develop pupils' language skills through engaging them in conversations in a purposeful manner, facilitating imaginative play, encouraging them to respond to simple instructions and directions, and undertaking story-based activities such as listening to and retelling stories, asking questions, and role-playing. Pupils in the middle and senior classes are enabled to discuss local, national and international news, topics from reading, and social issues; they should be able to make presentations to the class, justify opinions, and engage in formal debates. The teacher should expand pupils' vocabulary and enable them to use language more accurately and expressively as they progress through the school.

3.1.5 Reading in the English curriculum

The Primary School Curriculum – English (1999) emphasises the importance of providing each pupil with a reading experience that is appropriate to his or her needs and abilities. The development of literacy is emphasised at each class level, and the elements of the reading process are presented in different strand units:

- Developing concepts of language and print
- Developing reading skills and strategies
- Reading for pleasure and information
- Developing interest, attitudes, and the ability to think
- Responding to text.

The importance of developing a reading culture in schools, in which books and reading are seen as valuable and pleasurable, is emphasised. The role of a structured reading scheme in providing an adequate reading experience for pupils is explored. The curriculum recommends that a broad range of other reading material, encompassing a variety of narrative, expository and representational texts, should complement these schemes.

3.1.6 Writing in the English curriculum

The approach to writing outlined in the curriculum is based on the view that pupils learn to write through the process of writing. This approach emphasises the development of pupils' expressive and communicative skills through a consistent experience of drafting, editing and redrafting their work. Pupils are expected to write for a variety of audiences on a wide range of topics and in a variety of genres. An emphasis is placed on the writing process as well as the result, and the primary aim is to



help pupils to become independent writers. Pupils develop an appreciation of the functions of the parts of speech and a control of the conventions of grammar and punctuation through the writing process rather than in isolation from it.

3.1.7 *In-service for the implementation of the English curriculum*

English was the first subject area of the curriculum introduced in the PCSP in-service programme for teachers in 1999/2000. The implementation of the curriculum where the first language of the school is English began in the school year 2000/01. At the time of this evaluation, schools had been implementing the English curriculum for three years.

Evaluation of curriculum implementation

3.2 **Planning for English**

3.2.1 *School planning*

Most schools used whole-school planning days to devise their plans for the English curriculum. Many schools availed of the support services (SDPS and PCSP) to assist with their planning, and teachers reported that these supports were very beneficial and that they accelerated the process of devising whole-school plans. While most whole-school plans were developed as a result of a collaborative process involving all members of the staff, principals stated in interviews that they assumed overall responsibility for the production of the plan in English. It was only in a minority of schools that a member of the school management team had responsibility for co-ordinating the curriculum in this area.

The inspectors found that almost two-fifths of school plans were effective. These plans included information on school context factors, reiterated the central emphases of the English curriculum, outlined clear linkage with the structure of the curriculum, and detailed the methodologies to be adopted in the school. However, in approximately 60 per cent of schools whole-school plans required further development. These plans were general in nature, not specific to the particular school and its environment, not linked to the structure and focus of the English curriculum, and lacking detail regarding the methodologies adopted in the school.

3.2.2 *Classroom planning for English*

The English curriculum advocates that the starting point for classroom planning should be the strands of the curriculum. The inspectors found that four-fifths of teachers used the strand units of *oral language*, *reading* and *writing* as opposed to the strands as their starting points for classroom planning. During interviews, teachers stated that they were unclear about the strands of the curriculum. This is illustrated by the following inspector's comment: *"The teacher stated that she has*

yet to 'master' the art of structuring her planning in line with the curriculum." The inspector also noted: *"She has followed the structure of the curriculum in all other subject areas."*

More than half the teachers did not link their individual planning with the school plan. Some teachers said that they did not use the curriculum documents when planning the learning experiences for their pupils; they based their planning on the textbooks or commercially produced materials rather than on the content objectives outlined in the curriculum.

3.2.3 Allocation of time to English

In most classrooms the recommended amount of time was allocated to the teaching of English. In a quarter of classrooms no reference was made in long-term or short-term planning to the allocation of discrete time for the development of oral language objectives.

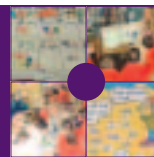
3.2.4 Differentiation

Three-quarters of teachers gave appropriate emphasis to the principle of continuity and progression and took the pupils' prior learning into consideration when planning. Three-fifths of teachers differentiated their teaching according to class levels and ability levels and provided for individual differences in English reading. There was evidence of collaborative planning and teaching between the learning support teacher, the resource teacher and the mainstream class teacher in only two-fifths of classrooms.

3.3 Quality of Classroom Organisation

There was evidence in the majority of classrooms of good practice in relation to the quality of classroom organisation and support for curricular implementation in English. The classrooms were print-rich and provided stimulating learning environments. In these classrooms the pupils were encouraged to involve themselves in learning activities in English at whole-class level and in small-group situations.

The provision of English resources was good in the majority of classrooms. Features of good practice included the attractive display of a broad selection of books, references made to books during the course of lessons, and the encouragement of children to become self-directed learners. However, there was a limited number and range of books in one-fifth of classrooms, and the inspectors found that poor provision and use of resources limited the implementation of the English curriculum in these classrooms.



3.4 Implementation of the Strands and Strand Units

3.4.1 Curriculum provision and implementation of strand units

Oral language

Oral language was taught effectively in a little over three-quarters of classrooms. In these instances, oral language was given a central role in the English programme, and specific oral language lessons were taught. In three-quarters of classrooms discrete time for oral language development was planned, and oral language content objectives were taught explicitly. However, in a quarter of classrooms the teachers did not refer to the curriculum when planning; as a result, important content objectives with regard to developing language skills in different social contexts were overlooked.

The majority of teachers placed appropriate emphasis on the development of pupils' receptiveness to language. In junior classes the pupils were afforded opportunities to observe simple commands, to play with language, and to develop an awareness of sounds. In the senior classes, language skills were developed in various social contexts. Discussion in pairs and groups was noted, and pupils were encouraged to take turns in speaking and listening.



The strand *competence and confidence in using language* – that is, developing the child's ability to use language as a speaker – was implemented effectively in almost three-quarters of classes. In these classes the children were given opportunities for turn-taking in an environment where tolerance for the views of others was fostered.

Three-quarters of teachers used a variety of approaches for oral language development effectively. These included talk and discussion, play and games, story, improvisational drama, poetry, and rhyme. Where scope for development was noted, the inspectors expressed concerns regarding the lack of planning to ensure that a variety of contexts was provided, and they recommended more extensive use of improvisational drama, poetry and rhyme as approaches to language development.

There was good practice in the strand *developing cognitive abilities through language* in two-thirds of classrooms. In a third of classrooms, however, pupils were not encouraged to engage in activities such as justifying and defending particular opinions or attitudes, or trying to persuade others to support a particular point of view.

Almost three-quarters of teachers encouraged the development of higher-order thinking skills. In these classes the pupils made presentations on particular topics, argued points of view, and discussed characters in novels or films from different viewpoints. There was scope for development in a quarter of classes observed. In these classrooms there was limited use of higher-order questions by teachers to elicit thoughtful responses from pupils as well as an overdependence on workbooks and the engagement of pupils in lower-order tasks, such as completing set questions.

Reading

The teaching of reading was effective in three-quarters of the class settings inspected. Aspects of practice that were commended included an emphasis on the emergent reader, the development of phonological awareness and phonemic skill development, the use of semantic and syntactic cues to assist with word identification, and the use of a variety of texts, such as novels, fact books, newspapers, film reviews, and catalogues. In most classes, word identification strategies were developed very effectively.

Significantly, difficulties with regard to the teaching of reading were identified in a quarter of the classrooms observed. In these instances there was evidence of mechanical reading of texts and a lack of variety in the reading material provided. In addition there was a lack of emphasis on higher-order questioning or on the use of reading material as a stimulus for discussion and analysis.

There was good practice in developing cognitive abilities through reading in two-thirds of classrooms. In these classes, pupils maintained a record of personal reading. However, in one-third of classrooms the pupils were not encouraged to distinguish between fact, opinion, bias and objectivity in texts and in the media.

The emotional and imaginative development of the child through language was developed effectively in half the classrooms, and teachers were observed to foster pupils' skills through exposure to a range of different genres and to engage pupils through the use of effective questioning techniques. While pupils were allowed choice in the materials read, the inspectors noted that in almost half the classrooms this choice was generally limited to choosing books from the class library. Teachers experienced significant difficulty in the teaching of the strand *emotional and imaginative development through language* in almost two-fifths of classrooms. In these classes the pupils were not given opportunities to express their personal reactions to ideas, emotions, images, music, artwork, films, television programmes, or videos, orally or in writing. They rarely examined similarities and differences in various types of texts or read aloud from a personal choice of texts to entertain or inform an audience.

Effective consultation and involvement of parents to enhance their children's learning was encouraged in three-quarters of class settings. Parents were involved in shared reading programmes, and good home-school communication systems had been implemented. Further consultation and involvement with parents was recommended by the inspectors in a quarter of classrooms, and they advised that this could be achieved through promoting shared reading initiatives, involving parents in reading to their children, encouraging the revision of sight vocabulary, undertaking phonic-based games and activities, and revising word families and spellings.



Writing

More than half the teachers experienced difficulties in the teaching of writing. In classrooms where there was scope for development, teachers placed insufficient emphasis on the writing process, were dependent on workbook activities, and underutilised information and communication technologies to support the writing process. In these classes the pupils did not take any decisions regarding the choice of topics for writing or for discussion.

In fewer than half the class settings observed there was good practice in relation to the development of writing. Good practice was reported in classrooms where process writing was promoted and writing in a number of genres was encouraged, and pupils wrote for a variety of purposes, independently and creatively. The following evaluative comment illustrates good practice:



The children have engaged in writing in different genres. They have written stories, scripts, poems, film and book reviews, projects, letters and menus. These are on display in the classroom. The children are also actively engaged in the writing process of drafting and re-drafting. ICT is used constructively.

In two-thirds of classrooms the pupils were encouraged to develop the conventions of grammar, punctuation, and spelling. There was scope for development in this area of the curriculum in a third of classrooms, where grammar was taught in isolation from the context.

Weak practice in the use of information and communication technologies (ICT) was noted in three-fifths of classrooms. Pupils, in general, were not encouraged to use computers to draft or re-draft their writing or to make use of ICT to gain access to information.

3.5 Assessment and achievement

3.5.1 Whole-school policies on assessment

All schools undertake some form of assessment in English. However, there was scope for development in assessment practices and whole-school policies in three-fifths of schools. Weaknesses in provision included the lack of written school assessment policies and the limited range of assessment approaches in use by teachers. In these schools the results of assessment were not sufficiently utilised to inform the teaching and learning in the classroom. In many instances there were no formal whole-school procedures for recording pupils' continuing progress. The results of standardised tests were rarely used to inform teaching and learning.

Competent assessment practices were in evidence in fewer than two-fifths of the schools surveyed. In these schools a coherent assessment policy was agreed and implemented. The teachers administered reading tests, devised their own tests, and used the outcomes of assessment to inform their teaching and learning.

3.5.2 Classroom practice in relation to assessment

Notwithstanding the limited practice in relation to whole-school policies on assessment, the practice of individual classroom teachers in relation to assessment was good in three-fifths of classrooms. Where good practice was noted, the results of assessment were used to inform teaching and learning. Teachers frequently undertook observation of their pupils and used teacher-devised tests to assess them. Records of pupils' progress were maintained in two-thirds of classrooms. Aspects of good practice in evidence in classrooms included the maintenance of records of teacher-designed tests and the results of standardised tests. One inspector noted:

The teacher assessed in a variety of ways-copybooks, homework, drawing, written work, teacher-designed tasks and sheets, screening tests, portfolios. In this class, notes are maintained of all pupils' progress and parents are informed of these results.

In more than a third of classes, assessment was isolated from teaching and learning and was not seen as an integral part of the teaching process. The inspectors' observations suggest the necessity for a greater emphasis on portfolios, diagnostic tests and error analysis as features of classroom practice in English.

3.6 Main Findings and Recommendations

This evaluation indicates that significant progress has been achieved in the implementation of the curriculum in three-quarters of schools. Schools developed whole-school plans for English, but more than two-thirds of these plans had scope for development. Teachers' planning is based on the strand units of oral, reading and writing. While this practice is at variance with the recommendations of the curriculum, it illustrates a perceived weakness for classroom teachers in the curriculum framework.



An alternative presentation of the English curriculum under the strands of oral language, reading and writing would alleviate teachers' concerns and confusion. More than half the classroom teachers differentiated their teaching according to pupils' needs in reading. Most classrooms provided a supportive environment for the implementation of the curriculum, and these classrooms were "print-rich," with a range of reading materials available.

However, common gaps in curriculum implementation include the lack of emphasis on the development of higher-order thinking skills, insufficient attention given to the development of emotional and expressive skills and to the promotion of pupils' cognitive skills in approximately one-third of classrooms. A significant finding is that the teaching of writing was weak in more than half the classrooms evaluated. The inspectors emphasised the need for more effective approaches to curriculum adaptation or differentiation in two-fifths of classrooms, the provision of a greater range of reading materials, the more effective use of classroom assessment procedures, and the creation of more stimulating learning environments.

The main recommendations are:

3.6.1 Whole-school planning

- Members of school management teams should undertake a more active role in the development and review of whole-school plans and should monitor their implementation. Members of the management team should be assigned responsibilities for the implementation of curricular areas.
- An additional emphasis should be placed on whole-school planning at school level, and the relevant support services should emphasise the link between the curriculum, the school plan, and individual planning.

3.6.2 Classroom planning

- There is a need to restructure the English curriculum in a format that is accessible and easier to use for teachers. The purpose of this restructuring would be to ensure the provision of a balanced and integrated curriculum. The proposed structure would outline content objectives for oral language development, reading, and writing.
- The curriculum statement, which outlines specific content objectives, should become the primary basis for planning in English. Teachers should acquire ownership of and become familiar with the overall aims, content objectives and guidelines of the English curriculum. The starting point for classroom planning should be the specific objectives of the curriculum. Setting clear, attainable short-term objectives would assist teachers in clarifying learning outcomes and contribute to effective assessment strategies.
- The NCCA should provide clear guidance to teachers on lesson structures for English reading and writing at each class level. Additional exemplars on teaching strategies and the processes and outcomes of reading and writing should be developed for each class level.

- Exemplars to support the teaching of discrete lessons in oral language at each class level should also be devised. Teachers should be provided with clear guidance on the timetabling and organisation of oral language lessons. The support services should emphasise the importance of teaching oral language as a discrete and integral aspect of the English curriculum.

3.6.3 Differentiation

- Practical guidelines on the adaptation of the English curriculum to meet the needs of the pupils, especially those in multi-grade classes, should be provided. The guidelines should encourage teachers to concentrate on the close connection between teaching objectives and learning outcomes and should assist them in ensuring that their teaching is directed towards meeting a range of pupils' needs.

3.6.4 Quality of classroom organisation and support for curriculum implementation

- Boards of management, principals and school management teams should ensure that DES grants to support the implementation of the English curriculum are expended on priorities identified for the current English curriculum. There is a need to ensure that classrooms environments are conducive to pupils' learning in English. PCSP and SDP facilitators should assist schools in undertaking an audit of their resources and provide guidance in evaluating resource materials.
- Further consultation and involvement with parents in promoting language development and literacy skills should be promoted at school level. Strategies to ensure the involvement of parents in the English curriculum should be included in whole-school planning documents.
- The NCCA should devise guidelines and video materials for parents that could be used in the home environment to promote literacy and oracy development, especially for young children. These materials should influence positively the development of language in the home through the normal parent-child interaction process. The materials would also support teachers and parents in communicating important messages and would enhance information-sharing.

3.6.5 Implementation of the strands and strand units

- There is a need to re-emphasise the importance of cognitive skills through structured oral language, reading and writing activities.
- Pupils' emotional and imaginative response is critical to the teaching of English, and the development of these skills is necessary for pupils in the middle and senior classes. It is recommended that this focus be included in any curriculum support material to be issued in the future.
- There is a need for all education partners to become more active in developing a culture of continuous improvement in the teaching of reading in schools. The various support services should



concentrate on assisting teachers to develop their understanding of the teaching of reading, and additional exemplar materials and web site facilities should be provided.

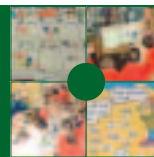
- An improvement in the quality of the teaching of writing should become a priority for all involved in the implementation of the English curriculum. Teachers' understanding of the writing process should be enhanced and additional professional development support provided.
- It is a matter of serious concern that in many classrooms there is an overdependence on workbook activities and that this results in pupils undertaking low-level and undemanding writing tasks, requiring little sustained independent writing of any quality. There is a need for teachers to provide a good stimulus to inspire pupils to write and they must engage in modelling, scaffolding, conferencing and appropriate intervention.

3.6.6 Assessment

- It is essential that all schools have a written assessment policy incorporated in the overall school plan. This assessment policy should be clearly linked to the school plan for English and to teachers' long-term and short-term planning. Assessment should be used for formative purposes, and the emphasis should be on enhancing teaching and learning.
- Schools should aim to promote excellence and to strive towards continuous improvement in teaching and learning. The progress of pupils in literacy should be a priority for teachers and pupils in all primary schools.



4 Mathematics



4.1 The structure of the curriculum

The *Primary School Curriculum – Mathematics* (1999) is structured under six strands or areas of content:

- *Number*
- *Algebra*
- *Measures*
- *Shape and space*
- *Data*
- *Early mathematical activities (a strand for junior infant classes only).*

The *Primary School Curriculum – Mathematics* (1999) promotes a broad range of approaches to teaching and learning. Teaching should be cross-curricular, with integration and linkage encouraged, to make Mathematics more meaningful for pupils and to avoid overload for teachers. The use of the environment and the importance of real-life problem-solving are emphasised, and the use of calculators by pupils in senior classes is advocated. Collaborative and active learning is encouraged, with an emphasis on thinking strategies and problem-solving skills rather than on rote learning. A hands-on approach to learning is recommended, with the use of concrete learning resources at all class levels. The importance of mathematical language is emphasised, with the provision of mathematics-rich environments recommended to support learning. The development of estimation skills is considered essential within all strands of the curriculum, with pupils' estimates refined over time rather than identifying wrong answers. Guided-discovery learning is recommended, and it is envisaged that teaching will be less reliant on textbooks and workbooks. Provision for individual differences and assessment is central to the curriculum with a variety of techniques suggested.

4.1.1 Time allocation for Mathematics in the curriculum

Time allocation for Mathematics in the infant classes is 2 hours 15 minutes per week. In the junior, middle and senior classes this allocation is increased to 3 hours per week.

4.1.2 In-service for the implementation of the curriculum

Mathematics was introduced in the PCSP in-service programme for teachers in 2000/01, and the implementation of the curriculum began the following year. At the time of this evaluation, schools had been implementing the curriculum in Mathematics for two years.

Evaluation of curriculum implementation

4.2 Quality of planning

4.2.1 Whole-school planning

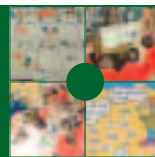
Many schools developed and were implementing good school plans for Mathematics. These plans were devised to reflect particular school contexts and needs. Significantly, high levels of whole-school collaboration, feedback and review characterised the planning process in these schools. Additionally, school management personnel undertook roles as subject co-ordinators in leading, monitoring, communicating and reporting on the progress of whole-school planning for Mathematics. A culture of collaborative planning existed, where new teaching approaches promoted during PCSP seminars and through RCSS and SDPS support services were developed on a whole-school basis. In many instances individual teachers availed of further professional development opportunities through “drop-in” courses in education centres.

However, whole-school planning for Mathematics was weak or had scope for development in more than half the schools inspected. In these schools, whole-school planning was characterised by a lack of ownership of the plan by the teaching staff, and whole-school plans referred only to subject content derived from textbooks. These plans did not describe how the school would monitor or review the implementation of the school plan. One inspector commented: *“Implementation of the plan is left primarily to individual teachers without any school based review mechanisms; textbooks continue to exercise a dominant influence . . .”*

4.2.2 Individual classroom planning

Individual teachers’ classroom planning for the implementation of the curriculum in Mathematics was good in three-fifths of schools. This planning included long-term and short-term written preparation, which addressed all strands of the curriculum in a balanced way and specified clear objectives drawn from the curriculum documents. Reference was made to the range of textbooks and workbooks to be used as an aid to learning and as a means of providing for consolidation and extension exercises. In half the classrooms inspected, planning for the use of resources to support learning was good. Where planning was very good there were precise, concrete materials specified to enrich learning for each unit of work.

Significantly, in two-fifths of classrooms planning was weak, with an overemphasis on number work and a complete reliance on the use of a single textbook to determine the content and sequence of what was taught. In these instances the inspectors recommended that greater use be made of the curriculum documents to inform and guide planning, thus providing for greater breadth, balance and linkage in curriculum implementation. In a significant number of schools, whole-school planning was not as well developed as teachers’ individual planning.



In almost half the classes there was good planning to provide for individual differences for pupils and for multi-class contexts. Excellent practice included collaborative planning between class teachers and learning-support or resource teachers. This facilitated team teaching in classrooms, whereby support teachers assisted class teachers in differentiating the content of lessons to suit individual needs and different ability groups. However, in more than half the classrooms there was no evidence that any such provision was made.

4.3 Quality of classroom organisation and support for curriculum implementation

The *Primary School Curriculum – Mathematics* (1999) provides substantial guidance on classroom organisation, with an emphasis on the importance of a rich learning environment, the effective use of resources, and the need for pupils to be actively involved in their learning.

In more than half the classrooms a mathematics-rich environment was created. Relevant mathematical illustrations, games, number lines, measuring instruments, labels and flash cards were displayed in the designated mathematics area. In these classrooms information and communication technologies were used to enhance teaching and learning.

In a quarter of classrooms there was an inadequate supply of resources. In these classrooms the teaching observed was based primarily on the textbooks, and there was little use of concrete materials.

There was evidence of positive involvement by pupils in lessons in three-quarters of the classrooms. Pupils were engaged in the tasks, were stimulated by the learning activities, and were actively involved in both pair work and group work.

Active involvement by pupils in mathematics lessons was very limited in a quarter of classrooms. In these classrooms the pupils were engaged solely in repetitive paper-and-pen exercises. This does not reflect the constructivist approaches that are central to the curriculum.

4.4 Curriculum provision and implementation of specific strands

The quality of curriculum provision for Mathematics was good in three-fifths of schools. Most teachers and many principals asserted that the implementation of specific strands of the curriculum was “working well.” Teachers commented positively on the structure of the curriculum, stating that it was “easy to plan for and organise.” Many also expressed particular enthusiasm for the “new” strands of *data and shape and space*. Most principals commented favourably on the quality of professional development and support made available to them and emphasised the support provided by the PCSP or SDP services.

In almost all instances there was good practice in relation to linkage, integration and the use of a cross-curricular approach in Mathematics. Pupils were provided with regular opportunities to practise, consolidate and extend their learning throughout the curriculum. While some effort was made to relate mathematics to other areas of the curriculum, there was a need for more consistent planning to enhance the effectiveness of this strategy.

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Early mathematical activities

The findings in relation to teachers' individual implementation of the various strands of the curriculum were positive. In those classrooms where *early mathematical activities* were observed, good or very good practice was widespread. Active learning tasks were organised that allowed the pupils to classify, match, compare and order objects in a structured way, and this practice was particularly commended.

Number

In the majority of classrooms the learning and teaching of *number* was of a high quality. Teachers employed active learning strategies successfully, and pupils displayed accuracy in mental calculations. They also demonstrated good ability in applying the appropriate number operations to problem-solving contexts. Number work in one classroom was described as follows:

Pupils are active in their mental calculations and have clearly acquired good number sense and estimation skills through a variety of number games and drill and practice software.

In a few instances the inspectors found that the teaching approaches employed did not promote the development of appropriate mathematical language and mental calculation and that there was a need to use concrete materials to support pupils' learning.

Algebra

In the majority of classrooms there was good practice in relation to the implementation of the *algebra* strand. Pupils were given the practical experience to develop algebraic skills through identifying and extending number patterns, sequences, and sentences. Where there was scope for development, pupils were not provided with opportunities to analyse numbers or formulate number sentences.

Measures

Learning and teaching in *measures* was effective in three-quarters of classrooms. Pupils were given opportunities to estimate measurements and to show competence in using practical equipment to measure. Teachers provided pupils with the opportunity to manipulate, explore and investigate with practical equipment before recording their answers formally.

Shape and space

In three-quarters of classrooms the teaching of *shape and space* was competent. In these instances learning was activity-based, with tasks aimed at allowing pupils develop a knowledge and understanding of the properties of two-dimensional and three-dimensional shapes. Pupils developed their understanding of the properties of shape by solving meaningful problems. However, in a quarter of classrooms the pupils were able to recognise shapes but demonstrated little understanding of their properties. This suggests the need for more discussion, explanation, investigation, and problem-solving activities.

Data

Learning and teaching in *data* is good in the majority of classrooms, but there was scope for



development in almost one-third of instances. Activities in subject areas such as Geography, and Science provided valuable opportunities for pupils to develop skills in data collection, data analysis, and constructing and interpreting graphs. Where there was scope for development, specific data skills were not developed and insufficient emphasis was placed on the development of data skills through the use of integration, linkage, and a cross-curricular approach.

4.5 Teaching approaches

The *Primary School Curriculum - Mathematics (1999)* outlines the essential teaching methodologies that should be employed. These include a problem-solving approach, use of the environment, guided-discovery methods, and the use of concrete materials, talk and discussion, and collaborative or co-operative learning.

Problem-solving approach

In the majority of classrooms, problem-solving was a feature of the lessons. Pupils were provided with a range of problems which promoted the specific skills of communicating, reasoning and connecting. In almost a third of classrooms there were weaknesses in the use of this teaching approach. These included the non-implementation of the school plan with respect to problem-solving and an over-reliance on traditional textbook problems, which did not promote the development of specific problem-solving skills.

Use of the environment

In the majority of schools, real-life situations provided the context in which mathematical problems were presented. In almost a third of schools the pupils' immediate environment was not fully exploited and often limited to specific strands, such as measures. Where effective use was not made of this approach, pupils had an understanding of algorithms but were unable to apply their skills to the solution of real-life problems.

Guided-discovery methods and concrete materials

Teaching that successfully emphasised and employed guided-discovery methods was evident in the majority of classrooms. Pupils used concrete materials in most strands of the curriculum. However, in almost a third of classrooms learning was passive and reliant on activities that lacked focus and required more purposeful direction by the teacher.

Talk and discussion

Talk and discussion was used effectively as a teaching strategy in most classrooms. Purposeful teacher-pupil and pupil-pupil talk assisted learning, understanding, and problem-solving. Where practice with regard to talk and discussion was not satisfactory, pupils were given insufficient opportunities to describe, question and clarify concepts and understanding.

Practice in relation to the development of mathematical language was positive in three-quarters of the classrooms. Teachers planned for the teaching of mathematical language, used appropriate

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terminology, provided opportunities for the children to use mathematical language, and referred to mathematical words and symbols. In a quarter of classrooms a more structured approach to the development of mathematical language was required.

4.6 Approaches to learning

The Mathematics curriculum accords equal importance to what the pupil learns and to the process by which he or she learns it. One of its essential features is the recognition that there are different kinds of learning and that individual pupils learn in different ways. A core aim is that the child will enjoy learning and will develop a positive attitude to Mathematics.

Active learning

In two-thirds of classrooms the pupils were active learners in Mathematics. As one inspector noted, *“the pupils are encouraged to participate actively in the lessons and good opportunities are provided for [them] to construct and apply their mathematical understanding and skills in contexts drawn from their experiences and environments.”* In a third of classrooms there was an overemphasis on textbook and paper exercises and didactic exposition by the teacher. Such a restricted teaching approach meant that the children were predominantly passive in their learning.

Individual differences

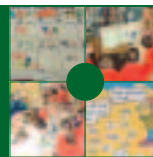
In a little over half the classrooms effective provision was made for individual learning styles and needs. This approach acknowledges that children acquire mathematical skills in different ways and at their own individual pace. However, in almost half the classrooms there was limited differentiation within learning tasks for pupils of varying abilities.

Collaboration and co-operation

In the majority of classrooms the pupils were provided with opportunities to collaborate and co-operate in their learning by working in pairs and larger groups. This provided contexts in which to use mathematical language, negotiate meanings and scaffold solutions. As one inspector observed, *“the pupils are given regular opportunities to collaborate on tasks that are interesting and challenging and that are differentiated to take account of different class levels.”* However, in more than two-thirds of classrooms there was still an over-reliance on whole-class teaching, where teacher talk dominated and where pupils worked silently on individual tasks for excessive periods.

4.7 Assessment and achievement

One of the most significant features of the current Mathematics curriculum is the central position given to assessment in the teaching and learning process. The curriculum describes the elements that should be assessed and the forms and uses of assessment that will provide the most relevant information about pupils' progress.



4.7.1 *Whole-school policies on assessment*

At whole-school level, approaches to assessment were weak or had scope for development in more than half the schools inspected. In many instances the schools had not devised a policy on assessment. In other schools a policy had been formulated but there was a failure to implement what was written. Further shortcomings included a restricted range of assessment strategies, insufficient monitoring of pupils' progress and ineffective use of the outcomes of assessment to inform planning, teaching, or learning. In schools where there was good practice, assessment policies had been devised, they were implemented in a coherent manner and incorporated formative and summative assessment. In many schools, records of pupils' achievement or progress were not maintained in a systematic manner.

4.7.2 *Classroom practice in relation to assessment*

Two-thirds of classroom teachers employed an appropriate range of assessment modes in Mathematics. Informal assessment included observation and error analysis of the pupils' oral and written work. This was complemented by more formal approaches, which included teacher-devised tests, commercially produced criterion-referenced tests, and standardised testing instruments. Teachers used standardised testing effectively in a little over half the classrooms. They analysed results to identify strengths and weaknesses in pupils' learning, and they planned their teaching programmes accordingly.



An inadequate range of assessment modes was used in a third of the classrooms. The major weakness in this regard was an overemphasis on standardised testing, to the exclusion of other approaches. However, almost half the teachers did not use the results of standardised assessments appropriately. Some teachers did not administer standardised tests in Mathematics and more than half the teachers did not maintain continuous records of pupils' achievement. The inspectors found that this had negative implications for matching teaching to pupils' learning needs, for improving pupils' attainment, and for reporting to parents and other interested parties.

4.8 **Conclusions and recommendations**

Findings regarding the overall implementation of the Mathematics curriculum are mixed. Teachers generally have a good understanding of the structure of the curriculum, and they attribute this to the manner in which the curriculum was presented to them at PCSP seminars. Most teachers are implementing the strands and embracing the new teaching approaches and central emphases of the curriculum. The majority of children are given opportunities to be hands-on learners, and learning activities are interesting and challenging. Most classrooms provide a broad range of mathematical resources to assist pupils' learning.

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There were significant weaknesses in the implementation of some aspects of the curriculum. Whole-school planning was weak in more than half the schools. Class teachers were not making use of the whole-school plan or the curriculum content for Mathematics as the basis for their individual planning. In addition, there was little planning for the use of resources or differentiation in teaching. This lack of planning impacts negatively on classroom practice.

Almost a third of teachers are experiencing difficulties with the methodologies for the implementation of the curriculum. The use of collaborative and co-operative approaches to learning requires further attention. In a significant number of classrooms, teacher talk and an overemphasis on didactic methodologies persist. There is over-reliance on the use of a single textbook in these classrooms, and pupils are not sufficiently active in their own learning. In two-fifths of classrooms attention needs to be given to the quality of classroom organisation and to the provision of resources to enhance learning. In particular, there is a need to create richer learning environments through the provision and display of mathematical resources, illustrations, games, and other visual stimuli. Greater emphasis should be placed on integration and a cross-curricular approach to the implementation of the *data* strand. Finally, the findings indicate that in many classrooms, practices in relation to assessment require significant improvement.

4.9 Recommendations

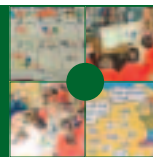
The following is a summary of the main recommendations for Mathematics:

4.9.1 *Whole-school planning*

- All members of the teaching staff should work collaboratively on the development of whole-school plans, develop a sense of ownership of the plans, and become involved in the monitoring and implementation of these plans. The focus of whole-school planning should be on improving teaching and learning in the school.
- A member of the school management team should be assigned an active role in co-ordinating and leading the process of whole-school planning. The co-ordinator should guide curriculum implementation and communicate and report on the progress of the whole-school implementation of Mathematics.

4.9.2 *Classroom planning*

- Classroom teachers require additional supports to assist them in undertaking classroom planning that ensures the balanced implementation of the strands of the curriculum. Classroom planning should be based on the whole-school plan for Mathematics.



4.9.3 Differentiation

- Teachers need further guidance on approaches to providing for individual differences in pupils' ability, attainment, and learning style. A more focused and integrated approach to assessment and planning is required, and the support services should provide guidance to teachers on how best to effect this emphasis.

4.9.4 Quality of classroom organisation and support for curriculum implementation

- Principals and class teachers should ensure that rich learning environments are created and mathematical resources, illustrations, games and other visual stimuli should be provided in all classrooms.

4.9.5 Implementation of the strands and strand units

- Greater emphasis should be placed on the development of estimation strategies. The support services should provide guidance to teachers on practical strategies for promoting estimation skills at different class levels.
- Additional emphasis should be placed on the *data* strand of the curriculum. Teachers require support in constructing meaningful contexts that will facilitate pupils in developing skills in data collection, data analysis, constructing and interpreting graphs.

4.9.6 Approaches to teaching and learning

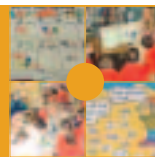
- During the lesson the teacher should provide purposeful direction to the pupils and structure opportunities for them to undertake problem-solving activities, engage in talk and discussion, and work with concrete materials. Over-reliance on textbooks as the primary teaching aid should be discontinued.

4.9.7 Assessment

- The National Council for Curriculum and Assessment should provide clear guidance to schools in relation to appropriate formative and summative assessment strategies.
- Every school should develop and implement a whole-school policy on assessment in Mathematics. The range of assessment modes needs to be extended, and schools and teachers need to maintain records of pupils' progress and achievement.
- The results of assessment need to be used more flexibly to inform teaching and learning. Supports should be provided to schools to enable them to clarify what should be assessed, and to specify the assessment approaches that should be used.



5 Visual Arts



5.1 Introduction

The visual arts provide a valuable means of communication for pupils and encourage them to explore, experiment with and discover the possibilities of a wide range of tools and materials. The Visual Arts curriculum affords pupils the opportunity to engage with the creative process, allowing them to express their experiences, imagination, and ideas.

The Visual Arts curriculum comprises the following strands:

- *Drawing*
- *Paint and Colour*
- *Print*
- *Clay*
- *Construction*
- *Fabric and Fibre.*

Each strand is presented in two strand units: *making art* and *looking and responding*. In each strand, pupils should have a range of art-making activities and be provided with opportunities to look at and respond to the visual environment and to art works. In the course of their arts activities, pupils are introduced to and made aware of the elements of line, shape, form, colour and tone, pattern and rhythm, texture, and spatial organisation. The curriculum promotes a balance between working in two-dimensional and three-dimensional media.

The Visual Arts curriculum stresses the importance of talk and discussion and the development of a visual vocabulary. It promotes the provision of opportunities to look at, handle, feel and talk about work created by pupils and their peers and by local, national and international artists. Teachers are encouraged to plan opportunities for integrated and linked studies. There is a strong emphasis on skills development and on guided discovery as the primary teaching methodology. Every art lesson is intended to incorporate the three steps of *stimulus*, *activity*, and *evaluation*.

Assessment is integral to the teaching and learning process, providing the teacher with valuable information on pupils' development and on the effectiveness of the teaching programme.

5.2 *In-service for the implementation of the visual arts curriculum*

The Visual Arts was the second curriculum area introduced in the PCSP in-service programme for teachers in 2000. The implementation of the curriculum began in the school year 2001/02. At the time of the evaluation, schools had been implementing the curriculum for two years.

Evaluation of curriculum implementation

5.3 Planning for the Visual Arts

The Primary School Curriculum – Visual Arts: Teacher Guidelines (1999) states that the “successful implementation of the curriculum will depend on careful planning.” Chapters 3 and 4 of the Teacher Guidelines provide guidance for schools and teachers on effective planning approaches. They advocate a whole-school planning approach for the Visual Arts that should ensure continuity and progression in the school's programme of work, outline how pupils' concepts and skills will be developed incrementally, and provide for an integrated and balanced learning experience.

5.4 Whole-school planning

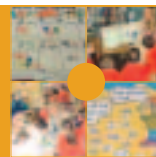
The majority of teachers acknowledged positively the assistance and guidance received from the support services in making possible the continuous development of school planning. For example, one teacher stated that “the facilitators encouraged the staff to self reflect and to look for areas that could be improved.” Support from the School Development Planning Support (SDPS) initiative and the Regional Curriculum Support Service was reported to be effective in helping teachers and schools plan the implementation of the curriculum.



Almost three-quarters of schools were found to have developed good plans for the Visual Arts. These schools employed a collaborative, consultative approach to planning based on the content and structure of the curriculum. Their school plans outlined a balanced approach to the exploration of the six strands and assigned equal emphasis to the *looking and responding* and *making art* strand units and to activities in two-dimensional and three-dimensional media. An emphasis was also placed on the creative process and on the effective development of skills and concepts.

Significantly, whole-school planning was found to be insufficiently developed in more than a quarter of the schools evaluated. In these instances there was an imbalance in planning for the six strands and two strand units, scant reference to the content of the work programme for pupils, and inadequate planning for skills and concepts development. In many of these schools the emphasis was on the generation of a plan rather than on the collaborative and co-operative nature of the planning process. Dates for review and prioritised action plans were not included. The inspectors found that in a third of the schools there were difficulties with regard to planning for continuity and progression in the programme offered to pupils. One inspector wrote: “Suitable reference is made to strands, strand units, content objectives, resources and methodologies but more detailed guidelines are needed to ensure progression and continuity from class to class and across strands.”

Formal whole-school review of the policy for Visual Arts was found to be documented in a little over a third of school planning documents, and action plans for future development were available in only



a small number of schools. These action plans gave priority to the *looking and responding* strand unit, the development of display areas, the organisation of storage facilities and the purchase of resources.

In many schools special duties post-holders were assigned responsibility for the promotion and development of the Visual Arts curriculum. In general, the allocated responsibilities related mainly to the acquisition, maintenance and distribution of equipment and resources. In a few schools this responsibility included the co-ordination, evaluation and review of the school plan. There is therefore potential for special duties post-holders to become more involved in curriculum leadership in the Visual Arts.

5.5 Individual teacher planning

The inspectors found that teachers' individual long-term planning was good in almost three-quarters of classroom settings and that it was related to the school plan and to the content and structure of the Primary School Curriculum (1999). Other features of good practice included planning for a broad and balanced approach to the strands and strand units, the development of an appropriate visual vocabulary, and activities in two-dimensional and three-dimensional media that provided suitable challenges for pupils.

Short-term planning was considered good in a little less than half the classrooms. Here, competent practice was found to include specific reference to the content objectives of the curriculum and to the development of concepts and skills linked to the age, ability and interest of pupils. In more than half the classrooms, however, teachers' individual planning had scope for development. In these instances lack of detail in the teachers' written preparation, an over-reliance on lists and topics, inadequate reference to the *looking and responding* strand unit and limited work in three-dimensional media were among the planning weaknesses found. In a minority of instances, classroom planning overemphasised "template" or replica art (i.e. where the outcomes of the art activity were the same for each pupil). In these classrooms short-term planning comprised a list of topics, with little or no reference to the curriculum documents. Such ineffective planning limited the implementation of a broad and balanced curriculum. It was also found that, in general, assessment was not included in teachers' long-term or short-term planning.

5.6 Differentiation

Although differentiated approaches and provision for special-needs pupils were not formally outlined in most whole-school or individual planning documents, practice observed by the inspectors suggested that this occurred frequently. Features of such practice included the appropriate management and adaptation of activities and the provision of additional materials and resources for pupils with a range of special educational needs.

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5.7 Time allocation to the Visual Arts

The curriculum guidelines recommend a time allocation for the Visual Arts of one hour per week. It appears that in almost all schools the recommended time was allocated; in addition, many teachers used blocked time for thematic and integrated approaches and for exploring a particular aspect of the programme in depth. In some schools teachers allocated a percentage of their weekly discretionary time to the Visual Arts curriculum.

5.8 Quality of classroom organisation and support for curriculum implementation

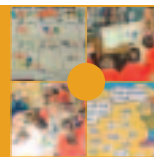
A significant profile was given to the subject in most classrooms, and pupils were encouraged to explore, interpret and enjoy art activities. The inspectors found that the use of effective integrated approaches enabled pupils to learn *through* as well as *about* art. In successful classrooms the pupils were responsible for and were active agents in the design and completion of their work. However, the inspectors also found that almost a quarter of classroom environments were not supportive of pupils' creativity. In such classrooms poor lesson stimulus, insufficient display and ineffective use of resources hindered pupils' spontaneity, initiative, and independence.

In most classrooms, commendable emphasis was placed on flexibility and freedom in obtaining access to, exploring and using a range of resources, materials and tools for all strands. One inspector commented that *"the breadth of resources now available is a significant support for more creative work,"* while another remarked that *"the annual class allocation of six bottles of paint and the set of brushes is a thing of the past."* However, the inspectors found that information and communication technologies were underutilised as a teaching and learning resource in most classrooms. For example, on-line galleries and computer art programs were not exploited fully.

Opportunities to develop sensitivity to visual surroundings and to observe the built and natural environment were afforded to pupils in most classrooms. Local features were used as a stimulus for individual design and expression. In a quarter of classrooms it was recommended that an additional emphasis be placed on the richness of the immediate world and that opportunities be provided for pupils to perceive, enjoy, invent and communicate visually.

The curriculum encourages schools to make use of community artists to enhance and enrich the school's provision in specific strands, so exposing pupils to a wide range of experiences. It was found that personnel from artist-in-residence schemes and from arts centres had been invited to many schools to give workshops, to support schools' arts weeks, and to talk to members of the staff about different curriculum strands. Several schools afforded pupils the opportunity to visit museums, galleries, and craft centres. These activities and excursions were funded from a variety of sources, including a visual arts grant issued to each school by the Department of Education and Science and various school initiatives and parents' association activities.

Parents' involvement in supporting the Visual Arts in schools appears to be limited. Parents were found to be involved only occasionally in policy formation or in contributing to and organising learning resources for the school in this curriculum area.



The majority of principals spoke positively about the range of supports and sources of professional development available with regard to the Visual Arts. They commended teachers' enthusiasm, their positive approach, and their dedication to the curriculum area. One principal stated that the Visual Arts had *"empowered teachers away from the 'can't draw, can't do art' perspective of the past."* Principals expressed their appreciation of the "hands-on" experience and curriculum input provided by PCSP at in-service. The majority of teachers praised the practical nature of these days and the opportunities to explore their own competence in creating art; a minority, however, found the in-service provision inadequate and stated that insufficient emphasis was placed on ensuring progression and continuity through the various strands of the curriculum.

5.9 Implementation of the strands and stand units

5.9.1 Making Art

Drawing

Drawing was implemented effectively in most classrooms. Features of good practice observed included an emphasis on the creative process, drawing and sketching ideas making use of other areas of the curriculum as stimuli, and attentive looking that afforded pupils the opportunity to create art that was personal.

In almost a quarter of classrooms, however, practice in *drawing* had scope for development. In these classrooms, age-appropriate activities were not provided, the development of a confident and expressive use of drawing media was limited, and drawing was incidental to other activities. The inspectors recommended that drawing be undertaken in a systematic manner, using a wide range of media and tools, and stated that a portfolio of both preparatory and completed work needs to be maintained. In this way stages of development and patterns of pupils' work could be monitored.

Paint and colour

The *paint and colour* strand was developed effectively in almost all classrooms. There was evidence of good practice in relation to pupils' engagement in the creative process, using a wide range of media and tools. Pupils were given opportunities to develop an understanding and appreciation of colour from the observation of natural and manufactured objects, and this was reflected in their work. Talk and discussion was frequently used to develop their visual vocabulary. Features of lessons included an emphasis on the development of techniques and skills. In a number of classrooms, however, little attention was given to this strand, and in other instances an overemphasis was placed on the *paint and colour* strand, resulting in an imbalance in strand provision.

Print

In the majority of schools there was evidence of good practice in relation to the *print* strand. Pupils had opportunities to engage in a variety of approaches that developed a range of skills and experimented with various print-making techniques. Weak practice was observed in a third of the classrooms. In these instances there was little evidence of planning, limited opportunities to

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experiment with a variety of print-making materials, tools and techniques, and a lack of emphasis on developing continuity and progression throughout the school.

Clay

Good practice in engagement with the *clay* strand was found in the majority of classrooms observed. A range of curricular areas was used as starting-points to stimulate work in clay. Pupils were reported to have opportunities to be active agents in the creative process and to design and make objects using their powers of invention and expression. However, there was little reference to this strand in teachers' planning, and insufficient attention was given to the development of skills and techniques appropriate to the age and development of the pupils in almost a third of classrooms.

Construction

In three-fifths of classrooms, activities and opportunities were provided for pupils to make imaginative and expressive use of materials to design and invent models in three-dimensional media in the *construction* strand. Imaginative interpretations of stimuli resulted in the creation of scenes that were linked to topics in English, Music, and local historical and geographical projects. However, there was little evidence of the inclusion of *construction* in teachers' planning or practice in two-fifths of the classrooms.

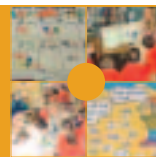
Fabric and fibre

Opportunities were provided in most classrooms for pupils to create imaginative inventions in fabric and fibre, especially in two-dimensional activities. Pupils regularly worked from their own experiences to construct, create and change fabric and fibre, using a variety of materials. However, in almost a quarter of classrooms weak practice was observed. In these classrooms there was limited reference to the provision for fabric and fibre activities in teachers' planning, little evidence of developmental work was available, and opportunities to create imaginative inventions in three-dimensional forms were limited.

5.9.2 Looking and responding to art

The provision of a broad and balanced programme of *making art* and *looking and responding to art* is an important emphasis of the Visual Arts curriculum. Both strand units afford pupils an opportunity to express themselves creatively and imaginatively. Access to different art styles, times and cultures provides stimuli for pupils and enables them to make connections between their observations and their own art. Exposure to a variety of art works enhances their sensitivity and promotes opportunities for questioning, discussion, reflection, and evaluation.

The inspectors found that the *looking and responding* strand unit was explored in slightly more than two-thirds of classrooms. Features of good practice observed included the development of an appropriate visual vocabulary, emphasis on attentive and critical looking skills, and opportunities to appreciate and enjoy art. However, while particular emphasis was placed on pupils' looking at and responding to their own work and to the work of their peers, little or no emphasis was placed on



looking and responding to the work of artists in all six strands.

In almost a third of classrooms an overemphasis was placed on the *making art* strand unit to the exclusion of the *looking and responding* strand unit. For example, one inspector noted that *“there is disproportionate practice regarding looking and responding across the six strands.”* In many schools undue emphasis was placed on responding to the work of artists in the *paint and colour* strand only. One inspector noted that *“there did not appear to be a process approach to looking and responding but rather occasional opportunities to discuss the work of painters only.”*

5.10 Teaching approaches

A number of different teaching approaches and methodologies are recommended to enable pupils to discuss, enjoy and critically respond to art. These include activity-based learning, pupil participation, the centrality of language and discussion, and the promotion of self-directed learning strategies. While direct teaching approaches are employed to enhance the pupil's development of skills, guided discovery is seen as the most appropriate teaching method: it helps teachers motivate, affirm and encourage pupils to explore and experiment.

Findings in relation to teaching approaches were generally positive. The majority of teachers were found to have comprehensively embraced the principles of the curriculum and displayed a willingness to experiment with different approaches in order to foster creativity. The majority of teachers employed a range of appropriate starting-points to stimulate pupils' interest and imagination. However, it was found that in some classrooms insufficient motivation, overprescriptive starting-points, lack of appropriate strategies and failure to provide stimuli prevented the realisation of curriculum objectives.

Structured activities ensured that pupils were effectively engaged in almost all classrooms. Commendable emphasis was placed on a *stimulus, activity and evaluation* approach to lessons. Positive affirmation, guided practice, teachers' enthusiasm, peer co-operation and a sense of ownership of their work all served to encourage and develop the pupils' forms of expression. However, in a small minority of classrooms it was found that pupils' creativity was hindered through the use of “templates,” poor lesson stimulus, inadequate attention to differentiation, and insufficient opportunities for individual expression.

The inspectors found that the majority of teachers used a range of guided-discovery methods. Careful explanations and demonstrations were seen to enable the development of skills. One inspector reported that *“direct teaching is effectively used to focus the pupils' attention on safety issues in relation to the use of the tools and to promote the development of key skills and techniques.”* However, poor lesson objectives, lack of opportunity to develop specific skills or undue emphasis on the making of pre-designed products were found in a number of classrooms.

Structured talk and discussion was an integral aspect of lessons in almost all classrooms, and the findings suggest that it was well facilitated. In one classroom it was found that *“significant opportunities are given to children to pose questions, reflect on what they see and to become critically aware.”* However, the inspectors also found that in several classrooms there was little emphasis on

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the development or use of visual language.

5.11 Approaches to learning

In the Visual Arts curriculum, important approaches to learning include encouraging pupils to explore and experiment, to work from experience, to use the environment, and to design their work. Pupils' achievements are to be celebrated and recognised through the regular updating of display and designated exhibition areas.

In almost all classrooms pupils were afforded the opportunity to engage in activity-based learning.

Features of good practice included the purposeful guidance of the activity by the teacher, the creation of art that was personal, and an appropriate emphasis placed on motivating pupils to explore and experiment with a wide range of materials, tools, and techniques. One inspector noted that *"teacher instruction was clear and the classroom atmosphere encouraged pupils to try and to experiment."*

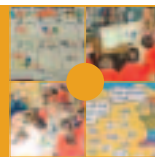
In the majority of instances teachers supported and encouraged pupils to engage in decision-making. It was found that pupils were given regular opportunities to explore, to experiment, to observe and to make independent and collaborative decisions through working in pairs and in groups. Most teachers encouraged individuality in practice and were generally supportive of the pupils' interpretation of tasks. However, in a few classrooms it was found that activities were almost entirely teacher-directed, with an overemphasis on copying and the production of "template" or formulaic art, at the expense of creativity. Such an overprescriptive approach limited the opportunities for pupils to create and design their own work.

The provision for individual difference was considered effective in more than three-quarters of classrooms. Pupils with learning difficulties were catered for kindly and sensitively and were actively encouraged to participate in all activities. One inspector noted that *"children with varying levels of ability are supported to address the task in their own unique way."* Another reported that *"pupils are learning at an appropriate pace and developing suitable skills."*

5.12 Assessment and achievement

Assessment is identified as one of the defining features of the Primary School Curriculum (1999) and is *"an integral part of the teaching and learning process in Visual Arts education."* An effective whole-school assessment policy in the Visual Arts involves the monitoring of pupils' progress, the maintenance of pupil records and portfolios, and using the outcomes of assessment to further inform teaching and learning.

5.12.1 Whole-school policies on assessment



One of the most significant omissions in whole-school policies was the lack of reference to a systematic and coherent approach to the assessment of pupils in the Visual Arts. In most schools, whole-school approaches to assessment were ineffective. Most school plans did not include assessment strategies for the Visual Arts, and even where a small number of schools had outlined an assessment strategy, this planning did not detail a systematic approach to monitoring and assessing pupils' achievement. Furthermore, the inspectors often found that even where assessment strategies were outlined there was a failure to implement them.

5.12.2 Classroom practice in relation to assessment

No reference was made to formal assessment in three-quarters of teachers' individual planning, and systematic approaches were not employed to monitor or record pupils' progress. For example, the inspectors found that *"assessment is limited to pupils' responses to peer work"* and that *"further work in the area of assessment is needed."* The inspectors recommended that assessment strategies be outlined in teachers' individual planning and that systematic records of achievement, including portfolios, work samples, and photographic samples need to be maintained. In interviews it was found that principals and teachers were aware that a range of structured assessment strategies needed to be developed and implemented in their schools.

In almost two-thirds of classrooms the main assessment strategy used was teacher observation. However, these observations were unrecorded in the main. One inspector noted that the *"teacher observes...but does not maintain any formal record,"* while another found that *"written records/documents of pupil achievement are not systematically structured and/or recorded."*

In four-fifths of classrooms, records, portfolios, check-lists or anecdotal notes were not maintained. In the schools where portfolios of work were compiled it was found that their use was limited, sporadic, and undated. In most instances they were used neither to record pupils' achievement and understanding of skills and concepts nor to inform teaching and learning.

Teacher-designed tasks were not employed for assessment purposes in almost two-thirds of classrooms, and teachers' planning documents did not contain specific reference to these tasks. One inspector stated: *"Although several teacher designed tasks are given to pupils they are not given with assessment in mind."* Where appropriate teacher-designed tasks were assigned, positive features included the recording of progression, development and understanding of skills and concepts.

5.13 Conclusions and implications

In summary, therefore, the findings in relation to the quality of planning for the Visual Arts are mixed. Most schools developed effective whole-school plans. Most long-term and short-term planning in the Visual Arts was based on the structure and content of the curriculum. More than half the teachers did not adequately plan for their pupils' skills or concept development. In addition, some teachers' planning consisted of an emphasis on "template" art and contained lists

of topics to be completed, with little or no reference to the curriculum documents. In general, little attention was given to planning for assessment of the Visual Arts. In most instances prominence was given to the subject through appropriate time allocation and timetabling, including block and discretionary curriculum time.

The implementation of the Visual Arts curriculum was found to be generally successful. Due emphasis was placed on the creation of stimulating and organised classroom environments, the provision of a broad and balanced curriculum, and the availability of a wide range of materials and resources. Commendable emphasis was placed on enjoyment, active participation, and opportunities to explore and experiment with a wide range of media. However, the potential of ICT to broaden pupils' experience and understanding of art was not exploited in most primary schools.

Teachers displayed an understanding of the structure and content of the Visual Arts curriculum and, in general, were successfully implementing the essential emphases. In the main, creative and effective use was made of stimuli, integration and use of the environment in teaching approaches. There was an overemphasis in some classrooms on particular strands, such as *paint and colour*, on two-dimensional work, and on *making art*. Additional emphasis, therefore, should be placed on ensuring that pupils have access to each strand and that the *looking and responding* strand unit is emphasised in all six strands.

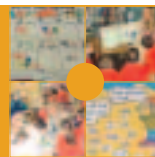
The findings suggest that formal assessment was neither planned nor implemented in most schools. A range of assessment modes outlined in the curriculum, including portfolios and teacher-designed tasks, needs to be incorporated in all planning documents. A regular review of the Visual Arts programme should provide teachers with information on pupils' level of involvement and stages of development and enable activities to be planned accordingly.

5.14 Recommendations

The following is a summary of the main recommendations:

5.14.1 Whole-school planning

- Principals and teachers, at whole-school level, should engage in a review and evaluation of the plan for Visual Arts.
- The potential for special duties post-holders to become more involved in curriculum leadership and co-ordination should be further developed in primary schools. These curriculum co-ordinators should undertake responsibilities for monitoring the implementation and evaluation of the whole-school programme.
- Better linkage between whole-school planning and teachers' planning is required in order to ensure a whole-school approach to the teaching of the Visual Arts.



5.14.2 Classroom organisation and support for implementation

- The potential of ICT to broaden pupils' experience and understanding was not exploited in most primary schools. Additional guidance should be provided to teachers that would facilitate the use of these resources.
- Boards of management, principals and school management teams have a responsibility to ensure that grant aid given by the DES to provide resources for curriculum areas is appropriately allocated for this purpose.
- There is a need for schools to ensure that classroom environments are conducive to pupils' learning. PCSP and SDP facilitators should assist schools in undertaking an audit of their resources and provide guidance in evaluating resource materials.

5.14.3 Implementation of the strands and the strand units

- All six strands and the two strand units of the Visual Arts curriculum should be implemented in a structured manner, and each pupil should have a balance of art activities and experiences in each strand. An equal emphasis should be placed on the strand units of *making art* and *looking and responding*.
- Particular emphasis should be placed on the development of the *looking and responding* strand unit in all six strands and on skills and techniques appropriate to the age of the pupil to ensure the implementation of a broad, balanced and developmental curriculum.

5.14.4 Approaches to teaching and learning

- The development of pupils' creativity and forms of expression is central to the Visual Arts curriculum. Commercial or teacher-designed "templates" should be avoided in lessons, and pupils should be provided with opportunities for individual expression.

5.14.5 Assessment

- Whole-school policies should include reference to a systematic approach to the assessment of pupils. Teachers require specific advice and guidance on how to assess pupils' progress and achievement in this area of the curriculum. The NCCA should provide teachers with guidance on appropriate assessment strategies in visual arts.
- Teachers should be provided with practical guidance on the use of portfolios as a strategy for formative assessment.



6 Conclusions and recommendations



This chapter presents the main findings and recommendations of the evaluation of curriculum implementation of English, Mathematics, and Visual Arts.

6.1 Main evaluation findings

6.1.1 Whole-school planning

All schools have addressed the issue of whole-school planning. However, the effectiveness of whole-school plans varies. Fig. 6.1 illustrates the percentage of schools that developed effective whole-school plans for English, Mathematics, or Visual Arts.

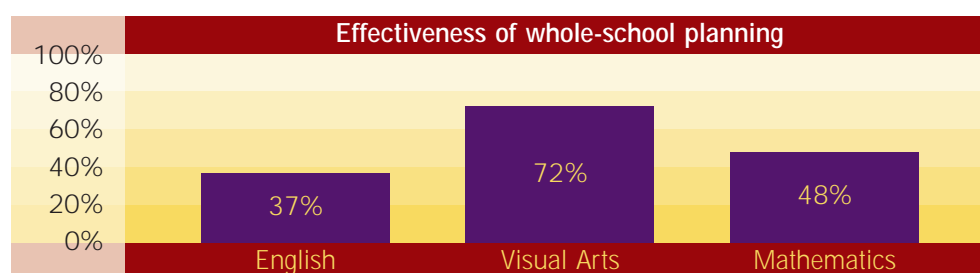


Figure 6.1: Effectiveness of whole-school planning for English, Visual Arts, and Mathematics

Where effective school plans were devised there was evidence of a collaborative and consultative approach to the planning process. In these schools whole-school plans significantly influenced individual teachers' classroom planning. There was a close alignment between the approaches and content objectives outlined in the curriculum statements, whole-school plans, and classroom planning.

In some schools planning documents were devised because they are obligatory rather than as a response to the school's need to contextualise the curriculum to meet its specific requirements. These planning documents had little impact on classroom practice.

A minority of schools had developed appropriate procedures and structures to facilitate the process of curriculum planning. Responsibilities for the co-ordination of whole-school planning were delegated to members of the school management team. These subject co-ordinators played an important role in leading, monitoring, communicating and reporting on the progress of whole-school planning.

6.1.2 Structure of the curriculum

In interviews, teachers discussed their familiarity with and understanding of the three curriculum areas. Most expressed the view that the mathematics curriculum was well structured, and they found that it was easy to plan for and to organise in their classrooms. They were enthusiastic about the "new" strands of *data* and *shape and space*. They expressed similar views about the Visual Arts curriculum and found that the structure and content of the curriculum was clear and easy to implement.

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The structure of the English curriculum presents difficulties for teachers. In general, they do not use the strands to plan their programmes in English, little integration is planned between the strands, and some teachers expressed the view that they find the strands difficult to comprehend.

6.1.3 Quality of classroom organisation and support for curriculum implementation

Quality of classroom environments

It was found that most classroom environments supported the implementation of the three curricular areas. In Visual Arts the classrooms were well organised and structured, and pupils had the resources, materials and tools to work creatively in the six strands. The quality and content of displays of work enhanced the school environment and demonstrated the importance attributed to the celebration of pupils' artistic work in the school.

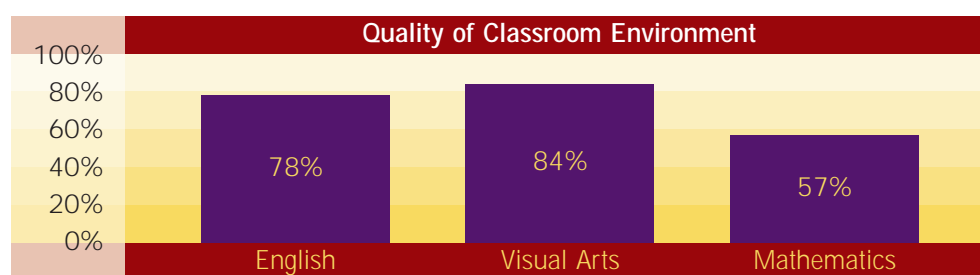


Figure 6.2: Quality of classroom environment in English, Mathematics, and Visual Arts

The majority of classrooms provided effective support for curriculum implementation in English. The provision of resources was good in these classrooms, and the pupils were encouraged to engage with a range of materials during the lessons. In Mathematics more than half the classrooms had displays of relevant mathematics illustrations, games, number lines, measuring instruments, mathematics labels and flash cards in a designated area of the classroom. However, there was scope for development in two-fifths of classrooms.

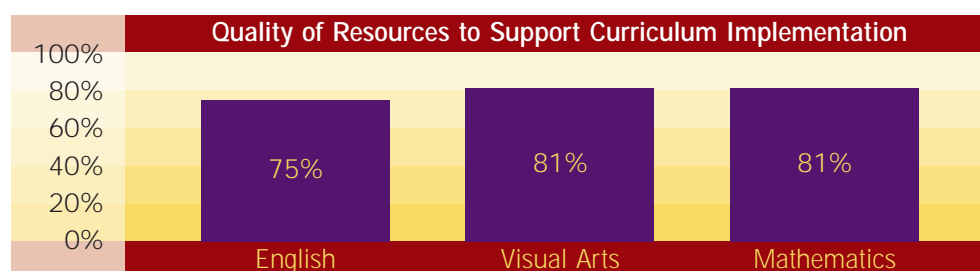
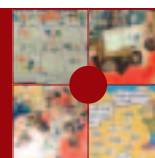


Figure 6.3: Quality of resources to support curriculum implementation in English, Mathematics, and Visual Arts

There was a significant under-use of information and communication technologies to support the implementation of the three curricular areas. While three-fifths of pupils used ICT to some extent to support their learning in English, only a quarter of pupils had similar experiences in Mathematics or in the Visual Arts.



Involvement of parents

Findings were varied in relation to parents' involvement in supporting the implementation of the curriculum and in their active participation in the life of the school. It was found that effective consultation and parental involvement to enhance their children's learning in English was encouraged in three-quarters of class settings. Parents were involved in shared reading schemes, and good home-school communication systems had been established.

In Mathematics there was limited involvement by parents, and positive parental involvement was observed in only approximately 5 per cent of schools. Where good practice was in evidence, the parents organised and developed learning resources for the school and were involved in the planning process. Furthermore, it was noted that changes of emphasis in mathematics teaching and learning were communicated to parents during information evenings.

Parents' involvement in supporting the Visual Arts in schools also appears to be limited. Parents were found to be involved only occasionally in policy formulation or in contributing to and organising learning resources for the school in this area.

Textbooks

Textbooks exert a dominant influence on teaching and learning in a significant number of classrooms. In these class settings the teaching tended to be didactic, and undemanding and repetitive learning tasks were provided for the pupils. There was little emphasis on the development of higher-order thinking skills, on nurturing pupils' creativity, or on encouraging pupils to respond emotionally and imaginatively. Teaching methodologies were restricted, and the essential emphases of the curriculum were not accorded due prominence. The quality of pupils' learning was found to have significant scope for development in these instances, and the pupils were not sufficiently interested or engaged in their learning.

6.1.4 Quality of whole-school curriculum provision

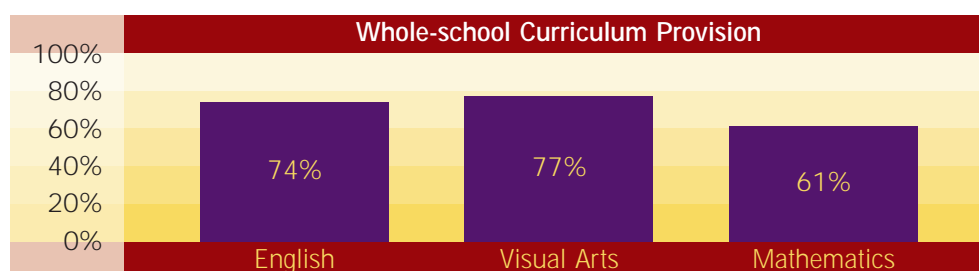


Figure 6.4: Quality of whole-school provision in English, Mathematics and Visual Arts

English

While the quality of curriculum provision was regarded as good in most classes, significant challenges are presented to schools and teachers as they endeavour to implement the full emphases and strands of the English curriculum. The majority of teachers were successfully implementing the *reading* strand

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unit. By comparison, there was poor implementation of the *writing* strand unit, with ineffective implementation in more than half the classrooms. There was an overdependence on workbook activities, which often resulted in pupils engaging in unchallenging and repetitive tasks. The findings suggest strongly that teachers require additional supports to broaden their teaching strategies and approaches and to further focus on the process approach to writing.

The majority of teachers were successful in implementing the *oral language* strand unit. However, in a significant number of classrooms the content objectives for language development were not emphasised sufficiently, and oral language was taught incidentally rather than explicitly.

Almost two-fifths of teachers were experiencing difficulties in fostering higher-order thinking skills through oral, reading and writing activities. It is of concern that only fair practice was noted in a quarter of classes in implementing the strands of *receptiveness to language, confidence and competence in using language, and developing cognitive abilities through language*. There was scope for development in 40 per cent of classes in ensuring that the principal focus of the *emotional and imaginative development through language* strand is achieved.

Mathematics

The quality of curriculum provision for Mathematics was good in three-fifths of classrooms. The findings in relation to individual teachers' implementation of the strands of the curriculum are positive. Most pupils were interested in and challenged by the activities that were structured for them. In the majority of schools the pupils were provided with a range of problems designed to develop the skills of communicating, reasoning, and connecting. Guided-discovery approaches were in evidence, and most pupils used concrete materials as they engaged in learning activities. Additional materials to support mathematics teaching were required in a quarter of classrooms, and 40 per cent of classrooms did not provide a "maths-rich" environment.

Significant shortcomings were found in a third of classrooms. These included an over-reliance on traditional textbook problems, which did not promote the development of specific problem-solving skills. In almost a third of schools the potential of the environment to contextualise learning was not fully exploited and was often limited to the strand of *measures*. In almost a third of classrooms learning was passive and learning activities lacked focus and required more purposeful direction by the teacher.

Visual arts

The implementation of the Visual Arts curriculum was considered to be generally successful. Teachers were implementing the essential emphases effectively. Creative use was made of stimuli, integration and use of the environment in teaching approaches. However, in some classrooms there was an overemphasis on particular strands, such as *paint and colour*, on two-dimensional work, and on making art. The *looking and responding* strand unit was not emphasised sufficiently in all six strands. In some classrooms 'template' art (where the pupils produce the same artefact, drawing, or painting) was a common feature of the Visual Arts programme.



6.1.5 Differentiation

The majority of teachers planned and provided for individual differences in pupils' ability, attainment and learning style in English and in Mathematics. While the majority of teachers did not plan for individual differences in Visual Arts, the inspectors commented favourably on the positive elements of practice observed.

Many teachers differentiated their teaching according to class and ability levels. There is a need for additional guidance for schools on how to adapt the curriculum to meet the differing needs of individual pupils and groups of pupils, especially in multi-grade classes.

6.1.6 Assessment

Most of the evaluative statements made by the inspectors suggest that assessment policy and practice are aspects of provision that require significant attention and improvement in English, Visual Arts, and Mathematics. Most schools had not developed whole-school plans for assessment, and where these were available the effectiveness of these plans was regarded as weak or required significant development. While most schools use a variety of assessment tools to gather information about pupils' attainment in English and Mathematics, the analysis and use of the data gathered was limited. Most schools did not use assessment data to inform teaching and learning. Teacher observation was the most commonly referenced assessment mode recorded in teachers' planning, especially in Visual Arts. However, a record of these observations was not available in most classrooms.

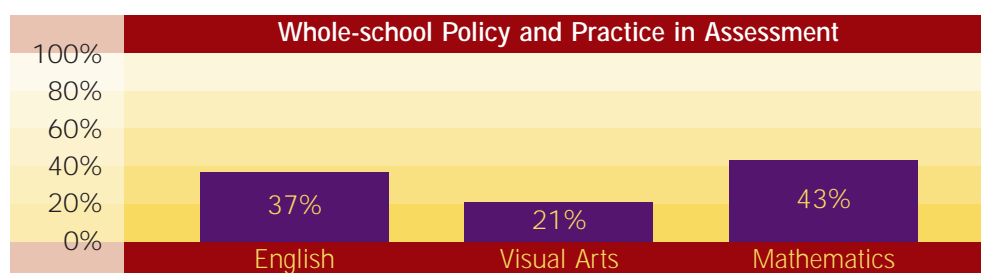


Figure 6.5: Quality of whole-school assessment policy and practice in English, Mathematics, and Visual Arts

6.2 Recommendations

6.2.1 Planning

- Teachers and principals should review the influence of whole-school plans on teaching practices and classroom planning. This review should be undertaken as part of the school self-review process. The DES publication *Looking at Our School: An Aid to Self-Evaluation in Primary Schools* should be used by school staffs in the process. Whole-school plans need to have a stronger influence on teaching methodologies and classroom practices.
- Members of school management teams should undertake a more active role in the development and review of whole-school plans and should monitor their implementation. They should be assigned responsibilities for curricular areas and should work with other members of the staff to

Conclusions and recommendations

ensure that whole-school plans are implemented in all classrooms. The focus of planning should always be on improving teaching and learning in the school.

- The relevant support services should emphasise the link between the curriculum, the school plan, and individual planning.
- Additional guidelines should be provided that encourage teachers to concentrate on the close connection between teaching objectives and learning outcomes and assist them in ensuring that their teaching meets a range of pupils' needs.

6.2.2 Classroom planning

- The curriculum statement, which outlines specific content objectives, should become the primary basis for planning in each subject area. Teachers should become familiar with the overall aims, content objectives, and guidelines. The starting point for classroom planning should be the specific objectives of the curriculum, rather than textbooks. Setting clear, attainable short-term objectives will assist teachers in clarifying learning outcomes and will contribute to effective assessment strategies.
- The NCCA and the support services should provide clear guidance to teachers on lesson structures for English reading, oral language development and writing at each class level.
- Exemplars to support the teaching of discrete lessons in oral language at each class level, should also be devised. Teachers should be provided with clear guidance on the timetabling and organisation of oral language lessons. The support services should emphasise the importance of teaching oral language as a discrete and integral aspect of the English curriculum.

6.2.3 Curriculum structure

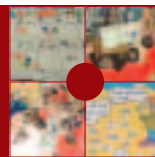
- There is a need to present the English curriculum in a format that is more easily understood and accessible for teachers. The proposed structure should outline content objectives for oral language development, reading, and writing.

6.2.4 Classroom organisation and support for implementation

- The potential of ICT to broaden pupils' experience and understanding in the various curriculum areas is not exploited in most primary schools. Additional guidance should be provided to teachers by the National Centre for Technology in Education (NCTE) to facilitate their use of this resource.

6.2.5 Teaching approaches and methodologies

- The development of higher-order thinking skills should be addressed further in both literacy and numeracy.



- A significant number of schools should create a “mathematics-rich” environment in the classrooms and employ concrete materials to a much greater extent in the teaching of numeracy.
- Schools should ensure much greater collaboration between class teachers and teachers providing supplementary teaching in the implementation of differentiated approaches and in the preparation and implementation of individual programmes (IPLPs). Supplementary support for pupils in literacy and numeracy should be provided in the context of an integrated and co-ordinated educational experience.

6.2.6 Implementation of the English curriculum

- The importance of cognitive skills through structured oral language, reading and writing activities needs further attention in schools.
- Pupils’ emotional and imaginative response is critical to the teaching of English, and the development of these skills is particularly necessary for pupils in the middle and senior classes. It is essential that this emphasis be maintained in any curriculum documents to be issued in the future.
- There is a need for all education partners to become more active in developing a culture of continuous improvement in the teaching of reading in schools. The various support services should concentrate on assisting teachers to develop their understanding of the teaching of reading. The provision of additional exemplar materials and web site facilities should be considered by the NCCA.
- Improvement in the quality of the teaching of writing should now become a priority for all involved in the implementation of the English curriculum. Teachers’ understanding of the writing process should be enhanced, and additional professional development is required on approaches to writing such as shared writing, modelling writing, scaffolding pupils’ writing, and conferencing.

6.2.7 Implementation of the Mathematics curriculum

- A further emphasis should be placed on the development of estimation strategies. The support services should provide additional guidance to teachers on practical strategies for promoting estimation skills at different class levels.
- Additional emphasis should be placed on the *data* strand of the curriculum. Supports for teachers should be provided to assist them in constructing meaningful contexts that will facilitate pupils in developing skills in data collection, data analysis, and constructing and interpreting graphs.

6.2.8 Implementation of the Visual Arts curriculum

- All six strands and the two strand units should be implemented in a consistent manner, and each pupil should have a balance of art activities and experiences in each strand. An equal emphasis should be placed on the strand units *making art* and *looking and responding to art*.

Conclusions and recommendations

- Particular emphasis should be placed on the development of the *looking and responding* strand unit in all six strands and on skills and techniques appropriate to the age of the pupil to ensure the implementation of a broad, balanced and developmental curriculum.

6.2.9 *Assessment and pupils' achievement*

- There is a need for boards of management and principals to concentrate on and provide leadership in assessment and achievement. High expectations and purposeful teaching should underpin progression in pupils' learning. It is essential that all schools have written school assessment policies incorporated in the overall school plan. This assessment policy should be clearly linked to the school plan for the various subject areas and incorporated in teachers' long-term and short-term planning at individual classroom level. Assessment should be used for formative purposes, and the emphasis should be on enhancing teaching and learning.
- The various support services, including the School Development Planning Support initiative and the Primary Curriculum Support Programme, together with the Department of Education and Science, the National Council for Curriculum and Assessment, and relevant agencies, should provide guidance to schools in relation to formative assessment strategies that can affect pupils' learning and achievement. The results of assessment need to be used by teachers more flexibly to inform teaching and learning. Further supports should be provided to schools to enable them to engage further with assessment issues, clarify what should be assessed, and specify the assessment tools that can be used.

6.2.10 *Parents' involvement*

- Schools should explore ways of supporting parents in becoming more fully involved in the education of their children. Case studies illustrating successful initiatives by schools in relation to the involvement of parents in their children's education should be published by the Home School Community Liaison (HSCL) service and disseminated to all schools.
- Further consultation and involvement with parents in promoting language development and literacy skills should be promoted at school level. Strategies to ensure parents' involvement in the English curriculum should be included in whole-school planning documents.
- The NCCA should devise guidelines and video materials for parents that can be used in the home to promote literacy and oracy development, especially for young children. These materials should influence positively the development of language in the home through the normal parent-child interaction process. These materials would support teachers and parents in communicating essential messages and enhance information-sharing.



6.2.11 School management and principal teachers

- The capacity of the school management to develop, monitor and implement policies for the improvement of teaching and learning should be developed further.
- Special duties post-holders should be assigned specific curriculum leadership duties and should have responsibility for the co-ordination of curriculum implementation and evaluation at whole-school level.

6.3 Conclusion

This evaluation, conducted at a relatively early stage of curriculum implementation, finds that the majority of schools and teachers have adopted the teaching approaches, content and essential emphases of the English, Visual Arts and Mathematics curricula. For a significant minority of schools and teachers, much further development is required. They should engage systematically in curriculum review and plan for development and improvement. Schools and teachers should assume responsibility for their professional development and identify and address inconsistencies in curriculum provision.

It is intended that the outcomes of this evaluation should encourage debate on curriculum implementation throughout the educational spectrum. This report finds that the schools that were most successful in curriculum implementation had taken ownership of the process and did not depend solely on external support services to mediate the curriculum. The teachers in these schools were familiar with the curriculum documents, identified where improvement in provision was required in their schools, and worked towards a shared vision. Successful schools had developed the capacity of their staff to lead and manage curriculum change.

Schools are at different levels of engagement with the curriculum. It is essential that those schools which are experiencing difficulties in implementing the curriculum should engage in a process of self-review and action planning. The support services should direct their attention towards schools that are still at an early stage of curriculum implementation or experiencing difficulties with certain aspects of subject areas.



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