CHILD, YOUTH & FAMILY DEVELOPMENT
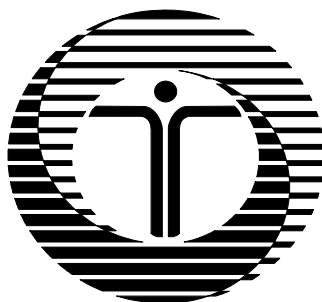
HUMAN SCIENCES RESEARCH COUNCIL

Report A: An analysis of the strengths and shortcomings of the current orientation documents for the implementation of the Revised National Curriculum Statement in the Senior Phase

Report for the Curriculum Directorate, National Department of Education

Child, Youth and Family Development (HSRC)
Private Bag x41
Pretoria 0001
South Africa

Phone: 27-12- 302 2215
Fax: 27-12- 302- 2247
Email: uhoadley@hsrc.ac.za

Contents

INTRODUCTION

The 'Revised National Curriculum Statement Grades R-9 Orientation Programme – Senior Phase 2005' facilitator's and participant's manuals represent the official model for the training for the implementation of the Revised National Curriculum Statement (RNCS) at the Senior Phase (Grade 7, 8 and 9). The training for the implementation is to take place in 2005 for Grade 7 teachers, for implementation in schools in 2006. This report presents an analysis of the strengths and shortcomings of the current orientation documents, as set out in the Manuals. The report focuses on the participant's manual, and where appropriate makes reference to the facilitator's manual. The manuals differ only in that further explanatory notes and possible reposes/answers are included in the facilitator's manual. Recommendations regarding the use of the materials as a guide for future orientation are made.

The Manual is understood as a *guide*, from which provinces are free to select in order to construct a training programme for teachers. However, the manual is also presented in such a way that it may be used as it is. This is appropriate: the guide should facilitate training in situations where the capacity and time for the development of unique training programmes does not exist. The critique therefore treats the manual as a model training programme, whilst understanding that provinces are free to use it more selectively in constructing their training programmes.

The central assumptions underlying this critique of the training manuals is that the training should focus on:

a) Where teachers are, what they are doing and what changes are to be introduced.
b) Generic issues which provide background to the RNCS, and address the central design features of the new curriculum.
c) Learning Area specific training, which should form the bulk of the training, and should focus on the specifics and particularities of the learning area to allow for its practical implementation.

This report focuses on the extent to which the manuals address these dimensions in the training, and what the strengths and weaknesses are in terms of their potential to prepare teachers for the implementation of the revised curriculum.

The report starts with a description of the manual. It then considers the content of the manual in four sections: the 'Introduction', 'Generic', 'Assessment' and the 'Learning Area Specific' sections of the manual. Finally the report makes

recommendations regarding the Manuals for the preparation of teachers for the implementation of the RNCS.

DESCRIPTION OF THE TRAINING MANUAL

The Manual is divided into four sections: Introduction, Generic training, Assessment (generic) and Learning Area specific training. In the Introduction to the training manual the developers attempt to model an Outcomes-Based approach to the training orientation for the RNCS. In doing so they provide a set of five focus areas with five 'Orientation Learning Outcomes'. These in turn incorporate 11 'elements'. Following these is a list of 40 'Orientation Assessment Standards'. These are followed by 13 lesson plans under the title of 'The Integrated Orientation Programme'. The lesson plans outline the sequence in which the lesson plans are organized, and indicates the Orientation Learning Outcomes, Orientation Assessment Standards and the content addressed in the lesson plans, as well as the integration of assessment standards. 'Cross-cutting Orientation Learning Outcomes' and Orientation Assessment Standards' are also introduced.

This introduction is followed by a suggested programme. This programme reorders the lesson plans across five days. Each day of the training lasts from 8:00 to 18:00 on the first four days, and from 8:00 to 13:00 on the fifth day. Taking away the breaks, a total of 35 and a half hours is thus suggested for training, and including breaks, 45 hours over the course of five days. The weighting for the different aspects of the training is:

Generic = 25%
Assessment = 35%
Learning Area Specifics = 40%

The remainder of the manual consists of detailed lesson plans. These include a series of activities for participants to engage in. The first set of lesson plans comprise nine lesson plans, labelled 'Generic'. These are followed by three lesson plans for 'Assessment' and three lesson plans for each Learning Area specific section. Finally, a 'Generic' resource pack is provided at the end. There are 32 activities contained in the 'Generic' lesson plans, ten activities in the 'Assessment' lesson plans, and a wide range in the number of activities in the subject area lesson plans.

THE GENERIC SECTION

Introduction

The Manual commences by setting out a complicated and extensive array of five Focus Areas, eleven Elements, and forty assessment outcomes for the training. These dimensions of the training are also invested with a special vocabulary: The 'Integrated Orientation Programme', 'Orientation Learning Outcomes (OLC)', 'Orientation Assessment Standards (OAS)', and 'Cross-cutting OLO and OASs. The list of 40 Orientation Assessment Standards are often expressed in complex language, where the purpose is at times unclear. For example, OAS2 requires that participants "Analyse and deliberate on how the constitution of SA informs curriculum transformation", and OAS27 requires that the participant in the training "Define curriculum management and explain how it is influenced by a transformational context". OAS23 specifies that participants should "Identify and discuss the policy and non-policy imperatives that guide and impact on the design, development and implementation of the Learning Programmes".

Rather than clarify the aims of the training, and its design, the complex language serves to obfuscate what it is that the programme is setting out to achieve. Although the aim in the Introduction is clearly to model an outcomes based approach to designing a programme of learning, it does so through vocabulary and terminology that is likely to intimidate and alienate, rather than explicate.

These Orientation Assessment Standards (OAS) and Orientation Learning Outcomes (OLO) are then arranged into lesson plans, which include columns for the sequence, OLOs and OASs, Clusters, Integration, and Content. Again the complexity of the initial statement of the training programmes outcomes are presented in a way that does not make them easily available to the participants.

Contents of the Generic section

The purpose of the generic section of the manual is to introduce participants to the social and policy context of curriculum change, and to address several generic aspects of the RNCS. The generic section of the manual is divided into ten lesson plans covering the following areas:

Lesson Plan 1 - Transformation
Lesson Plan 2 - Theoretical framework of the RNCS
Lesson Plan 3 - Change management and Curriculum change
Lesson Plan 4 - OBE approach in RNCS
Lesson Plan 6 - Policies and legislation supporting curriculum transformation

Lesson Plan 7 - Managing diversity in teaching, learning and assessment
Lesson Plan 10 - Learning programmes in the senior phase
Lesson Plan 11 - Managing implementation of the RNCS in the Senior phase
Lesson Plan 12 – Managing resources
Lesson Plan 13 – Monitoring, evaluating and supporting the implementation of the
RNCS in the Senior Phase (Grade 7)

Lesson Plan 1 focuses on the general concept of transformation. *Lesson Plan 2* moves on to the Theoretical Framework of the RNCS. This section deals briefly with the shift from C2005 to RNCS. The bulk of the lesson plan, however, deals with the RNCS principles and the Constitutional values, rather than the specific design features of the RNCS in relation to these.

Lesson Plan 3 again focuses on issues of transformation and 'paradigm shift', and transformational leadership. Lesson 4 focuses on the OBE approach in the RNCS. Several activities in this lesson plan are unclear, and although relate to OBE, do not refer to the RNCS directly. Introduced within one activity is the new concept of 'Eight Multiple Intelligences and Learning Styles'. The focus thus becomes diffuse, and the introduction of too much terminology does not facilitate understanding of the key aspects of OBE as embodied in the RNCS.

Lesson Plan 6 centres around policy and legislation supporting curriculum transformation. The focus in this section is broad, covering a wide range of policies. As presented, the relevance of these policies to the RNCS is attenuated.

Lesson Plan 7 is about managing diversity in teaching, learning and assessment. Activity 7.1. although raising interesting issues, does not provide participants the means to engage with important questions regarding barriers to learning. Activity 7.2 deals in detail with different kinds of barriers and provides a useful mapping of the different levels of barriers. A detailed set of notes and exemplars are then presented in order to explain the implications for the relationship between context and content and method of presentation of learning and assessment. The presentation is dense, and does not allow for teachers' application. The case is similar in the discussion of multi-grade and multi-level.

Lesson Plan 10 deals with the development of learning programmes. Again the focus is on policy, and its relation to planning. Generic issues related to the three levels of planning are dealt with briefly. Lesson Plan 11 raises the issue of the split phase as a topic for discussion, but does not propose any concrete or practical solutions. The 'possible/suggested responses' in the facilitator's guide largely restate the problem and raises questions but no concrete solutions are proposed.

Lesson Plan 12 deals with managing resources, and focuses on curriculum planning at the level of the school. The section deals with the construction of school development plans and policies, and 'Curriculum structures' within the school. It is questionable whether this should form part of the training for the implementation of the RNCS for teachers. Again, a lot of information in a short space of time, extraneous to the core issues of the curriculum is introduced. Activity 12.2 deals directly with the management of LTSM and human resources. Again, references to the IQMS, to textbook procurement and management issues do not contribute directly to teachers understanding of the RNCS. It is notable that this lesson plan does not feature in the timetable for the 5 day training at the beginning of the manual. The Lesson Plan ends with a section and activity on external and internal factors influencing the timetable.

Lesson Plan 13 considers the monitoring, evaluating and supporting of the implementation of the RNCS. Like Lesson Plan 11 and 12, this lesson is not included in the timetable for training given in the manual. It is unclear how these issues relate to *teachers* implementation of the RNCS. Should they be aimed at provincial officials or trainers, then this should be indicated clearly, and its exclusion from the training timetable explained. Further, as it stands the complex processes of monitoring, evaluation and support are dealt with very superficially.

A number of specific issues related to the Lesson Plans in the Generic section presented above are made below.

Starting point

If we take the earlier contention that the central purpose of the training is to shift teachers from one understanding of the curriculum to a revised understanding, then it is necessary to start where the teachers are, and their current understanding. Insufficient time is spent on clarifying (through activities or discursively) what has been revised in the new curriculum. There are also no references to what teachers are currently doing, nor opportunities for them to express their current understandings of outcomes-based education, their current planning, assessment and teaching activities.

In considering the move from C2005 to the RNCS the following aspects have fundamentally changed, and refer largely to the design and specificity of the curriculum:

- The streamlining and simplification of the <u>design,</u> including the abandonment of phase organisers, programme organisers, replaced with a learning programme, work schedule and lesson plan. Range statements, assessment

criteria, performance indicators and expected levels performance were also streamlined are replaced by learning outcomes and assessment standards.

- There is greater <u>specification</u> of the knowledge focus and concepts of each learning area. Progression, pace and sequencing per grade is specified more closely.
- The number of subject areas has remained the same for the senior phase, but some of their names have been <u>simplified</u> (for example, Mathematics Literacy, Mathematics, and Mathematical Sciences is now simply 'Mathematics.')
- <u>Time allocations</u> for the different subjects have changed.
- <u>Human rights</u> issues have been strengthened.

These crucial changes are not made explicit at the start of the generic section. Activity 2.3 should be at the beginning of the training, and should be extended. The manual does not make it clear from the outset what lies at the heart of the training. Rather it sets out a complex set of foci, elements, learning outcomes and assessment standards.

The purpose and central thrust of training needs to be started clearly and simply in a short paragraph at the start of the manual. The outcomes and assessment standards need to be reduced and made clear. If these terms are to be used at all, the same vocabulary as that of the RNCS should be used (i.e. Learning Outcomes and Assessment Standards, rather than Orientation Learning Outcomes and Orientation Assessment Standards).

The training should start with a clear articulation of the changes to C2005 in the RNCS, in terms of structure and design. The enduring principles and aspects that have remained unchanged should be highlighted. Teachers at the start need to be given space to raise key questions in relation to the curriculum change. These would then be addressed in the course of the training.

Number of activities

There are a total of 32 activities in the generic section. These, according to the timetable, are spread over a period of 11 hours. The number of activities over such a period of time is likely to result in a thinning out of the learning. For example, in Activity 6.1 teachers grapple with 12 different policies in a one hour period.

Many of the activities are complex and require that participants deal with complex issues in a short space of time. Some activities also introduce too many concepts at once, which is confusing. It is therefore unlikely that teachers will reach any depth of understanding.

The number and breadth of the activities needs to be reduced in order to focus on a smaller number of key concepts to allow for deeper engagement with the issues. Some of the activities would benefit from revision in order to attain greater clarity and depth.

Coverage

The generic section of the manual attempts to cover too much. Selections in terms of the key purposes of the training need to be made more carefully. For example, Lesson Plans 1, 3 and 6 could form a single session on curriculum change and policy in order to contextualize the RNCS. The key issues relevant to the implementation of the curriculum at the level of the generic should be identified and dealt with in depth. These issues may include:

- The central shifts from C2005 to the RNCS: changes and continuity.
- Key design features of the new curriculum, and how they are related.
- Policies affecting how the curriculum is implemented
- Managing diversity in teaching, learning and assessment
- Developing learning programmes

Terminology

New terminology should be introduced only where absolutely necessary and where this relates directly to the RNCS. To introduce such terms as 'transformational context', 'paradigm shift', and 'multiple intelligences' takes up valuable time, and is likely to be alienating for some teachers. It is more important to focus on the terminology used in the curriculum documents and to explicate these. The issue of multiple intelligences arises in all the learning area sections as well and the section on assessment. It is not clear why 'different learning styles' is not used, rather than 'Multiple Intelligences' which appears to refer to the same issues and is simpler for participants to grasp.

Political emphasis

There is a strong political emphasis in the generic section of the manual. Certain sections of the programme serve purely political rather than practical training ends. The purpose is often to persuade, rather than explain. Extensive periods of time are spent engaging teachers in the consideration of transformation and the need for transformation, and issues such as paradigm shift.

This is clearly important, but much of this will come through and be embedded in the actual curriculum itself. So, in the interests of teacher learning, it may be better

to keep the focus on a clear explication of the structure and practical implementation of the RNCS. The relevant issues from the policies that pertain directly to the RNCS could be extracted if necessary.

There is excessive emphasis on an extensive number of policies. Whilst teachers' understanding of these policies in terms of the broader context of their work is important, it is not as essential in this instance as it is of the RNCS. This kind of understanding should constitute background and context for the training, and be summarily presented in one page. Also all teachers have been provided with a 'Policy Handbook for Education' by the ELRC, containing all the relevant policies. If they are not familiar with policy they have the materials to become so. Issues that pertain to education more broadly should not be addressed in this training manual. If the training is to be successful it needs to be focused and directed towards the implementation of the RNCS *in particular*.

The number of activities focusing on the policies should be reduced. Key policies, and the issues pertaining directly to the RNCS should be extracted and presented in summary. This should take no longer than half a day of training.

ASSESSMENT SECTION

The short section on assessment deals with a range of generic issues around assessment in relation to two lesson plans:

Lesson plan 8 - Outcomes-based assessment
Lesson plan 9 - Managing Assessment

Lesson Plan 8 focuses on assessment in an outcomes based framework. It deals with topics such as assessment principles, the role of assessment standards, concepts relating to assessment and different types of assessment (criterion referenced and norm referenced assessment), recording and reporting.

Lesson plan 9 - Managing Assessment – also focuses on issues around recording and reporting, and addresses briefly the issue of the split phase for discussion, and school level practices with respect to assessment.

The generic section on assessment suffices in explicating the central principles and features of assessment in the RNCS. The challenge is the practical application of these principles in relation to specific Learning Areas. This will be addressed further below, but a key issue is raised here. There are two documents available to teachers in preparing assessment. The one is the section on assessment at the end of each Learning Area Statement document. This section deals with generic issues relating to assessment. The other is the Assessment Policy for the General Education

and Training Band, Grades R-9 and ABET (December, 1998). A number of issues in the latter document are not applicable to the RNCS. For example, the credit allocation and weighting of assessment outcomes does not apply. Also the Specific Outcomes for C2005 referred to in the document have changed for the RNCS. Thus teachers do not have an adequate resource for the planning of weighting, progression and integration and clustering in the various Learning Areas. Although some of these issues are addressed in some of the Teacher's Guides, issues around the procedures and practices relating to assessment need to be clarified and made available to teachers urgently.

LEARNING AREA SPECIFIC TRAINING

Structure of the learning area specific training

Following the section on assessment in the training manual is the Learning Area specific training. Each Learning Area has a separate section. These learning area sections are organised into three lesson plans:

Lesson Plan 5: Theoretical framework of the RNCS
Lesson Plan 7: Managing diversity
Lesson Plan 8: Learning Programmes in the Senior Phase

These lesson plans form the basis for the subject specific training and structure the presentation of the series of activities. However, the logical development of ideas, and the careful introduction of concepts varies between the Learning Areas. The logic is clearest in the Natural Sciences, where and incremental and carefully scaffolded series of activities introduce concepts and their relationship with reference to clear and subject-specific examples. In language the series of activities is least clear: The logic of the development of activities is rendered unclear largely through making constant distinctions between home language, first language and second additional language. Although these distinctions are important, issues like conceptual progression in Languages, and the key design features of the curriculum and assessment in relation to Languages are not adequately addressed.

Number of activities

As in the Generic section, there are too many activities in several of the Learning Area sections. The languages section of the manual contains thirty different activities for participants to engage in. The vast majority of these activities entail groupwork with subsequent reporting back to plenary. Because of the number of activities, and range of issues dealt with, these issues are dealt with quite superficially. In contrast the Natural Sciences section contains fourteen clear,

detailed and useful lesson plans, which indicate how teachers integrate the different elements of the curriculum. The Natural Sciences deal specifically with the core knowledge and concepts and relate these to the Learning Outcomes, Assessment Standards, resources, knowledge focus/concepts/content, integration, assessment, sequencing.

Type of activities

The Learning Areas differ in the clarity, type and duration of activities. The Natural Sciences is again exemplary in providing activities that are clear and simple, focusing on a particular concept or set of relationships between concepts. These activities are logically developed, and an explicit programme of learning for participants is carefully scaffolded and developed. The result is potential depth in learning.

The Learning Area sections also vary in the extent to which they present or refer to discursive sources. These are often referred to in the Teacher's Guide, or presented in the form of 'readings' which convey information which teachers are then given an opportunity to use. In this way a clear explication of the information needed to complete the activities is presented. The Technology Learning Area provides further reading in the form of discursive notes on various sections. These are useful in drawing out the key issues and expanding on them. The EMS Learning Area also refers extensively to the Teacher's Guide. The Mathematics and Natural Sciences Learning Area sections provide extensive opportunities through the activities for participants to engage with and read through the Teacher's Guide.

There is a preponderance of group work in all the activities. This leads to a monotony in the pedagogy. Pair work, and individual work is rare. Natural Sciences is again an exception where a number of activities are done individually or in pairs.

Some activities are poorly constructed, and inappropriate for developing conceptual understanding. The following is an example taken from the Arts and Culture Learning Area section:

Identify and write down the teaching and learning strategies that you have selected for the activities in your lesson plans
You should also indicate the assessment strategies that you are going to use
Construct a few sentences on these strategies. The sentences should form a story or a rhyme that can be used as a song or a rap song
Form groups of four share your ideas and compose one consolidated song/rap. Combine the song with dance movements.
Link up with another group and while the one group performs the other group will assess their performance. You can use the provided list of criteria for your assessment

The activity is both confusing and complex, and the methodology in relation to conceptual development is questionable. Here teachers are required to identify learning strategies, assessment strategies and develop or use assessment criteria. At the same time they are required to devise a rap/song with dance movements. This is all to be done in the space of 10 minutes. In almost all the Arts and Culture activities the time allocations for activities are unrealistic, undermining depth in learning.

Language and terminology

Most of the Learning Areas introduce the vocabulary of the RNCS and present explanations of concepts/design features. In all, however, the concept of Multiple Intelligences is introduced. As stated above, it is not clear why 'Learning Styles' in this regard does not suffice. It appears unnecessary to introduce a new concept that does not pertain directly to the RNCS, and that can be expressed in simpler terms.

The Arts and Culture learning Area is the only other section where additional terminology is introduced – 'design down and deliver up', 'Bloom's Taxonomy', and SPARK (which stands for Skills, Product, Attitude/Values, Reasoning, Knowledge). Again, insofar as possible the introduction of new terminology should be minimized and restricted to what is absolutely necessary in relation to the RNCS. Additional terminology is obfuscating and alienating.

Content of the Learning Area specific training

The Lesson Plans for the subject specific training (Theoretical framework of the RNCS; Managing diversity; and Learning Programmes in the Senior Phase) direct the content of the learning area training sections. At the same time, certain key issues are either not dealt with, or dealt with in insufficient depth. In order to interrogate the training outlined in each of the learning areas, two sets of documents were consulted in order to evaluate whether or not the key issues pertaining to the implementation of the RNCS in specific Learning Areas were addressed. The two sets of documents were the 'Learning Area Statement' and the 'Teacher's Guide for the development of Learning Programmes' for each of the Learning Areas.

The Learning Area Statements are the official inscriptions of the RNCS that teachers are expected to implement. Although they were developed according to the same framework and philosophy, differences between them do exist in relation to the peculiarities of the particular Learning Areas. These need to be explicated in the training.

The Teacher Guides for the Development of Learning Programmes for each of the learning areas are also central in a consideration of the training and implementation of the RNCS. This is because they were designed by the working groups for each of the Learning Areas. The groups were asked in developing the teacher guides to develop an implementation guide for teachers to use. In this way the working groups in many instances were able to clarify issues in the Learning Area Statements, address gaps and questions, and provide practical assistance to teachers in implementing the revised curriculum.

The key features of the RNCS, from structure and design, to assessment and planning were extracted from the two sets of documents in order to evaluate whether the training in specific learning areas addressed the key aspects of the Learning Area for the implementation of the RNCS. These features are organized under three headings:

1.   Design elements of the RNCS and their relationships

This includes the explication of the **Learning Area focus**; **Learning Outcomes**; **Assessment Standards**; **Knowledge focus, contents and concepts**; **Critical and developmental outcomes** and the **RNCS principles**. It also shows the **relationships** between the different elements.

2.   Assessment

Includes an explication of the **nature of assessment** in a particular Learning Area, **Assessment strategies**, and considers issues of **Clustering** and the **Weighting** of learning outcomes.

3.   Planning

Includes a consideration of the three levels of planning: **Lesson Plans**, **Work Schedules**, and **Learning Programmes**. It also addresses issues of **Clustering**, **Barriers to learning**, **Weighting**, **Integration**, **progression,** and the accessing and use of **Learning and teaching support materials**.

It is argued here that these aspects of the RNCS need to be explicated in full in order to enhance the potential for participants to successfully implement the RNCS. The Learning Areas address these features with different degrees of success. Each of these categories are discussed below, and reference is made to the Learning Area training sections in the manual.

Design elements of the RNCS and their relationships

Most of the Learning Area sections give participants an opportunity to engage with the Learning Outcomes and Assessment Standards. One of the shortcomings in several of the Learning Area sections however is the failure to adequately link these different aspects to each other, and to carefully explicate each dimension prior to discussing their relationships. In several cases this could be strengthened. The links and relationships pertain centrally to those between the Critical Outcomes and Developmental Outcomes and the Learning Outcomes; between the Learning Outcomes and Assessment Standards; and also the relationship between the different Learning Outcomes within a particular Learning Area. All these are related to the knowledge/concepts/content of the particular Learning Area. The relationships should be highlighted in order to avoid a fragmented view of the Learning Areas and Outcomes.

The mathematics module is clearly and logically set out. It starts with allowing participants to become acquainted with the Learning Area Statement, by requiring that they find specific information in the Learning Area Statement regarding the definition and purpose of the Focus and Learning Outcomes. In Mathematics, cross cutting skills are identified that go across the Learning Outcomes, thus establishing the relationships between them.

In Languages, the section deals extensively with an explication of social goals of the curriculum, to the exclusion of practical examples of appropriate content/concepts and assessment practices. In Languages the interrelations between different Learning Outcomes need to be identified.

In the Natural Sciences Learning Area the relationships between learning outcomes, assessment standards and core knowledge and concepts are explored in depth. In particular the core knowledge and concepts are dealt with extensively. Process skills, which cut across Learning Outcomes are also identified (such as conducting investigations, measuring, comparing). Each concept is introduced incrementally, before their relationships are explored through practical, subject specific activities. In this way, one activity builds on the former, and concrete, subject specific examples emphasise the relationships and links between different elements of curriculum.

In the Social Science Learning Area activities are not as clear. For example, Activity 5.4 attempts to show integration of the RNCS principles and Learning Outcomes. The activity is complex and confusing. In Arts and Culture, too, the links between Learning Outcomes is neglected.

In Life Orientation the structure and content of learning area statement is dealt with through referring the participants to the Learning Area Statement document. Activities allow the participants to engage with the whole document, and with reference to particular pages in the document and the purposes of the sections.

Those Learning Areas most successful in making the design elements clear to participants are those that make frequent reference to the Teacher's Guides and Learning Area Statements, providing discursive resources for the activities presented. In this way participants become familiar with the documents they will practically use in planning and implementing the RNCS.

Knowledge focus/concepts/content

One of the key recommendations of the Review Committee on Curriculum 2005 (Chisholm, 2000) was to specify more closely in the Learning Area Statements the knowledge focus/concepts/content for each grade. In the RNCS this is accomplished in different ways in the different Learning Area statements. In some the 'skills, knowledge and values' are embedded in the Learning Outcomes and Assessment Standards, and in others the knowledge focus is dealt with separately, and specified in lists of concepts and contents to be covered. The table below indicates the differences in the presentation of knowledge focus/concepts/content for the different Learning Areas:

Table 1: How knowledge focus/concepts/content are presented in the RNCS

Learning Area	Presentation of knowledge focus/concepts/content
Languages	Embedded
Mathematics	Embedded
Natural Sciences	List of 'Core knowledge and concepts'
Social Sciences	List of 'knowledge focus framework'
Arts and Culture	Embedded
Technology	Learning Outcome 2 – 'Core knowledge areas'
Economic and Management Sciences	'Focus for Grade'
Life Skills	Embedded

Where the knowledge focus/concepts/content are embedded, there is variation in their level of specificity and the ease with which they can be identified. For example in Mathematics and Life Orientation, the knowledge focus/concepts/content are relatively well specified, in Arts and Culture and language there is low specification and conceptual development is more difficult to retrieve from the Learning Area Statement.

It is therefore crucial that a focus of the training should be on assisting teachers not only to identify knowledge focus/concepts/content in the Learning Area Statements,

but also to understand how these knowledge focus/concepts/content can be generated should they be under-specified. Further, the training should offer practical advice to teachers on how they may generate content relevant to the learners that they are teaching. This refers particularly to the use of LTSM, discussed further below. Finally, the *links* and *relationships* between Learning Outcomes, Assessment Standards and appropriate knowledge focus/concepts/content for teaching should be prioritised in the explication of the elements of the design of the curriculum.

In the Languages Learning Area section conceptual aspects and actual texts for use are left at the level of the generic. There is no reference to specific grade appropriate texts, why some texts are more suitable than others, or the opportunity to discriminate between different texts on the basis of their relation to the conceptual development, interests, level and local culture of learners.

Several of the Learning Area sections require that participants identify the Skills, Knowledge and Values (SKV) in each of the Leaning Outcomes or Assessment Standards. For example in Life Orientation participants are set the following task:

"You will be able to identify knowledge by looking at the nouns and skills by looking at the verbs contained in each Assessment Standard. Sometimes the values and attitudes of each Assessment Standard will be stated explicitly, while at other times one has to look at the knowledge and skills for guidance".

However, simply identifying the SKV in the Learning Outcomes and Assessment Standards is not enough for teachers to understand how these elements are related and what their implications are in terms of planning and assessment.

In the Arts and Culture Learning Area there is very little reference to conceptual development and knowledge. Most of the activities deal with generic aspects of assessment and planning, and managing diversity.

In Technology, conversely, there is a focus on content without sufficient reference to the relationship to the Learning Outcomes or Assessment Standards. Many of the activities presented in this regard are very inductive, introducing the concepts too quickly and in a complex way.

In summary then, the relationships between the various elements of the design of the RNCS are not sufficiently emphasised in the training. The links between the Critical Outcomes and Developmental Outcomes, and the Learning Outcomes and the Assessment Standards should be made clear. The issue of where the knowledge focus/concepts/content reside in the learning area should be dealt with clearly and in a way that facilitates teachers' recognition and use of these knowledge

focus/concepts/content in relation to the Learning Outcomes and the Assessment Standards.

Assessment

Because assessment is not treated as a separate section (or lesson plan) in the Learning Area sections of the manual, it is given uneven attention across the Learning Area sections. In addition several of the activities focus on generic aspects of assessment which would have already been covered in the section on Assessment (generic). What is required is a focus on assessment in reference to the particular Learning Area. The section for the Natural sciences is exemplary in this respect. It has a strong emphasis on assessment and deals with the issues and problems in depth, and through practical examples which allow teachers to gain practice in the particularities of assessing in the Natural Sciences. For example, participants are given a specific lesson plan to use to develop an assessment activity. There is a strong bias in this section towards assessment. How, when, what and how often to assess is addressed through practical examples and activities that pertain directly to the Natural sciences Learning Area. Activity 8.3 asks of participants: 'Certain forms of assessment best fit with the nature of this learning area. Which assessment strategies would you recommend for the natural sciences?

In the Natural Science Learning Area the relationships between assessment standards, process skills and assessment strategies is emphasized through a detailed assessment design task. The actual task and model answer and rubric are given around a particular topic in the Natural Sciences. The application of assessment principles and practices is thereby clearly demonstrated.

In the Languages Learning Area, the activities in the section on assessment manual focus on the principles underlying assessment, rather than opportunities to understand and practice how assessment is conducted in relation to Languages. In this regard clustering is not referred to. There is no detailed explication of how, when and what to assess.

In Mathematics there is a mix of generic and subject-specific assessment activities. As in several of the other Learning Areas recording and reporting are dealt with largely at the level of the generic. There are extensive references to the Teachers Guide and Learning Area Statement, but they also focus more on generic aspects. Some subject specific activities, such as the preparation of a marking memo, and the differentiation between learners in assessment are included.

In the Social Sciences Learning Area assessment is dealt with largely generically, with activities on formative and summative assessment referring mostly to the concepts generically, and normative and criterion referencing is also discussed

generally. Although an example is given for the relationship between Assessment Standards and assessment strategies, it is complex and does not clarify what is expected of teachers. Participants are not given the opportunity to practice planning for assessment, but do evaluate given learning programmes, work schedules and lesson plans with respect to assessment.

In Arts and Culture a number of clear practical examples are also given. Participants are required to assess a series of learner drawings. They are also required to tell a story and then assess the narrative using different rubrics/frameworks. However, a number of the activities are too general, focusing on feelings and responses to assessment rather than understanding and application. No references to the actual Learning Area statement are included. The section on diversity in assessment is unclear. A new set of terminology is introduced – SPARK – which is potentially confusing.

In the Technology the assessment strategies are made clear in relation to Technology. The EMS activities dealing with assessment are largely generic, and where they do address subject specifics are relatively superficial.

The generic section on Assessment should focus on recording and reporting, definitions of rubrics and types of assessment (summative, formative; criterion and norm reference, and assessment types, such as tests, orals, exams, etc). Further, the reality of the number of assessment tasks that teachers are required to perform must be taken into account. Teachers shoul dnot only be trained in how to assess (in terms of portfolios, CASS etc.) but also how to *manage* what they are experiencing as excessive demands.

Assessment within the Learning Area sections should focus on the relationship between particular Learning Outcomes, Assessment Standards and knowledge focus/concepts/content in relation to appropriate strategies for that Learning Area. There are insufficient specific exemplars and practice opportunities provided in some of the Learning Area sections. As stated above in the assessment section, there are a number of issues relating to assessment that still need to be addressed at the level of policy. This must be done as soon as possible and integrated into the training programme for teachers.

Clustering

This is particularly important for assessment purposes and designing assessment tasks. Clustering avoids the fragmentation of the curriculum statements, and allows teachers to see the links between Assessment Standards and the Learning Outcomes. For example, in Mathematics, the links between the Learning Outcomes Measurement and Space and Shape need to be demonstrated. In Arts and Culture

integration and clustering are dealt with together. Both are relatively complex issues to deal with. Ideally they should be separated out and clarified, before the connections between them are dealt with.

In general, the Learning Area sections do not deal sufficiently with the notion of clustering.

Managing diversity

Because Managing diversity is one of the organizing lesson plans for the Learning Area sections, it is dealt with extensively in all the Learning Area sections. However, issues pertaining to the management of diversity particular to the specific Learning Areas are not sufficiently addressed.

Managing diversity is dealt with in relation to two main issues: barriers to learning and multi-level and multi-grade teaching. Although some of the learning area sections do identify issues that relate to their subject, in general they cover issues that have been dealt with in the Generic section.

Weighting

In several of the Learning Area sections the question of weighting is addressed as a timetabling issue. Thus the question of how much time should be allocated to the particular Learning Area is explicated. Though a simple issue, this is frequently done through a dedicated activity. This however does not address the more difficult question of the weighting of Learning Outcomes in planning and teaching the RNCS. Not all Learning Outcomes in the Learning Area statements are intended to be given equal weighting, and this may also vary across different learning contexts. This complex issue is crucial in helping teachers to understand how to plan and teach the RNCS.

The question of the weighting of Learning Outcomes becomes even more crucial when one considers that the available assessment documents (Assessment Policy for the General Education and Training Band, Grades R-9 and ABET (December, 1998)) provide guidance in this regard only to the Specific Outcomes of C2005, which have changed in the RNCS. In two Learning Areas the issue of weighting (not timetabling) is dealt with effectively.

In EMS a weighting for Learning Outcomes is given. This is discussed in terms of how Assessment Standards are clustered. One Activity refers participants to an exercise where the assessment standards were clustered. The question asked of participants is: "in your groups discuss how this clustering and integration is going to impact on your allocation of time for each activity, is it enough just to allocate a

number of hours to each Learning Outcome? Discuss a possible solution to the challenge." Page 38

In Life Orientation as well, both time allocation to the Subject Area and weighting with respect to how much time should be spent on the different learning outcomes is clearly explicated through an effective activity.

The issue of weighting with respect to the Learning Outcomes should be given serious attention in all the Learning Area sections.

Integration

In C2005 phase organizers and programme organizers were the drivers of integration. Integration was the organising frame and dominant design principle for a learning programme. The Review Committee on Curriculum 2005 found that what happened in this process was that conceptual coherence in subject areas was undermined, and that progression was jeopardized (Chisholm, 1999:42). In addition, there is evidence that teachers' qualifications did not enable adequate integration across different Learning Areas, often resulting in disadvantages for learners. For example, a teacher trained in Physics and not Biology being required to teach both suffers. In the RNCS the organization of the learning is derived from the learning outcome, and integration is opportunistic. Thus the task of recognising opportunities for integration, and designing lessons around these opportunities is both different from before, and requires particular skills of teachers.

Integration is not dealt with sufficiently in any of the Learning Areas. Integration can be both vertical (within a subject area, and considering issues of progression), and well as horizontal (in considering links with other Subject Areas). The key, however, is that a balance needs to be maintained between integration and conceptual progression. As stated in the Teachers' Guide "integration must support conceptual development rather than being introduced for its own sake" (DOE, 2003:6). Training in integration must also take into account the realities of teachers' skill levels and training. Teachers must be aware of and look for opportunities for integration both within and across Learning Areas, but the focus should remain on conceptual integration and planning within Learning Areas. The changes in the understanding of integration between C2005 and the RNCS should be emphasized.

Planning

In general the issue of planning is dealt with clearly in the Learning Area training. The movement from one level of planning to the next is exemplified through activities, the presentation of templates for planning and exemplary learning programmes, work schedules and lesson plans. The latter range in their level of

detail and complexity, however, all the Learning Area sections adequately explicate the differences in the different levels of planning, their requirements and purposes.

Planning and its relation to issues of weighting, integration, progression and clustering is less developed in some of the Learning Area sections. Further, in none of the sections is the issue of the split phase (the Senior Phase split across primary and secondary school) considered. Most of the learning programme exemplars focus on Grade 7, thus limiting the understanding of planning across phase. This remains an unresolved issue in the training manual as a whole.

In the Natural Science section a full Grade 7 work schedule, which includes the context, Learning Outcomes and Assessment, core concepts and knowledge, learning activities, integration, resources and assessment is given. Likewise a full learning programme for the phase is given, which includes specification of the duration for each area. Learning Outcomes and Assessment Standards, core concepts and knowledge, integration and resources are included. In addition an exemplar of the demarcation of core knowledge and concepts per grade is provided. In the Natural Sciences the emphasis in the planning activities is not on how to plan, but how it strengthens classroom practice. The activities show the logical development from one level of planning to the next, and allows participants the opportunity to practice planning. How to integrate the different elements of the curriculum in planning is also dealt with, and the relationship between the knowledge focus/concepts/content and the Learning Outcomes, Assessment Standards, resources, integration, assessment and sequencing is addressed.

In the Arts and Culture Learning Area section there is insufficient scaffolding for the development of learning programmes. It is not clear what the learning programme should consist of. In one activity, participants are required to design a whole learning programme in 20mins. The exemplar given is unclear and shows no progression. Likewise the development of work schedules and lesson plans are confusing, and too little time is given to teachers for their development. The section does however make frequent reference to the Teacher's Guide, a comprehensive resource for planning.

In the Arts and Culture Learning Area there is insufficient discussion of separateness of subjects and their integration, nor conceptual development in the subjects. This is partly a shortcoming of the learning area guide, which underspecifies conceptual development. One response in one of the provinces to this lack of specification has been to develop 'learning pathways' for each specific discipline. These learning pathways focus on skill and knowledge building in a particular art form so as to prepare learners for the FET. This is a key issue not addressed in the Arts and Culture section in the Manual, and the planning section

in the Learning Area section suffers as a result in terms of specific and practical examples given to teachers.

In the Language Learning Area section participants are not given an opportunity to design learning programmes or work schedules. They are required to comment on templates given. The exemplar for the learning programme consists only of learning for Grade 7, which is not conducive to understanding the logic and purpose of developing a learning programme across the phase. Insufficient subject-specific examples and detail are given in relation to the different levels of planning. The lesson plan to be designed focuses again on social goals, and does not take into account conceptual development or other issues pertaining to learning in Languages.

In Mathematics the process of planning is clear, however the templates given are complex to use. Mathematics and EMS also distinguish crucially between content and context, and provide excellent examples and activities in relation to this distinction.

In the Social Science Learning Area participants are given opportunities to plan at different levels, through clearly defined activities which specify what should be included at different levels, and how to go about designing programmes of learning. A partial example of a learning programme across the phase is given.

In the Technology Learning Area there is clarity on the knowledge focus/concepts/content of three levels of planning. However the activities are presented quickly with insufficient scaffolding between three levels of planning. Clear exemplars of templates for learning programmes, work schedules and lesson plans are provided.

In the Life Orientation sections there is a focus on conceptual progression across the grades in the phase. Clustering and integration are also dealt with clearly and effectively.

An exemplary learning programme for all Learning Areas for the Senior Phase should be provided for teachers given the difficulty of planning within a split phase. In addition, clear exemplars should be made available to all teachers for work schedules and lesson plans, which they are able to use should they so choose. The development of exemplary learning programmes for all Learning Areas across the whole phase has taken place in one of the provinces, and these are available to teachers.

Learner and teacher support Material (LTSM)

The Department of Education regards adequate learning and teachings support materials as 'essential to the effective running of an education system and asserts that these materials are an integral part of curriculum development and a means of promoting both good teaching and learning' (DOE, 1998). In implementing the RNCS, teachers are required to use new textbooks effectively, as well as prepare materials themselves, and use old materials in new and effective ways. There is in the training manual no attention paid to the use of LTSM, access to them, differentiating and discriminating between different types of material, judging appropriateness of materials, considering materials in relation to learning outcomes and assessment standards, and understanding the pedagogical approaches underpinning different textbooks. LTSM needs to be integrated into the training, especially with respect to planning.

Summary of Learning Area Specific sections

Most of the design features identified at the beginning of the discussion of the Learning Area sections of the Manual are referred to in the Learning Area sections. They are often not all dealt with in sufficient depth and clarity for deep understanding. Those Learning Area sections that provide the clearest explanations and activities involve familiarising the participants with the actual Learning Area Statement document and the Teacher's Guide for the specific Learning Area. In some of the Learning Area Specific sections there is an emphasis on social aspects of learning (such as the social goals of the curriculum and managing diversity) to the detriment of the understanding of the instructional aspects of the curriculum design. The core knowledge/concepts/content for some of the Learning Areas, particularly where these are embedded in the Learning Outcomes and Assessment standards is inadequately addressed in some cases.

Whilst some Learning Areas incrementally introduce the concepts and them show links between them, in others they are dealt with discretely, and the understanding of the RNCS concepts/ design features are fragmented. In particular the links between different Learning Outcomes needs to be addressed, as well as the links between the core knowledge/concepts/content and the Learning Outcomes and Assessment Standards. Further, some of the more difficult issues, such as progression, integration, clustering, the split phase are left out or dealt with superficially.

Although there are at times references to changes from C2005 to the RNCS (in Languages, for example) these are not presented systematically. In particular, the fact that the Assessment Policy for the General Education and Training Band, Grades R-9 and ABET (December, 1998) is still in use, the differences need to be

highlighted in each Learning Area case. The lack of specification of the nature of the change between C2005 and the RNCS is a gap both in the generic section and in the Learning Area sections.

Many activities are too complex, and in some cases there are too many activities without sufficient time for meaningful engagement with the tasks. Some activities enable teachers to take away practical examples of what it is they are required to do in their classrooms, whilst other activities may serve to obfuscate what is required of teachers. In relation to assessment not enough opportunity is given to teachers to practice designing assessment tasks (apart from Natural Science and Mathematics).

There is a significant amount of generic content in the Learning Area Specific sections, especially in relation to Managing Diversity and Assessment. There are also not enough subject-specific examples in which particular core knowledge/concepts/content are presented.

CONCLUSION

In general the Manual provides a comprehensive guide to the RNCS. It aims to cover all aspects of the curriculum and its implementation. As is evident from the analysis presented above, however, it does so unevenly in the Learning Area specific sections, and the focus of the training in general is not always clear. Nonetheless, the Manual provides a comprehensive base from which a training course can be developed. It does need to be streamlined and tightened if it is to serve as an effective model for teacher training. As it stands it is overloaded, fragmented, and does not address certain issues in sufficient depth, and leaves out others. In the Generic section particularly there is a problem with focus. In the Learning Area sections the most challenging aspects of the curriculum are not addressed sufficiently, and too much generic content is included. Below, specific recommendations regarding the possible revision of the Manual are made.

RECOMMENDATIONS

Focus of the Generic section

a) The purpose and central thrust of the training be stated clearly and simply in a short paragraph.

b) The design of the programme should be simplified. The Learning Orientation Outcomes and Assessment Standards should be reduced and made clear. If

these terms are to be used at all, the same vocabulary as that of the RNCS should be used (i.e. Learning Outcomes and Assessment Standards, rather than Orientation Learning Outcomes and Orientation Assessment Standards. The lesson plans should be narrowed in focus. The number and breadth of the activities should be reduced to focus on a smaller number of key concepts to allow for deeper engagement with the issues.

c)   The Generic programme should be shortened to address the key issues relating to teachers' practical implementation of the RNCS. In particular this would mean drastically reducing the political emphasis and the concentration on a wide range of policies.

d)   The training should start with a clear articulation of the changes made from C2005 to the RNCS, in terms of structure and design. The enduring principles and aspects that have remained unchanged should be highlighted. Teachers at the start need to be given space to raise three key questions in relation to the curriculum change. These would then be addressed in the course of the training.

e)   The weighting of the training programme should be as follows:
Generic Section: 20%
Assessment Section (generic): 20%
Learning Area Section: 60%

Focus – Learning Area Specific Sections

a)   The sections of manual pertaining to Learning Area Specifics should be reorganized under the headings of 1. Design elements of the RNCS and their relationships; 2. Assessment, and 3. Planning.

b)   The links between the Developmental and Critical Outcomes, Learning Outcomes and the Assessment Standards should be made clear, especially in relationship to integration and clustering.

c)   The issue of where the knowledge focus, content and concepts reside in the learning area should be dealt with clearly and in a way that facilitates teachers' recognition and use of these knowledge focus/concepts/content in relation to the Learning Outcomes and the Assessment Standards.

Training methodology for generic and subject specific sections

a)   In order to avoid fragmenting participants' learning, the number of activities should be reduced, and there should be an explicit, clear and logical

development of activities. Activities need to be rationalized, streamlined and the logic of the development made explicit, in order that the central conceptual orientation of the RNCS and the purpose of the training is available to participants.

b) There needs to be a balance between activity based learning and discursive presentation. The danger in a purely activity-based course is that key concepts may be obscured. In some cases concepts need to be explained, and definitions provided in order for activities to be meaningful and training effective. In terms of documentation two resources are central to teachers for their on-going reference: the Learning Area Statement and the Teacher Guides. Reference in the training to these two documents is crucial, and teachers in the course of the training should be able to engage with the two documents, familiarizing themselves with them.

c) Alongside activities, alternative methods of training should be seriously considered, such as the presentation of exemplary learning programmes, work schedules and lesson plans. Further, demonstrations of both the planning process, and actual teaching should be demonstrated. Expert teachers, who could participate in the making of videos, for example, could be identified, used and compensated for their expertise.

The split phase

a) Given the difficulty of planning within a split phase, a model learning programme for the Senior Phase should be drawn up urgently and provided to teachers. This can be referred to by them until such time as the difficulties around the phase being split across school types (primary and secondary) is resolved.

Assessment

a) The generic section on Assessment should focus on recording and reporting, definitions of rubrics and types of assessment (summative, formative; criterion and norm reference, and assessment types, such as tests, orals, exams, etc). Assessment within the Learning Area sections should focus on the relationship between particular Learning Outcomes, Assessment Standards and Knowledge focus/concepts/content in relation to appropriate strategies for that learning area. Specific exemplars and practice opportunities should be provided, and generic aspects left out.

b) At the level of policy, a clear statement of assessment requirements and practices should be made available to teachers urgently, and these should be incorporated into the training as soon as possible.

LTSM

a) Issues around LTSM are not addressed in the training. They need to be incorporated, in particular in discussions around planning. Teachers should be given opportunities to explore how to access LTSM, differentiating between types of material and discriminating between different resources, judging the appropriateness of materials, considering materials in relation to learning outcomes and assessment standards, and understanding the pedagogical approaches underpinning different textbooks.

REFERENCES

Chisholm, L. (2000). A curriculum for the twenty-first century: Report of the review committee on Curriculum 2005. Report presented to the Minister of Education.

DOE (1998). Language in Education Implementation Plan. Pretoria.

DOE (1998). Assessment Policy for the General Education and Training Band, Grades R-9 and ABET. Pretoria.

DOE (2005). Revised National Curriculum Statement Grades R-9 Orientation Programme – Senior Phase 2005 Facilitator's Manual.

DOE (2005). Revised National Curriculum Statement Grades R-9 Orientation Programme – Senior Phase 2005 Participant's Manual.