DESIGNING
AN EVALUATION INSTRUMENT
FOR
SOUTH AFRICAN
INTERMEDIATE PHASE SCHOOL TEXTBOOKS

by

Barend Jacobus Vosloo, B.A. M.Ed.

Submitted in fulfilment of the requirements for the degree of
DOCTOR EDUCATIONIS

in the
FACULTY OF EDUCATION

at the
UNIVERSITY OF PORT ELIZABETH

PROMOTERS
Dr J McFarlane
Prof A N Lemmer

May 2004
COPYRIGHT

No part of this thesis may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information storage and retrieval system, without permission in writing from the author.
# TABLE OF CONTENTS

PREFACE

ABSTRACT .................................................................................................................................19
KEY WORDS ...............................................................................................................................21
ACKNOWLEDGEMENTS .............................................................................................................22
DEDICATION ..............................................................................................................................23

CHAPTER ONE - INTRODUCTION

1.1 CONTEXT OF THIS STUDY – AN OVERVIEW .................................................................24

1.1.1 Introduction ..................................................................................................................24
1.1.2 Personal context ..........................................................................................................25
1.1.3 Educational change in South Africa ............................................................................25
1.1.4 The production of school textbooks ...........................................................................28
1.1.5 Summary .....................................................................................................................29

1.2 MOTIVATION FOR THIS STUDY ....................................................................................30

1.2.1 Introduction ..................................................................................................................30
1.2.2 The importance of good quality textbooks .................................................................31
1.2.3 The inadequacy of school textbook evaluation and selection processes in South Africa ..................................................................................................................35
1.2.4 Summary .....................................................................................................................36

1.3 STATEMENT OF THE RESEARCH PROBLEM ..............................................................37

1.4 STATEMENT OF THE RESEARCH QUESTION .............................................................37

1.5 THE PURPOSE OF THE RESEARCH ...............................................................................38

1.6 DEFINITION OF TERMS ..................................................................................................38

1.6.1 “Criterion” ..................................................................................................................38
1.6.2 “Curriculum 2005” ......................................................................................................38
1.6.3 “Intermediate phase” ...................................................................................................39
1.6.4 “Outcomes-based education” .......................................................................................39
1.6.5 “Textbook” ....................................................................................................................39
1.6.6 “Learning support materials” ........................................................................................40
CHAPTER TWO - RESEARCH FRAMEWORK

2.1 INTRODUCTION..................................................................................45
2.2 PHILOSOPHICAL ISSUES .................................................................45
   2.2.1 Introduction ...............................................................................45
   2.2.2 The positivist paradigm .............................................................47
      2.2.2.1 Introduction ........................................................................47
      2.2.2.2 The origins of positivist philosophy ..................................47
      2.2.2.3 The essence of positivist philosophy ...................................48
      2.2.2.4 Educational research in the context of the positivist paradigm ...50
      2.2.2.5 The relevance of the positivist paradigm for this study ...........50
      2.2.2.6 Summary .............................................................................52
   2.2.3 The interpretive paradigm ..........................................................53
      2.2.3.1 Introduction ........................................................................53
      2.2.3.2 The origins of interpretive philosophy .................................53
      2.2.3.3 The essence of interpretive philosophy .................................54
      2.2.3.4 Educational research in the context of the interpretive paradigm ...56
      2.2.3.5 The relevance of the interpretive paradigm for this study ...........56
      2.2.3.6 Summary .............................................................................57
   2.2.4 The critical paradigm .................................................................57
      2.2.4.1 Introduction ........................................................................57
3.3.4.3 Motivation ........................................................................................................ 97
3.3.4.4 Learner predispositions ............................................................................. 97
3.3.4.5 Individual differences ........................................................................... 98
3.3.4.6 Structure and form of learning content ............................................. 98
3.3.4.7 Relevance for the authoring process .................................................. 98
3.3.4.5 Relevance of the authors’ understanding of the process of learning and instruction for this study ........................................................................ 99
Table 3.2 - A synergic system of learning .................................................. 99
3.3.5 Accessibility ............................................................................................... 100
3.3.5.1 Introduction ............................................................................................ 100
3.3.5.2 Typography ............................................................................................ 101
3.3.5.2.1 Introduction ........................................................................................ 101
3.3.5.2.2 Format ................................................................................................. 102
    Introduction ................................................................................................. 102
    Page-size ..................................................................................................... 102
    Number of pages ........................................................................................ 103
    Binding and paper quality ......................................................................... 104
    Summary ..................................................................................................... 104
3.3.5.2.3 Design ................................................................................................. 104
    Introduction ................................................................................................. 104
    Typesetting ................................................................................................. 105
    Illustrative material .................................................................................... 106
    The use of colour ....................................................................................... 108
    Summary ..................................................................................................... 109
3.3.5.2.4 Textual organisation ........................................................................... 109
    Introduction ................................................................................................. 109
    Helping learners to find their way into and around the text .................... 110
    Page design ................................................................................................. 113
    Word spacing ............................................................................................. 113
    Positioning illustrative material ................................................................. 113
    Line widths ................................................................................................. 113
    Headings ..................................................................................................... 114
    Use of white space ..................................................................................... 114
    Numbering system ...................................................................................... 115
3.3.7.3.2 The hidden curriculum ...............................................................133
    Table 3.3 - Criteria for fair representation.........................................135
3.3.7.4 The economic context ..................................................................135
3.3.7.5 The pedagogical context ...............................................................136
    3.3.7.5.1 Introduction ...........................................................................136
    3.3.7.5.2 Traditional or progressive? .....................................................137
    3.3.7.5.3 Aspects of learner-centred education worth observing ..........139
        Introduction .....................................................................................139
        The integration of knowledge ..........................................................139
        Multi-dimensional learning .............................................................141
    Table 3.4 - Model for cognition and creativity ....................................142
        Constructivist learning .................................................................143
        Collaborative learning ...................................................................145
        Democratic learning .......................................................................145
        Formative assessment .....................................................................146
3.3.7.6 Relevance of the observance of a given curriculum for this study...146
3.4 ARTICULATING A THEORY ABOUT THE PRACTICE OF
    TEXTBOOK EVALUATION ..................................................................147
    3.4.1 Introduction ..................................................................................147
    3.4.2 Key issues about textbook evaluation ............................................148
        3.4.2.1 The process of evaluation.......................................................148
        3.4.2.2 The difference between analysis and evaluation......................148
        3.4.2.3 The development of criteria ...................................................148
        3.4.2.4 The checklist ..........................................................................148
        3.4.2.5 The context of evaluation ........................................................149
    3.4.3 The attributes of a good quality textbook ......................................149
        3.4.3.1 The composition of the authoring team ...................................149
            3.4.3.1.1 Explanation .....................................................................149
            3.4.3.1.2 Criterion ........................................................................149
        3.4.3.2 The authors’ rationale .............................................................150
            3.4.3.2.1 Explanation .....................................................................150
            3.4.3.2.2 Criterion ........................................................................150
        3.4.3.3 The authors’ understanding of the process of learning and instruction ................................................................................150
CHAPTER FOUR - DATA COLLECTION, ANALYSIS AND INTERPRETATION

4.1 INTRODUCTION......................................................................................157
4.2 THE NATIONAL DEPARTMENT OF EDUCATION’S REVISED NATIONAL CURRICULUM STATEMENT (RNCS)............................158
4.2.1 Introduction............................................................................................158
4.2.2 The principles of the RNCS.................................................................159
4.2.2.1 The principle of outcomes-based education........................................159
4.2.2.1.1 Introduction.......................................................................................159
4.2.2.1.2 The first principle...............................................................................160
4.2.2.1.3 The second principle .................................................................162
4.2.2.1.4 The third principle ........................................................................162
4.2.2.1.5 The fourth principle ......................................................................162
4.2.2.2 The principle of achieving a balance between progression and integration..................................................................................164
4.2.2.2.1 Introduction.......................................................................................164
4.2.2.2.2 Progression......................................................................................164
4.2.2.2.3 Integration .................................................................................................164
4.2.2.3 The principle of clarity and accessibility...........................................165
4.2.2.4 The principle of a high level of knowledge and skills for all .........165
4.2.2.5 The principle of social and environmental justice, human rights and inclusivity .................................................................166
4.2.2.6 The principle of achieving critical and developmental outcomes ....167
4.2.2.6.1 Introduction ...............................................................................................167
4.2.2.6.2 What they specify .....................................................................................167
4.2.2.7 Relevance of the RNCS for the authoring process.....................168
4.2.3 Analysis, comparison and interpretation ..............................................168
4.2.3.1 Introduction ...............................................................................................168
4.2.3.2 Composition of the authoring team .......................................................169
Table 4.1 – Composition of the authoring team ..................................169
4.2.3.3 The authors’ rationale ..............................................................................170
Table 4.2 - The authors’ rationale ..............................................................170
4.2.3.4 The authors’ observance of the process of learning and instruction .........................................................................................172
Table 4.3 - The authors’ observance of the process of learning and instruction .........................................................................................172
4.2.3.5 Accessibility ...............................................................................................173
Table 4.4 - Typography ...........................................................................174
Table 4.5 - Readability ............................................................................174
Table 4.6 - Linguistic style and tone ..........................................................174
Table 4.7 - Authors’ assumptions ..............................................................175
4.2.3.6 Providing teacher support .................................................................175
Table 4.8 - Providing teacher support .......................................................175
4.2.3.7 Accommodating the requirements of the given curriculum ......176
4.2.3.7.1 Introduction ...............................................................................................176
4.2.3.7.2 Values ........................................................................................................177
Table 4.9 - Values ....................................................................................177
4.2.3.7.3 Pedagogical expectations .......................................................................178
Table 4.10 - Pedagogical expectations .....................................................178
4.2.3.7.4 Values ........................................................................................................179
Table 4.11 – Skills ....................................................................................179
4.2.4 Relevance of an analysis of the national Department of Education’s Revised National Curriculum Statement (RNCS) ............................................ 180

4.3 THE NATIONAL DEPARTMENT OF EDUCATION’S DRAFT POLICY FOR THE DEVELOPMENT OF LEARNING AND TEACHING SUPPORT MATERIALS (LTSM) .............................................................. 181

4.3.1 Introduction ............................................................................................................................ 181

4.3.2 Analysis, comparison and interpretation ............................................................................... 185

4.3.2.1 The composition of the authoring team .............................................................................. 185

4.3.2.2 The authors’ rationale ........................................................................................................ 186

4.3.2.3 The authors’ observance of the process of learning and instruction ................................... 187

4.3.2.4 Accessibility ....................................................................................................................... 188

4.3.2.5 Teacher support .................................................................................................................. 190

4.3.2.6 The authors’ observance of a given curriculum, i.e. the RNCS ......................................... 191

4.3.2.6.1 Introduction ................................................................................................................... 191

4.3.2.6.2 Values ............................................................................................................................ 192

4.3.2.6.3 Pedagogical expectations .............................................................................................. 193

4.3.2.6.4 Skills .............................................................................................................................. 193

4.3.3 Relevance for this study of the Department of Education’s draft policy for the development of learning and teaching support materials. .... 194
4.4 A SURVEY OF THE PERCEPTIONS OF SOUTH AFRICAN INTERMEDIATE PHASE TEACHERS AND AUTHORS OF SOUTH AFRICAN INTERMEDIATE PHASE SCHOOL TEXTBOOKS........194

4.4.1 Introduction ........................................................................................................194

4.4.2 The data collection process ........................................................................195

4.4.2.1 Design ........................................................................................................195

4.4.2.2 Sample .......................................................................................................196

4.4.2.3 Method .......................................................................................................198

4.4.2.4 The survey questionnaire .......................................................................199

4.4.2.4.1 Introduction ...............................................................................................199

4.4.2.4.2 The structure of the survey questionnaire............................................199

4.4.2.4.3 Survey items with forced choices .......................................................200

4.4.2.4.4 Open-ended survey items ..................................................................201

4.4.2.4.5 The survey questionnaire .......................................................................201

4.4.3 An analysis and interpretation of teachers’ responses ............................201

4.4.3.1 Introduction ...............................................................................................201

4.4.3.2 Key issues about textbook evaluation ..................................................202

4.4.3.3 The composition of the authoring team ................................................205

4.4.3.4 The authors’ rationale ..............................................................................206

4.4.3.5 The authors’ observance of the process of learning and instruction.................207

4.4.3.6 Accessibility ...............................................................................................209

4.4.3.6.1 Typography ...............................................................................................209

4.4.3.6.2 Readability .............................................................................................210

4.4.3.6.3 Style and tone ........................................................................................211

4.4.3.6.4 The authors’ assumptions .......................................................................211

4.4.3.6.5 Interpretation ...........................................................................................212

4.4.3.7 Providing teacher support .........................................................................213

4.4.3.8 Meeting the requirements of the Revised National Curriculum Statement (RNCS) .................................................................214

4.4.3.8.1 Values ......................................................................................................214

4.4.3.8.2 Achieving the pedagogical expectations broached by the RNCS...214

4.4.3.8.3 Skills ...........................................................................................................215

4.4.3.8.4 Interpretation ............................................................................................215
4.4.4 Relevance of the teachers’ perceptions for this study ................. 216
4.4.5 An analysis and interpretation of authors’ responses ................. 216
4.4.5.1 Introduction ........................................................................... 216
4.4.5.2 Key issues about textbook evaluation .................................... 217
4.4.5.3 The composition of the authoring team .................................. 220
4.4.5.4 The authors’ rationale ............................................................. 221
4.4.5.5 The authors’ observance of the process of learning and instruction ............................................................. 221
4.4.5.6 Accessibility ........................................................................ 222
4.4.5.6.1 Typography ........................................................................ 222
4.4.5.6.2 Readability ......................................................................... 222
4.4.5.6.3 Style and tone .................................................................... 222
4.4.5.6.4 The authors’ assumptions .................................................. 223
4.4.5.6.5 Interpretation ..................................................................... 223
4.4.5.7 Providing teacher support ....................................................... 224
4.4.5.8 Meeting the requirements of the Revised National Curriculum Statement (RNCS) ............................................................. 224
4.4.5.8.1 Values ................................................................................. 224
4.4.5.8.2 Achieving the pedagogical expectations broached by the RNCS... 225
4.4.5.8.3 Skills .................................................................................. 226
4.4.5.8.4 Interpretation ..................................................................... 226
4.4.6 Relevance of the authors’ perceptions for this study ................. 226
4.5 ADJUSTING THE THEORY ABOUT THE PRACTICE OF TEXTBOOK EVALUATION TO REFLECT A SOUTH AFRICAN INTERMEDIATE PHASE SCHOOL TEXTBOOK BIAS .......... 227
4.5.1 Introduction ............................................................................. 227
4.5.2 Key issues about textbook evaluation .................................... 227
4.5.2.1 The process of evaluation .................................................... 227
4.5.2.2 The difference between analysis and evaluation .................. 227
4.5.2.3 The development of criteria .................................................. 228
4.5.2.4 The checklist ........................................................................ 228
4.5.2.5 The context of evaluation .................................................... 228
4.5.3 The attributes of a good quality textbook ............................... 228
4.5.3.1 The composition of the authoring team ............................... 228
4.5.3.1 Explanation ...............................................................................................228
4.5.3.1.2 Criterion cluster ........................................................................................229
4.5.3.2 The authors’ rationale ..............................................................................229
4.5.3.2.1 Explanation ...............................................................................................229
4.5.3.2.2 Criterion cluster ........................................................................................229
4.5.3.3 The authors’ observance of the process of learning and instruction ..................................................................................................230
4.5.3.3.1 Explanation ...............................................................................................230
4.5.3.3.2 Criterion cluster ........................................................................................230
4.5.3.4 Accessibility ...............................................................................................230
4.5.3.4.1 Explanation ...............................................................................................230
4.5.3.4.2 Criterion cluster ........................................................................................231
   Typography........................................................................................................231
   Readability........................................................................................................231
   Linguistic style and tone.................................................................................231
   The authors’ assumptions .............................................................................232
4.5.3.5 Teacher support .......................................................................................232
4.5.3.5.1 Explanation ...............................................................................................232
4.5.3.5.2 Criterion cluster ........................................................................................232
4.5.3.6 Meeting the requirements of the Revised National Curriculum Statement (RNCS) ..................................................................................233
4.5.3.6.1 Explanation ...............................................................................................233
4.5.3.6.2 Criterion cluster ........................................................................................233
   Values .............................................................................................................233
   Pedagogical expectations ..............................................................................233
   Skills ............................................................................................................235
4.6 SUMMARY ................................................................................................235
4.7 ABOUT THE NEXT CHAPTER .......................................................................236
CHAPTER FIVE - AN EVALUATION PROCEDURE FOR SOUTH AFRICAN INTERMEDIATE PHASE SCHOOL TEXTBOOKS

5.1 INTRODUCTION........................................................................................................237

5.2 ORIGINATING A PROCEDURE FOR EVALUATING SOUTH AFRICAN INTERMEDIATE PHASE SCHOOL TEXTBOOKS...........237

5.2.1 Introduction ........................................................................................................237

5.2.2 The principles underpinning an evaluation procedure ...................238

5.3 the format of the evaluation instrument ................................................240

5.3.1 Introduction ........................................................................................................240

Table 5.1 - Criterion cluster A ................................................................241

Table 5.2 - Criterion cluster B .................................................................................241

5.3.2 Rating systems ..............................................................................................241

Table 5.3 - Criterion cluster C ................................................................................242

Table 5.4 - Criterion cluster D ................................................................................242

Table 5.5 - Criterion cluster E ................................................................................243

Table 5.6 - Rating graph ........................................................................................243

5.3.3 Design principles of the evaluation instrument ......................................244

5.3.3.1 Configuration..........................................................................................244

5.3.3.2 Phrasing items .........................................................................................244

5.3.3.3 Flexibility.................................................................................................245

5.3.3.4 Brevity ....................................................................................................245

5.3.3.5 Acknowledging the expertise of the users. .............................................245

5.3.3.6 Avoiding ambiguity ................................................................................246

5.3.3.7 Objectivity ...............................................................................................246

5.3.4 Structure of the evaluation instrument ....................................................247

5.3.4.1 Introduction .............................................................................................247

5.3.4.2 The relative value of criterion clusters ..................................247

5.3.4.3 A rating system .....................................................................................248

Table 5.7 - The credentials of the authoring team.................................248

Table 5.8 - A profile of the textbooks under review ............................249

5.3.5 Refining the evaluation instrument ..............................................................249

5.3.6 The advantages and disadvantages of the evaluation instrument...252

5.3.6.1 Advantages ..............................................................................................252
### CHAPTER SIX - CONCLUSIONS AND RECOMMENDATIONS

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1</td>
<td>Introduction</td>
<td>256</td>
</tr>
<tr>
<td>6.2</td>
<td>CONCLUSIONS</td>
<td>257</td>
</tr>
<tr>
<td>6.2.1</td>
<td>Research methodology</td>
<td>257</td>
</tr>
<tr>
<td>6.2.2</td>
<td>Textbook evaluation is a complex issue</td>
<td>258</td>
</tr>
<tr>
<td>6.2.3</td>
<td>The context of evaluation</td>
<td>259</td>
</tr>
<tr>
<td>6.2.4</td>
<td>Methods of evaluation</td>
<td>259</td>
</tr>
<tr>
<td>6.2.5</td>
<td>Evaluation and textbook development</td>
<td>260</td>
</tr>
<tr>
<td>6.2.6</td>
<td>Using checklists as evaluation instruments</td>
<td>260</td>
</tr>
<tr>
<td>6.2.7</td>
<td>Opposing views regarding textbook evaluation</td>
<td>261</td>
</tr>
<tr>
<td>6.2.8</td>
<td>Advantages and disadvantages of the evaluation instrument</td>
<td>261</td>
</tr>
<tr>
<td>6.3</td>
<td>Recommendations for future research pertaining to intermediate phase school textbook evaluation</td>
<td>262</td>
</tr>
<tr>
<td>6.3.1</td>
<td>Introduction</td>
<td>262</td>
</tr>
<tr>
<td>6.3.2</td>
<td>The evaluation instrument</td>
<td>262</td>
</tr>
<tr>
<td>6.3.2.1</td>
<td>The composition of the authoring team</td>
<td>262</td>
</tr>
<tr>
<td>6.3.2.2</td>
<td>The learning and instructional processes</td>
<td>263</td>
</tr>
<tr>
<td>6.3.2.3</td>
<td>Typographic issues</td>
<td>263</td>
</tr>
<tr>
<td>6.3.2.4</td>
<td>The development of values</td>
<td>263</td>
</tr>
<tr>
<td>6.3.2.5</td>
<td>Other issues</td>
<td>264</td>
</tr>
<tr>
<td>6.3.3</td>
<td>General</td>
<td>264</td>
</tr>
<tr>
<td>6.3.3.1</td>
<td>Post-use evaluation</td>
<td>264</td>
</tr>
<tr>
<td>6.3.3.2</td>
<td>Open-ended evaluation</td>
<td>264</td>
</tr>
<tr>
<td>6.3.3.3</td>
<td>Facilitating a paradigm shift in official thinking about textbook evaluation</td>
<td>264</td>
</tr>
<tr>
<td>6.3.3.4</td>
<td>Evaluation and materials design</td>
<td>264</td>
</tr>
<tr>
<td>6.4</td>
<td>In closing</td>
<td>265</td>
</tr>
</tbody>
</table>
ANNEXURES

ANNEXURE A - An analysis of some US, UK and SA textbook evaluations...266
ANNEXURE B - The authors’ rationale .................................................................268
ANNEXURE C - Helping learners to find their way into and around the text ...270
ANNEXURE D - Various typographical features...................................................274
ANNEXURE E - Questionnaire ............................................................................275
ANNEXURE F - An evaluation instrument for South African intermediate phase
school textbooks.................................................................................................285

BIBLIOGRAPHY..................................................................................................300
No coherent theory about the practice of South African intermediate phase school textbook evaluation has been forthcoming since the advent of a new South African school curriculum in 1998. This deficiency has had an adverse effect on the quality of intermediate phase school textbooks, as well as on the capacity to assess their value.

This research project, therefore, had two aims. The first was to articulate a theory about the practice of textbook evaluation. The second was to develop a procedure for evaluating South African intermediate phase school textbooks in terms of the theory.

The research method was underpinned by the interpretive research paradigm in terms of which relevant data were analysed and interpreted. The data emanated from a literature review, an analysis of the national Department of Education’s Revised National Curriculum Statement and its draft policy for the evaluation of learning support material, and two surveys. The first survey comprised a sample of intermediate phase teachers and the second a sample of intermediate phase textbook authors.

Sufficient evidence was found to conclude that the capabilities of the authoring team, the authors’ rationale and their observance of the process of learning and instruction, the accessibility of the textbook, the availability of teacher support, meeting the requirements of the Revised National Curriculum Statement, and certain key notions about textbook evaluation play a role in articulating a theory about textbook evaluation in order to guide the process of determining the effectiveness of South African intermediate phase school textbooks.
Based on the above-mentioned theory, this study proposes a procedure to assist teachers and textbook evaluators to assess the worth of South African intermediate phase school textbooks in a brief, systematic, thorough, rigorous, and practical manner.
KEY WORDS

Evaluation
Instrument
Quality
Intermediate
Phase
School
Textbooks
ACKNOWLEDGEMENTS

My dear wife, Rita, has patiently given me scope to pursue an ideal at the relatively advanced age of sixty-three.

My promoter, Dr Johann McFarlane, is an astute scholar and a caring man. Prof André Lemmer, whose academic credentials are equally impeccable, ably assisted him.

Teachers Gretchen Vosloo, Reinette du Toit, and former colleagues Joe Pretrorius and Jan Beukes readily shared with me their considerable experience and expertise.

Mr Lindelwe Mabandla of Maskew Miller Longman Publishers came to my assistance after I had almost given up trying to obtain information about textbook evaluation criteria from provincial education departments. He e-mailed me a copy of the national Department of Education's draft policy on the evaluation of learning support material. It proved to be crucial for this study.

Mrs Roelien Clarke of the inter-library loans section of the University of Port Elizabeth, cheerfully and ably responded to my numerous requests for reading material.

Mr John Deane, of Pietermaritzburg, meticulously proofread this thesis.

This study was blessed with the infinite grace of the Almighty.
DEDICATION

Ek dra hierdie proefskrif op aan my kleinseun en naamgenoot, Barry Vosloo,
wat saam met sy ouers in Swords, Co. Dublin,
Republiek van Ierland,
woonagtig is.

Tans het hy hoogstens 'n vae herinnering aan 'n oupa vir wie hy slegs drie keer in sy kort leeftyd van agtien maande gesien het. Ek vertrou nietemin dat hierdie proefskrif en alles wat dit verteenwoordig, hom sal aanmoedig om voortdurend daarna te strewe om sy Godgegewe potensiaal te bereik. Soos H W Longfellow dit so treffend stel:

Let us be up and doing,
With a heart for any fate;
Still achieving, still pursuing,
Learn to labour and to wait.
CHAPTER ONE

INTRODUCTION

1.1 CONTEXT OF THIS STUDY – AN OVERVIEW

1.1.1 Introduction

As shown in paragraph 1.5 below, the aim of this study is to articulate a theory about the practice of textbook evaluation, which is intended to underpin a proposed evaluation procedure to be used to assess the effectiveness of South African intermediate phase school textbooks.

The study should be viewed against the background of the understanding I have gained from a lifetime spent in education and a brief sojourn in the educational publishing industry as a publisher. Even more important, though, is the matter of fundamental educational change in South Africa following the first democratic elections in 1994. These changes were exemplified by the introduction into schools in 1998 of a new national curriculum to transform a system of education that was described in Government Gazette no. 22559 as “divided and unequal” (Ministry of Education, 2001: 20). The new national curriculum became known as *Curriculum 2005*. It was amended in 2001 and renamed *Revised National Curriculum Statement*.

I personally experienced the profound impact of *Curriculum 2005* on the educational community and the production of intermediate phase school textbooks.
1.1.2 Personal context

I spent thirty-four years as a teacher, lecturer, primary school principal, education adviser and education planner in the former Natal Education Department.

As an education adviser, I was co-responsible for curriculum development in the senior primary phase, as it was known then. Our mission was to encourage teachers to adopt a pedagogy that required a shift away from the emphasis on the transmission of factual content for its own sake, to an approach where factual content would be the means to facilitate the development of knowledge, understanding, skills and values. I was also occasionally called upon to assess recently published senior primary school (currently intermediate phase) textbooks. I suspect that while my evaluations were founded on the educational beliefs subscribed to in Natal at the time, evaluators in at least two other provincial education departments held different points of view. This inter-provincial inconsistency would have provided publishers with a conflicting array of appraisals. It was only a few years later, when I became an educational publisher, that these inconsistencies assumed awkward proportions for me.

After accepting early retirement, I spent two years with Kagiso Publishers as an educational publisher before it was taken over by Maskew Miller Longman Publishers. During this period, my brief was to commission authors, to manage the authoring process and to prepare manuscripts for the production phase.

1.1.3 Educational change in South Africa

Before 1994, the ruling powers in South Africa overtly emphasised separateness rather than common citizenship and nationhood. Legislation perpetuated race, class, gender and ethnic divisions. Inequalities permeated society.
In 1994, South Africa became a democracy in which the notion of equity was to be the guiding principle, heralding fundamental transformation of virtually every aspect of the existing social order, including education. Although the transformation in educational thinking in South Africa started further back than the transition to democracy in 1994, it gained impetus in 1998 when Curriculum 2005 was first introduced into schools.

Chisholm (2000: 7) points out that the transformation process included a number of major signposts. The South African Qualifications Authority (SAQA) was formed during the latter half of 1995 as a result of the development of the National Qualifications Framework (NQF) prior to and immediately following the election in 1994. The principles of the NQF were subsequently endorsed in 1995 by the White Paper on Education, which determined the norms and standards of South African education. Two curriculum advisory bodies, created in 1995 and 1996, led to the establishment of a new curriculum framework for General Education and Training (GET) Band. GET covers the first nine years of education and forms the first of three bands of the NQF, the other being the Further Education and Training (FET) Band and the Higher Education and Training (HET) Band. Finally, the new curriculum framework was produced by the National Curriculum Development Committee, and approved by the Council of Education Ministers in 1996. It became known as Curriculum 2005 and was implemented in 1998.

Curriculum 2005 was intended to provide the means for delivery of the critical outcomes defined in the National Qualifications Framework. It drew on a variety of contemporary educational ideas in the international arena and adapts these to meet perceived local needs.

Amongst many others, Popkewitz (1984: 11) reminds us that underlying an explicitly stated school curriculum is a range of “unpostulated and unlabeled” assumptions about the environment in which it occurs. Chisholm (2000: 11) confirms this by pointing out that Curriculum 2005 is a political strategy underpinned by elements of redress, access, equity and development as well as drawing philosophically on progressive learner-centred approaches,
outcomes-based education theory and the notion of an integrated and holistic approach to knowledge. It is “based on a constructivist view of learning … [and] … seeks to produce workers who are flexible, technologically literate and able to learn new skills, and citizens who are able to think critically and act responsibly in a new democracy” (Czerniewicz, Murray & Probyn, 2000: i).

However, Chisholm (2000: 8) points out that despite considerable support for Curriculum 2005, its implementation was not an unqualified success. She cites the combination of changes occurring at an extraordinary pace, and implementation that was not always carefully thought through, properly piloted and inadequately resourced schools as the main reasons for the education system being unable to implement Curriculum 2005 according to schedule. Perhaps the most notable and consistent South African critic of the new curriculum is Professor Jonathan Jansen (1999b) of the University of Pretoria. He bluntly states that outcomes-based education will never work in South Africa. He advances ten reasons in support of his point of view, including overcrowded classrooms, a pervasive lack of even the most basic physical resources, poorly trained teachers, virtually no ongoing support for teachers by education department officials, to name but a few. My own belief is that, given time, the essence of the new curriculum is attainable in South Africa. In my experience it requires much persuasion, guidance and encouragement over a long period of time to convince teachers of a need for change, particularly one as fundamental (for South Africans) as the one required by the new curriculum. South African teachers are notoriously unwilling to change from something that “works” for them and their pupils to one that, in their view, might work. At the former Natal Education Department, two colleagues and I were only partially successful over a period of eight years to encourage our skilled primary school teachers to accept the need for, then to assume ownership and finally to implement the changes we proposed, i.e. a shift from a fixation on the transmission of factual content to a pedagogy emphasising the development of knowledge, understanding, skills and values.

In the light of the perceived deficiencies of Curriculum 2005, University of Natal (Durban) Professor Linda Chisholm was appointed to head the Review
Committee on Curriculum 2005. The brief of this committee was to provide the Minister of Education with recommendations on – among other things – “key success factors and strategies for a strengthened implementation of the new curriculum”, and “the structure of the new curriculum” (Chisholm, 2000: 8).

The report of the Review Committee on Curriculum 2005 was presented to the Minister of Education on 31 May 2000. It claims that the successful implementation of Curriculum 2005 had been hampered by seven deficiencies, including one that has a direct bearing on this investigation, namely learning support materials (including textbooks) that are variable in quality.

The introduction at the end of 2001 of the Revised National Curriculum Statement for Grades R – 9 was a direct outcome of recommendations by the Review Committee on Curriculum 2005. According to Government Gazette no. 22559 (2001: 90), it envisaged the implementation in due course of guidelines for the development of learning support materials for publishers and other materials developers. In March 2003 the national Department of Education (2003: 1) responded by producing a draft document with the object of aligning learning support material more directly with curriculum requirements.

1.1.4 The production of school textbooks

From personal experience I can say that the educational fraternity and textbook publishing industry (including those producing material for the intermediate phase) have been expected to cope with challenges of monumental proportions since approximately 1994, primarily because of being faced with a paradigm shift from a curriculum “emphasising separateness” to one stressing “common citizenship and nationhood” (Department of Education, 1997: 1); from an educational philosophy founded upon the principles of Fundamental Pedagogics to a progressive, learner-centred one; from content-based textbooks to learning support materials favouring a pupil-centred, integrationist approach in which the development of knowledge, skills and values are of paramount importance (Department of Education, 1997).
Transformation proceeded swiftly, throwing into turmoil those used to gradual, evolutionary educational change. In the past, textbooks were developed over a period of up to eight years. Now the pace was perceived as having become frenetic, dictated by deadlines that often allowed less than two years from the inception of the idea to the production of the textbook.

Confusion appears to reign amongst teachers, authors and publishers while officialdom exacerbates the state of affairs. For example, Czerniewicz et al. (2000: 19) point out that official documents emanating from the National Department of Education present teachers, authors and publishers with mixed messages with regard to the nature of learning support materials: that there “appears to be a blurring of distinctions between resources, textbooks and learning support materials, and a lack of clarity as to what these may mean”, while Chisholm (2000: 15) reports that education officials alternately approve and disapprove of textbooks.

The current state of confusion may or may not be alleviated by the development of guidelines envisaged by the Ministry of Education (2001: 90) for the development of learning support materials. These guidelines are intended to “assist in aligning learning support materials more directly with curriculum requirements”. I hope that this study will play a part in achieving this goal, while simultaneously helping South African intermediate phase teachers to make an orderly transition from an educational past, exemplified by a “time-based subject and content-specific knowledge” (Chisholm, 2000: 11), to a progressive, learner-centred pedagogy by means of textbooks containing systematic, self-contained learning programmes that are intended to provide activities for learners to construct knowledge and to develop concepts, skills and values.

1.1.5 Summary

The year 1994 heralded the start of a process revolutionizing the South African education system and the textbook industry by instituting a shift from a traditional content-based curriculum to a progressive one that is underpinned by learner-centred outcomes-based education theory and an integrated and
holistic approach to knowledge. Despite the best efforts of education officials and teachers, its implementation was not an unqualified success. The dearth of good quality learning support materials (including intermediate phase school textbooks) is one of the aspects that is having a detrimental effect on the performance of the new system.

1.2 MOTIVATION FOR THIS STUDY

1.2.1 Introduction

Evidence quoted elsewhere in this chapter (paragraph 1.2.2) points to the fact that teachers are relying on textbooks to do their jobs well. In fact, “some teachers feel paralysed without [such] resources” (Czerniewicz et al., 2000: 72). Teachers have indeed themselves pointed out that “textbooks are crucial to effective implementation of the [new] curriculum” (Chisholm, 2000: 48).

The essential motivational factor for this study is that while there may be general agreement about the usefulness of textbooks, there is evidence (Chisholm, 2000: 3; Czerniewicz et al., 2000: x) that the implementation of Curriculum 2005 has had a deleterious effect on the capacity of the school textbook publishing industry to produce good quality learning support materials, including intermediate phase school textbooks, as well as on the ability of many teachers and education officials to assess their value. Its sequel, the Revised National Curriculum Statement for Grades R – 9 in my opinion is unlikely to improve the situation in the short to medium term unless there are well-researched guidelines as to what constitutes a high-quality intermediate phase school textbook.

These guidelines appear to be overdue, particularly in the light of Woodbury’s (1979: 16) realisation that “there is surprisingly little consensus or usable research” on the quality of instructional materials in education, including textbooks. Years later the situation had not improved when Johnsen (1993: 320) concluded that not a great deal of work had been done about methodical
appraisal of textbook quality. In her study entitled *School textbooks and teachers’ choices*, Mary Reynolds declares that the paucity of appropriate data means that those who write or evaluate textbooks must rely on their own judgement and experience (1997: 19). I have also found this to be so.

Whilst noting Woodbury’s (1979: 5) warning that any effort to simplify and rationalize the complex process of the selection of instructional materials is a daunting one, I must agree with Reynolds (1997: 27) who stresses the need for guiding principles on what makes for good textbooks in South Africa. This study will hopefully make a contribution towards such a debate.

1.2.2 The importance of good quality textbooks

Venezky (1992: 436) declares that textbooks were anathema to notable educationists such as Rousseau, Dewey, Eliot and FitzGerald. Contrary to their views and the beliefs of some academics (Czerniewics et al., 2000: 58), there is evidence that many ordinary teachers believe that the good textbook is an essential aid to efficient curriculum delivery. This has also been my experience. As a former primary school principal and education adviser, I am confident that the vast majority of South African intermediate phase teachers would wholeheartedly agree with Hutchinson and Torres’ (1994: 327) discovery that the textbook is an important means of meeting the range of needs that are to be found in the classroom:

> It is a visible and workable framework around which the many forces and demands of the teaching-learning process can cohere to provide the basis of security and accountability that is necessary for purposeful action in the classroom.

Hutchinson and Torres base their conclusion on their investigation into the reasons why the textbook survives and prospers despite the apparent apathy and even hostility, with which it is viewed in the literature,

Cunningsworth (1995: v) echoes Hutchinson & Torres’ viewpoint by stating that “probably nothing influences the content and nature of teaching and learning more than the books and other teaching material used.” Altbach and Kelly
(1988: 3) place the sentiments of the former two authors in a South African context, albeit by implication, when they state that textbooks “stand at the heart of the educational enterprise … particularly in Third World countries where there is a chronic shortage of qualified teachers”. Mbuyi (1988: 167) concurs. He writes about the “vital role” textbooks play in the African school. Venezky (1992: 442) narrows the argument down to the needs of teachers at the elementary level (the US equivalent of the South African intermediate phase level), who work in a “self-contained classroom” requiring them to teach a range of subjects. A similar situation exists in this country. Many intermediate phase teachers are expected to know enough about virtually all the learning areas of the curriculum in order to accommodate them in their teaching programme, notwithstanding the fact that, due to the general nature of teacher education courses at colleges of education, students do not acquire sufficient conceptual understanding of their content (Vosloo, 1990: 38). McKenzie (1997: 1) adds a further perspective to the argument when he claims it is impractical to expect the average intermediate phase pupil and teacher to rely on a primary source as a “knowledge-builder” because it requires much time and skill to find and develop such resources. He reasons that a useful alternative is the textbook, because textbook writers process vast amounts of complex knowledge and present it “in manageable, digestible chunks and bites”. The final word belongs to Taylor and Vinjevold (quoted by Chisholm, 2000: 49) who in 1999 stated that: “Studies have found that textbooks are the most cost-effective way to improve classroom practice …”. They base their conclusion on classroom-based research in South Africa (e.g. Threshold Project, 1990; PEI Research, 1999; various Curriculum 2005 evaluations, 1998 – 1999) indicating that, with “admirable exceptions”, the average class in South African Schools is invariably “under-resourced, teacher-centred and conceptually impoverished”. Further reference to the importance of good quality school textbooks is to be found in a number of other sources, including Farrell and Heyneman (1989), Verspoor (1989), Gopinathan (1989), Tyson-Bernstein (1989), Johnsen (1993) and Reynolds (1997).

Yet, as Chisholm (2000: 45) points out, South African teachers are confused about whether the use of textbooks is a good thing. She states that education
officials have so far sent out conflicting signals regarding their use. On the one hand they have contended that teachers need textbooks because adequate learning support materials are “an integral part of curriculum development and that they are a means of promoting both good teaching and learning”. On the other hand officialdom has also disapproved of their use (Chisholm, 2000: 45). Czerniewics et al. (2000: 20) have recently confirmed the ambivalence of official pronouncements on the use of textbooks. They state that local policy documents have so far largely been unclear about the nature of learning support materials and particularly where textbooks fit into the picture. These policy documents use the terms “resources” and “learning support material” (Department of Education, 1997), “resource materials” (Department of Education, 1997b) and “teaching and learning materials” (Department of Education, 1997c) interchangeably. Czerniewics et al. (2000: 20) were nonetheless able to develop a useful model showing that in the official mind the textbook can to all intents and purposes stand alone within the family of learning support materials (see paragraph 1.6.6, Table 1.1).

The fact that education officials appear to be in two minds about the use of textbooks in schools conceivably stems in part from uneasiness about some teachers’ uncritical dedication to their textbooks. However, Venezky (1992: 436) reassuringly quotes US research to the effect that there is little evidence that teachers generally slavishly follow each “command and cue from front to back”. Instead, teachers prefer to use the textbook as a source of content, which they supplement and complement as the need arises and follow suggestions with regard to pedagogical approaches. I have found that this a valid observation of many skilled intermediate phase teachers in South Africa, though probably less valid of poorly skilled ones who would most likely be inclined to unquestioningly follow the directions offered by their textbooks. The latter situation is in all probability due to a condition, which is described by McGrath (2002: 8) as being “particularly worrying for its undertones of transferred responsibility and undue veneration for the authority of the printed word”. I expect this to be an accurate reflection of the mind-set of many poorly-skilled South African teachers, who must be overwhelmed by the complexities emanating from little support by school management and the education department, overcrowded and under-
resourced classrooms, comprising a bewildering array of linguistic ability, and cultural and social diversity. It is therefore not surprising that the school textbook as a survival kit, is particularly seductive in the majority of contexts where teachers do not have the time, resources or skills to develop their own teaching materials.

A final thought relates to the likelihood of computer technology rendering textbooks obsolete. Tomlinson (2003: 8) reports that there is increasing evidence that the internet is becoming a “source of current, relevant and appealing texts. While Naidoo (1993: 131) agrees and contends that “linking books to electronic media can serve both the financial interests of book publishers and, ... the educational interests of millions of deprived South Africans”, Fernig, McDougal and Ohlman (1989: 204) argue that the textbook is likely to retain its primacy for the immediate future. Olson and Sullivan (1989: 195) also insist that the computer “is unlikely to rival textbooks in the next fifty years.” I expect that the non-availability of receiving technology at most South African schools is likely to undermine the obvious capacity of the electronic media for some time to come. The projected cost to a cash-strapped South African education system of approximately R2 000 per learner (Van Niekerk, 2002), will almost certainly see to that.

In summary, the school textbook’s central role in the classroom seems widely accepted, albeit reluctantly in some quarters. On balance, however, it may be said that teachers need good textbooks to teach effectively. Most of them are driven by their commitment to give their pupils of their best. Evidence to the effect that textbooks make a considerable contribution to effective teaching and to improving the quality of education in developing countries (Verspoor, 1989: 52) comes as no surprise and is a powerful argument in favour of textbooks, also in South African intermediate phase classrooms. So too is the belief that the availability of textbooks is one of the most important predictors of academic achievement among learners in developing nations in Africa (Altbach and Kelly, 1988: 21).
1.2.3 The inadequacy of school textbook evaluation and selection processes in South Africa.

Tomlinson (2003: 15) defines materials (including school textbooks) evaluation as follows:

[Textbook] evaluation is a procedure that involves measuring the value (or potential value) of a [textbook]. It involves making judgements about the effect of the materials on the people using them and tries to measure … the credibility of the [textbook] to learners, teachers and administrators.

McDonough and Shaw (1993: 63) express a commonly held conviction that “the ability to evaluate teaching materials is a very important professional activity.” Yet, school textbook evaluation has hardly improved since De Castell, Luke and Luke (1989: vii) referred to school textbooks as at times “memorable and edifying”, while at others “eminently forgettable and uneducational”. Crismore (1989: 133) agrees and states that an increasing number of critics are questioning the quality of textbooks, saying that many “are superficial in content [and] lacking in academic rigour”. In the South African context, the Review Committee on Curriculum 2005 found that the quality of learning support material (including school textbooks) produced in response to Curriculum 2005 is “uneven” (Chisholm, 2000: 48). The review committee further asserts that the procedures used by teachers and education officials to determine whether learning support materials meet curricular requirements, are deficient (Chisholm, 2000: 52). Johnsen (1993: 320) is of the same mind. Similarly, Reynolds (1997: 126) found that most South African school textbooks are inadequate and that South African teachers are poorly equipped to evaluate and select textbooks.

My experiences during a brief period of employment as an educational publisher bear this out. I did not have access to a reliable procedure to assess the suitability of manuscripts or give adequate guidance to my authors. We (my authors and I) tried, not always successfully, to infer the appropriate principles from official policy documents that Chisholm (2000: 17) describes as showing a “lack of clarity”. Judging by the haphazard fashion in which provincial education
departments evaluated some of my manuscripts, they experienced similar difficulties. In at least two instances, one of the departments approved school textbooks which another had rejected as unsuitable. The Publishers’ Association of South Africa (2000: 1) also claims that in their experience “controls (by departmental evaluations committees) were unevenly applied in terms of standards and uniform criteria”. Pretorius (2001) has raised similar concerns.

But where do educators start rectifying a state of affairs that is so obviously deficient? What do they need to take into account when embarking on school textbook evaluation? Few would disagree with McGrath (2002: 18) who states that in order to decide which textbook is likely to be the most suitable, the person conducting the evaluation is faced with a “multiplicity of factors”. However, he offers a solution. “One of the key problems,” he argues, “… is the specification of criteria”. Cunningsworth (1995: 14) elaborates on this statement by pointing out that, as textbook evaluation will inevitably involve elements of comparison, “a standard procedure and a common set of criteria [are needed to make] the process more objective, leading to more reliable results”, while Tomlinson (2003: 5) emphasises the fact that to ensure valid textbook selection processes, educators need to make sure that procedures are put in place that are “thorough, rigorous, systematic and principled.” This study attempts to do so.

1.2.4 Summary

Czerniewicz et al. (2000) accurately reflect the motivation for this study. Quoting international research into the ways in which carefully designed learning support materials (including textbooks) can support teachers in bringing about curriculum change, Czerniewicz et al. (2000: 63) state that there is substance to the view that “appropriately structured [learning support] materials have an important role to play in times of change when normal routines are broken and classrooms become unpredictable and stressful places”. However, clumsy learning support materials’ evaluation procedures have proved harmful to the
production of good quality materials. So too have authors who often lack sufficient insight to effectively meet the exigencies of the new curriculum.

Both Woodbury’s (1979: 92) insistence upon attempts to bring “rigour and logic” to the selection (and authoring) process and Reynolds’ (1997: 127) recommendation that research into learning support material (school textbooks) development should be conducted to provide a theoretical framework to establish consistency in the development and evaluation of school textbooks, provide a rationale for this study.

1.3 STATEMENT OF THE RESEARCH PROBLEM

Owing to the fact that a coherent theory to underpin the assessment of intermediate phase learning support materials has not been forthcoming since the advent of *Curriculum 2005*, two problems have arisen:

- South African authors and publishers are producing intermediate phase school textbooks of variable quality.
- South African educators responsible for the evaluation and selection of intermediate phase school textbooks are not equipped to perform these tasks in a consistent manner.

1.4 STATEMENT OF THE RESEARCH QUESTION

The research question following from the problem is: What would be an efficient and theoretically sound way to evaluate South African intermediate phase school textbooks?

The following sub-questions apply:

- What are the theoretical considerations relevant to textbook evaluation?
- How do these considerations apply in the South African situation?
- How can the latter be applied to the development of a coherent evaluation procedure for South African intermediate phase school textbooks?
1.5 THE PURPOSE OF THE RESEARCH

In the light of the research question, the purpose of the research is twofold:

- to articulate a theory about the practice of textbook evaluation, and
- to develop a procedure for evaluating South African intermediate phase school textbooks in terms of the theory.

1.6 DEFINITION OF TERMS

1.6.1 “Criterion”

Thompson (1995: 565) defines “criterion” as a rule for thinking; a principle or standard that a thing is judged by (Thompson, 1995: 319). The “thing” in the context of this investigation refers to an intermediate phase school textbook.

1.6.2 “Curriculum 2005”

According to Pring (1976: vi), the curriculum describes “what should be planned, taught and learned” in schools. Curriculum 2005 is a South African plan for teaching and learning and is the means to deliver the critical outcomes defined in the National Qualifications Framework. It draws on a variety of contemporary educational ideas in the international arena which it has adapted to meet perceived local needs.

Chisholm (2000: 11) points out that Curriculum 2005 is a political strategy underpinned by elements of redress, access, equity and development as well as drawing philosophically on progressive, learner-centred, outcomes-based education and on an integrated approach to knowledge. It is “based on a constructivist view of learning … [and] … seeks to produce workers who are flexible, technologically literate and able to learn new skills, and citizens who are able to think critically and act responsibly in a new democracy” (Czerniewicz et al., 2000: i).
Curriculum 2005 came under re-examination by the Review Committee on Curriculum 2005 and was replaced in 2001 with the Revised National Curriculum Statement.

1.6.3 “Intermediate phase”

“Intermediate phase” refers to the fourth, fifth and sixth years of the General Education and Training Band of the National Qualification Framework and accommodates pupils from the age of approximately nine to eleven years (Department of Education, 1997: 5).

1.6.4 “Outcomes-based education”

“Outcomes-based education means clearly focusing and organizing everything in an educational system around what is essential for all students to be able to do successfully at the end of their learning experiences” (Spady 1994: 1). It clearly defines what pupils are to learn in terms of knowledge, understanding, skills and values (Department of Education, 1997: 23).

1.6.5 “Textbook”

A “textbook” is a book used for studying (Thompson, 1995: 1442). De Castell et al. (1989: vii) describe it as “an officially sanctioned, authorised version of human knowledge and culture”. In the context of this study, “textbook” refers to “new-style” intermediate phase school textbooks containing a “systematic, self-contained learning programme” (Czerniewicz et al., 2000: 20) in order to meet the needs of “real [intermediate phase] teachers in real [intermediate phase] classes”. These teachers are either poorly trained or “sufficiently constrained by their workloads” (Bruner, 1971: 97) so as to leave them very little time or energy to devise their own learning materials. Nonetheless, these new-style textbooks are open-ended enough to enable more creative teachers to digress. In keeping with the requirements of the Revised National Curriculum Statement, textbooks aim to develop knowledge, skills and values. Ultimately these elements must be delivered in a child-friendly package, which is probably best described by a
Californian State report (1988: 105, cited by Johnsen, 1993: 152) as engaging the imagination of the reader. “Textbooks,” the report stresses, “will fail unless they excite the enthusiasm of the students who read them”.

1.6.6 “Learning support materials”

In an investigation into what the National Department of Education has to say about learning support materials, Czerniewicz et al. (2000: 19) found that there “appears to be a blurring of distinctions between resources, textbooks and learning support materials, and a lack of clarity as to what these may mean”. They consequently developed a useful model to clear up the confusion (see Table 1.1 on the next page). In terms of this model “new-style” textbooks as “systematic, complete, self-contained learning programmes comprising content plus skills plus pedagogy” (Czerniewicz et al., 2000: 20) are an element of the overarching class, “learning support materials”.

1.6.7 “Ubuntu”

Kamwangamalu (1999: 24) describes ubuntu as “a multidimensional concept which represents the core values of African ontologies” and includes humility, solidarity, caring, hospitality, interdependence, communalism, respect for any human being, for human dignity and for human life, to list but a few. Ubuntu is a system against whose values the members of a community measure their 'humanness'. These values are not innate but are transmitted from one generation to another by means of oral genres such as fables, proverbs, myths, riddles, and story telling.
Table 1.1 - The role of learning support materials in *Curriculum 2005*

<table>
<thead>
<tr>
<th>PRIMARY RESOURCES</th>
<th>LEARNING SUPPORT MATERIALS (LSMs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any print, non-print, human, visual, geographical or other resource can be a raw material or a primary resource.</td>
<td>LSMs are prepared materials which structure and support learning and teaching. They can be prepared by teachers in schools as well as by other educationists in NGOs, publishers and other institutions.</td>
</tr>
<tr>
<td>In themselves these raw materials do not support learning and teaching. But they all have the potential to aid learning.</td>
<td></td>
</tr>
<tr>
<td>These primary resources require some kind of intervention in order to scaffold learning. They must be used, shaped, transformed or adapted so that they contribute to a pedagogical purpose.</td>
<td></td>
</tr>
<tr>
<td>When they have both been incorporated into a structured learning process, they become learning support materials.</td>
<td></td>
</tr>
</tbody>
</table>

(Source: Czerniewicz et al., 2000: 20).

1.7 FRAMEWORK OF THE THESIS

1.7.1 Chapter one

Chapter one introduces the study, places it in context and states its purpose.

1.7.2 Chapter two

As shown in Table 1.2, chapter two provides an overview of the positivist, interpretative and critical research traditions and concludes with the
methodological orientation of this study. Also included is an outline of the research method.

1.7.3 Chapter three

Chapter three contains a description of a literature review enabling me to articulate a theory about the practice of textbook evaluation.

1.7.4 Chapter four

The purpose of Chapter four is to reflect on the theory articulated in Chapter three in order to give a South African intermediate phase bias to it. The process of reflection is informed by the analysis and interpretation of the following and concludes with a theory about the practice of South African intermediate phase school textbook evaluation

- the Revised National Curriculum Statement,
- the Department of Education draft policy for developing and evaluating learning and teaching support materials,
- interviews with a sample of South African intermediate phase teachers, and
- a questionnaire survey of a sample of authors of South African intermediate phase school textbooks.

1.7.5 Chapter five

Chapter five describes a procedure for the evaluation of South African intermediate phase school textbooks.

1.7.6 Chapter six

Chapter six will conclude the study by reflecting on it (the study), consider its shortcomings and make recommendations for the future.
### Table 1.2 – Framework of the thesis

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ONE</td>
<td>Introduction</td>
</tr>
<tr>
<td>TWO</td>
<td>Research methodology</td>
</tr>
<tr>
<td>THREE</td>
<td>Literature review with the object of articulating a theory about the practice of textbook evaluation</td>
</tr>
<tr>
<td>FOUR</td>
<td>Data collection, analysis and interpretation in order to give a South African intermediate phase bias towards the theory</td>
</tr>
<tr>
<td></td>
<td>- Analysis and interpretation of the Department of Education's draft policy for developing and evaluating learning and teaching support material.</td>
</tr>
<tr>
<td></td>
<td>- A survey of the perceptions of South African intermediate phase school teachers.</td>
</tr>
<tr>
<td></td>
<td>- A survey of the perceptions of South African intermediate phase school textbook authors.</td>
</tr>
<tr>
<td></td>
<td>- A theory about the practice of South African intermediate phase school textbook evaluation.</td>
</tr>
<tr>
<td>FIVE</td>
<td>A procedure for the evaluation of South African intermediate phase school textbooks</td>
</tr>
<tr>
<td>SIX</td>
<td>Conclusion</td>
</tr>
</tbody>
</table>
1.8 ABOUT THE NEXT CHAPTER

Chapter two describes an overview of the philosophical issues underpinning research methodology in order to clarify the methodological orientation of this study.
CHAPTER TWO

RESEARCH FRAMEWORK

2.1 INTRODUCTION

This chapter has three aims. The first aim is to give an overview of the philosophical issues underpinning the positivist, interpretivist and critical research traditions. Flowing from this is the second aim, which is establishing a methodological orientation for this study. Finally an outline of the research method is provided.

2.2 PHILOSOPHICAL ISSUES

2.2.1 Introduction

Many years ago I first encountered the positivist research tradition in a Psychology III module called “Research Methodology”. That was before interpretivist and critical thinking about research became accepted alternatives. The module bristled with the certainty that there is only one genuine kind of knowledge, i.e. “science”, consisting of empirical statements whose validity is quantifiable. Furthermore, studies of human behaviour enjoyed little credibility if they could not yield to an intimidating procedure called statistical analysis.

I am afraid I did not respond well to the vagaries of statistical analysis. Perhaps I intuitively had reservations about the capacity of the traditional scientific method to fully explain the complexity of the human psyche by subjecting aspects of human behaviour to empirical verification and then offering it to the world as comprehensive psychological knowledge. It later occurred to me that, in the same way, a human activity such as education is not entirely suited to the methods of enquiry associated with the natural sciences, or as O’Connor (1957:
puts it: “theories in the sciences of man are less closely tied to their supporting facts than theories in the sciences of nature”.

It was therefore with a sense of relief that I became aware of viable alternatives to positivism in the research of educational issues.

Phillips & Burbules (2000: 4) make the point that educational researchers are a group of investigators who seek knowledge (as opposed to beliefs) about matters that are of great importance to those people who want to be guided by reliable answers to specific issues, including educational practitioners and policy makers. “The crucial question,” they contend, “is how researchers are to provide the necessary evidence to support the claim that their understandings can reasonably be taken to constitute knowledge rather than false belief”. They go on to quote Dewey who stressed the fact that some methods of inquiry are better than others, thereby justifying the purpose of this chapter as stated in the first paragraph, i.e. to investigate the philosophical issues underpinning the positivist, interpretivist and critical research traditions in order to clarify the most appropriate research framework for this study.

The means of articulating a theory to develop a procedure for South African intermediate phase school textbook evaluation is closely allied to the philosophical issues that underpin research methodology. I shall therefore be tracing the arguments of the three main paradigms, or frameworks of thinking, namely the positivist, the interpretivist and the critical paradigms in order to clarify my research framework. Kuhn defines paradigm as “universally recognised scientific achievements that for a time provide model problems and solutions to a community of practitioners” (Bernstein, 1976: 85). A “community of practitioners” shares values that are the basis for choosing theories. The communities of practitioners dealt with in this chapter are the positivists, the interpretivists and those who operate within the critical paradigm. Paradigms regulate future research in a particular discipline. As soon as a variety of factors cause a pronounced failure in the normal problem-solving activity guided by a particular paradigm to the extent that it no longer solves the problems it defines,
a breakdown occurs. At such times a paradigm shift occurs, culminating in a new paradigm with new problems, new standards and new procedures.

2.2.2 The positivist paradigm

2.2.2.1 Introduction

This section contains an overview of the origins and essence of positivist philosophy and the rise of post-positivism. Then follows an attempt to relate educational research to the positivist research tradition. Finally I shall be offering a few remarks relating to the relevance of positivist thinking for my study before summarising the section.

2.2.2.2 The origins of positivist philosophy

The University of Port Elizabeth Faculty of Education (2000: 2) writes that a fundamental shift in thinking occurred in Europe during the seventeenth and eighteenth centuries, which has had a profound influence on the subsequent development of the whole world. This shift of thinking was referred to as the enlightenment and was based on four compelling ideas: Reason, Control, Progress and Science. The enlightenment was opposed to superstition, mystery, tradition and the authority of classical texts, and gave rise to the belief that human beings can control their own fate in the world.

A central idea of this period was “of a world that comes to us already constituted from fundamental components that are intrinsically separate from each other” (Watt, 1994: 29). Knowledge of these basic parts could be obtained by scientific means, i.e. “through observation, refined by experiment and aided by statistical procedures for weighing the evidence obtained” (O’Connor, 1957: 3). Philosophers, physical and social scientists, and mathematicians argued that it was literally meaningless to make statements about things that could not be verified in terms of possible sense experience. Their argument, for example, rendered all theological issues meaningless. They labelled such meaningless dialogue “metaphysics” (Phillips & Burbules, 2000: 9).
This way of thinking became known as “positivism” after nineteenth-century French philosopher Auguste Comte argued that the method of science – which he referred to as the “positive” method – was the best method of arriving at genuine knowledge (Phillips & Burbules, 2000: 8).

2.2.2.3 The essence of positivist philosophy

Hempel’s “covering law” model of explanation is one of the basic assumptions of the culture of positivism. All proper scientific explanation must be consistent with it. Taylor (1970: 8) provides an exhaustive account of this model of explanation, which enables the scientist to provide answers to questions such as: Why did this happen? Why have things changed, or developed in this way rather than that? Why, when this happens, does that happen? As the scientist accumulates information a chain reaction happens: whenever an event of type\textit{a} occurs, an event of type\textit{b} occurs, expressing the causal relationships between events that play a part in scientific explanations. Taylor (1970: 15) goes on to say that an explanation of the above-named event\textit{a} consists of three elements: (1) a universal generalisation (whenever an event of type\textit{b} happens, an event of type\textit{a} happens), (2) a statement of initial conditions (\textit{b} happened), (3) a statement of the consequent condition (\textit{a} happened). In other words, if premiss (1) is true and premiss (2) is true, then the conclusion (3) must be true, thereby constituting a valid argument.

The “covering” law model is also called the deductive-nomological model of explanation (Giroux, 1997: 18), in which the following are inherent:

- The questions of natural science can be settled by empirical observation, i.e. by hypothesis arising out of sensory experience of the material world and observational data or measurements confirming hypothesis (O’Connor, 1957: 21).
- Knowledge is entirely value-free (Giroux, 1997: 10).
- Knowledge must be justified in terms of observational data or measurements, thereby ensuring its objectivity.
In the case of similar events in similar circumstances, explanations or predictions may be made.

Giroux (1997: 3) points out that the term “positivism” has gone through many changes since Comte first used it, including logical positivism and post-positivism. He suggests that one should rather speak of the culture of positivism as the legacy of positivistic thought emanating from the period of enlightenment during the 17th and 18th centuries.

Despite the assumption that positivism provided philosophy with a straightforward, clear-cut, criterion of genuine knowledge, complications soon developed when social scientists accused positivists that their principle rendered meaningless every single moral, aesthetic and value judgement ever made because they could not be empirically verified.

Compromises seemed to be called for when the realisation grew that all research methodology, including our understanding of what constitutes scientific methodology, is located in history and that it develops with time (Schwandt, 1990: 261). During the second half of the twentieth century people began to accept that different scientific researchers have different perceptions of reality and that an individual brings to the observational process a unique frame of reference made up of intellectual ability and background knowledge. Observation can therefore never be entirely neutral. It embodies exactly the same types of fallible reasoning as is found elsewhere. According to Phillips & Burbules, (2000: 1) a new era has developed in which researchers from various orientations question the basic assumptions of the positivistic era. The many different approaches developing as alternatives to positivism represent the post-positivistic era.

Phillips & Burbules (2000: 26) contend that post-positivistic thinking offers the best hope of ascertaining how and why certain credible conclusions have been put forward while other types of thinking have not and cannot do so. At the same time they are at pains to stress that “it is important to realise that this new position is an ‘orientation’, not a unified ‘school of thought’”. They further point
out that while post-positivists often disagree about many issues, they are united in believing that human knowledge is conjectural. In other words, scientists have reason to maintain their beliefs, but these reasons are not indubitable. Acceptance of these beliefs can be withdrawn in the light of further investigation.

2.2.2.4 Educational research in the context of the positivist paradigm

According to Giroux (1997: 18) the traditionalists in the field of educational research share the basic assumptions of the culture of positivism concerning their position on theory and knowledge. This results in the conviction that

- the natural sciences provide the covering law model of explanation - also called the deductive-nomological model of explanation - for the concepts and techniques of educational research;
- educational research ought to aim at the discovery of law-like propositions about human behaviour which are empirically testable;
- educational modes of inquiry can and ought to be objective;
- educational knowledge can be used predict how a course of action can best be realized;
- educational procedures of verifying or disproving must rely upon scientific techniques to ensure results that are value free and universally applicable.

However, OConnor (1957: 104) says that most theories in education rarely conform to the models found in the natural sciences and therefore do not have the logical status of scientific theories. “Nevertheless,” he continues, “it would be absurd to deny that education has a theoretical basis”. He goes on to say that an analysis of educational theories shows that they fall into three distinct categories.

- In the first instance there are statements of a metaphysical kind – emanating from a particular theology or philosophy – that have had a significant effect on the aims and methods of education. The main difficulty with statements of this kind is that they do not meet the established criteria of empirical verification or refutation. However, if we
believe in the particular theology or philosophy, we shall be prepared to support the statements.

- Secondly, there are *judgements of value* that are often embodied in educational theories. Such statements are not self-evidently true nor are they beyond criticism. O’Connor insists that they should be explicitly formulated, related to practice and *recognised for what they are*. “An undiagnosed value judgement,” he says, “is a source of intellectual muddle”.

- The third category of educational theories is *empirical*. They are capable of being supported by the evidence of observable fact. Prior to the development of a scientific psychology, teaching practice came first and its theoretical justification had to wait for the scientific evaluation of its (teaching practice) success. Since the advent of scientific psychology it is experiment rather than practice that now suggests theory.

O’Connor concludes his analysis by declaring that “the word ‘theory’ as it is used in educational contexts, is generally a courtesy title” and is justified only when they can be verified or disproved on empirical grounds.

2.2.2.5 The relevance of the positivist paradigm for this study

The essence of the positivist paradigm is that it seeks to emulate the natural sciences in that it strives to achieve certainty, and to be objective and value-free. In this study, however, my own background in education and the publishing industry has influenced my thinking and has provided me with the motivation for this study. I am, therefore, not approaching my research in a completely objective, nor a value-free fashion. I also do not intend generating “law-like propositions” (Giroux, 1997: 18) about aspects of what essentially is human behaviour, because it simply does not submit to scientific explanation in the positivist sense. Instead, I am seeking knowledge (as opposed to beliefs) about matters that I perceive to be of importance to people who need reliable answers on a particular issue. More specifically, I want to articulate a theory about the practice of textbook evaluation in order to develop a procedure for evaluating South African intermediate phase school textbooks. To achieve this
aim, I must try to understand what the value-laden perceptions of South African
departmental officials, teachers and authors are with regard to intermediate
phase school textbooks. This explains why the purest conventions of the
positivist research tradition will not suit my investigation.

2.2.2.6 Summary

Positivism provides us with a simple answer to the question of what genuine
knowledge is and how to acquire it: a true picture of reality obtained through
empirical verification of a relevant body of facts.

The value of the positivist paradigm for educational research has been
vigorously debated for some time. The consensus seems to be that theories in
education do not, in general, have the logical status of standard theories in the
natural sciences. Degenhardt (1984: 232), for example firmly discounts central
positivist theses, which he sees as harmful to education. Such thinking, he
argues, is preoccupied with objectivity and neutrality while discounting the
researchers' own beliefs. Observation and quantification are emphasised,
thereby overlooking the fact that human uniqueness and unpredictability simply
defy scientific analysis of complex and elusive phenomena such as intelligence,
creativity, learning, understanding and morality. The natural scientist’s
preoccupation with generalisation and abstraction overlooks the fact that human
behaviour does not allow itself to be governed by general laws, nor does its
propensity to devise new and extravagant terminologies – or “barbaric jargon” –
for human behaviour do much to dispel discomfort at their mechanistic view of
man.

This investigation is unlikely to meet the fundamental demands of the natural
sciences, which is to achieve certainty, and to be objective and value-free.
2.2.3 The interpretive paradigm

2.2.3.1 Introduction

This section contains an overview of the origins and essence of interpretive thinking. Then follows an attempt to relate educational research to the interpretivist research tradition. Finally I shall be offering a few remarks about the relevance of interpretivist thinking for my study before summarising the section.

2.2.3.2 The origins of interpretivist philosophy

According to Burrell & Morgan (1979: 227) the intellectual roots of the interpretive paradigm can be traced back to the German idealist tradition of social thought whose foundations were laid by Immanuel Kant (1724 – 1803). For the most part, however, the interpretive paradigm can be regarded as a phenomenon of the second half of the twentieth century. Kant put forward the idea that knowledge is logically independent of experience; that knowledge is the product of the ‘mind’ and its associated interpretive processes and not an understanding of the sense data of empirical experience; that knowledge goes before any insight derived from controlled observation. In the context of the social sciences his philosophy offered an alternative to positivism.

Peters (1958: 2) was one of the early social scientists who argued that explanations of human action are far removed from the mechanistic explanations favoured by those adherents of the scientific approach who “cast their theories in a mould dictated by the current conception of scientific method”. There was a fast-growing conviction that there is a fundamental difference between positivist concern about stating the facts about something and the social scientist's objective of passing judgement upon these facts (Warnock, 1967: 63).

The early 1970s signal the watershed between the positivist and interpretivist paradigms when adherents of the latter seriously challenged the hitherto
dominant positivist framework of thinking in the context of the social sciences (Carr & Kemmis, 1986: 84), i.e. the “picture of science advocated by logical empiricists and endorsed by many social scientists” (Bernstein, 1976: 85). Positivist thinking was referred to as “the habits of minds and the techniques by which social processes are systematically misdescribed or passed over” (Bloor, 1983: 6). Interpretivist thinking now seriously began promoting the idea that such processes encompass the social role of the researcher and the “social and cultural context of inquiry and human hopes, values and interests” (Popkewitz, 1984: vii).

2.2.3.3 The essence of interpretivist philosophy

Carr & Kemmis (1991: 85) provide a concisely formulated basic aim of sociological research by affirming that it “must be concerned with how social order is produced by revealing the network of meanings out of which this order is constituted and reconstituted by its members.” Revealing the network of meanings involves a range of fundamental concepts, including human action, the notion of theory, facts and values, and the meaning of language. These concepts are stated below, often in juxtaposition with the particular features of positivism, which they reject:

- According to Carr & Kemmis (1991: 87) the most significant feature of human action is its subjective meaning. Actions mean something to those who perform them and are understood by others only when they know what meaning the actor attaches to them. Human action can only be interpreted by taking cognisance of the actor’s motives, intentions or purposes in performing the action. In interpretivist terms, therefore, the primary concern is to understand the subjective experience of individuals (Burrell & Morgan, 1979: 253).

- In terms of positivist thinking a theory is a precise manifestation of the real world and, Popper (1957: 341) reminds us, achieves scientific status only when it is testable through empirical method. The interpretivist notion on the other hand, according to Burrell & Morgan (1979: 253), is that facts are perceived in keeping with one’s conceptual scheme. They are not a given. The description a social scientist gives of an event...
depends on the way in which those who are involved in it interpret it. Theoretical accounts of human action and social life can therefore only be valid if the relevant rules and assumptions underlying them are known and accepted within a community of social scientists (Popkewitz, 1984: 24). Moreover, practices cannot be independent of theory because “as all theories are the product of some practical activity, so all practical activities are guided by some theory” (Carr & Kemmis, 1991: 113).

- As indicated previously, the essence of the positivist position is that facts exist in the world and are waiting to be discovered and described “through observation, refined by experiment and aided by statistical procedures for weighing the evidence obtained” (O'Connor, 1957: 3). Values on the other hand, are irrational. They are subjective feelings or attitudes that cannot be verified in terms of possible sense experience. To be scientific, science must embrace the neutrality of facts and avoid values. Warnock (1967: 63) explains that social scientists reject this distinction. They argue that it is “probably true to say that any expression which occurs in the context of the evaluation of something could also occur in the context of the description of something”. Facts and values are therefore not logically independent of each other, which reinforces both Carr & Kemmis’ (1991: 89) and Burrell & Morgan’s (1979: 253) reference to the subjective nature of all human action referred to earlier.

- The interpretivists’ view is that society has an impact on the meaning of language. This is contrary to the positivist assumption that the essential function of language is to make assertions about matters of fact (Pitkin, 1972: 42). Interpretivists stress that language has many functions besides naming things. But words not only have functions, Pitkin (1972: 37) argues. They also have meanings. For the interpretivist, the social environment in which it is uttered influences the meaning of a word, emphasising once again the importance of the subjective, value-laden aspect of the interpretivist framework.
2.2.3.4 Educational research in the context of the interpretive paradigm

Carr & Kemmis’ (1991: 85) contention that within the field of education, enquiry should focus on understanding “the social processes through which a given educational reality is produced and becomes ‘taken for granted’” is appropriate. So too is Degenhardt’s (1987: 246) assertion that education is about values, common sense, traditional wisdom and experience – all aspects that positivist thinking discount because they are subjective and therefore cannot be empirically validated. However scrupulously educational data may be processed, the positivist approach is too clumsy to deal with the subtleties at stake. Yet, despite its assertion that educational realities are “subjectively structured rather than objectively given”, Carr & Kemmis (1991: 99) insist that the interpretive approach, like positivism, strives to maintain a neutral, disinterested stance when describing these realities.

2.2.3.5 The relevance of the interpretive paradigm for this study

This study proposes to determine the attributes of good quality South African intermediate phase school textbooks and to use them to develop a method to assess the effectiveness of such books in a consistent fashion.

As stated previously, my background in education and the school textbook publishing industry has influenced my thinking about intermediate phase school textbooks currently being produced in this country. My approach to this study is therefore neither objective nor value-free. So too are the perceptions and needs of South African departmental officials, intermediate phase teachers and authors of intermediate phase school textbooks taking part in the empirical investigation. The description of the attributes of effective South African intermediate phase school textbooks depends on the interpretation (by definition a subjective action) of those who are involved in the empirical study (officials, teachers and authors). The knowledge generated in this fashion is therefore the product of the interpretive process in which values, common sense, traditional wisdom and experience play a deciding role.
2.2.3.6 Summary

The basic tenets of the interpretivist paradigm, may be summarised as follows:

- Human behaviour is a person’s response (actions and practices) to his/her understanding of things that happen to him/her and around him/her. He or she has reasons for his actions and practices and knows what they are. Social scientists can explain his/her actions and practices because it is possible to interpret his/her understanding of the world.
- The meaningfulness of language is indispensable when explaining human behaviour.
- Because facts are perceived in keeping with one’s conceptual scheme, they (the facts) may be interpreted in terms of different theories.
- Facts and values are not logically independent of each other. Nor are theory and practice.

Identifying what the attributes of good quality South African intermediate phase textbooks is done in terms of classical interpretive research methodology.

2.2.4 The critical paradigm

2.2.4.1 Introduction

This section contains an overview of the origins and essence of critical thinking. Then follows an attempt to relate educational research to the critical research tradition. Finally I shall be offering a few remarks about the relevance of critical thinking for my study before summarising the section.

2.2.4.2 The origins of critical philosophy

Critical theory, according to Carr & Kemmis (1991: 131), means different things to different people. Since the late 1920s critical theory developed as a response to the “scientific rule-following” of the positivist fraternity, which critical theorists felt was threatening the power of reason because positivists assumed that all
significant questions could only be answered “through observation, refined by
experiment and aided by statistical procedures for weighing the evidence
obtained” (O’Connor, 1957: 3). They were convinced that this posed a danger
for modern society.

Gibson (1986: 3) informs us that critical theory originated in the writings of Karl
Marx and, according to Agger (1991: 109), targeted positivism as the most
effective new form of capitalist ideology, promoting passivity and fatalism. It has
since progressed far beyond orthodox Marxism, though. It now not only
attempts to explain the origins and nature of social ills, but is also committed to
their transformation. “The function of critical theory,” Popkewitz (1984: 45) says,
“is to understand the relations among value, interest, and action, and, to
paraphrase Marx, to change the world, not to describe it”. In order to do this
critical theory explains the assumptions and premisses of social life that are
likely to become changed and those that are not.

The writings of Freud have also contributed much to critical theory. Like Freud,
critical theorists stress the importance of aspects such as the unconscious,
irrationality, repression and feeling (Gibson, 1986: 13).

Critical theorists somewhat immodestly claim that only critical theory reliably
addresses the real state of affairs of social life. Teachers, they declare, should
be interested in critical theory because it is the only approach to research that
enables them to logically justify educational practices (Gibson, 1986: 17).

2.2.4.3 The essence of critical philosophy

Carr & Kemmis (1991: 130) identify the central task of critical theory as
emancipating people from the domination of positivist thought “through their
own understandings and actions”. It is a form of explanation of human action
that takes the interpretive model a step further.

Critical theory relies on the belief that people establish and sustain structures
such as ideology, language and others that are rule-dominated (Carr & Kemmis,
Bernstein (1976: 202) emphasises the critical theorist’s conviction that “individuals ascribe meaning to their actions and situations, and that this self-interpretation is constitutive of social … reality”. He reminds us that these individuals may have “systematically distorted misconceptions of themselves, the meaning of their actions, and their historical situations”. Critical theory obliges the researcher to make the individual aware of this by exposing these false beliefs in order to free him to take part in the discussion about them with nothing inhibiting him. Only then will the researcher be able to plumb a deeper consciousness and thereby gain insight into the individual’s real self-understanding, provided that he or she does not impose his/her own biases on the individual he or she is studying.

Gibson (1986: 3) points out that there is no such thing as a “unified critical theory”. Many writers who have dealt with the topic have differed from each other in major respects. Nonetheless, despite “turgidness, unnecessarily complex sentence structures, a preference for their own neologisms and an almost wilful refusal to attempt to communicate directly and clearly”, social scientists have been able to extract the central features of critical theory from their work because there are assumptions that they commonly share. One of these is the critical theorist’s concern about theory. Another is the nature of facts, and the last to be dealt with in this section is emancipation. Reference will also be made to the way in which we may justify educational action and practices. These concerns are dealt with below:

- Judging by the extent to which critical theorists write about the nature of critical theory, they seem very focused on theory-construction. They are highly suspicious of any approach that in their view is not sufficiently grounded in theory because, Gibson (1986: 4) says, “there is always theory underlying, and embedded in, any practice”. Bernstein (1976: 202) reminds us that interpretivists subscribe to a similar position considering their conviction that practice cannot be divorced from theory. Theory has a monitoring role because it enables one to reflect on practice with a view to possibly improving it. Moreover, interpretivism generates participatory theories that enable us to participate in social issues. They do not venture beyond description and explanation of the issues, though.
Critical theory buys into the interpretivist view, but adds an extra dimension: an outsider can contribute to a change (my emphasis) in a person’s perceptions if the latter so wishes. Carr & Kimmel (1991: 146) argue that, in terms of the critical paradigm, the process of developing knowledge, and thereby maintaining the link between theory and practice, involves three functions. The first is for individuals involved in the process under investigation to co-operatively establish theories that are coherent and able to bear examination in the light of evidence collected in relevant contexts. Secondly there follows a period of reflection by the participants who must have the opportunity to raise, question, affirm and deny validity claims and test their own point of view in self-reflective discussion before achieving consensus on what should be done. In the third place participants become involved in selecting appropriate strategies to solve problems, putting them into practice and establishing their validity. “It is evident,” Carr & Kimmel (1991: 146) conclude, “from these three functions of critical social science that its epistemology is constructivist, seeing knowledge as developing by a process of active construction and reconstruction of theory and practice by those involved”.

- Critical theorists, Gibson (1986: 4) tells us, expend much energy rejecting the natural scientist’s notion that facts – even in human society – are given or natural or value-free. All facts, the critical theorists insist, are “socially constructed, humanly determined and interpreted, and hence subject to change through human means”. Moreover, critical theorists provide explanations of the actual conditions of social life that are heavily influenced by the needs and concerns or vested interests of particular groups. Particularly revealing is the identification of conflicting interests, such as when a dominant or a privileged group tries to suppress the interests of a subordinate group. A key issue of critical theory concerning the nature of facts entails the question “whose interests are being served?”

- The interpretivists contend that man’s self-understanding of the impact on his/her life of removable constraints (such as ideology, religious convictions, poverty, ignorance, etc.) preventing him/her from taking
control of his/her own life, is transparent. Gibson (1986: 6) refers to this self-understanding as a “deeper awareness of your true interests“. Analysing and describing these constraints form the basis of all social explanation. Critical theorists agree with the issue of self-understanding. However, they maintain that man’s self-understanding is not as transparent as the interpretivists would have us believe. Constraints are usually deeply entrenched and sustained by both the dominated and dominator. They permeate the entire social fabric to such an extent that the individual has no control over actions and practices. Schwandt (1990: 268) speaks of the “manner in which lived experience may be distorted by false consciousness and ideology”. Bernstein (1976: 201) makes the point that the individual is not aware of his/her misconceptions; they do not form part of his/her consciousness. Although they readily concede that it is extremely difficult to do, critical theorists hold that they have a role to play in the reduction or removal of these constraints in order to help the individual to achieve greater degrees of autonomy. Autonomy emancipates the individual. Bernstein (1976: 201) further emphasises the fact that success depends less on the critical theorist’s understanding of these misconceptions than on the extent to which the individual by his/her own self-reflection can achieve an understanding and consequently transform his/her mistaken beliefs, “a transformation which … liberates him from the distorting causal efficacy of processes not initially accessible to his consciousness”.

2.2.4.4 Educational research in the context of the critical paradigm

Carr & Kemmis (1991: 149) declare that critical social science has a five-fold impact on educational theory. Firstly, a critical social scientific approach to educational research sees truth as “historically and socially embedded”, thereby rejecting positivist notions of rationality and objectivity. Secondly, critical social science brings to educational research a greater reliance on the meanings and interpretations of the practitioners. Thirdly, critical social science encourages educational researchers to become self-reflective in order to distinguish between ideas resulting from deeply entrenched ideological constraints and
those that do not. Fourthly, critical social science enables educational researchers to identify and overcome constraints on rational change. Finally, critical social science insists that it is not enough for educational theory to simply describe the problems with which teachers may be confronted, as the interpretivists would have it, but should guide them to what they need to do in order to overcome their problems.

Gibson (1986: 17) insists that educational theory should force teachers “to reflect on their practice, their children, their schools, in order to foster desired change”.

2.2.4.5 The relevance of the critical paradigm for this study

As stated previously, my background in education and the school textbook publishing industry, and the inadequacies which I perceive to exist in the processes associated with the production, evaluation and selection of South African intermediate phase school textbooks, inspired the objectives of this study. They are to articulate a theory about the practice of textbook evaluation and to develop a procedure for evaluating South African intermediate phase school textbooks in terms of the theory.

My background militates against the objective and value-free approach to research that is cherished by positivists. So too does the nature of my empirical study, which involves revealing the perceptions of South African education officials, intermediate phase teachers and authors of intermediate phase school textbooks. The knowledge generated in this way equates to the first objective of this study, i.e. to articulate a theory about the practice of intermediate phase textbook evaluation, and is the product of the interpretive process.

Yet, the critical paradigm also contributes to the accomplishment of the first objective of this study. Subjectivity and value-laden perceptions are also tolerated and even encouraged by philosophers who function within the parameters of the critical paradigm, provided that the researcher does not impose his/her own biases on the object of his/her study. The critical paradigm
also encourages reliance on the meanings and interpretations of education officials, teachers and authors. The critical paradigm is also compatible with Margetson’s (1979: 16) view that the link between theory and practice occurs on the basis that the researcher firstly theorises about possible practices. This enables him to reflect in order distinguish between ideas resulting from ideological constraints and those that do not, resulting in a judgement regarding which of these practices may be the feasible one to follow. Subsequently he or she selects a practice to carry out. As indicated in the previous section, this is what occurs in this study, where the relationship between theory and practice is pursued by integrating the literature study with the insights revealed through the empirical study. The literature study generates a theory about the practice of textbook evaluation, and determines the way in which the empirical study is structured. The empirical study seeks to give a South African intermediate phase bias to the theory, by analysing and interpreting the requirements of the national department of education, the perceptions and needs of intermediate phase teachers, and those of authors writing intermediate phase school textbooks. The knowledge that is generated in this fashion is therefore the product of the interpretive process.

The two research paradigms part company at this juncture. Critical thinking adds an extra dimension to the interpretivist’s chief concern with identification and description, i.e. the creation of knowledge. The critical paradigm requires that the knowledge that has been generated must deliberately be used to devise appropriate strategies to transform mistaken beliefs. It is not the intention of this study to take deliberate steps to bring about change in the research participants.

2.2.4.6 Summary

Critical theorists radically question assumptions and beliefs that are taken for granted and challenge many conventional ideas and practices. They claim that they alone can use knowledge to free the mind of the restrictions imposed upon it by dominant ideologies. Schwandt (1990: 274) refers to the ability of critical social science to achieve “true as opposed to false consciousness” and, as a
result, to bring about change and improvement to society itself. This study is not intended to transform teachers and authors, and is therefore not compatible with this basic assumption of critical theory.

2.3 ESTABLISHING A METHODOLOGICAL ORIENTATION

2.3.1 Introduction

Carr & Kemmis’ (1991: 151) overview of the three paradigms under consideration closely matches my understanding of them. They remind us that the positivist educational researcher is an objective observer of reality. The interpretive researcher, by contrast, reconstructs and interprets events. The critical approach to educational research requires the researcher to develop knowledge as “social and political action” to change mistaken beliefs.

While Popkewitz (1984: 54) is unwilling to argue for the superiority of any single paradigm for considering the complexities of education, my research project clearly draws on the interpretive paradigm.

In the following paragraphs, I shall briefly describe how and why this orientation came about, culminating in an account of the strategies employed to accomplish the aims of this study.

2.3.2 Positivist, Interpretivist or Critical?

As my understanding of the research paradigms grew, so my preference for a particular one changed. Initially, I found the apparent simplicity of the positivists’ deductive-nomological model of explanation most seductive. However, Degenhardt’s (1984: 233) argument that an exclusively positivist approach to educational research was “naively empiricist” and amounted to “a false and over-simplified notion of natural science and which risk extending science beyond its proper limits” reinforced my intuitive belief that positivist thinking is not compatible with studies of human action such as education.
One must concede, though, that the positivists have established an admirable culture of investigative rigour that ought to bolster all research. Carr & Kemmis (1991: 133) state that the “rigorous conception of objective knowledge into the study of human and social life” was regarded as a major gain.

Eventually I found myself feeling comfortable with the central theses of the interpretive paradigm, which unambiguously reject the fundamentals of positivist thinking. In the social sciences, human action is different from the other things that happen in the natural world. A person’s actions and practices are the result of things that happen to him/her and around him/her. These occurrences are subject to rules and conventions. He or she is aware of these things and is able to rationalise his/her behaviour. Social scientists are able to explain his/her behaviour because they are capable of interpreting his/her understanding of the world. These principles can be applied to education because education is a form of human action.

Critical theorists add a further dimension to the interpretivist paradigm. People use rules and conventions to establish and nurture ideologies resulting in distorted misconceptions of self. The researcher is obliged to expose these false beliefs in order to free people from them and to expose them to alternative and more healthy modes of self-perception. This correlates with their view of theory, which, they assert, enables one to reflect on practice with a view to possibly improving it.

My methodological orientation meets the conditions for qualitative research as identified by Delamont (1992) and McMillan & Schumacher (1993). Qualitative research is typified by “the use of non-interfering data collection to discover the natural flow of events and processes and how participants interpret them” (McMillan & Schumacher, 1993: 372). Moreover, researchers collect data by interacting with “selected [my emphasis] persons in their settings” (McMillan & Schumacher, 1993: 373) and by obtaining relevant documents. Delamont (1992: 150) likewise refers to the use of documentary data such as published sources and public documents, and oral data elicited from formal interviews and informal conversations. McMillan & Schumacher (1993: 373) further state that
qualitative researchers are not particularly concerned about generalizability because the understandings generated are invariably further investigated in subsequent studies. The latter point is important in view of my sampling method described in Chapter 4.

2.4 RESEARCH METHOD

2.4.1 Literature review

The purpose of the literature review was to articulate a theory about the practice of textbook evaluation.

2.4.2 Data collection and recording

2.4.2.1 Fieldwork

The purpose of the fieldwork was to gather and record relevant data in terms of the theory about the practice of textbook evaluation articulated in Chapter 3. The data were extracted from documentary evidence emanating from the national Department of Education and a survey of the perceptions of teachers and authors.

2.4.3 Data analysis and interpretation

As qualitative data analysis and interpretation is primarily an inductive process, they (the data) were organized into categories and relationships between them identified on the basis of the theory about evaluating school textbooks articulated in Chapter 3.

During the process of data analysis and interpretation, my reflection on the theory about the practice of evaluating school textbooks culminated in the theory acquiring a *South African intermediate phase* bias, in terms of which a procedure to conduct intermediate phase textbook evaluation in South Africa was originated.
2.5 ABOUT THE NEXT CHAPTER

In Chapter 3 I shall conduct a literature review in order to articulate a theory about the practice of textbook evaluation.
CHAPTER THREE

LITERATURE REVIEW

3.1 INTRODUCTION

In the first chapter I explained that two issues concerning intermediate phase textbooks in South Africa have motivated this study. In the first place, most South African intermediate phase teachers need good quality textbooks to deliver the new national curriculum as prescribed by the Revised National Curriculum Statement (Ministry of Education, 2001). Secondly, as a consequence of the non-existence of a coherent theory about the practice of textbook evaluation, there is a lack of consistency in South African intermediate phase textbook evaluation procedures, the outcome of which is a dearth of good quality intermediate phase textbooks.

Chapter 2 provided an overview of three research paradigms, i.e. positivist, interpretivist and critical, in order to establish a research framework for this study. Since my background in education and the publishing industry (essentially subjective and value-laden activities) is unsuited to either the objective and value-free approach to research that underpins the positivist paradigm or bringing about the transformation of those persons who are participating in my research as required by the critical paradigm, the most viable approach to this study is the interpretive research paradigm.

Margetson (1979: 16) explains that, in terms of interpretive thinking, the link between theory and practice occurs on the basis of the practitioner articulating a theory about a practice as a first step towards critical reflection of that practice – possibly with a view to improving it. The relationship between theory and the practice in this study is pursued by articulating a theory about the practice of textbook evaluation. In respect of the latter, the literature review undertaken in this chapter plays a critical role. The theory of textbook evaluation enables me
to reflect on the practice of textbook evaluation. An analysis and evaluation of certain data (Chapter 4) is intended to give a South African intermediate phase bias to the theory, on which a procedure for the evaluation of South African intermediate phase school textbooks (Chapter 5) is based.

This chapter represents a reflection on literature pertaining to the evaluation of textbooks. While the main focus is on the attributes of good school textbooks, the next paragraph is devoted to a general overview of various authors’ views on the theoretical issues relevant to the evaluation of textbooks.

3.2 THEORETICAL CONSIDERATIONS RELEVANT TO TEXTBOOK EVALUATION

3.2.1 Introduction

This section gives an overview of various aspects that impact on learning materials (including school textbooks) evaluation. These serve to provide a broad frame of reference for the development of an evaluation procedure for intermediate phase school textbooks. In so doing, it seeks to respond to the first research question about the theoretical considerations relevant to textbook evaluation. It also provides the basis for the conclusions and recommendations discussed in Chapter 6.

3.2.2 The process of textbook evaluation

While Tomlinson (2003: 23) states that there are many different types of evaluation, serving many different purposes, he and Cunningsworth (1995: 14) call attention to three basic methods that occur before a textbook is used, during its use and after use. In this paragraph I shall use Cunningsworth’s (1995: 14) terms pre-use, in-use and post-use evaluation. Tomlinson (2000: 24) prefers “whilst-use” instead of “in-use”.

Cunningsworth (1995: 14) regards pre-use evaluation as the most difficult because the evaluator has no recourse to impressions gained during actual use
of the textbook. Tomlinson (2003: 23) points out that pre-use evaluation requires the evaluator to predict the possible value of the textbook for the target group.

McDonough and Shaw (1993: 67) and McGrath (2002: 29) favour a three-stage approach to pre-use evaluation, while Cunningsworth (1995: 1) is satisfied with a two-stage approach. McGrath (2002: 29) refers to the first stage as “first-glance evaluation”, Cunningsworth (1995: 1) speaks of an “impressionistic overview” and for McDonough and Shaw (1993: 67) it is the “external evaluation”. Tomlinson (2003: 23) perceives it as a brief “flicking through” the textbook. The purpose of the first stage of pre-use evaluation is to enable the evaluator to obtain an impression of what the textbook contains. According to McDonough and Shaw (1995: 67) it involves reading the “blurb”, in which the author/publisher enunciates the aims and objectives of the book. Subsequently, the table of contents is scrutinized to establish whether the aims and objectives have been accommodated. One may use the foreword and a brief perusal of a single chapter/module/unit for the same purpose. McGrath (2002: 29) points out that the first stage enables the evaluator to save time to either reject the textbook forthwith or to set it aside for closer scrutiny later.

Cunningsworth (1995: 1) states that the first stage of evaluation will not give the evaluator enough detail to compare the contents of the textbook and the requirements of the teaching environment. For this one needs an “in-depth evaluation”, or a “close analysis and evaluation” (McGrath, 2002: 29), or an “internal evaluation” (McDonough and Shaw, 1993: 75). The purpose of the second stage is to establish the extent to which the observations during the forgoing stage “actually match up with the internal consistency and organization” of the textbook. A checklist of criteria may be used for a detailed examination of at least two units/modules/chapters (Cunningsworth, 1995: 2; McGrath, 2002: 40).

“Where any doubt remains and time and expertise are available,” says McGrath (2002: 56), a final stage may be embarked upon. The third stage requires an “in-depth analysis” (McGrath, 2002: 54) or an “overall evaluation” in terms of a
number of parameters, including usability, generalizability, adaptability and flexibility (McDonough and Shaw, 1993: 75).

In-use evaluation occurs while textbooks are being used in the teaching environment. Tomlinson (2003: 24) feels that in-use evaluation is more objective and reliable than pre-use evaluation, but is limited to observable events and cannot “claim to measure what is happening in the learners’ brains”.

“Post-use evaluation,” writes Cunningsworth (1995: 14), “provides retrospective assessment of [a textbook’s] performance”, and, according to Tomlinson (2003: 25), is conceivably the best of the three types of evaluation because “it can measure the actual effects of the [textbook] on the users”. This ties in with McGrath’s (2002: 13) assertion that “the most secure basis for deciding which textbook to select is to try out the materials with the students for whom they are intended”. Tomlinson (1999: 11) regards post-use evaluation as the ideal way and pre-use evaluation as the least reliable way of establishing a textbook’s merits. “Even the most systematic, thorough and rigorous evaluation,” he writes, “can fail to predict the actual effect of the materials in use.” One cannot fault the logic of his argument. However, McGrath (2002: 14) concedes that in the past the emphasis has been on pre-use evaluation, because of the fact that so much depends on “making the right decision about materials that it pays (in terms of money and time) to be as rigorous as possible”. This point is particularly relevant to the South African situation.

Cunningsworth (1995: 15) further distinguishes between “evaluating for potential” and “evaluating for suitability”. The former does not have particular learners in mind, while the latter “involves matching the textbook against specific requirements”.

Rubdy (2003: 51) touches on important questions in the evaluation of textbooks. The questions are important because they go beyond issues involving format and content, e.g. whether the materials “encourage creativity, imagination and exploration”. Questions such as these take evaluation into the area of materials development and refinement. They tie in with Tomlinson’s (2003:101)
suggestion that evaluation and adaptation of materials be built into material
development. This would represent an even earlier stage than pre-use
evaluation, and could be referred to as in-production evaluation. Considering
these suggestions makes it clear that evaluation for the selection or rejection of
textbooks represents only one (and maybe the most barren), albeit essential,
aspect of textbook evaluation.

Then there is the matter of opposite approaches and metaphors with respect to
textbook evaluation. Wala (2003: 62) refers to the importance of considering
whether the textbook has a top-down approach. McGrath (2002: 7) introduces
the concept of metaphor as a way in which teachers perceive textbooks. The
metaphors he refers to (“a coursebook is a recipe; a springboard; a straight
jacket, a supermarket … a survival kit”, etc.) represent two alternative themes:
freedom (choice) and control as the two extremes, with support in between.
This clearly refers to the author’s philosophical point of departure, which has
been touched on in the section dealing with the development of the evaluation
procedure, and which should be seriously considered in textbook evaluation.

In closing, McDonough and Shaw (1993: 63) assert that the options to choose
textbooks vary from totally free to extremely circumscribed. The first approach,
says Chambers (1995: 30), relies on what educators glibly refer to as
“professional judgement and expertise”. These teachers view textbook writing
as a creative undertaking, and as such, deserving of an open-ended approach
to evaluation. They disapprove of textbook rating lists, arguing that they are
mechanistic and therefore unable to deal with the subtleties at stake. At the
other extreme we find “highly precise, mathematical systems” of evaluation.

3.2.3 Distinguishing between analysis and evaluation

According to Warnock (1967: 63) there is an “insurmountable” difference of
principle between the activities of evaluating something (passing any sort of
judgment on them) and describing it on the basis of an analysis, i.e. stating the
facts. Tomlinson (2003: 16) relates this argument to the process of textbook
evaluation when he states that the objectives and procedures associated with
analysis and evaluation are dissimilar. Simply put, one analyses objectively to “discover what is there” and evaluates subjectively “to discover what one is looking for, is there - and, if it is, to put a value on it” (McGrath, 2002: 22). Analysis enables the analyst to respond with a “yes” or a “no” to a question that is intended to find out whether the textbook meets a specific requirement or not (Tomlinson, 2003: 16), for example, “Does the textbook contain a declaration about the intended learning outcomes?” McGrath (2002: 22) stresses that analysis occurs at “different levels of sophistication”, particularly when the analyst is required to make inferences. When this happens, the process becomes more subjective due to the analyst’s own bias playing a more pronounced role (Tomlinson, 1999: 10). McGrath (2002: 22) is at pains to point out that both concepts have their limitations.

McDonough and Shaw (1993) do not make this distinction and use the concepts interchangeably.

Evaluation, on the other hand, “focuses on the users of the materials and makes judgments about their effects” (Tomlinson, 2003: 16), and is therefore largely subjective. A response to an evaluation question can be shown on a continuum. For example, responding to “Is the textbook accessible for 10 year old learners?” an evaluator might judge that accessibility rates 4 on a 6-point scale ranging from “not accessible” to “accessible”.

Tomlinson’s (2003: 16) observation that “evaluation can include an analysis or follow from one” has important implications this study. He (1999: 10) argues that, “a good analysis … provides a detailed summary of the materials which can be used for other purposes”. Hence, an analysis of the observable aspects of a particular textbook attribute could focus the evaluator’s attention on matters that need to be taken into account when evaluating what its effect might be on the target group. It may therefore be inferred that analysis and evaluation could both be included in a single procedure for evaluating school textbooks.
3.2.4 The development of criteria

Everyone who has ever been involved in the evaluation and selection of school textbooks will attest to the multiplicity of factors that have to be taken into account. An analysis (see Annexure A) of a variety of school textbook evaluation formats reprinted by Woodbury (1979: 76), McCormick (1981: 8) and Tyson-Bernstein (1989: 80), and the perusal of textbook evaluation procedures described by McCormick (1981), Williams (1983), McDonough and Shaw (1993), Chambers (1995), Cunningsworth (1995), Potenza & Monyokolo (1996), McGrath (2002) and Tomlinson (1999, 2003) confirms this, substantiating Venezky’s (1992: 443) observation that dissimilarities in textbook evaluation formats are caused by “widely varying textbook adoption practices [because] educational consensus on textbook quality is nearly impossible to obtain.” Nonetheless, they have one feature in common: evaluation occurs in terms of specified criteria. This section will, therefore, review the issue of criteria development - also because criteria play a central role in articulating a theory about the practice of textbook evaluation at the end of this chapter.

According to Warnock (1967: 65), “evaluation of any kind “implies the acceptance of, and must be done in the light of, certain rules, principles, or criteria of judgment.” Tomlinson (2003: 27) concurs. He finds it useful to base an evaluation on formal criteria because it ensures that the evaluation is “systematic, rigorous and … principled”. This pronouncement has an important bearing on the criteria developed in subsequent chapters.

As explained in Chapter 1, “criterion” is defined as a rule for thinking; a principle or standard that a thing is judged by (Thompson, 1995: 319). The “thing” in the context of this investigation is intermediate phase school textbooks. This definition seems to support the phrasing of criteria as statements in the theory in contrast to Tomlinson’s (2003: 28) preference to couch them as questions. To my way of thinking it seems right to express a rule/principle/standard such as “motorists and cyclists will stop at a stop sign,” as a statement rather than a question, e.g. “do motorists and cyclists stop at a stop sign?” It seems useful, however, to state criteria as questions in a textbook evaluation checklist.
Examples of this abound, for example McDonough and Shaw, 1993: 70; Cunningsworth, 1995: 3; McGrath, 2002: 33; Tomlinson, 2003: 28; Department of Education, 2003: 23; and others. The object of the questions is to seek answers to issues such as to whether the textbook meets specific requirements (analysis) or to make judgments about certain situations (evaluation).

According to Tomlinson (1999: 11) there are five basic types of criteria for evaluation. Firstly there are universal criteria, which are applicable to all types of learning material. Then there are media-specific criteria, i.e. criteria relevant for books or audio cassettes, etc. Thirdly, he identifies content-specific criteria relating, for example to individual learning areas such as Mathematics or Natural Sciences. In the fourth instance there are age-specific criteria, which relate to the age of the target group, and finally there are local criteria. This study focuses on local criteria in view of its analysis in Chapter 4 of documents emanating from the Department of Education and surveys of South African intermediate phase teachers and textbook authors.

Tomlinson (2003: 27) favours “brainstorming with other colleagues” as a way of developing criteria. Based on the likelihood of “other colleagues” being average intermediate phase teachers, I believe that this study requires more than canvassing the views of colleagues. As a first step one needs to base criteria on expert opinion and research results, hence the literature review. A second step involves finding out what the views of colleagues, i.e. teachers, authors and departmental officials, are.

Tomlinson (2003: 27) subdivides the criteria into categories of criteria, each as a general heading. Each category is then explored further by asking more specific questions. I prefer using the term “criterion clusters”¹ in the context of this study because it seems more precise than “categories of criteria”. Each criterion cluster includes a set of related criteria. As indicated above, the

---

¹ The concept “criterion clusters” was coined by Dr Susan Klein of the US National Institute of Education. A criterion cluster refers to a major textbook attribute that may be broken down into criteria that are specific to it (Woodbury, 1979: 103).
criterion cluster (including the related criteria) is phrased as a statement. When
they are incorporated in the proposed evaluation procedure in Chapter 5, they
are turned into questions.

According to Tomlinson (2003: 28) each criterion should be examined in terms
of a number of issues, e.g. whether it involves analysis or evaluation, that it
deals with one issue at a time, that it does not give the evaluator an opportunity
to impose his or her bias, and that it is unambiguous. These recommendations
have been rigorously applied to the criteria in this study.

Finally, a trial ought to be conducted to ensure that the criteria are “sufficient,
answerable, reliable and useful” (Tomlinson, 2003: 32).

3.2.5 The checklist

3.2.5.1 Introduction

The checklist features prominently in discussions about course
book/textbook/materials evaluation by many authors, including McCormick
Chambers (1995), and McGrath (2002).

A checklist is defined as a “list for reference and verification” (Thompson, 1995:
224) containing items that may be marked off once their presence has been
confirmed. According to Rubdy (2003:42), many checklists have been
developed over the years for the evaluation of textbooks. While these checklists
facilitate quick and comprehensive evaluation, they “frequently involve making
general, impressionistic judgments … rather than providing an in-depth and
systematic investigation into what they contain”.

As indicated by McDonough and Shaw (1993: 75) the fundamental issue is for
the evaluator to determine the extent to which the factors touched on during the
impressionistic overview/external/first-glance evaluation stage “actually match
up with the internal consistency and organization” of the textbook. McGrath
(2002: 40) declares that a checklist is the most efficient way of gathering comparable data systematically. Compared to an “impressionistic overview” Cunningsworth (1995: 1) it has decided advantages. According to McGrath (2002: 27) it ensures that important information is borne in mind, and it allows a lot of information to be checked in a comparatively short space of time. Moreover, information is recorded in a handy format that facilitates comparisons, and its wording is precise. McGrath (2002: 41) goes on to give a list of possible steps to be taken in the design of a checklist.

3.2.5.2 A checklist development process

The first step is to decide on the general categories forming the basis on which specific criteria will be organised. This study articulates a theory about the practice of textbook evaluation in a South African intermediate phase context, comprising six main attributes (general categories) relating to good quality textbooks.

The second step is to select specific criteria within each category. Once again the study delivers specific criteria grouped together under one of the attributes of good quality textbooks, thereby becoming criterion clusters. The specific criteria are also derived from the sources mentioned above.

The third step is to sequence the general categories and specific criteria (criterion clusters). In this study the criterion clusters are more or less randomly sequenced. The centrality of the RNCS, however, may have contributed to its placement at the end.

The fourth step is to decide on a “format of prompts and responses” (McGrath, 2002: 41). In this study the structure or format of the procedure for evaluation is based on the contents of this section and an analysis of existing evaluation procedures.
3.2.5.3 Unfamiliar concepts

McGrath (2002: 44) identifies two problems often associated with checklists. Firstly, to a greater or lesser degree users may find that some of the concepts used are unfamiliar. The second problem relates to dated criteria. This is a difficult thing to control. Even so, the users ought to be prompted to adapt the checklist if circumstances warrant it.

3.2.5.4 Determining format

McGrath (2002: 48) recommends that the evaluation checklist has to fulfil a number of functions. Firstly, it is useful to include a section summarising basic information about the book under consideration. Secondly, a checklist, in which questions are combined with a numerical response is likely to be completed more quickly and the responses of different evaluators or the same evaluator evaluating different books, compared more easily. Thirdly, some checklists include a rating scale permitting qualitative judgments to be made. It also seems general practice to allocate a higher weighting to items perceived to be more important than others.

3.2.5.5 Piloting and revising checklists

According to McGrath (2002: 51) an evaluation checklist “should ideally” be piloted or trialed. He suggests that a realistic trial would involve the designer (or preferably someone else) to use the checklist to evaluate one textbook, which he or she has used, and another with which he or she is unfamiliar. Following such a trial the checklist can be revised.

3.2.5.6 Group evaluation

On the basis of two (or more) heads being betters than one, McGrath (2002: 52) recommends that group evaluations using the same procedure have decided advantages over evaluations that are conducted in isolation because the book will be examined from a variety of perspectives.
3.2.6 The context of evaluation

Contextual factors deal with the needs of the teachers and learners (McGrath, 2002: 18). While this section concerns itself with these needs only, Wala (2003: 59) goes further and says that one needs to determine to what extent a textbook meets the needs of teachers, learners, the publisher, the writer(s) as well as the requirements of the syllabus. He (she?) then goes beyond the checklist idea by saying: “there is a need to go beyond a mere listing of the presence or absence of these features and attributes to consider what their presence or absence means”. Wala represents the line of thinking which pursues the possibilities of in-depth evaluation, and which is obviously the preferred but more costly, and therefore less viable option in most instances. Rubdy (2003:47) also advocates a needs analysis process in the construction of materials. This can lead one to the question whether the “materials have the potential to foster self-directed, independent learning”.

McGrath (2002: 18) points out that it is evident that context determines the type of evaluation procedure to be chosen. McDonough and Shaw (1993: 65) identify two issues that are relevant to most South African intermediate phase teachers. The first is that they teach in contexts where “stimulating [and] authentic materials” are difficult to obtain. It is asserted in this study that, while many ordinary South African teachers believe that the good textbook is an essential aid to efficient curriculum delivery, the quality of prescribed textbooks is often indifferent. Flowing from this is the second: hard-pressed teachers and education officials need an evaluation procedure that is “brief, practical to use and yet comprehensive in its coverage of criteria”. South Africa is no different. The dynamics of proposed South African textbook procurement procedures militate against post-use evaluation. The Department of Education (2003: 71) envisages two “case scenarios concerning the approval of national or provincial [textbook] lists”. Both scenarios rely on centralised control (at either national or provincial level) over the provision of a standardised list of approved school textbooks. Such a system is likely to
provide teachers with a limited choice despite undefined protestations that “lists should be wide, open and inclusive” (Department of Education, 2003: 73). Subsequent to the publication of a list of approved textbooks exhibitions are envisaged to enable teachers to select textbooks from the prescribed list. Hence the purpose of this study: to develop a procedure for evaluating intermediate phase school textbooks. Ordinary teachers would be precluded from freely selecting textbooks that are likely to meet their individual professional needs or the educational needs of their learners, thereby eroding their professional judgment.

On balance, however, the proposed centralised system involving the very best available expertise is probably better suited to current South African conditions than an open-ended system of unlimited choice where there is a greater chance of substandard textbooks being chosen. Clearly South African education requires pre-use textbook evaluation that is brief, systematic, thorough, rigorous, and practical to use and yet comprehensive in its coverage of criteria despite being imperfect. One hopes that the evaluation instrument emanating from this study will meet that need.

McGrath (2002: 19) also gives a summary of the learner factors that need to be considered in textbook evaluation. They include age range, proficiency level in the teaching language, socio-cultural background, and target audience and situation. The study has addressed all these factors and concurs with Cunningsworth (1995: 15) who feels that they should be reflected in the aims and objectives of a textbook.

3.2.7 The relevance of the theoretical considerations for this study

This study deliberately focuses on pre-use textbook evaluation, which involves gaining an overall impression of the usefulness of a textbook before it is subjected to closer scrutiny.
The fact that this study differentiates between analysis and evaluation is particularly evident in the procedure for evaluating South African intermediate phase school textbooks.

The development of criteria and the concept of checklist play a central role in articulating a theory about the practice of textbook evaluation and in the subsequent development of a procedure for evaluating South African intermediate phase school textbooks.

Contextual factors deal with the needs of the teachers and of the learners. This is an aspect that is both implicitly and explicitly dealt with throughout this study, for example, support for teachers and accessibility of textbooks.

3.3 DEVELOPING CRITERIA FOR THE DEVELOPMENT OF AN EVALUATION PROCEDURE

3.3.1 Introduction

The literature review suggests that the effectiveness of a school textbook is influenced by six main attributes. The purpose of this section is to describe these attributes. An array of criteria for good quality school textbooks is derived from each of the six attributes. In turn, each criterion belongs to a category or a criterion cluster. The criterion clusters underpin the theory about the practice of textbook evaluation, which ultimately informs the proposed procedure for intermediate phase school textbook evaluation.

3.3.2 The composition of the authoring team

3.3.2.1 Introduction

The first attribute of a good quality textbook concerns the composition of the authoring team. In the context of this study, “authoring team” refers to the people who are normally involved in the pre-printing phase of school textbook
production, i.e. writers, artists, editors and technical personnel identified in this section.

This section explains how the composition of the authoring team may affect the effectiveness of school textbooks in general, and is the first step towards achieving the purpose of my study, i.e. to articulate a theory about the practice of school textbook evaluation to underpin a procedure for South African intermediate phase school textbook evaluation.

3.3.2.2 Authoring team competencies

An analysis of various UK and US textbook rating forms (see Annexure A), shows that there is support for the belief that “desirable author attributes” (Tyson-Bernstein, 1989: 83) impact on the quality of school textbooks. For example, a rating form reprinted by Tyson-Bernstein (1989: 80) requires authors to be “well-qualified and reliable in the field”, and to have experience with [the] age group”. Another values “the author’s training and expertise” (Woodbury, 1979: 80). The Sussex (UK) scheme for the analysis of published curriculum materials suggests that the evaluator may seek details about the authors’ competencies and background “if it is helpful” (McCormick, 1981: 8).

Quoting from the Department of Education document entitled “Norms and standards for educators” (1998), Czerniewicz et al. (2000: 22) provide the following list of the “foundational competencies” required by persons who design learning materials:

- A theoretical understanding of curriculum, including its role in the design of learning programmes and its impact on different kinds of learning;
- understanding the principles and practice of outcomes-based education;
- having an intimate knowledge of learning area content and how to establish links between learning areas;
- understanding the way learners learn from texts;
- understanding how language and cultural differences affect learners’ ability to deal with the contents of a textbook;
- understanding the common barriers to learning;
• understanding how to construct materials that are suitable for the learning needs of the individual learner.

The list of “foundational competencies” implies that expertise in didactics, linguistics, learning area content and typography are desirable. This list may be extended to include competency in teaching the target group, which is one of Van Rooyen’s (cited by Blacquiere, 1995: 12) recommendations.

Of course, an authoring team may have all the attributes listed above and still not be effective textbook writers. The list should therefore be extended to include the ability to write readable prose.

Introducing these skills to an authoring team on a one-team-member-one-skill basis, might conceivably result in clumsiness and inefficiency, and may have financial implications for both the publisher and individual members of the authoring team. In my view, however, that does not reduce the necessity for the textbook authoring process to be impacted upon – and seen to be impacted upon - by people who are skilled in each of the areas mentioned above. Yet, beyond stating the names of an authoring team, including those with specific skills involved on an ad hoc basis, it is unusual for South African publishers to give details about their (the authoring team) qualifications or competencies. Such information seems likely to enhance the credibility of the authoring team and enable the end users to make a more informed choice when selecting their textbooks.

While the composition of the authoring team in terms of the competencies dealt with in this section does not guarantee the delivery of a good intermediate phase school textbook, a situation in which they are lacking to a lesser or greater degree, could detract from its worth.

3.3.2.3 Relevance of the composition of the authoring team for this study

Evidence has been forthcoming to suggest that a school textbook is unlikely to be effective if its authoring team is composed of persons whose qualifications
and expertise are inappropriate. This condition forms the essence of the first criterion cluster containing criteria for good quality school textbooks appearing in a theory about the practice of textbook evaluation in section 3.9.

3.3.3 The author’s rationale

3.3.3.1 Introduction

The previous section dealt with the first of the attributes of good quality school textbooks. The second attribute, which relates to the question of whether the textbook has been planned in terms of a clear rationale, is relevant to this section.

Dougill (1987: 33) confirms the significance of the authors’ rationale when he writes that “... teachers need to be able to identify the aim and nature of a [text]book as quickly as possible”. Woodbury (1979: 76), McCormick (1981: 8), Tyson-Bernstein (1989: 80) and Cunningsworth (1995: 3) all recognise the importance of the authors’ rationale to justify textbook content and to allow teachers to obtain an early overview of what the textbook is intended to do. Johnsen (1993: 290) adds that the author’s basic rationale should be prepared in advance, containing a detailed plan of both “the philosophy of the instructional design” and “key instructional features”. Rowntree (1995: 41) agrees that the author’s rationale must include an unambiguous statement of philosophy and feels that a “thumbnail sketch” of the type(s) of learners and their environment for whom the textbook is intended, is also needed. He points out that the type of learner and his/her environment are instrumental in guiding the selection of aims and objectives. Similarly, McGrath (2002: 19) catalogues an assortment of “learner factors” authors need to take into account when planning their textbook. McDonough and Shaw (1993: 67) suggest that the “blurb” on the back cover, and the introduction deal with similar issues, i.e. the “contextual factors”. The latter includes learner characteristics and details about the setting, or the “whole teaching and learning environment” (McDonough and Shaw, 1993: 7).
In this section I shall deal with each of the factors contributing to the author’s rationale referred to in the previous paragraph, namely the underlying philosophy, the target audience and situation, and the aims and objectives flowing from these two elements.

3.3.3.2 Philosophy

Dewey (1936: 3) first differentiated between “traditional” and “progressive” education at the beginning of the twentieth century. He pointed out that traditional education focuses on conveying the “lore and wisdom of the past” to passive learners who are expected to submit to external modes of control. Conversely, progressive education essentially gives credence to each learner’s individuality.

The argument between the protagonists of the two pedagogies continues to this day and still features in the work of contemporary writers.

Authors of school textbooks may also be expected to clearly state their position regarding their own philosophical position, thereby providing the consumer with a “profile of the context” (Cunningsworth, 1995: 5) for which textbook content is selected and organised. McCormick (1981: 8) refers to a summary justifying “the materials provided by the author”. For example, Chabangu, Steenkamp and Subramani (2001) state that their book “is based on OBE principles” and that the activities provide for learner-participation, “cross-curricular coverage”, content that is learner-centred and “contextualised in learners’ experience”.

3.3.3.3 Target audience and situation

Rowntree (1995: 40) argues that there are four types of information the author needs to know (and state) about the target audience and situation. They are demography, level of motivation, learning factors and learning content background. The demographic information could include age, gender, ethnic origin, area of residence (whether rural or urban), and social level, etc. Motivation is dependent on the needs and interests of the intended users, while
learning factors might take into account their intellectual ability, physical attributes, teacher competence, parent involvement, and access to physical resources such as electronic media, laboratories and libraries. Learning content background refers to matters such as prior knowledge, skills and values. McDonough and Shaw (1993: 7) and McGrath (2002: 19) more or less cover the same ground.

Most South African textbooks fall short of the requirements mentioned in this section and if the information is provided, it is incidental. Hendry, Lemmer, Maart and Ntlebi (1999), for example, simply state that their textbook has been written for learners who “do not bring English as a mother tongue to their study of the language”. Govender, Human, Llewellyn, Ngcono and Van Aardt (2000) have taken into account the “growing life-experiences” of the Grade 4 learner.

3.3.3.4 Aims and objectives

McGrath (2002: 19) refers to the “general expectations” of the textbook. Rowntree (1995: 44) is more explicit when he contends that a declaration of aims signifies “a general statement of what you hope [the textbook] to achieve”, while objectives refer to “a statement of what learners should be able to do or do better” as a result of having worked through the book. The objectives should be prefaced with a phrase such as, “By the end of this book learners should be able to, or have improved their ability to … “. Breen and Candlin (1987: 14) suggest that a clear account should be given of what the textbook aims to do and what it contains. This, they say, implies that the teacher needs to know how the textbook will assist learners, what the learners should know of and about the themes at their completion, and what they should be able to do with their newfound knowledge. Breen and Candlin (1987: 15) add that the aims and objectives should also indicate what kinds of learning activities the textbook offers in terms of structured tasks and working procedures. Finally, Breen and Candlin (1987: 16) maintain that the objectives ought to indicate to teachers how they could use the textbooks to teach their learners in the classroom.
Rowntree (1995: 47) points out that the usefulness of aims and objectives lies in the fact that they help to make clear the author’s intentions. They also help the author to “distinguish between possible and essential content and to identify ways of sequencing it”. Finally, they help the author to decide on suitable ways of assessing what has been learned.

South African textbook authors generally state their aims and objectives fairly clearly. For example, Human, Olivier, Le Roux and Murray (2001) formulate theirs as follows:

In some activities you’ll think about businesses and money, and in others you’ll use your skills to solve problems about food, sports and helping people. There are also many opportunities for you to work together and be creative … You will find it really easy to have a lot of fun while you develop your knowledge and skills.

Each module is also prefaced with specific objectives. For example, Module 1 informs the learner that he or she “will learn how to calculate the costs of travelling”, and will be assessed on their ability to work out and describe how fast things move, etc. (Human et al., 2001: 1).

3.3.3.5 The relevance of the authors’ rationale for this study

In this section I attempted to explain the importance of a textbook author’s rationale. The rationale has to precede the authoring process, firstly explaining the fundamental pedagogical beliefs underpinning the content of the textbook and secondly describing the target audience and their circumstances. Textbook aims and objectives should flow from these two aspects, making clear what the author hopes the textbook will achieve. The significance of the authors’ rationale for the ultimate effectiveness of a school textbook is evident in the literature and therefore forms part of the theory about the practice of textbook evaluation.

Annexure B is an example of the authors’ rationale in Engelbrecht, Smith and Smith (2001: i)
3.3.4 The learning and instructional processes

3.3.4.1 Introduction

The first attribute of a good quality school textbook relates to the composition of the authoring team. The second one is concerned with the question whether the textbook has been planned in terms of a clear rationale. The third attribute of good quality school textbooks involves the textbook authors’ understanding of the processes of learning and instruction.

Sound teaching practices reinforce the generally held belief that a school textbook can best assist learners and teachers if the content is delivered in terms of recognised learning and instructional processes. In this section I shall provide an overview of what emerged from the literature about the conditions under which learners learn best what they are taught. It includes the essential features of the structures of learning, followed by an account of the instructional events in the learner’s environment that make learning happen. The section concludes with a discussion of how the various constituents of learning combine into a synergic system of learning and how the author’s understanding of these processes is likely to impact on the way in which the instructional events are presented in the textbook.

3.3.4.2 Structures of learning

3.3.4.2.1 Introduction

In this section I shall briefly explain the internal information-processing structures and their function, the impact of external stimulation on them, and the implications of both for school textbooks. Gagne’s (1985) information-processing model has a profound impact on the section because he is arguably still the world’s most influential learning theorist. While his model may be viewed as simplistic and mechanistic, I nonetheless find it most useful in proposing a practical way in which the learning experiences provided by a textbook could be sequenced.
3.3.4.2.2 Internal structures

Gagné (1985: 70) explains that when the learner receives stimulation from the environment, receptors are activated, transforming the stimulus to patterns of neural impulses or information. This information is briefly retained in the sensory register where selection occurs. The selected information is then stored in the short-term memory, semantically encoded and transferred to the long-term memory. When needed, the information is retrieved from the long-term memory and sent to the response generator either directly or via the short-term memory. The response generator organises a suitable response, activating the effectors mediating learner performance. Houston (1981: 330) describes information processing in terms of the three “aspects” of memory, namely “encoding, storage and retrieval”. Feedback occurs when the learner observes the effects of his/her performance, activating the phenomenon of reinforcement. “Learning,” writes Bruner (1971: 50), “depends upon knowledge of results at a time when and at a place where the knowledge can be used for correction.” Duly reinforced, the learning entity becomes a capability that is available for future recall and use. Table 3.1 graphically illustrates the information-processing flow.

This account of the information-processing flow does not do justice to the ingenuity, flexibility and complexity of human learning, which, according to Gagné (1985: 77), is mediated by two further processes that are not connected with structures mentioned above. The learner has acquired these processes in previous learning situations. They determine his/her unique approach towards information processing and are called executive control processes and expectancies. Executive control has an influence on what the learner’s sensory register rejects and what it retains and transfers to the short-term memory, rehearsed there and subsequently retained in the long-term memory. Leithwood, Begley and Cousins (1992: 174) concur with this view of information processing. For them the three structures referred to by Gagné, namely the “Executive, Short-Term Memory (STM), also called the working memory, and Long-Term Memory (LTM)” dominate the process. The STM makes sense of
the information passed on to it by the Executive. This function occurs when the
STM searches through the LTM for schemata (“clusters or nodes of
information”), which can assimilate this new information. Expectancies affect a
learner’s motivation to achieve a particular goal of learning. What he or she
intends to accomplish can influence the way he or she encodes the information
and how he or she organises his/her or her responses.

Table 3.1 - The information processing flow

<table>
<thead>
<tr>
<th>Executive control processes</th>
<th>Expectancies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectors</td>
<td>Response Generator</td>
</tr>
<tr>
<td>Receptors</td>
<td>Sensory Register</td>
</tr>
<tr>
<td></td>
<td>Short-term Memory</td>
</tr>
<tr>
<td></td>
<td>Long-term Memory</td>
</tr>
</tbody>
</table>

(Source: Gagné, 1985: 71)

3.3.4.2.3 External stimulation

Apart from the internal structures of learning described above, other things can
happen externally that either promote or hinder learning. Fraser, Loubser and
Van Rooy (1993: 60) provide a list of factors, both intrinsic and extrinsic, that
enhances motivation in a learning context. Some of these are the use of striking
teaching media, the formulation of objectives, variation of teaching methods and
teaching media, didactic clarity (arising out of effective communication between
learner and teacher), and the active involvement in the instruction-learning
action. These have obvious implications for textbook writing. As before, I shall
rely on Gagné’s (1985: 80) explanation of these events.
In the brief moment before something is stored in the short-term memory, the learner must firstly be alert to stimuli so that his/her senses may be oriented toward the source of the stimulation in order to capture it in the sensory register. Once held in the sensory register, the raw stimulation is screened and organised, and subsequently retained or discarded through a process known as **selective perception**. Previous learning, verbal instructions or other forms of stimulation may influence selective perception. Another factor that motivates information processing is, according to Leithwood et al. (1992: 175), the perception by a learner of how successful a specific behaviour will be in achieving certain objectives.

As indicated above, learning material in the short-term memory is semantically encoded so that it becomes meaningful, and then enters the long-term memory as a new capability. The process of encoding is the critical event in an act of learning and is always influenced by events in the learner’s environment, for example instructional events in the classroom. The new capability only qualifies as something that has been learned if it is stored in the long-term memory for a shorter or longer period of time.

The processes of searching for and retrieving learned capabilities from the long-term memory depend on events external to the learner, for example when cues are provided.

The retrieved information is sent to the response generator, which organises a suitable learner response. Once again external events dictate the nature of the response. For example, the learner may be asked to provide a solution to a problem, demonstrate a particular skill, and so on.

The selection of executive control processes is also often influenced by external events such as instructions, suggestions or other similar events. So too are expectancies, when the learner, for example, is informed of a particular learning objective.
3.3.4.2.4 Relevance for the authoring process

According to the information-processing model, learning is composed of a number of distinct phases occurring consecutively in a learner’s internal structures, each responding to external stimuli. It is therefore seems prudent that the author should strive to ensure that he or she provides appropriate external stimuli in his/her school textbook in order to activate the learner’s internal structures and his/her (the learner’s) consequent heightened state of receptiveness. These internal conditions eventually culminate in the acquisition of a capability (knowledge and/or skill) that is available for future recall and use.

3.3.4.3 The instructional process

3.3.4.3.1 Introduction

The processes suggested by the information-processing model (Table 3.1) are continually influenced by inputs whose origins are external to the learner. Among others, these inputs emanate from a rational and systematic arrangement of elements, called events of instruction, forming an instructional framework intended to create an effective learning environment. Gagné (1985: 246) identifies the events of instruction (elements of the instructional process) as gaining attention, informing learners of the objectives, stimulating recall of prior learning, presenting the stimulus, providing learner guidance, eliciting performance, providing feedback, assessing performance, enhancing retention and transfer. He (Gagné, 1985: 256) contends that it is advisable to use the full set of nine events in learning events for younger children. Moreover, they must be effectively sequenced, thereby improving the learner’s ability to “grasp, transform and transfer” what he or she is learning (Bruner, 1971: 49). Effective sequencing would therefore ensure that conceptual progression occurs. Byrnes (2001: 37) refers to four phases of the instructional process, namely modelling plus a verbal explanation; allowing the learner to practice (together with teacher feedback); the teacher gradually withdrawing from the scene (“reciprocal teaching”); and lastly teacher and learners taking turns to be the teacher.
Ross, Bondy and Kyle (1993: 112) identify four steps teachers should take in what they refer to as “active teaching”. Firstly, the learners should be helped to see the purpose of the lesson. Secondly, learner understanding should be checked. Thirdly, regular and immediate feedback should be provided. Fourthly, important aspects covered should be reviewed.

The purpose of this section is to provide a brief overview of the instructional process emerging from the literature and to show how it enhances internal learning processes, and how they impact on the textbook authoring process.

3.3.4.3.2 Gaining attention

This is an initial instructional event and should be designed to create a sense of alertness for the reception of further appropriate stimuli. There is an obvious advantage in matching the stimulus with the learning content.

Hendry et al. (1999: 1) offer a good example of an initial instructional event (“Getting connected”), which forms the introduction to a teaching unit entitled “Righting wrongs”. “Getting connected” is designed to prepare the learners to investigate children’s rights. The learners are firstly invited to brainstorm and list the things they can think of that a good mother does. The second part of the initial instructional event entails an activity to help the learners to acquire the concept of children’s rights.

3.3.4.3.3 Informing learners of the objective

When learners understand the objective of the instructional event, it creates an expectancy that is likely to persist while the learning is taking place. It is reinforced by the feedback given during the event.

Hendry et al. clearly enunciate the objectives of “Righting wrongs”. They are: to guide the learners to find out more about children’s rights, to practise using direct and indirect speech correctly in context, to enrich their vocabulary, and to improve their dictionary skills.
3.3.4.3.4 Stimulating recall of prior learning

A link must be established between current and prior learning, and might relate to previously acquired knowledge, concepts, skills and values.

Chabangu et al. (2001: i) make an indifferent attempt at stimulating recall of prior learning when they state, “Last year you were introduced to the scientific process”. However, no revision of previously learned material occurs. By way of contrast, in Unit 2 (“Food and energy”) Leckstein (1997: 7) asks the learners to “look” back to Unit 1 (“The human body”) and to answer three key questions about content dealt with in that unit.

3.3.4.3.5 Presenting the stimulus

A fourth instructional event calls for the presentation to the learner of the essential stimulus relating to the new knowledge, concepts, skills and values to be learned. Clear description of stimulus features is desirable, as is the use of a variety of instructional techniques.

Hendry et al. (1999: 5) use a newspaper report about a person who provides a home for a number of street children, and whom they call “Mama G”, as a stimulus related to the development of the subsequent new knowledge, concepts, skills and values.

3.3.4.3.6 Providing learner guidance

This event has a direct bearing on the internal process of semantic encoding in the short-term memory before being transferred to the long-term memory. It stands to reason that the guidance must be meaningful. To enhance meaningfulness, for example, abstract terms and concepts must be explained in concrete terms and related to others already in the learner’s long-term memory.
Hendry et al. (1999: 4) provide a very good example of learner guidance by informing the learners that, because some of the words in the article about Mama G (see paragraph 3.3.4.3.5) may be new to them, they are required to match up given words with suggested meanings, using a dictionary to facilitate the matching process.

3.3.4.3.7 Eliciting performance

Up to now, the new capability reflected in the objective of the instructional event has been stored in the learner’s long-term memory. Now the time has come for him to demonstrate the newly learned capability by performing an appropriate action.

Once again, Hendry et al. (1999: 13) provide an excellent example of the learners having to demonstrate their newly-acquired knowledge, skills and values by brainstorming and writing a “Children’s Rights Charter”, using a few prompts provided by the authors. As a final activity the learners are required to organise a “Citizen-of-the-year Award Ceremony” for Mama G. The ceremony is expected to make provision for a specially designed certificate, speeches, a master of ceremonies and a vote of thanks.

3.3.4.3.8 Providing feedback

Providing feedback includes continually informing the learner about the degree of correctness of his/her performance, thereby activating the phenomenon of reinforcement. South African textbooks are singularly lacking in meeting this requirement.

3.3.4.3.9 Assessing performance

The purpose of assessment is to confirm that a new capability has been reliably stored. In outcomes-based education, assessment (including self-assessment) is mostly continuous and intended to identify strengths and weaknesses and to

95
act upon them without delay. This kind of assessment is called formative assessment.

Hendry et al. (1999: 15) require the learners to review their performance at the end of each unit under the heading “How did you do?” The initial activity instructs the learners to turn back to the first page of the unit and to read the objectives. Then they are requested to page through the unit and look back at the work they have done in their workbook. Then follow a number of questions that the learners are required to answer as accurately and honestly as they can in order to identify their own strengths and weaknesses, for example, “I did best in …”, “I had the most difficulty with …”, “I could improve my writing by …”, “I have improved most in …”, etc. Subsequently a table is provided requiring the learners to evaluate themselves in terms of a number of criteria, indicating whether their performance was weak, good or excellent. Finally, the learners are asked to reflect on parts of the units they did not understand and decide whether they need to do more work in any of the activities covered in the unit. They are encouraged to discuss these areas with their teacher.

3.3.4.3.10 Enhancing retention and transfer

Practice and repetition enhance the retention of knowledge, skills and values, and their transfer to new situations must be actively sought. Each unit in Hendry et al. (1999: 8) includes a section entitled “Think it over”, which is intended to enable the learners to review the knowledge, concepts and skills dealt with in the preceding sections. In Unit 1, for example, the “Think it over” section invites learners to decorate their room by hanging children’s rights posters on the wall in their preferred sequence.

3.3.4.3.11 Relevance for the authoring process

This section gives an overview of the elements of the instructional process and their link with internal structures of learning. In my view, the implications of the instructional process on the sequencing of the events of instruction in a school textbook, are important. This is particularly true of textbooks containing
systematic self-contained learning programmes designed to meet the needs of teachers who are either poorly trained or constrained by their workloads, brought about, for example, by having to teach large groups of learners with a wide range of capabilities in a single classroom.

3.3.4.4 Conditions affecting instruction

3.3.4.4.1 Introduction

Learning occurs in the context of, and is influenced by, a set of variables that impact significantly on the instructional situation. According to Gagné (1985: 256) these variables include time, learner motivation and individual differences. Bruner (1971: 40) adds to this list learner predisposition, and the structure and form of learning content.

3.3.4.4.2 Time

Protagonists of outcomes-based education believe that, barring extreme exceptions, all learners can and should ultimately achieve success in learning (Spady and Schlebusch, 1999: 29). Gagné (1985: 256) cites the findings of a number of empirical studies showing that the amount of learning is indeed determined by the time devoted to it.

3.3.4.4.3 Motivation

It is self-evident that learning cannot occur without motivation on the part of the learner. However, Gagné (1985: 257) suggests that motivation may be enhanced if the learner is informed that the current objective of the learning experience relates to “some pre-existing” motivation in himself/herself.

3.3.4.4.4 Learner predispositions

Not only does the learner bring to the school predispositions to learn that are influenced by cultural, motivational and personal factors (Bruner, 1971: 42), he
or she also has previously learned capabilities (Gagné, 1985: 17). These form cognitive and behavioural frameworks that “pattern the use of the mind” (Bruner, 1971: 43), creating a state of readiness for new learning (Gagné, 1985: 17) that would ensue in a continual “broadening and deepening of knowledge [skills and values]” that is fundamental to the instructional process (Bruner, 1977: 17). It follows that learner predispositions and previously acquired knowledge should be exploited to achieve particular instructional purposes.

### 3.3.4.4.5 Individual differences

Individual differences in the rate at which learners learn, are similarly apparent. The intensity and scope of all learning activities must reflect an appreciation of different levels of learner intelligence or other academic abilities.

### 3.3.4.4.6 Structure and form of learning content

Bruner (1971: 44) insists that it is possible to present learning content in a form that is accessible to any particular learner. He states that there are three factors affecting the learner’s ability to master it. First: learning content must be presented in a mode that is appropriate for a particular learning area. Second: the volume of learning content presented must be in direct proportion to the learner’s capacity to process it. Third: the presentation of content is effective only if the learner is able to establish connections between matters that, on the surface, seem separate. Byrnes (2001: 32) adds to the above by stating that the information processing theory teaches us that learners can only process and remember a limited amount of information. That is why content should be organized in groups, also called “chunks”.

### 3.3.4.4.7 Relevance for the authoring process

When writing or evaluating a textbook, peripheral issues affecting learning must be taken into account. Such issues are dealt with in this paragraph and include the time needed to learn, learner motivation, individual differences regarding
learner ability, learner predisposition creating a state of readiness for new learning, and the structure and form of learning content.

3.3.4.5 Relevance of the authors’ understanding of the process of learning and instruction for this study

Table 3.2 demonstrates the link between the internal process of learning and the elements of the instructional process dealt with earlier in this section, and gives examples of the type of external stimulus that is required to trigger the learning process. This model is important for the planning and design of intermediate phase textbooks. In the context of this study, textbooks will provide those stimuli to support the kinds of internal processing taking place in the learner. So, for example, a well-planned textbook provides stimuli that are designed to activate the processes of gaining attention and selective perception, enhances encoding by progressively building up a conceptual framework, maintains an executive control process by creating the expectancy of a particular learning outcome, and provides appropriate feedback for the sake of reinforcement and consequent motivation. Also significant is the influence of a larger set of variables that do not in the narrow sense form part of the instructional events. They include time, learner motivation, individual differences, learner predisposition, the structure and form of the learning content, and the sequencing of learning.

**Table 3.2 - A synergic system of learning**

<table>
<thead>
<tr>
<th>Internal process of learning</th>
<th>Elements of the instructional process</th>
<th>Example of the type of external stimulus required to trigger the learning process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reception</td>
<td>Gaining attention</td>
<td>Use abrupt stimulus change</td>
</tr>
<tr>
<td>Expectancy</td>
<td>Informing learners of the objective</td>
<td>Tell learners what they will be able to do after learning</td>
</tr>
</tbody>
</table>

99
Table 3.2 (continued)

<table>
<thead>
<tr>
<th>Retrieval to working memory</th>
<th>Stimulating recall of prior learning</th>
<th>Invite recall of previously acquired knowledge, skills and values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selective perception</td>
<td>Presenting the new stimulus</td>
<td>Display the content with distinctive features</td>
</tr>
<tr>
<td>Semantic encoding</td>
<td>Providing learner guidance</td>
<td>Suggest a meaningful organisation</td>
</tr>
<tr>
<td>Responding</td>
<td>Eliciting performance</td>
<td>Ask learner to perform</td>
</tr>
<tr>
<td>Reinforcement</td>
<td>Providing feedback</td>
<td>Give informative feedback</td>
</tr>
<tr>
<td>Retrieval and reinforcement</td>
<td>Assessing performance</td>
<td>Require additional learner performance with feedback</td>
</tr>
<tr>
<td>Retrieval and generalisation</td>
<td>Enhancing retention and transfer</td>
<td>Provide varied practice and spaced reviews.</td>
</tr>
</tbody>
</table>

(Source: Gagné, 1985: 256)

The authors’ understanding of the learning and instructional process for the ultimate effectiveness of a school textbook appears to be significant and therefore forms the essence of the third criterion cluster of the theory about the practice of textbook evaluation in section 3.8.

3.3.5 Accessibility

3.3.5.1 Introduction

Accessibility refers to the ease with which a learner interacts with the content of a textbook and is determined by its “rhetorical form”, i.e. the way the content is presented (Crismore, 1989: 133). McGrath (2002: 19) argues in favour of a text that meets the learners’ language needs. Amongst others, issues related to
grammar, vocabulary and phonology are worthy of consideration, as are “different levels of formality or different registers”. Harrison (1980: 14) describes accessibility as “the constellation of text factors which together determine whether a reader will find a book attractive, interesting and comprehensible”. In this section I shall attempt to explain that the “constellation of text factors” embraces typographical issues and matters of linguistic complexity, style and tone, and the assumptions the author brings to the authoring process.

Accessibility is the fourth attribute of good quality school textbooks. This section is a further step in the incremental process of articulating a theory about the practice of textbook evaluation

3.3.5.2 Typography

3.3.5.2.1 Introduction

Typography is a respected technical discipline in its own right. Almost seventy years ago Morison (1936: 7) defined the concept as follows:

[It is] the craft of rightly disposing printing material in accordance with specific purpose; of so arranging the letters, distributing the space and controlling the type as to aid to the maximum the reader's comprehension of the text ...

McLean (1980: 8) describes typography as “the art of designing communication by means of the printed word”, requiring a high degree of “skill, grace and efficiency”. The typographer's job is to help the author to “reach his public”. In fact, “the typographer's only purpose is to express, not himself, but his author” (McLean, 1980: 121). Although pictures or symbols, as opposed to words, involve a different kind of skill, a typographer may often be called upon to deal with illustrations (McLean, 1980: 8). More recently, Johnsen (1993: 222) has described typography as “extra-textual enhancements”, comprising notions such as “volume, arrangement, information-density and the text–picture correlation” which “are relevant to the question of textbook effectiveness”. One can equate Johnsen's “extra-textual enhancements” to McLean's (1980: 120) “format”, “design” and “layout”. Read (1986: 46), Hutton (1989: 92) and
Rowntree (1995: 163) use the same terminology. I prefer the term *textual organisation* to *layout*. McLean (1980: 120) agrees that they are important matters to attend to when producing a textbook but warns that each is an extension of the other, and that the border between them is often blurred.

Typography clearly has an important bearing on the quality of textbooks. I shall therefore be concentrating on matters relating to format, design and textual organisation (or layout) in this section in order to generate some of the criteria referred to in paragraph 3.1.

### 3.3.5.2.2 Format

**Introduction**

According to Read (1986: 46), *format* refers to the size of a book, number of pages, binding, type of cover and paper quality. This section deals with format in those terms.

**Page-size**

While various authors have commented on textbook format, Chall & Conard (1991: 113), after extensive investigations, concluded that little research has been done on optimal book size. Hochuli & Kinross (1996: 36) contend that it is hard to describe a “reasonable format” or page-size for school textbooks. Williamson (1966: 20) is equally vague when he states that the choice of page-size depends on the function of the book. Hartley (1994: 11) points out that while page-size is not a priority issue in typographic research, he believes that it is a matter of primary importance and therefore deserves consideration even before deciding on line-length, fonts and font-size. Williamson (1966: 21) agrees. Hartley (1994:12) also advises that standard page-sizes recommended by the International Organization for Standardization (ISO) should be adhered to in order to contain paper wastage and cost. The underlying principle of the ISO-recommended sizes (also described by Williamson, 1966: 15) is that a “rectangle with sides in the ratio of 1:√2 can be halved or doubled to produce a series of rectangles each of which will retain the proportions of the original”. For example an A4 sheet, laid down landscape-style and cut or folded down the
centre, will produce two A5 sheets. While Hartley (1994: 16) is unwilling to propose an optimum page-size because the choice is mainly related to how the text is going to be used, he maintains that A4 “is not a particularly useful size for hand-held reading”.

Read (1989: 46) contends that in a poorly resourced and overcrowded educational environment such as exists in many South African schools, the optimum page-size of a textbook is 220 mm x 140 mm (A5) and of the portrait type. McLean (1980: 130) concurs and describes the portrait type format as having the “greatest elegance”. He (McLean, 1980: 127) also recommends a square format of the portrait type when a book is heavily illustrated because it accommodates pictures of different shapes and sizes more efficiently. South African intermediate phase teachers may disagree with these opinions. They are likely to prefer a larger format to counteract the inclination towards dense printing inevitably brought about by a smaller page. In fact, the dimensions of most intermediate phase school textbooks are in the region of 250 mm x 180 mm.

**Number of pages**

Read (1989: 46) suggests that publishers should take careful note of textbooks’ cost-effectiveness. For example, books containing many pages cost more to produce than ones with fewer pages. It therefore becomes imperative to correctly estimate the amount of work a teacher is able to cover in a year in order to limit the number of pages in a book, as the Philippine education authorities have done (De Guzman II, 1989: 154). The number of pages in their books is determined on the basis that textbooks are used for 150 school days per year. A further moderating factor in South Africa is the time allocation for specific learning areas. So, for example, an Arts and Culture textbook, having been allocated 2.75 hours per week (Ministry of Education, 2001: 42), would require fewer pages than a Mathematics textbook where the subject is allocated 6.25 hours per week (Ministry of Education, 2001: 42).

In South Africa the number of pages vary from approximately 130 in a Grade 4 textbook to rarely more than 220 in a Grade 7 textbook, depending on the
learning area. On average, Mathematics and Language textbooks fairly consistently contain more pages than, for example Social Sciences or Economic and Management Sciences textbooks.

**Binding and paper quality**

Wire-stitched paper-backed books printed on 70 – 80 gsm wood-free type of book paper accepting type and a judicious combination of four-colour with one- or two-colour visuals, have distinct cost and pedagogic advantages, suggests Read (1989: 46). Eastman (1989: 110) agrees that the use of book paper is cost-effective, but adds that newsprint and duplicating paper should be considered as alternatives. He suggests that for most purposes heavyweight book paper coated on one side and overprint varnishing will suffice as book covers. Hochuli & Kinross (1996: 100) argue that whatever paper is chosen, its grain should run parallel to the spine of the book because this facilitates turning the pages. For books that contain text and line drawings, they prefer a soft, off-white uncoated matt paper that is opaque enough not to let the printing on the reverse side show through. This seems to be the case in most South African intermediate phase school textbooks.

**Summary**

What this adds up to is that sturdy paper-backed textbooks containing no more than the required number of pages appear to have the most cost and pedagogic advantages. Moreover, the printing should be done on A5 size, off-white, uncoated matt 70 – 80 gsm wood-free book paper. South African intermediate phase teachers are likely to opt for a larger format than A5.

**3.3.5.2.3 Design**

**Introduction**

*Design* includes the typesetting, illustrations (drawings and photographs, etc) and the use of colour (Read, 1986: 47) and is intended to improve the visual appeal of textbooks (Johnsen, 1993: 221). In this section the issue of design is dealt with in terms of typesetting, illustrations and the use of colour.
Typesetting

Hartley (1994: 23) states that much of the research concerning the appropriate size of type (or font) for reading matter is not very helpful to designers of instructional materials such as school textbooks. McLean (1980: 47) is of the same opinion. Although there appears to be little consensus about the advantages of serif fonts, (i.e. those with finishing strokes at the ends of letters such as Times New Roman) over sans serif fonts (those that do not, such as Arial) (Hutton, 1989: 98) or vice versa, writers appear to favour the latter. De Guzman II (1989: 153) reports that graphic standards laid down in the Philippines require publishers to use serif fonts such as Times Roman. The font-size varies from 14 point (grade 3 and 4), to 12-point, which is most suitable for grades 5 to 7. Rowntree (1995: 290) also prefers the serif font for the main body of the text because learners are likely to be more accustomed to it. Special fonts and the use of capital letters may be used occasionally for specific purposes such as headings or to distinguish between sections of text.

McLean (1980: 42) is yet another protagonist of serif fonts. He maintains that serifs have three prime functions. Firstly, they help to keep letters a certain distance apart. Secondly, they link letters together to form words. Thirdly, they differentiate individual letters, particularly the top halves, “which is what we recognise words by”. Sans serif fonts do not meet these requirements, so they are “intrinsically less legible than serifed type”.

Hartley (1994: 27) refuses to be drawn into specific recommendations regarding fonts and font-sizes. He prefers to point out general principles that underlie decision-making in this regard. Firstly, the font and its size should not detract from the accomplishment of a sensible syntactic grouping of the words in a line. Secondly, fonts should be firm, open and even in spacing and without peculiar features in their design that might confuse young readers. Thirdly, the number of different fonts used in the same text should be limited, and should be dictated by what is appropriate for the particular text, for example serif for text body and sans serif for headings, figure labels and captions. Fourthly, capitals, italics and underlining, etc. should be used sparingly. In the fifth place, line spacing should
be not less than 125% of the font-size; for example, with a type size of 4 mm the line space should be 5 mm.

The wisdom of Williamson’s (1966: 67) contention that “good letter-form does not admit of easy definition, if indeed it can be defined at all”, and McLean (1980: 42) view that “legibility is a personal word, neither scientific nor precise”, seems valid. Typographers use the word *legible* to say that text is easily read and that it conveys meaning right away (Williamson, 1966: 67). In fact, Williamson (1966: 113) is even more specific when he says, “Text composition must both *appear* to be legible and *be* legible”. Therefore, any peculiarity that may be observed by the reader must be avoided. He defines legibility as the “capacity of the text to be read with ordinary speed and accuracy and without undue effort”.

In closing, Williamson (1966: 114) summarises the prevailing view about typesetting when he refers to sans serif fonts as “radical alterations” to the “traditional style of text” represented by serif fonts. In fact, quoting from an investigation into the fonts used in British publications between 1945 and 1963, he (1966: 407) states that serif fonts were by far the most prevalent.

In the majority of current South African textbooks investigated, sans serif fonts prevail, particularly when instructions and explanations are given or activities set. Serif fonts are used by way of variation, for example when a reading passage is provided. However, the latter is seldom allowed to dominate. Du Plessis and Richards (2000: 40) provide a fair example of typical typesetting in a South African intermediate phase school textbook (see Annexure D).

**Illustrative material**
Rowntree (1995: 181) cautions that textbook authors are inclined to rely too much on prose and not enough on functional illustrative material. He advocates a “pictorial approach” which includes the use of diagrams, graphs, drawings, maps and photographs to enhance text by conveying “something that could not be spoken in words”. Citing US research, Johnsen (1993: 223) declares that teachers all strongly emphasise the importance of good illustrations. Williams
points out that understanding will be improved if much information
could be presented via illustrations in situations where there is a range of
learners’ reading ability, because it enables all readers to extract greater
meaning from text, particularly when there is integration between text and
illustrations. He identifies captions and extensive annotation in full grammatical
sentences as particularly useful to give less experienced readers a “point of
entry” to the text. Blacquiére (1995: 86) cautions that, while illustrations do not
automatically make a verbal text comprehensible, realism in pictures makes for
more effective transmission of the intended message. This is particularly
important to prevent misinterpretations by readers who are “graphically
inexperienced”.

Johnsen (1993: 224) argues that in order to determine what a good
illustration is, one should be able to answer two questions: how is it used in the classroom
and does it have educational potential? He found that hardly any research has
been done on the first question, and that theory and research regarding the
second are entirely lacking. The little research that has been done has provided
few guidelines for practical application. His view is borne out by Chall & Conard
(1991: 113). Quoting from studies in Nepal, the US, Canada and Sweden,
Johnsen (1993: 226) points out that artists’ drawings are more stimulating and
informative than photographs; that illustrations should be closely related to the
consecutive text; and that intuition, traditions and market factors are major
influences on the illustrative strategies of publishing houses. Blacquiére (1995:
122) agrees that it would be better to avoid the use of photographs. Hartley
(1994: 81) quotes research that found that pictures illustrating textual material
aid the recall of the textual material they illustrate. Although there do not appear
to be hard and fast rules for providing labels and captions for diagrams and
pictures, Hartley (1994: 93) believes that it should be done in a consistent
manner. McLean (1980: 144) feels that they should be as short as possible.
Researchers cited by Langhan (1993: 29) advise that textbooks illustrated for
white children may not be suitable for all black learners in South Africa due to
differences in degrees of visual literacy between the two main cultural groups.
In addition, only essential information should be included to lessen the
possibility of the reader becoming distracted. In fact, Hartley (1994: 91) advises
that research has shown that children have to learn the conventions used in illustrations that adults take for granted. They are often irritated by illustrations and confused by their ambiguity and changes in scale. Authors should therefore assess the effectiveness of their illustrations, for example by obtaining feedback from representatives of their target group.

McLean (1980: 144) offers a few interesting guidelines with regard to illustrations. Pictures that “look” in one direction should be placed in such a way that they “look” into the book and not out of it. When two or more photographs are placed on the same page, the one with the most distant horizon should be placed at the top. If two pictures are placed one above the other the other they should be identical in width or conspicuously different.

Blacquiére (1995: 120) recommends that the good artwork brief would specify who the target audience will be and what the instructional objective is. If people are to be included, the artist should be informed of details such as their gender, age, the clothing they are wearing, their posture and their positioning. The brief should furthermore indicate the point of view (from below, at eye level, from above, etc.) and what props need to be included. The medium (line drawing in black ink, etc.) and style (simplified, realistic, etc.) should also be stated.

In summary, authors agree that illustrations add value to text. South African publishers concur. Most of their illustrations are line drawings in black and white. Du Plessis and Richards (2000: 40) provide a fair example of a typical illustration in a South African intermediate phase school textbook (see Annexure D). Line drawings are sometimes interspersed with black and white photographs.

**The use of colour**

“Colour,” writes Hartley (1994: 89), citing research, “can be used functionally to aid the instruction, or for aesthetic and motivational reasons”. However, while authors agree that the use of colour is visually pleasing, it does not find much favour with them because it is too expensive (De Guzman II, 1989: 154). South African publishers seem to agree. They seldom use colour. A notable exception
is Afro Publishers. In their textbook by Hendry et al. (1999), colour is used to
good effect to accentuate headings and some drawings. They have even used
two colour photographs. Rowntree (1995: 288) suggests that the limited use of
tinted pages to separate activities may be considered. South African textbooks
follow a similar trend.

Summary
My sources prefer serif fonts, and recommend that font-size allow text to be
grouped in units of meaning. South African publishers, however, seem to give
preference to sans serif fonts, using serif fonts occasionally for a particular
purpose.

The experts agree that functional illustrative material is desirable. They point
out, however, that artists’ drawings are better than photographs and that
accessibility of textbook illustrations may be influenced by cultural background,
while the cost involved in the use of colour is prohibitive.

3.3.5.2.4 Textual organisation

Introduction
In the literature, textual organisation has a great deal to do with the way the
content of a textbook is put together and is an overarching phrase that includes
matters such as the use of certain devices to ease a reader’s access to text
(Fry, 1988; Crismore, 1989; Hartley 1994; and Rowntree, 1995), page-design
(Hartley, 1994), word spacing (Williamson, 1966; Rowntree, 1995), positioning
illustrative material (Hartley, 1994; Rowntree, 1995), line widths (De Guzman II,
Langhan, 1995), the use of white space (Hartley, 1994), and a consistent
numbering system (Hartley, 1994).

useful ideas with regard to textual organisation and because they largely
overlap, I shall focus on those described by Rowntree and refer to Fry, Hartley
and Crismore whenever the need arises.
Helping learners to find their way into and around the text

Fry (1988: 83) contends that expository text generally benefits from the Statement-Example-Restatement (SER) sequence, makes sense. SER “includes repetition, giving concrete examples, and restating the principles in another way”. Rowntree (1995: 163), though, deals with the issue of textual organisation in greater detail. He argues that if learners do not understand the organisation and structure of the textual content, they are more likely to stumble through it in the vain hope that “some grand design will eventually emerge”, and become confused and lose their enthusiasm in the process. To counter this he suggests “access devices” to help the learners to find their way into the text and to find their way about in it. He groups the access devices according to whether they are inserted before, during, or after the main body of a section or lesson or theme or chapter or module. In the interests of brevity I shall use only the word module in this paragraph.

• Those organisational or access devices placed before the main body of a module, according to Rowntree (1995: 164), include an explanatory title, contents list, flow diagram, list of intended outcomes and pre-test. He suggests that a title such as The use and abuse of chisels has a lot more to say than Hand Tools: Module 4, while a list of the main topics of the module, arranged in the order in which they occur, can provide a useful overview of what is to follow. A flow diagram would reveal the relationships between the topics and a list of the most important intended outcomes would tell the learners what they might expect to be able to do, or do better, after the completion of the module. Lastly, the “pre-test” informs the learners of the knowledge, skills and values they are expected to have acquired before they can benefit from the module. Unit 6 in Du Plessis, Hansen, Rau and Wightman (2001: 111) meets most of these requirements and in so doing provides an overview of what the unit is intended to achieve. The title of the unit is “Penguin’s progress” and evokes a memory of three penguins, named Peter, Pamela and Percy by a newspaper reporter. The penguins were covered in oil as a result of a major oil pollution disaster near Cape Town in 2000. As an experiment to establish the homing instinct of the penguin, they were scrubbed clean.
and taken to Port Elizabeth, fitted with radio transmitters to enable scientists to monitor their progress, and set free. They immediately started swimming towards Cape Town, a distance of 750 km, and soon reached their original colony. At the start of the unit (see Annexure C) the learners are given a list of objectives, including reading activities, discussion and writing activities. It is followed by a section entitled “About this unit”, in which a warthog and a hen are having a dialogue. The hen says, “This unit is about a disaster. An oil spill damaged more than half of the African penguins in the world.” The hen continues by explaining that people from all over the world helped to save the remaining penguins. In turn, the warthog informs her that the unit will show how different kinds of media can be used to tell a story.

- The second series of access devices occur during the module and include an introduction, links with other modules, headings, instructions, verbal and visual signposts, and summaries. The introduction provides an overview of what is to follow and is aimed at persuading the learners that the module is worth spending time on. The links with other modules promote a sense of coherence. Headings, placed either in the body of the text or in the margins should form a hierarchical pattern ranging from module heading, through section and sub-section heading to sub-sub-headings if need be, thereby reflecting the structure of ideas that are being developed in the module (Rowntree, 1995: 168). Hartley (1994: 45) suggests that they may be written in the form of questions or one- or two-word statements. Instructions should be written in clear language so that learners know exactly what they are supposed to be doing. Verbal signposts keep the learners informed about the development of the argument, for example “on the other hand … ,” “In much the same way … ,” “What this all adds up to is … ,” etc. Visual signposts in the margin are often useful means of alerting learners to the kind of material that lies ahead. For example, a stylised picture of a pen might signify that a written activity is in the offing. Brief summaries within a module and at the end of it review the main points that have been covered thus far (Fry, 1988: 83; Rowntree, 1995: 168). Once again Du Plessis et al. (2001: 111) demonstrate how the access devices occurring during the module
may be used to help learners to find their way around the text (See Annexure C). The unit is introduced by placing a newspaper report entitled “Peter, Pamela and Percy survive the oil”. The same style is used throughout for the headings and instructions to the learners are brief and to the point, for example “Find out more”, “Discuss”, “Find more examples”, “Write your own newspaper report”, and so on. Visual signposts are used to alert the learners about what to expect. One guinea fowl denotes that individual work is about to commence, two guinea fowls means that pair work is about to be embarked upon, and three guinea fowls feeding from the ground, shows that a group activity is in the offing. A weakness of this unit is that it does not include summaries.

- The final series of access devices occur at the end of a module and include a glossary containing working definitions of all the new concepts that have been introduced, a post-test and an index. A post-test consists of exercises that learners should be able to carry out successfully after having worked through the module, and should be consistent with the module objectives. An index may need to relate to a set of modules rather than to each one individually and should consist of the key words that learners are likely to look up (Rowntree, 1995: 176). While Du Plessis et al. (2001) do not include a glossary at the end of a unit. New concepts are often explained in the text when they occur, which seems a more immediate way of dealing with them. Nonetheless, under the heading “Dictionary” at the end of their book, Du Plessis et al. (2001: 199) define unfamiliar concepts appearing throughout the book. An index is not provided nor does it seem to be done in other intermediate phase school textbooks observed. In Unit 6, the post test is in the form of the learners’ version of the story of Peter, Percy and Pamela.

In offering his “metadiscourse criteria for rhetorical textbooks”, Crismore (1989: 143) underscores Rowntree’s ideas. He describes *metadiscourse* as

reflecting an author’s presence in a text, [and providing] a footing or an alignment between author and reader and between author and subject matter, [helping] readers [to] organize, classify, interpret, evaluate and react to the material.
Page design
Rowntree (1995: 284) advocates the use of a single column on a page, printed portrait style, covering no more than two thirds of the width of a page. Hutton (1989: 94) contends that while two-column design is cheaper because of the possibility of more print per page and the consequent saving on paper, it is also the dullest for an unskilled reader. Both agree that it is easier for the eye to take in a short sentence line than a long one and that the column should be unjustified because, argues Rowntree (1995: 285), the “jagged” edge helps the reader to locate a position in a paragraph. Hartley (1994: 25) is of the same opinion.

Word spacing
Williamson (1966: 121) maintains that readers are decidedly uncomfortable when confronted with text where the word spacing is close and interlinear space is limited, thereby presenting “too solid an appearance”. Rowntree (1995: 284) also warns against densely printed pages because they are more difficult to read, causing learners to lose heart because they may feel that they are making slow progress. Care should therefore be taken to break page monotony and direct the reader’s eye with judicious placing of headings, white spaces, visuals and text boxes containing, for example, a summary or review of an important point or points made on the page.

Positioning illustrative material
The positioning of illustrative material is important because of its didactic role. As a general rule, both Rowntree (1995: 287) and Hartley (1994: 82) feel that visuals should be placed close to the paragraphs referring to them. Moreover, Hartley (1994: 82) insists that the learner’s attention should be drawn to such material by referring to it in the text.

Line widths
Rowntree (1995: 284), citing research, feels sentences that are no longer than about 12 words can be read most comfortably, while Hartley (1994: 49) is of the opinion that sentences with fewer than 20 words “are probably fine”.

113
Headings
Hutton (1989: 99) and McLean (1980: 120) stress the fact that the style of headings should be consistent throughout the book. Headings are important because they direct the reader’s attention, show the structure of the book or section and break up information into convenient portions. Misleading or obscure headings are also known to interfere with understanding because they might activate inappropriate background knowledge at a time when the construction of meaning is dependent on the reader’s existing experience of the world (Langhan, 1995: 60).

Use of white space
Hartley (1994: 34) argues that a “rational and consistent use of the ‘white space’” also helps the reader to understand textual organisation and consequently has a significant effect on his/her ability to understand and retrieve information from the text. “White space” refers to the space between letters, words, phrases, clauses, paragraphs, subsections and chapters. Hartley (1994: 34) cites evidence from eye-movement research suggesting that these spatial cues have a marked effect on the reader’s eye-movement by reducing the tendency for “regressive fixations or look-backs”. He suggests “units of line-feed” can be used in a proportional system to separate components of the text such as sentences, paragraphs, sub- and major headings. For example, one could start each sentence on a new line within a paragraph with no extra line-feed (reserved for more complex text); separate paragraphs by one extra line-feed; separate sub-headings from paragraphs by two extra lines above and below them; and separate main headings from text by four extra lines above them and two below them. He cautions against situations where a page might start with the last line (or part of it) of a previous paragraph, or end with the first line of a new paragraph, or end with a heading. Every page should also end with a complete sentence. Unjustified columns of print produce consistent spacing between each word, which has been shown to be more helpful for less experienced readers such as learners in the intermediate phase.
Numbering system
Hartley (1994: 47) encourages the use of a consistent numbering system to aid textual organisation. He prefers the use of Arabic numbers, letters of the alphabet or bullets, or a combination of all three.

Conclusion
The ease with which a reader gains access to a text is determined by the textual organisation. A number of devices affecting page design, word spacing, the positioning of illustrative material, the use of headings and white spaces, have been shown to facilitate ease of access. A page reprinted from Du Plessis and Richards (2000: 40) (see Annexure D) is a fair example of the foregoing.

To many, particularly those who are not entirely familiar with intermediate phase education, this section may appear too detailed and somewhat prescriptive. Hartley (1994:17), however, persuasively argues that typographic issues related to “primary school texts”, which would include those used in the intermediate phase, are often more complex than those used in higher education. They are deserving of meticulous planning by the author to provide a consistent frame of reference to ease the reader’s access into a textbook and to enable him to move about, leave and return without confusion.

3.3.5.2.5 Relevance for the authoring process

According to the literature typography has an important bearing on the quality of school textbooks. Experts agree that a sturdy, well-organised, properly sequenced textbook makes it (the textbook) more accessible for the reader. Hochuli & Kinross (1996: 76) summarise the importance of typography when they argue that the “whole repertoire of form, type, image, rules, spaces” should be “in tune with each other and consistently applied, so that the different levels of text can be perceived and distinguished at one glance”.

The last word belongs to Hartley (1994: 17) who says that the textual organisation of a textbook is so important that the author has to have a final say
in the way it is done because he believes that the user must on no account be confused by arbitrary and inconsistent arrangements of the text.

3.3.5.3 Readability

3.3.5.3.1 Introduction

According to Williams (1985: 2) writing is readable when “its meaning can be quickly and easily understood by the reader for whom it is intended”. Perera (1986: 53) declares that linguistic complexity is one of the main reasons why difficulties in understanding text may occur. Wright (1995: 4) agrees. He feels it is important to identify the linguistic features of English that cause breakdowns in communication.

Davies (1986: 101) points out that the linguistic form, which textbooks embody, has been consistently challenged since the late 1960s. Ghosn (2003: 292) alludes to wide-ranging research criticizing the use of language in textbooks for learners whose home language is not English. The deficiencies include limited vocabularies and simple sentence structure, which do not reflect “real-life language”. This has also been the case in South Africa. Langhan (1993: 1) cites local research identifying textbooks as important contributors to the linguistic and conceptual problems confronting learners. This is particularly true when African children in the intermediate phase, whose first language is not English, are required to make the transition from their mother tongue to English as the medium of instruction before having achieved sufficient competence in that language. He found ample evidence to sustain his supposition that the factors most likely to affect the readability of English Second Language (ESL) texts are vocabulary, syntax, cohesion, coherence and text structure. Williams (1985: 1) also pinpoints these factors as the principal aspects affecting readability of English in second-language situations in the intermediate phase when English becomes the medium of instruction. Finally, the matter of measurements of readability should also be considered.
The purpose of this section, then, is to describe the aspects of readability as discussed in the literature.

3.3.5.3.2 Vocabulary

According to Langhan (1993: 17), confirmed by Johnsen (1993: 186) and Williams, 1985: iii), vocabulary is the aspect of reading most frequently identified by readers as being difficult. Williams (1985: iii) and Johnsen (1993: 186) cite extensive Nigerian, Chinese, Scandinavian and British vocabulary studies investigating the ability of learners to comprehend words used in various prescribed textbooks. These studies showed that most children were unable to understand most of the words used out of context. Even using the unknown words in context did not help the children to understand them better. Another problem is the sheer quantity of new words and new ways of expressing ideas. It is therefore important for an author to know what reading vocabulary a reader brings to a text.

While heeding Woodbury’s (1979: 145) warning that restricted vocabularies are inclined to impart a repetitive, unappealing quality to intermediate phase textbooks, one is obliged to take cognisance of the fact that eminent writers such as Williams (1985: 11), Langhan (1993: 17), Rowntree (1995: 207), Lanham (1995b: 81) and Hartley (1994: 49) warn against the following because they detract from the readability of text:

- using unfamiliar (*breeze* instead of *wind*), long (*assist* instead of *help*) and abstract words;
- using difficult words (such as words imported from a text originally written for older readers), unfamiliar terminology, metaphors and homonyms;
- using passive verbs (the bone *is being dug* for by the dog);
- using intensifiers such as *definitely, completely and partly* unnecessarily and inappropriately;
- using unfamiliar collocations, for example *strong* collocates with coffee, *powerful* does not;
- using obscure reference words;
• using substitute terms as a cohesion device, for example using lady, female, woman when referring to the same person three times in the same paragraph;
• using noun compounds such as canal irrigation system.

3.3.5.3.3 Syntax

As shown in the previous paragraph, inexperienced ESL readers find it difficult to use a process of syntactic decoding to uncover meaning in text. Lanham (1995b: 78) points out that “young incipient bilinguals” process the relatively unknown English by searching for similarities between English and their mother tongue. However, many syntactic devices in English have no equivalent forms in the young learner’s home language. Consequently, when the following occur, fluency is disrupted and comprehension slowed down (Langhan, 1993: 20):
• ellipsis (a syntactically controlled deletion as a cohesion device), for example John promised his friend that he would;
• syntactic structures that do not occur in southern African languages, for example the opened letter and clock face;
• convoluted syntax, for example: To grow, plants need water;
• sentence structure overload, for example: This is the cat that chased the rat … Jack built.

According to Williams (1985: 25), the following also make sentences less readable:
• Independent clauses that are not placed early in the sentence so that the brain receives the most important information first: for example, reference to the head, thorax and abdomen, followed by a statement that the body of the housefly has three parts.
• Present participles that are not carefully dealt with resulting in the reader becoming confused about which noun or pronoun a present participle relates to.
• Ambiguous syntactic structures.
Perera (1986: 57) has identified a few additional “interrupting constructions”. The first is a tendency to insert lengthy interruptions between subject and verb. She offers the following thirteen-word interruption (italics) as an example: “The agouti, a very nervous 20 inch, 6 pound rodent that lives in South America, can leap twenty feet from a sitting position.” The second type includes subordinate clauses introduced by whom or which. Williams (1985: 32) also identifies this as an undesirable style of writing. The third is the frequent use of passive verbs: for example, “furniture is made by skilled craftsmen”. The fourth is the tendency to use complex subject noun phrases, for example, “The remains and shapes of animals and plants buried for millions of years in the earth’s rocks are called fossils” (seventeen words).

3.3.5.3.4 Cohesion

Cohesion refers to devices establishing relationships between and across sentences and occurs where the interpretation of an aspect of a communication is dependent on that of another, i.e. the one presupposes the other, thus establishing cause and effect logic (Johnsen, 1993: 195). Understanding is undermined if the learner is unable to make the essential links between a reference and its antecedent. This, for example, occurs when a general noun is used to replace a phrase or a clause, or elliptical gaps occur in the information (Peter asked his mother if he could), or conjunctions (similarly, therefore, nevertheless, etc.) are used to string sentences together (Langhan, 1993: 23; Perera, 1986: 57). In fact, Chapman and Louw (1986: 22) found that learners who are unable to fill these gaps in factual texts are inclined to “retreat from print”, a situation that does not substantially improve with time.

As a remedy for cohesion problems, Williams (1985: 50), Hutton (1989: 73) and Perera (1986: 56) advocate the use of simple conjunctions, for example and, but, so, because, then, next, etc. Perera (1986: 58) also points out that the repetition and “pronominalization” (also known as deixis) of nouns whose meaning depends on knowledge of who the speaker is, and when or where he or she speaks (e.g. ‘I felt a fool in front of those people. I knew they were laughing at me”) are further important factors in creating a sense of cohesion.
Fry (1988: 84) proposes that the SER (statement – example – restatement) sequence described above is another type of cohesion where different parts of the text are repeated and interrelated. The text then becomes an integrated unit rather than simply a list of independent sentences (Williams, 1985: 44).

3.3.5.3.5 Coherence

Text is coherent when the reader is able to predict the contents of the section he or she is reading (Williams, 1985: 56). This section deals with a number of textual deficiencies militating against coherence.

When the following occur, text often becomes incoherent and reading comprehension is consequently negatively affected:

- Text that is not well organised and does not contain logically connected ideas, following each other sequentially, is generally more difficult to read (Perera, 1986: 55; Langhan, 1993: 32; Lanham, 1995b: 82). This implies a number of textual flaws. Firstly, an overview of the contents, their sequence and their interrelationship is absent (Williams, 1985: 58). Secondly, paragraphs do not elaborate on or lead up to a key sentence (Rowntree, 1995: 227), forming “psychological units of cohesion” (Williams, 1985: 59) and guiding the reader into seeing “units of thought” (Fry, 1988: 82). Thirdly, “unprincipled paragraphing” (Langhan, 1993: 32; Lanham, 1995b: 82), i.e. one-sentence paragraphs and inappropriate paragraph divisions, breaks up the paragraph topic. Fourthly, badly chosen headings and titles that are not predictive and not timeously reinforced by the contents, undermine the young reader’s ability to call up the appropriate background knowledge (Williams, 1985: 56; Langhan, 1993: 32; Lanham, 1995b: 82) in order to accurately predict the contents of the section concerned (Williams, 1985: 56).

- Obvious links are not necessarily present when reporting a conversation, for example, A: “That’s the doorbell” (A requesting B to see who is at the door); B: “I’m in the toilet” (B offering an excuse for not being able to comply with A’s request). Understanding is adversely affected if a reader does not have appropriate background knowledge to access the schema
underlying the text (Langhan, 1993: 26). In other words, the writer needs to connect with the reader’s schema.

- The use of negatives, particularly double negatives, and the monotonous repetition of sentence structure impacts negatively on the word order (Rowntree, 1995: 226).

Hutton (1989: 74) also identifies a few textual traps that are likely to have a negative bearing on cohesive prose. They include the following:

- Verbs not always showing when the tense is changing.
- Inexperienced ESL readers being confused by the difference between auxiliaries, would, could, should, may/might.
- The use of have to and ought to (I have to/ought to …) in stead of must (I must go to town).
- The pronouns he or she do not exist in Xhosa, Zulu or Sotho and could result in confusion about who the author is referring to.
- Using it and this without the author making sure that what it refers to is clear to the reader.
- Using unfamiliar slang such as hassle, or worked up. This also applies to jargon.

Williams (1985: 68) identifies punctuation as a further aid to comprehensibility because it reduces the likelihood of communication breakdown between author and reader owing to ambiguity and the latter becoming confused. He argues that in written discourse punctuation fulfils the same function as stress, intonation, pausing, facial expressions, etc. in verbal communication.

3.3.5.3.6 Text structure

Langhan (1995: 60), supported by Lanham (1995b: 81), identifies the “properties of expository discourse” that are essential for effective reading and comprehension. Firstly, unfamiliar topics and concepts should be introduced by relating them to the reader’s existing experience of the world. Secondly, he pleads for thematic coherence in the sense that there should be a logical progression of ideas, uninterrupted, for example, by information gaps that occur
when the author falsely assumes that the reader possesses certain knowledge. Thirdly, text should be full and explicit. In other words, the author should not be afraid to state the obvious. Fourthly, obscure references should be avoided. The referent (for example *it*, *they*, *their*), which may appear in the text or outside the text in the real world, must be identified so that, according to Williams (1985: 47), ambiguity may be avoided. In the fifth place, Langhan (1995: 60) continues, the nature and essential properties of unknown concepts must be explained before applying them. Finally, using different terms for the same referent, for example *climate* and *weather* or contradictions such as a *sloping plateau*, causes confusion. Fry (1988: 86) offers his concept of “imageability” in order to enhance reading and comprehension. “Imageability” refers to the ease with which a reader can visualise what is referred to in text. The ingenious way in which authors of children’s science books often illustrate basic principles of physics with familiar situations to make concepts or strategies used by educators more understandable by citing classroom incidents, are examples showing how imagery is used to put ideas across. He further suggests that imageability can be improved by adding appropriate pictures, diagrams, maps or graphs to the text.

### 3.3.5.3.7 Measurements of readability

One should take cognisance of measurements of readability which take into account both vocabulary and syntax.

Ellington & Race (1985: 47), Woodbury (1979: 147), Harrison (1980: 84) and Johnsen (1993: 191), amongst others, describe a readability testing method suitable for continuous prose, called the *cloze procedure*, which they respectively identify as “objective”, “relatively simple”, “sensitive” and “the most familiar”. Despite its limitations, Ellington and Race (1993: 48) describe the cloze procedure as a “reasonably accurate and useful method of checking the appropriateness of the level of textual material”. The main principle of this method is to select a typical passage roughly 250 words long, blanking out the 36th and thereafter every 10th word until a total of 20 words has been dealt with in this fashion. Thereafter a few members of the target population are selected.
at random and asked to read the prepared text. If they are able to fill in 40% – 60% of the blanks with the correct words or totally acceptable alternatives, the text is regarded as being satisfactorily accessible.

Other tests that have been described include Fry’s Readability Graph (Harrison, 1980: 73; Fry, 1988: 95; Woodbury, 1979: 146); the Gunning Fog Index (Harrison, 1980: 79; Hartley, 1994: 51); the Flesch Reading Ease (Harrison, 198: 77; Hartley, 1994: 51); the Modified Fog Index (Ellington and Race, 1993: 47, Rowntree, 1995: 230); a “short-cut cousin” of the former called the Complexity Quotient (Rowntree, 1995: 231); LIX which flourished in the 1970s, only to lose ground later (Johnsen, 1993: 195), the Powers-Sumner-Kearl Formula (Harrison, 1980: 67); the Spache Formula (Harrison, 1980: 67); the Mugford Chart (Harrison, 1980: 68); the Dale-Chall Formula (Harrison, 1980: 74), McLaughlin’s SMOG Formula (Harrison, 1980: 79), the FORCAST Formula (Harrison, 1980: 80) and the Nomograph for Predicting Text Comprehensibility (Zakaluk & Samuels, 1988: 121).

While Binkley (1988: 98) thinks that measurements of readability have potential for measuring text difficulty and Fry (1988: 91) warns that they are not “deadly accurate”, their accuracy is comparable with most other psychological measuring instruments. Johnsen (1993: 184 – 195) has been unable to find conclusive evidence either supporting or rejecting them. Woodbury (1979: 145) argues that readability formulas do serve as an “index of vocabulary difficulty and sentence length – two factors that affect but do not determine readability”. Williams (1985: 3) points out that formulae “cannot tell a writer what to do to make text more readable”. Tyson-Bernstein (1989: 79) is quite adamant when she warns against the use of mechanistic readability formulas to write and edit text. Moreover, she asserts that readability measurements cause “violence [to be done] … to good English style”, because the text becomes “choppy, stilted and extremely monotonous”. Not only is it to the children’s advantage to read well written instead of badly written prose, they actually prefer it.

In my view, any assessment of readability would be incomplete without the qualitative input by an experienced intermediate teacher of good standing.
Critics might be tempted to dismiss such a practice as one based on guesswork, intuition or subjective judgement and therefore unreliable, to which I would respond that one should never underestimate the instincts of a skilled practitioner! Perhaps the answer lies in the fact that Chall & Conard (1991: 114) found a positive correlation between quantitative and qualitative measurements of text difficulty. The one should therefore not be abandoned at the expense of the other. Harrison (1980: 11) puts forward a sensible compromise when he argues that while the teacher’s professional judgement ought to be respected, a credible measurement of readability would serve to make his/her assessment more reliable.

3.3.5.3.8 Relevance for the authoring process

Authors should note that school textbooks that are difficult to understand by the readers for whom they are intended, have been identified as important contributors to the linguistic and conceptual problems confronting South African learners. I think that the following comment on the readability of legal documents and publications by former law professor Robert Benson (quoted by Fry, 1988: 91), encapsulates the shortcomings that authors of intermediate phase textbooks should also guard against:

There exist scores of empirical studies showing that most of the linguistic features found in legalese cause comprehension difficulties. Legalese is characterized by passive verbs, impersonality, nominalizations, long sentences, idea-stuffed sentences, difficult words, double negatives, illogical order, poor headings, and poor typeface and graphic layout. Each of these features alone is known to work against clear understanding.

These deficiencies can be obviated by measurements of readability, although at best they “offer crude guides to the difficulty of text” (Hartley, 1994: 59). Nonetheless they can provide useful indicators of the relative difficulty of different texts. Significantly, Fry (1988: 77) declares that, in spite of criticism, readability formulas remain popular.
3.3.5.4 Style and tone

3.3.5.4.1 Introduction

According to Hutton (1989: 61) style and tone also affect the accessibility of text. Style can apply to the use of humour, being conversational, using stories and giving examples. By tone she means how the “material ‘sounds’ to the reader”. For example, is it too simplistic or patronising or academic? She warns that the style and tone must be consistent with the content.

This section explores various elements of style and tone that are deemed to enhance the style and tone of school textbook writing.

3.3.5.4.2 Using inducements to read on

Beverton (1986: 37), Hutton (1989: 61), Rowntree (1995: 209), Lewis (quoted by Ellington and Race, 1993: 46) and Perera (1986: 54) to a greater or lesser degree declare that the text arouses and maintains the reader’s interest if it is made lively and exciting by means of inducements to read on (a kind of “what happens next?”), while direct speech, rhetorical questions, images and humour, active verbs rather than nouns and adjectives, short words and short paragraphs, the use of pronouns, and so on, make non-fiction closer to fiction and, consequently, more personal and appealing to young learners. Writing in a friendly manner as one would talk, dramatising whenever possible, avoiding clichés and over-use of favourite words and phrases further enhances style as does integrating cartoons, exercises, activities, anecdotes, analogies, examples, case studies, etc. “It is worth allowing any people in the text to feature as grammatical subjects and therefore as agents of actions,” Perera (1986: 62) writes. While my sources prefer the use of shorter sentences, it is interesting to note that Johnsen (1993: 191) claims that there is growing acceptance of the theory that, depending on the complexity of sentence structure, longer sentences can be easier to read than short ones. This gives credence to Fry’s (1988: 81) contention that short sentences are not the total answer. For example, the conjunction because actually more often than not
promotes cohesion when used to join two simple sentences to form a longer one.

3.3.5.4.3 Formal versus informal writing styles

The tone of writing is adversely affected, Lewis suggests (quoted by Ellington and Race, 1993: 46), when it is pompous, too formal or slapdash. Fry (1988: 84) is critical of authors who commit “literary castration” by, for example, concluding a report with “It was found that … “ instead of accepting responsibility by saying, “I found that …”. Moreover, Lewis (quoted by Ellington and Race, 1993: 46) argues that addressing the reader personally by using you and making use of phrases like, “We have already seen …” and “Remember …” establish an element of intimacy between writer and reader. Fry (1988: 85) concurs.

3.3.5.4.4 Using narrative instead of expository text

Langhan (1993: 26) argues that in the intermediate phase, the learners’ lack of experience with expository text is a significant obstacle to understanding. They have more experience with narrative forms and are consequently better at understanding it. Perera (1986: 53) concurs and neatly places the accessibility issue into perspective. Her investigation into fiction and non-fiction with regard to some linguistic differences between the two genres draws attention to some significant dissimilarities between them. “Even by the age of 5,” she points out, “many children are aware of the essential constituents of story structure” (Perera, 1986: 57). In contrast, the structural elements of expository text are strange to young children because they neither read texts of this type nor are they read to them. This led her to conclude that if non-fiction were written in the same linguistic style as fiction, learners in the 9 to 14 year age range would better be able to understand their textbooks.
3.3.5.4.5 Relevance for the authoring process

Pretentious and excessively formal writing is frowned upon, while a style and tone associated with fictional writing appeals most to learners in the intermediate phase, consequently enhancing the accessibility of textbooks writing in that style.

3.3.5.5 Authors’ assumptions

Lanham (1995a: 11) adds a further dimension to the problem of inaccessible text when he identifies inappropriate assumptions on the part of the writer as to the language ability, and the background knowledge and world knowledge of the reader. Langhan (1995: 57) concurs and argues that this results in a “serious mismatch between … textbooks and their intended readers … “.

Authors’ inappropriate assumptions about the language ability of the target group can cause a state of cognitive dissonance in learners. For example, Tyson-Bernstein (1989: 79) writes that immigrant and black children entering US mainstream education during the latter half of the nineteenth century did not know English very well and therefore had difficulty reading textbooks. Gillham (1986: 4) argues that this situation is exacerbated by authors who prefer to function as learning area experts rather than professional communicators, thereby relegating the importance of language in the educative process to a lesser level. In fact, Gillham (1986: 4) is adamant that “the language of school subjects is very frequently hostile to communication”. South African intermediate phase textbook authors are also often guilty of using inappropriate language. Examples of inappropriate language are to be found in Govender et al. (2000), who expect the average nine-year-old Grade 4 learner whose mother tongue is not English, to understand an explanation such as “A scientist is a learned person who follows systematic methods in gaining and testing knowledge”, or “Biosphere: the part of the earth that is capable of supporting life”, or instructions/questions such as “Can you indicate the relationships between natural features and human activities?” or “Can you demonstrate an understanding and appreciation of the earth as a place (sic) whish (sic)
supports life?”. These exemplars are to be found in the first fifty pages of a textbook containing one hundred and sixty nine pages. I expect this to happen where authoring teams do not include an intermediate phase teacher and a linguist to moderate inappropriate language usage. Consequently, many children who can read stories competently and with enjoyment have great difficulty in reading their school textbooks independently and understanding them.

Fry (1988: 87) urges authors to be aware of their reader’s background knowledge in order to select the proper level of sophistication when writing text, otherwise the reader’s motivation might be adversely affected. His point of view achieves further credibility when Johnsen (1993: 197) warns that authors (and teachers) should recognise the skills, knowledge, ability and cultural bias the reader brings to the reading process. One might add that authors dare not underestimate the importance of language in developing a learning area conceptual framework.

What this adds up to is that the readability of intermediate phase textbooks is likely to be adversely affected if practitioners with an abiding understanding and experience of intermediate phase teaching are excluded from the authoring process.

3.3.5.6 Relevance of accessibility for this study

In this section I have attempted to show that the literature provides evidence that one of the major factors affecting the quality of intermediate phase textbooks is accessibility, which is the fourth of six main attributes determining their effectiveness. Technical and linguistic factors as well as matters of style, tone and the author’s understanding of the background and abilities of the intermediate phase learner clearly determine accessibility. Accessibility forms the essence of the fourth criterion cluster of the theory about the practice of textbook evaluation.
3.3.6 Providing teacher support

3.3.6.1 Introduction

In the context of this study, providing support for teachers enables them to use a textbook in the way intended in order to deliver the new curriculum in a responsible manner. This calls for guidelines to help them to become familiar with the vision of the authors and to understand their conceptual goals.

3.3.6.2 The need

Potenza and Monyokolo (1996: 4) describe guidelines to teachers as negotiable, yet desirable. However, teachers’ guidelines have been the norm in the US and the UK for some time (Fetter, 1978: 55; Woodbury, 1979: 88; McCormick, 1981: 8; Tyson-Bernstein, 1989: 80; Cunningworth, 1995: 3). Czerniewicz, et al. (2000: 12) have developed a cogent argument in favour of guidelines for South African teachers. They point out that a highly skilled teacher is required to use outcomes-based related textbooks successfully because of the need to “develop the cognitive outcomes specified in the curriculum, and to play a facilitating role different from the traditional teaching role”. Yet, most South African teachers have been poorly trained and have to be retrained in order to cope with outcomes-based education. A recent declaration by the national Department of Education (2003: 13) requiring that teachers should be trained in the effective use of outcomes-based learning and teaching support material to enhance the learning process, supports this notion. A further point made by Czerniewicz, et al. (2000: 38) is that teachers do not necessarily “share the vision of materials developers or understand their conceptual goals”, because they “mediate materials according to their worldview, experience and practice.” This invariably results in dissimilarities in the way they interpret and use textbooks.

My own experience has made me aware that most South African intermediate phase teachers are general practitioners who are required to teach most of the learning areas in spite of rarely having the requisite knowledge. Consequently,
they are in urgent need of access to adequate resources, preferably in the form of a functioning school library and the internet. Yet, school libraries in South Africa have suffered a serious decline since 1994 and public libraries in the rural areas are virtually non-existent (Czerniewicz, et al., 2000: 34). Guidelines for teachers could conceivably provide intermediate phase teachers with access to the required factual content in the absence of other resources. This notion receives significant support in Chapter 5 where an analysis of a departmental draft document about learning support material (Department of Education, 2003) and teachers’ responses to a questionnaire are described.

3.3.6.3 The format

What action is needed in the short term, at least until the benefits of further teacher training are felt? Woodbury (1979: 88), Tyson-Bernstein (1989: 80) and the Department of Education (2003) feel that the answer seems to lie in teacher manuals addressing issues including content, aims and objectives, suggested alternative materials and learners’ activities, alternative teaching strategies, suggestions for methods of motivation, follow-up, extension and enrichment, assessment, an answer key, and so on.

3.3.6.4 Relevance of providing teacher support for this study

In this section I have attempted to show that teachers, and intermediate phase teachers in particular, need access to teacher manuals in order to obtain background information about the content they are required to teach. Moreover, they need pedagogical advice to assist them to bring about the required curriculum change. The significance of providing teacher support for the ultimate effectiveness of a school textbook is evident in the literature and therefore forms part of the theory about the practice of textbook evaluation.
3.3.7 The authors’ observance of a given curriculum

3.3.7.1 Introduction

3.3.7.1.1 The sixth attribute of an effective school textbook.

In this section, the sixth and final attribute of good quality school textbooks is dealt with. This attribute of a good textbook is that it accommodates the requirements of the curriculum.

3.3.7.1.2 The content and form of the curriculum

Arguments concerning the appropriate content and form of the school curriculum have raged ever since the justification of an unidentified version of knowledge was documented as far back as 1890 (De Castell et al., 1989: vii). Apple and Christian-Smith (1991: 1) argue that knowledge is a version of reality. Reality is socially constructed; therefore knowledge invariably achieves legitimacy in a given social context. More often than not, what the learners will be expected to learn in schools is based on the results of political, economic and cultural compromises occurring within that social context. Cornbleth (1990: 23) echoes these sentiments. “Curriculum development,” she writes, “is an ongoing social activity that is shaped by various contextual influences [my emphasis] within and beyond the classroom”.

3.3.7.1.3 The role of school textbooks in the interpretation and delivery of the curriculum

Curriculum interpretation and delivery is “a complex and messy matter” (Hutchinson and Torres, 1993: 327). However, there is some comfort to be found in their assurance that good textbooks “create a degree of order within potential chaos”. Various influential authors agree. According to Apple and Christian-Smith (1991: 4), the textbook plays a key role in delivering a particular curriculum. It “participates in creating what a society has recognised as legitimate and truthful”. Biraimah (1988: 140) emphasises the need for
textbooks to conform to the reader’s “lived culture”. “School textbooks,” submits Mbuyi (1988: 167), “are good indicators of ‘core values’ in which the country’s leadership wishes to inculcate its values”.

As indicated earlier (see paragraph 1.2.2), textbooks also supplement the pedagogical efforts of the teacher by carrying out similar functions to those of a teacher, including provoking, reminding, asking questions, and so on (Rowntree, 1995: 11). In fact, in the US textbooks “generally turn out to be the curriculum” because educators insist on textbooks that cover all aspects required by the curriculum (Tyson-Bernstein, 1989: 78). Confirming this phenomenon Johnsen (1993: 287) cites investigations showing that since the 1980s teachers largely follow the teaching plans incorporated into the textbooks. Closer to home, Lesotho teachers also rely very heavily on school textbooks as an aid to curriculum delivery (Aimé and Overton, 1989: 177). This is also the situation in South Africa where, “for the majority of the teachers, textbooks are crucial to effective implementation of the curriculum” (Chisholm, 2000: 49).

The interpretation of curricular guidelines, therefore, has to play a key part in textbook development.

3.3.7.1.4 The purpose of this section

This section reviews the influence exerted by the political, social, economic and pedagogical context on any given curriculum.

This study is located in an educational context that is impacted upon by four overarching issues, i.e. political, social, economic and pedagogical. These factors are embedded in any given curriculum, including the Revised National Curriculum Statement (RNCS). It is beyond the scope of this study to explore these factors in great detail, because it (this study) is primarily concerned with the identification of a procedure for intermediate phase school textbook evaluation and selection as a vehicle for the delivery of the RNCS in an
education system that is plagued by endemic inefficiency, corruption, poorly trained teachers, overcrowded classrooms, and under-resourced schools.

3.3.7.2 The political context

Ours is a world where national curricula are more often than not seen as the instruments whereby dominant political and social structures advance their schema. “Any healthy society,” Arons (1989: 204) maintains, “will use some method to maintain and reinforce cohesion amongst its members”. Carlson (1989: 46) defines this process of legitimation as “the capacity of the state to engender and maintain the belief that existing institutions, structures and state policies are the most just and appropriate ones for the society generally when in fact they facilitate the power of dominant social groups”.

3.3.7.3 The social context

3.3.7.3.1 Introduction

Johnsen (1993: 286) points out that what learners will ultimately learn is not solely dependent upon the overt curriculum. The hidden or implicit curriculum, exerts an enormous influence on the way learners and their teachers perceive and deal with curricular content.

3.3.7.3.2 The hidden curriculum

According to Cornbleth (1990: 42) the hidden curriculum signifies information, beliefs and ways of behaving that are shaped by social, political, historical, national and local conditions. It has come to be called the “sociology of the curriculum” involving epistemological as well as political issues (Apple, 1989:156). Various authors, including Biraimah (1988: 115), Kwong (1988: 228), Carlson (1989: 46), Apple (1989: 156), Sleeter & Grant (1991: 79) and Rowntree (1995: 203) testify that textbooks, being generated within a particular society, invariably reinforce the values of the dominant group within that society by transmitting selected values and role models to learners. For example, in an
investigation into, amongst others, personal attributes of male and female characters in French-produced Togolese (West Africa) textbooks, it transpired that gender differentiation was clearly evident. Females were portrayed as poor, without rights, wives or girlfriends, while men were depicted as having a broader range of characteristics and were mainly placed in positions where they appeared to be dominating women (Biraimah, 1988: 120). In fact, Kwong (1988: 227) goes so far as to declare that the transmission of such social values facilitates the acceptance of the status quo by learners, thereby establishing and maintaining a form of social control.

Black South Africans are particularly sensitive to a culture of racism cultivated by the former dominant South African apartheid education system. Masokoane (1988: 227) quotes from a number of textbooks to support his argument that they perpetuate “attitudes of paternalism, racial stereotypes, the distortion of language and history and the naturalisation of racial divisions”. This situation does not appear to be unique to South Africa. In spite of the US educational system being well provided with the appropriate guidelines, Woodbury (1979: 153) found that most textbook evaluations in that country seem to refer to instances of racial, ethnic, religious and sexist bias. Sleeter and Grant (1991: 101) and Taxel (1991: 111) confirm this. They observed that the treatment of diversity with regard to race, class, gender and disability embedded in the texts of US textbooks had not improved much over the previous fifteen years or so.

However, it is not only gender and race that fall victim to the hidden curriculum. Cornbleth (1990: 44) identifies a number of further aspects, three of which are worth mentioning in this context. First: the greater portion of the school timetable allocated to a learning area such as mathematics as opposed to less time accorded to, for example, social sciences, clearly communicates the idea that the one counts as more worthwhile knowledge than the other. Second: arranging the school programme into separate learning areas conveys the message that knowledge is not integrated. Third: textbooks that do not invoke other learning resources create the impression that books are the sole or most authoritative sources of knowledge.
Lorimer and Keeny (1989: 171) add a further dimension to the matter of “covert sway” exerted on the delivery of the curriculum. They argue that while the publishing industry responds to the educational marketplace, sufficient evidence has been found to conclude that publishers often impart certain pedagogical styles and an ideology seen by them as being compatible with what they view as a “transnational or pan-cultural world”, or a world of “idealised types and settings”. This is done because they are appropriate to the publishers’ “production and organizational capabilities”, thereby providing some consistency in a market that is notoriously unpredictable in educational and political terms.

Woodbury (1979: 157) in Table 3.3 below provides a set of criteria for fair representation in textbooks.

**Table 3.3 - Criteria for fair representation**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Description</th>
</tr>
</thead>
</table>
| Validity of information| • Information is accurate.  
• Stereotypes are not perpetuated.                                                                                                 |
| Unity                  | • All points of view concerning historical events or issues are included (e.g., is only the Anglo point of view emphasized? Other points of view should be emphasized as well).  
• The text includes the contribution and involvement of the ethnic group(s) at all points where it is appropriate and meaningful to do so. |
| Realism                | • Erroneous impressions are not created by citing selected facts and omitting others about an ethnic group.  
• The language of the text, its tone, and its illustrations (if any) combine to give an overall impression of recognizable people.  
• The text does not provide woodenly literal or stilted translations. |

(Source: Woodbury, 1979: 157)

3.3.7.4 The economic context

South Africa provides a good example of economic pressures having been brought to bear on the curriculum development process. After the first democratic election in 1994, the country once again became part of the global
economy with its attendant pressures to become globally competitive (Czerniewicz et al., 2000: 1). Local business responded to these demands and soon called for more vocational and entrepreneurial education (Jansen, 1999a: 5; Skinner, 1999: 119). Amongst other things, this stimulated the need to transform South African education in order to produce citizens who have the understanding to cope with local and global economic demands (Ministry of Education, 2001: 23), hence a curriculum that also meets with the approval of the business community (Jansen, 1999a: 5).

Not only does the South African curriculum embrace “entrepreneurial capacities” as a developmental outcome, but skills and competencies which are seen in economic circles as being highly desirable (Skinner: 1999: 119) have to be developed. These include those skills associated with problem-solving, the ability to work effectively with others, communication, understanding the world as a set of related systems, and research.

3.3.7.5 The pedagogical context

3.3.7.5.1 Introduction

Dewey’s (1936: 3) enduring account of the difference between the traditional and progressivist (also lately referred to as learner-centred education) philosophies of education dating back to the beginning of the previous century, still features in the work of contemporary writers and continues to have an impact on curriculum development. I have previously (see paragraph 3.3.2) referred to Dewey’s view that traditional education is bent on transmitting the “lore and wisdom of the past” to docile, receptive and obedient learners who are expected to conform to external rules and standards. On the other hand, progressive education acknowledges and cultivates the learner’s individuality, freedom of activity, learning through experience, and is anti-rote learning and adaptable.
3.3.7.5.2 Traditional or progressive?

The parameters of this study do not permit an in depth discussion of the merits of traditional and progressive pedagogies. What follows, therefore, is at best an overview of these issues as they have been, and still, are unfolding in South Africa.

During the latter half of my career in education, learner-centred education became fashionable. This shift exerted enormous pressure on the teaching profession by insisting, for example, on the integration of “subject knowledge” and placing value on local knowledge that learners bring to the classroom (Czerniewicz et al., 2000: 7). Chisholm (2000: 24) reminds us that “progressive education” nurtured by liberal universities, became the main pedagogical alternative to the South African education system’s fixation on Fundamental Pedagogics. In the 1980s the progressive learner-centred approach acquired political overtones, and became the cornerstone of People’s Education, which was offered as the alternative to “apartheid education”. One of the main features of People’s Education, which was absorbed into contemporary policy during the 1990s, was the need for an “egalitarian political mission (Kraak, in Jansen and Christie, 1999, cited by Chisholm, 2000: 24). The legacy of apartheid is deeply embedded in the South African psyche. It needs to be expunged in no uncertain manner. The new curriculum aims to do exactly that by laying emphasis on issues of justice, democracy and respect for diversity and difference.

Yet, paradoxically, Cuban’s (1997:26) assertion that teachers are “change-resistant” assumed renewed meaning under the new dispensation. Despite “scores of teachers” experimenting with methods and approaches that are “alternative” to traditional education (Chisholm, 2000: 11), it would not surprise me if most South African teachers remain steeped in the theory and practice of Fundamental Pedagogics for some time to come. These teachers are likely to identify with simplistic “back to basics” arguments, which tend to “hark back to a golden age where all could read, write and do mathematics” (Chisholm, 2000: 15).
I have found teachers to be reluctant to forsake teaching practices they feel are working for them and their learners. The educational convictions of traditionalists were (and still are) reinforced by the views of a number of respected educationists. Hirst and Peters (1970: 31) contend that the progressivist conception of education could be criticised in respect of its “general woolliness and indeterminancy with regard to aims and content”. It “would be laughable if it were not so frequently assumed” by the protagonists of a learner-centred pedagogy that learners could acquire sophisticated principles and procedures “simply by living in, and exploring freely” (Hirst and Peters, 1970: 77). Shanker (1997: 107) states, “No one has yet found an alternative to the traditional model that has been tested by time”. “Moreover,” he continues, “the traditional model seems to work quite well in other industrialised countries.” After all, Vygotsky points out that children learn by doing under the guidance of an adult (cited by Cope and Kalantzis, 1993: 70), which is in support of Hirst and Peters’ (1970: 36) assertion that the “directive function of the teacher”, who acknowledges his/her learners’ need for “stimulation, novelty and environmental mastery”. Such a teacher, they continue, deliberately and systematically facilitates “desirable states of mind involving knowledge and skill”, yet shows respect for the “knowledge and know-how that the children bring to school” (Pring, 1976: 84). A learner therefore learns many things he or she cannot directly see or experience when the teacher brings about learning deliberately and systematically in terms of his/her needs and interests. A teacher is better able to select those aspects that are most likely to facilitate the achievement of outcomes in the intermediate phase, while taking care to respect the diversity of the educationally desirable things the learners are interested in.

Teachers often mistakenly believe that advocates of progressive pedagogy frown on content. Spady (1994: 2), when explaining his conception of learner-centred outcomes-based education (see paragraph 4.2.2.1) plainly describes outcomes as “actions and performances that embody and reflect learner competence in using content, information, ideas” (my emphasis), is unambiguous.” Jansen (1999b: 152) is of the same opinion. He bluntly states that “content matters,” because it is “a critical vehicle for giving meaning to a
particular set of outcomes”. While acknowledging the significance of content, Spady’s (1994: 53) warning that content has a habit of changing due to the expansion of knowledge, must be heeded by teachers. Moreover, teachers will have to be circumspect in their selection and sequencing of key content, taking care to distinguish between content and skills that learners are likely to find merely enriching and those that are essential for them to develop “into high-level performers” (Spady, 1994: 53).

I find it unhelpful that learner-centred, or progressive pedagogy, is often described in opposition to traditional, or teacher-centred, ones. The answer probably lies in Hirst and Peters’ (1970: 32) point of view that neither of these two polarized concepts (traditionalist and progressivist) is adequate in itself. Cope and Kalantzis (1993: 21), for example, call for a pedagogy that promotes the traditionalists’ structured, systematic approach to learning combined with the progressivists’ insistence on experiential learning. After all, “rather than discarding the best of the old, it should be incorporated [in the new] as a strong foundation of what teachers already know and can do well” (Czerniewicz et al., 2000:76).

3.3.7.5.3 Aspects of learner-centred education worth observing

Introduction
Even arch traditionalists would be well advised to take note of a number of critically important notions that make eminent sense and therefore must be accommodated in school textbooks without neglecting worthwhile elements of a more traditional pedagogy. Concepts associated with learner-centred education that are worth observing include the integration of knowledge, multi-dimensional learning, constructivist learning, collaborative learning, democratic learning and formative assessment.

The integration of knowledge
When Hirst and Peters (1970: 73) refer to the “unfortunate polarization between the ‘traditional’ devotees of subjects [learning areas] and the ‘progressive’ devotees of integration”, they are alluding to a philosophical gap between those
who insist on the systematic development of a learner’s grasp of learning area content as opposed to those who argue that it is of paramount importance to maintain the unity of knowledge. Significantly, the Revised National Curriculum Statement (Ministry of Education, 2001: 29) urges South Africans to bridge the gap between these two opposing opinions by achieving a “balance between integration and progression”, or to fashion “a hybrid integration” of traditionalist and progressivist pedagogies (Harley and Parker, 1999: 182). In this section I shall attempt to show how one may tread the middle ground between these two extremes.

“To integrate,” Lloyd (1971: 20) explains, “means to make up a whole from the parts, to combine separate elements”. Dearden (1971: 46) describes the integration of the curriculum as “an undifferentiated sequence of activity serving now this and now that aspect of our aims” as opposed to activities formally differentiated into the learning area divisions of the curriculum.

Hirst and Peters (1970: 68) point out that the vast array of information confronting modern education necessitates breaking knowledge up into a “number of limited tasks of manageable proportions” called school subjects. Nonetheless, they remind us that when the curriculum is organised in this fashion, each subject calls for the pursuance of a limited number of objectives to the exclusion of all others. Subjects, or learning areas for that matter, consequently do “scant justice to the complex interrelations” between them and so assume an artificial discreteness that violates the unity of knowledge. This situation, Hirst and Peters (1970: 69) argue, calls for a “topic or project type of curriculum unit where objectives from many modes [learning areas] are brought together”. Twenty-four years later Spady (1994: 65) contends that outcomes “literally invite staff to step beyond the constraints of individual content areas” to pursue integrationist objectives by following an interdisciplinary thematic approach. A further six years on, A Chisholm (2000: 26) concurs: “strong integration requires thematic continuity”. Hirst and Peters (1970: 73) point out a worrying factor, however. They concede that while the integration of the curriculum is attainable, it makes “vast demands” on the knowledge and ability of teachers, and they fear that in “less competent hands”
the systematic development of a learner’s grasp of a subject (or learning area) will be compromised, an assertion that was validated time after time during my tenure as a primary school principal end education adviser.

What this adds up to is that while a solid case could be made for the systematic instruction in learning areas requiring the progressive mastery of concepts, the integration of the curriculum is indeed possible within an interdisciplinary thematic approach.

Multi-dimensional learning
Child-centred education advocates multi-dimensional learning through the advancement of knowledge, values and skills. This could safely be taken to include what Bloom, Kratwohl and Masia (1964: 4) long ago conceptualised as the cognitive, affective and psychomotor dimensions of human response as “desired outcomes of education”. In this paragraph I shall briefly explore multi-dimensional learning in the context of Bloom et al.’s (1964) taxonomy of educational objectives.

Confucius (quoted by Woodbury, 1979: 125) insisted that “learning without thinking is labour lost; thinking without learning is perilous”. After all, in a world where computerised technology facilitates the storage and extraction of vast increments in information, augmenting and even replacing limited human ability to store knowledge, it has long ago become accepted teaching practice to concentrate less on the acquisition and retention of factual content and more on using factual content to develop cognitive dexterity. Bloom, et al. (1964: 6) found that the largest proportion of cognitive elements of understanding fall into a domain varying on a continuum from “simple recall of material learned to highly creative ways of combining and synthesizing new ideas and materials”, including knowing, comprehending, applying, analysing, synthesising and evaluating.

Affective objectives form the second of the three major domains in Bloom’s taxonomy of educational objectives and “emphasise a feeling tone, an emotion, or a degree of acceptance or rejection” (Bloom, et al., 1964: 7). These affective
objectives may well be equated to “values”. “Values” can safely be understood to imply a range of attitudes that are informed by “simple attention to selected phenomena to complex but internally consistent qualities of character and conscience” (Bloom, et al., 1964: 7). According to Bruner (1997: 33), however, the problem is that learners come from families that may or may not subscribe to these desirable values. As a solution, he argues that it is incumbent upon teachers to build and maintain a “collaborative culture” in order to collectively advance the required values regardless of each learners’ own home culture.

The third domain of Bloom’s taxonomy of educational objectives emphasises psychomotor skills enabling a learner to perform some act requiring neuromuscular co-ordination and “are most frequently related to handwriting and speech and to physical education, trade and technical courses” (Bloom, et al., 1964: 7).

Table 3.4 is a proposed model for cognition and creativity, exemplifying the essence of Bloom’s notions.

**Table 3.4 - Model for cognition and creativity**

<table>
<thead>
<tr>
<th>Area of Bloom’s Taxonomy</th>
<th>Learner activities</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Knowing</strong> (recall specific bits of information)</td>
<td>Observing, asking, matching, labelling, listing, identifying, locating, etc.</td>
<td>To produce diagrams, models, audio and video tapes, reports, etc</td>
</tr>
<tr>
<td><strong>Comprehending</strong> (understanding of communicated materials, not related to other materials).</td>
<td>Identifying, locating, matching, paraphrasing, writing, etc.</td>
<td>To compare, contrast, demonstrate, examine, listen, question, etc.</td>
</tr>
<tr>
<td><strong>Applying</strong> (using methods, concepts, principles or theories in new situations)</td>
<td>Constructing, experimenting, drawing, sketching, interviewing, listing, recording, simulating, etc.</td>
<td>To compile a scrap book, draw a map, illustrate, keep a diary, start a collection, etc.</td>
</tr>
</tbody>
</table>
Although Woodbury (1979: 128) describes a similar variant, the source of the model is unknown. I used it during my tenure as an educational adviser in the late nineteen-eighties. Quoting research on the improvement of thinking and learning, Kerry (1986: 81) makes the point that open-ended questions encouraging learners to apply, analyse, synthesise and evaluate are “clearly the warp and woof of genuine learning”. Open-ended questions may be described as questions that have no predetermined limit or boundary, enabling the mind to range freely over all options and permutations. They help learners to verbalise knowledge and make it their own by indulging in higher order thinking. For example, much teacher talk consists of giving explanations such as, “here are X number of reasons why a spider is an arachnid,” followed up with instructions to ingest it so that it may later be regurgitated under test or examination conditions, whereas the cognitive demands on the learner posed by an open-ended question such as, “is the spider an insect?” should seem obvious to any teacher worth his/her salt.

Constructivist learning
Once again, the aims of this study do not permit an in-depth discussion of constructivist learning. Suffice to say, constructivist learning refers to an approach where the learner is allowed to construct his/her own knowledge by pursuing his/her own fields of interest through problem-solving activities set by...
teachers who have “keen skills of observation and a substantial knowledge base about learning and development so as to recognise what students are thinking and what they are ready to learn” (Darling-Hammond, 1997: 119). Czerniewics et al. (2000: 7) observe that constructivist pedagogy begins with what learners bring to the [learning] situation”, and that it is “co-operative and involves using language to discuss, ask questions and make sense of things”. Dewey (1938: 4) points out that this kind of learning rests on the principle of learning through personal experience, which is rooted in the belief that there is an intimate relationship between actual experience and learning as opposed to imposing “adult standards, subject-matter, and methods upon those who are only growing slowly to maturity”.

Without wishing to invalidate constructivist learning as explained above, I expect its implementation in South Africa to be adversely affected by three conditions. First: many South African intermediate phase teachers are likely to be swayed by Shanker’s (1997: 107) fairly recent assertion that successful teaching requires “solid mastery” of learning content, or the “cognitive core” (Pring, 1976: 81). Second: constructivist learning requires highly skilled teachers who are able “to teach both subjects and students well” (Darling-Hammond, 1997: 12). I am not convinced that the average South African intermediate phase teacher working in the average over-crowded South African intermediate phase classroom has been appropriately trained nor does he or she have access to adequate support, time or resources. Third: unqualified adherence to the things learners are interested in may lead to what Davies (1971: 61) refers to as “cramping, restricting [learning] experiences rather than demanding ones”.

However, the new South African curriculum calls for a constructivist approach to teaching and learning. Teachers have little choice but to conform to this expectation. They would be wise, though, to heed Cope and Kalantzis’ (1993: 21) suggestion quoted in paragraph 3.7.5.2, i.e. to strike a balance between traditionalist and progressivist teaching approaches; not to forsake the one for the other. After all, this would not be at odds with the “discretionary spirit” of outcomes-based education, which, according to Chisholm (2000: 26) advocates
“considerable flexibility and teacher discretion”. The reader is reminded that the new South African curriculum has been developed within an outcomes-based framework (Ministry of Education, 2001: 27)

Collaborative learning
Collaborative learning is also closely associated with a progressive pedagogy. Darling-Hammond (1997: 129) explains that collaborative learning occurs between and among learners when they are organised into carefully structured and guided groups to share ideas, test solutions to problems, design and carry out experiments, or conduct teach-backs. Teach-back is another term for peer teaching and occurs where learners take turns teaching the rest of the group what they have learned about a topic. Learning is enhanced because it allows them to talk, make meaning and take collective action in order to hone their thinking about a particular topic by sharing with one another the insights each has acquired.

Democratic learning
Democratic learning is a fourth concept linked with progressive education. As far back as 1916 Dewey (1916: 87) stated that “a democracy is more than a form of government; it is primarily a mode of associated living, of joint communicative experience” which also applies to schools. Darling-Hammond (1997: 141) reasons that democratic learning requires the learners to be exposed to the kind of knowledge that does not stifle diverse thinking and provides “access to a social dialogue that enables democratic communication and participation”. Meier (1997: 60) argues in favour of a pedagogy that develops sceptical and empathetic “habits of mind”, which are essential for any functioning democratic society. This requires a democratic pedagogy that “supports freedom of expression, inclusion of multiple perspectives, opportunities to evaluate ideas and make choices, and opportunities to take on responsibility and contribute to the greater good” (Darling-Hammond, 1997: 144).
Formative assessment
A fifth concept that is associated with a learner-centred pedagogy is formative assessment. Formative assessment is “developmental” and “will show whether learners are making progress towards achieving the learning outcomes or not”, an “aid to learners in their subsequent learning” (Rowntree, 1995: 302). In this form, therefore, assessment becomes a learning experience and not just a formal check-up on what has already been learned, as is the case with summative assessment, i.e. a process during which work is tested and marked or graded to establish to what extent the learning outcomes have been achieved. It is important to realise that “any one act of assessment can be used both formatively and summatively” and that feedback will help learners to learn from their assignment (Rowntree, 1995: 303).

An obvious question now arises: what aspects of the learner’s competence ought to be assessed? The answer is equally evident: the attainment of assessment standards as steps towards the attainment of the aims of the learning outcomes.

Flowing from the previous paragraph is the next question: how should one assess a learner’s work? Rowntree (1995: 306) divides assessment exercises into two broad categories: product assessment and process assessment. In product assessment there is a physical product to assess, for example essays, calculations, multiple-choice test answers, drawings, etc. Process assessment relates to an open-ended activity that may or may not result in any physical product, such as performances, interviews, using science skills in a variety of settings, demonstrating entrepreneurial attitudes, etc., requiring the teacher to be present when the learner is displaying the competence.

3.3.7.6 Relevance of the observance of a given curriculum for this study

Any given curriculum has been shaped by political, social, economic and pedagogical influences that need to be interpreted because they play a significant role in the production of good quality school textbooks, which, in turn, could help teachers to deliver the curriculum in a responsible manner.
In the pedagogical context, I have reviewed concepts associated with learner-centred education, including the integration of knowledge, multi-dimensional, constructivist, collaborative and democratic learning, and formative assessment, while arguing in favour of a “mix” of progressivist and traditional approaches.

The significance of the observance of a given curriculum for the ultimate effectiveness of a school textbook is evident in the literature and therefore forms the essence of the fifth criterion cluster of the theory about the practice of textbook evaluation.

3.4 ARTICULATING A THEORY ABOUT THE PRACTICE OF TEXTBOOK EVALUATION

3.4.1 Introduction

This theory about the practice of textbook evaluation has been informed by a literature review during which it transpired that two sets of theoretical considerations are liable to impact on textbook evaluation through an evaluation procedure that is brief, practical to use and yet comprehensive in its coverage of criteria. The first set deals with a number of key issues about textbook evaluation, i.e. the process of evaluation, the logical difference between analysis and evaluation, the development of criteria, the checklist, and the context of an evaluation. The second includes the attributes of a good quality textbook, i.e. the composition of the authoring team, the authors’ rationale, the authors’ understanding of the process of learning and instruction, accessibility, teacher support, and the authors’ observance of a given curriculum, which are stated as criterion clusters and include an explanation and individual criteria.
4.5.2 Key issues about textbook evaluation

3.4.2.1 The process of evaluation

Three basic methods of evaluation occur before a textbook is used. They are referred to as pre-use (predicting the possible value of a textbook for the target group), in-use (used in the teaching environment) and post-use (retrospective appraisal of a textbook’s performance) evaluation. Pre-use evaluation involves gaining an impression of what the textbook contains, and, if it appears to meet expectations, to subject it to closer scrutiny. In-use evaluation occurs while a textbook is being used in the classroom. Post-use evaluation provides a retrospective assessment of a textbook’s performance in the teaching and learning situation.

3.4.2.2 The difference between analysis and evaluation

The concepts of analysis and evaluation are logically different, yet they may complement each other in a single procedure. The analysis focuses the evaluator’s attention on observable aspects of the textbook that need to be taken into account when evaluating what their effect on the target group might be.

3.4.2.3 The development of criteria

Evaluation criteria are needed to ensure that textbook evaluation is performed in a methodical, principled way. This notion has influenced the way in which the attributes of good quality textbooks have been formulated below.

3.4.2.4 The checklist

The checklist is an efficient way of systematically gathering comparable data about a textbook. It articulates the general categories forming the basis on which specific criteria are organised. In addition, unfamiliar concepts need to be explained, the checklist should be piloted, revised, and applied by a group of
evaluators evaluating the same textbook. Finally, checklist items could be combined with a numerical response and rating scales to permit qualitative judgements.

3.4.2.5 The context of evaluation

The contextual factors that are to be taken into account include the professional needs of the teachers and the educational needs of the learners. The former requires textbooks that are stimulating and authentic, and selected in accordance with a procedure that is brief, practical to use and yet comprehensive in its coverage of criteria. The latter calls for acknowledgement of age range, proficiency level in the language of instruction, socio-cultural background, and situation.

3.4.3 The attributes of a good quality textbook

3.4.3.1 The composition of the authoring team

3.4.3.1.1 Explanation

A multidisciplinary approach to textbook authoring seems in order. An authoring team should therefore include a range of competences.

3.4.3.1.2 Criterion

A credible authoring team is composed of persons who are expert in

- learning area content;
- converting content into readable prose;
- linguistics;
- typography;
- teaching the target group;
- didactics.
3.4.3.2 The authors’ rationale

3.4.3.2.1 Explanation

The author's rationale contextualizes the textbook within the whole curriculum and has three purposes. Firstly, it clarifies fundamental philosophical issues. Secondly, the author sets parameters in terms of which he or she would select and sequence textbook content. Thirdly, it enables the teacher to obtain an early overview of what the textbook is intended to do. The author's rationale may appear in the “blurb” and/or the introduction.

3.4.3.2.2 Criterion

The authors briefly and unambiguously state the following:

- the underlying philosophy of the book, which should connect with the values expressed in the given curriculum;
- information about the target audience and situation, including demography, level of motivation, learning factors and previous learning;
- a declaration of aims (linked with the underlying philosophy of the book) and objectives (related to the critical and developmental outcomes).

3.4.3.3 The authors' understanding of the process of learning and instruction

3.4.3.3.1 Explanation

Credible learning and instruction theories hold that optimal conditions for learning occur when an individual is exposed to sequential events of instruction intended to stimulate his/her internal structures. Learning is moderated by his/her control processes and expectations, which govern what input he or she retains or rejects and his/her motivation to learn.
3.4.3.3.2 **Criterion**

The textbook is structured in such a way that the following instructional events occur sequentially:

- an activity to gain the learner’s attention,
- informing learner of the desired learning outcomes,
- relating prior learning to current learning,
- presenting new knowledge, skills and values; while at the same time explaining new or difficult words,
- learner to demonstrate the newly acquired knowledge, skills and values,
- providing feedback,
- assessing performance, and
- enhancing retention and application of knowledge, skills and values.

3.4.3.4 **Accessibility**

3.4.3.4.1 **Explanation**

A textbook is accessible if it is easy for the learners to find their way into the text, and to find their way about in it. Moreover, they are expected to be able to understand the meaning of and interact with the content. Factors that are likely to affect accessibility include typography, readability, style and tone, and the author’s assumptions.

3.4.3.4.2 **Criteria**

A textbook meets the following typographic requirements:

- The binding and cover are sturdy
- It is printed on 70 – 80 gsm, off-white, uncoated matt paper.
- Its format is A5.
- Its layout is single-column, portrait type.
- 12 point serif font is used.
• An orderly system of access devices (e.g. index, headings, a consistent numbering system, verbal and visual signpost, summaries and a glossary) is included.
• The text is grouped in units of meaning.
• The illustrations are artists’ line drawings in black and white.
• The illustrations are placed close to the text referring to them.
• Printing and illustrations are spaced in such a way that the pages appear uncluttered.

Readability is enhanced when authors observe the following:
• The language competence of the learners is taken into account.
• The text shows logical progression of ideas.
• The text is subjected to at least one readability test, taking into account both vocabulary and syntax, for example the cloze procedure.

The authors use a linguistic style and tone similar to that of children’s fiction.

The authors demonstrate their awareness of
• the learners’ previous learning, and
• the learners’ current experience of the world.

3.4.3.5 Teacher support

3.4.3.5.1 Explanation

Providing support for teachers enables them to appreciate the vision of the textbook developers and to understand their conceptual goals. Well-structured guidelines enable teachers to use a textbook in the way it is intended.
3.4.3.5.2 **Criteria**

Teachers’ guidelines

- make available background information about the content they are required to teach;
- explain the intended learning outcomes;
- suggest alternative resource materials and learners’ activities;
- propose alternative teaching strategies;
- suggest means of motivating learners;
- offer ideas for extension and enrichment;
- offer ideas for assessment;
- provide an answer key.

3.4.3.6 **The authors’ observance of a given curriculum**

3.4.3.6.1 **Explanation**

Over the years curricula have invariably been shaped by political, social, economic and pedagogical influences. These influences have played a determining role in the pursuit of values, pedagogical expectations and skills. A curriculum challenges the education community to ensure that particular values and a high level of skills are infused across the curriculum. It further advocates specific pedagogical expectations, whether traditional, child-centred or a hybrid of the two. These values, pedagogical expectations and skills must be reflected in school textbooks to help teachers to deliver the curriculum in a responsible manner.

3.4.3.6.2 **Criteria**

**Values**

Teachers and learners collaborate in order to collectively advance the required values, regardless of each learner’s home culture.
Pedagogical expectations

- The following pedagogical expectations are in evidence:
- advancing the process of learning without neglecting the content;
- devising learning activities that are planned to achieve learning area outcomes;
- learning experiences occurring repeatedly and at ever-increasing levels of complexity;
- *multi-dimensional learning*, i.e. the advancement of knowledge, skills and values through the judicious use of learning content;
- *constructivist learning*, i.e. an approach where the learner is allowed to construct his/her own knowledge by pursuing his/her own fields of interest. South Africans will have to be circumspect in their pursuance of this notion;
- *collaborative learning*, i.e. learners are organised into carefully structured and guided groups to share ideas, test solutions to problems, design and carry out experiments, and conduct teach-backs or peer teaching;
- *democratic learning*, i.e. learners are exposed to the kind of teaching and learning that encourages diverse thinking and freedom of expression;
- *formative assessment*, i.e. the learner himself/herself, his/her teachers and/or his/her peers assess different kinds of oral and written work while they occur and at their completion without awarding marks or grades, while not altogether discounting *summative assessment*, i.e. a process during which work is tested and marked or graded to establish to what extent the assessment standards have been achieved;
- an interdisciplinary thematic approach, which allows for links to be established *between* the learning areas without neglecting conceptual progression occurring *within* each learning area.

Skills

Skills development includes the under-mentioned.

- *Knowing*, i.e. recall specific bits of information.
- *Comprehending*, i.e. understanding of communicated materials, not related to other materials.
• **Applying** i.e. using methods, concepts, principles or theories in new situations.
• **Analysing**, i.e. breaking a communication into constituent elements.
• **Synthesising**, i.e. combining parts into a whole.
• **Evaluating**, i.e. judging values, applying standards and criteria.

3.5 SUMMARY

This chapter has described the literature review, which culminated in a theory about the practice of textbook evaluation. It is the first phase in the process of achieving the purpose of this study, i.e. to develop a procedure for evaluating South African intermediate phase school textbooks.

The theory postulates that two sets of theoretical considerations are liable to impact on a textbook evaluation procedure. The first set deals with a number of key issues about textbook evaluation, i.e. the process of evaluation, the logical difference between analysis and evaluation, the development of criteria, the checklist, and the context of an evaluation. The second set pertains to six attributes that may be associated with a good quality textbook, i.e. it is written by a capable authoring team whose credentials are appropriate; it is planned in terms of a clear rationale; it is underpinned by the observance of the process of learning and instruction; it is accessible; it provides teacher support; it meets curricular requirements.

3.6 ABOUT THE NEXT CHAPTER

Chapter 4 contains an analysis and evaluation of the following data in order to give a South African intermediate phase bias to the theory articulated in this chapter:

• the national Department of Education’s Revised National Curriculum Statement;
• a national Department of Education draft policy for learning support materials that are relevant to my study;
• individual semi-structured interviews with a sample of intermediate phase teachers; and
• a questionnaire applied to a sample of authors of intermediate phase school textbooks.

The chapter will conclude with a reformulation of a theory about the practice of textbook evaluation to give it a South African intermediate phase bias.
CHAPTER FOUR

DATA COLLECTION, ANALYSIS AND INTERPRETATION

4.1  INTRODUCTION

The literature review in Chapter 3 culminated in the articulation of a theory about the practice of textbook evaluation and was the first phase in achieving the purpose of this study. The theory postulates that two sets of theoretical considerations are liable to impact on textbook evaluation. The first set comprises a number of key issues about textbook evaluation, i.e. the process of evaluation, the logical difference between analysis and evaluation, the development of criteria, the checklist, and the context of an evaluation. The second embraces six attributes of a good quality textbook, i.e. the composition of the authoring team, the authors’ rationale, the authors’ understanding of the process of learning and instruction, accessibility, teacher support, and the authors’ observance of a given curriculum.

Chapter 4 is the penultimate phase in the process of achieving the purpose of this study, and contains an analysis and evaluation of appropriate data in order to give a South African intermediate phase bias to the theory mentioned in the previous paragraph, and culminates in a procedure for the evaluation and selection of South African intermediate phase school textbooks in Chapter 5.

The data was derived from four South African sources: the national Department of Education’s Revised National Curriculum Statement (RNCS), its draft policy for learning support materials, and two surveys. One of the surveys dealt with the beliefs of intermediate phase teachers, while the purpose of the other was to determine the perceptions of intermediate phase school textbook authors.
4.2 THE NATIONAL DEPARTMENT OF EDUCATION’S REVISED NATIONAL CURRICULUM STATEMENT (RNCS)

4.2.1 Introduction

In his foreword to the Revised National Curriculum Statement, the South African Minister of Education unambiguously states that the “curriculum expresses our idea of ourselves and our vision as to how we see the new form of society being realised through our children and learners” (Ministry of Education, 2001: 16). The new curriculum is aimed at redressing the disparities of apartheid by promoting “the democratic transformation of society” which continues to be a “significant agenda” locally (Skinner, 1999: 117). This, of course, is nothing new in a world where national curricula are more often than not seen as the instruments whereby dominant political and social structures advance their schema. As a matter of fact, “any healthy society will use some method to maintain and reinforce cohesion amongst its members” (Arons, 1989: 204). Carlson (1989: 46) defines this process of legitimation as “the capacity of the state to engender and maintain the belief that existing institutions, structures and state policies are the most just and appropriate ones for the society generally, when in fact they facilitate the power of dominant social groups”.

South Africa is no exception. In my lifetime we first had to endure the “apartheid curriculum” (Jansen, 1999a: 145), which was exemplified by “narrow visions, concerns and identities” (Ministry of Education, 2001: 20) and “racially offensive and outdated content” (Jansen, 1999a: 145). The apartheid curriculum was followed by Curriculum 2005, a curriculum policy that was designed to “overturn the legacy of apartheid education” and to “catapult South Africa into the 21st century” (Ministry of Education, 2001: 20). Curriculum 2005 subsequently had to go through a process of streamlining and simplification, which culminated in the RNCS in 2001.

My analysis of the RNCS is conducted in terms of the theory about the practice of textbook evaluation emanating from the literature review in Chapter 3, and
focuses on the following principles of the RNCS and their implications for the school textbook authoring process:

- Outcomes-based education.
- Balance of progression and integration.
- The necessity for clarity and accessibility.
- The development of a high level of knowledge and skill.
- Social and environmental justice, human rights and inclusivity
- The achievement of critical and developmental outcomes.

4.2.2 The principles of the RNCS

4.2.2.1 The principle of outcomes-based education

4.2.2.1.1 Introduction

At first glance this section may contain elements of a literature study. However, American educationist William G Spady’s conception of outcomes-based education is so embedded in the South African educational context, that dealing with it elsewhere in this study would not do justice to its influence on the RNCS.

Czerniewicz et al. (2000: 6) point out that the designers of Curriculum 2005 (and by implication its sequel, the Revised National Curriculum Statement) have “developed a progressive [or learner-centred] outcomes-based pedagogy”, “uniquely a product of a culture whose child-rearing practices are child-centred” (Darling-Hammond, 1997: 57). Chisholm (2000: 24) confirms the learner-centred underpinning of the new curriculum and states that it has been derived from, amongst others, the philosophy of outcomes-based education.

The Ministry of Education (2001: 27), having placed its faith in outcomes-based education to produce socially and economically literate learners who have achieved “their maximum ability and are equipped for lifelong learning”, turned to Spady’s notion of outcomes-based education to develop a South African variant (Chisholm, 2000: 13). It offers South African teachers an educational philosophy that “considers the process of learning as being as important as the content” (Ministry of Education, 2001: 28).
Spady, described as the “chief proponent” (Spady, 1994: v) of outcomes-based education and obviously accepted as such by the Ministry of Education, defines the concept as an approach “clearly focusing and organizing everything in an educational system around what is essential for all students to be able to do successfully at the end of their learning experiences” (Spady, 1994: 1). This means starting with a clear picture of what is important for students to be able to do, then organizing curriculum, instruction, and assessment to make sure this learning ultimately happens.

Spady’s definition is based on three premisses. Firstly, all learners can achieve success, each at their own pace and in keeping with their own learning style. Moreover, learning opportunities must be unrestricted, thereby providing scope for extended learning. Secondly, achieving success in learning will inevitably bring about further success. Thirdly, schools have power over successful learning (Spady, 1994: 9).

Spady’s understanding of outcomes-based education is informed by the four key principles described in the ensuing paragraphs.

4.2.2.1.2 The first principle
Outcomes-based education requires teachers to establish a clear picture of what learners need to achieve. In the context of outcomes-based education this means that, rather than primarily concerning themselves with getting specific content covered as in the past, they should “define, organize, structure, focus and operate their activities based on culminating outcomes” (Spady, 1994: 3). The RNCS uses the term “critical and developmental outcomes” as a synonym for “culminating outcomes” to describe various kinds of performance abilities that South African learners will need in their lives after finishing school. The culminating outcomes emphasise that learners should be able to do observable things and not their “values, beliefs, attitudes or psychological states of mind” (Spady, 1994: 2) because these represent “non-demonstrable mental processing”. Demonstration verbs such as describe, explain, illustrate, etc. are therefore used in defining outcomes, rather than “non-demonstration” verbs.
denoting values and other affective factors such as know, understand, believe, appreciate, etc. (Spady & Schlebusch, 1999: 42). Nonetheless, the Ministry of Education’s (2001: 22) insistence that “the challenge for the Revised National Curriculum Statement is how the goals and values of social justice, equity and democracy can be infused across the curriculum” is worth mentioning. While these mental processes are not outcomes in their own right, and learners should therefore not be held accountable for them, no learning is possible without them (Spady, 1994: 56).

At this juncture, I find it necessary to point out that the Ministry of Education’s (2001: 31) statement that “learning outcomes do not prescribe content” in my view does not mean that officialdom frowns on content or that content is unimportant. While the Ministry may not prescribe content, learning area statements almost always provide clear guidelines in this regard by means of stated “focuses” and assessment standards. Spady’s (1994: 2) description of outcomes as “actions and performances that embody and reflect learner competence in using content, information, ideas” (my emphasis), is as unambiguous as his conviction that content is one of the “critical domains” of outcomes, without which the ability to carry out an outcome is impossible (Spady, 1994: 61). Jansen (1999b: 152) is of the same opinion. He bluntly states that “content matters,” because it is “a critical vehicle for giving meaning to a particular set of outcomes”. While acknowledging the significance of content, Spady’s (1994: 53) warning that content has a habit of changing due to the expansion of knowledge, must be heeded. Moreover, teachers and authors will have to be circumspect in their selection and sequencing of key content, taking care to distinguish between content and skills that learners are likely to find merely enriching and those that are essential for them to develop “into high-level performers” (Spady, 1994: 53). In the current South African context, content coverage of issues such as health (e.g. HIV/AIDS), the environment, equity, etc. would be appropriate.

Spady (1994: 54) makes a final point worth bearing in mind in this regard when he maintains that learners “have to know something; be able to do something
with what they know; and be like a confident, successful performer as they’re doing it” (my emphasis).

4.2.2.1.3 The second principle
Teachers should consistently start planning their teaching with the critical and developmental outcomes to be achieved. From there they should then “systematically trace back” (Spady and Schlebusch, 1999: 32) the steps that will be needed to achieve the critical and developmental outcomes. At the same time teachers must ensure that the learning outcomes and assessment standards articulated in the appropriate learning area statements, are dealt with.

4.2.2.1.4 The third principle
Outcomes-based education is based on the belief that, barring extreme exceptions, all learners can and should ultimately achieve success in learning (Spady and Schlebusch, 1999: 29). Moreover, teachers ought to establish high standards of performance for learners and ultimately hold them to those. This principle is also of fundamental importance for authors.

4.2.2.1.5 The fourth principle
Spady (1994: 12) refers to the fourth key principle of outcomes-based education as the “expanded opportunity” principle, which involves five dimensions teachers and authors would be wise to heed:

- Firstly, this principle requires that the previous three key principles be applied “consistently, systematically, creatively and simultaneously”.
- Secondly, teaching and learning time should be sufficiently flexible in order to accommodate the rate at which individual learners are able to demonstrate their mastery of critical and developmental outcomes. For example, intrinsically motivating open-ended learning activities would contribute to the required flexibility. Ellington and Race (1985: 58) distinguish between “convergent” questions where the learner has to respond in a way largely predetermined by the text, and “open-ended” questions that allow the learner scope for divergent thinking. Johnsen (1993: 231) confirms this when quoting various investigations into the types of questions that would enhance learners’ interaction with textual
information, i.e. rising above low-level cognitive responses that merely require the learner to extract factual information from a text, for example “How many legs does a spider have?” It was found that apart from “input” questions such as the one quoted above, “processing” (“Is a spider an insect?”) and “output” (“What effect would the disappearance of spiders have on the environment?”) questions engage learners intellectually and emotionally and help them to become aware of the connections between their school tasks and their life experiences. Such questions also enable each learner to respond in a manner appropriate to his/her “mix of aptitudes and barriers to learning” (Darling-Hammond, 1997: xi).

- Thirdly, expanded opportunity also involves recognition of the fact that learners have different aptitudes. This diversity is exemplified by Thurstone’s notion of multiple intelligences (quoted by Darling-Hammond, 1997: 124) namely: logical-mathematical, musical, spatial, interpersonal, intrapersonal, bodily and linguistic. Learners are stronger in some than in others. Creative teachers (and authors) should devise learning activities that would enable the learner to build upon his own strengths.

- The fourth dimension calls for a criterion-referenced system of assessment (dealt with in greater detail below) showing where learners stand at any stage in their progress towards achieving their highest level of performance. This eliminates the inherent competitiveness of the traditional system of norm-referenced appraisal, which has been shown to inhibit learners’ motivation.

- In the fifth instance, learning experiences must occur repeatedly and at ever increasing levels of complexity. This principle of progression receives special mention in the RNCS and specifies “more complex, deeper and broader knowledge, skills, values and understanding to be achieved in each grade as well as from grade to grade” (Ministry of Education, 2001: 29). Spady (1994: 63) explains progression in terms of advancing from relatively simple content-dominated outcomes, through “transitional outcomes” that are dominated by higher order competencies, to context-dominated “transformational outcomes” requiring learners to integrate, synthesise and apply knowledge.
Transitional outcomes also encourage a constructivist pedagogy, which allows learners to create their own knowledge, thereby progressing beyond the confines of tasks set by someone else (Spady, 1994: 65).

4.2.2.2 The principle of achieving a balance between progression and integration

4.2.2.2.1 Introduction
According to the Ministry of Education (2001: 29), this principle is central to the RNCS. Once again, I find it necessary to explore the concept in a more detail.

4.2.2.2.2 Progression
Conceptual progression occurs through the assessment standards. The assessment standards are designed to ensure that knowledge, skills and values turn out to be more complex and are dealt with in more detail as the learner moves from grade to grade (Ministry of Education, 2001: 29).

4.2.2.2.3 Integration
The Ministry of Education (2001: 30) states that integration is achieved by the application of “values, skills and knowledge within and across learning areas” (Ministry of Education, 2001: 30). In simple terms: integration is “a matter of creating connections between subjects” (Pring, 1976: 103). However, this is not as simple as it seems. Hirst and Peters (1970: 68) point out that the vast array of information confronting modern education necessitates breaking knowledge up into a “number of limited tasks of manageable proportions” called school subjects. The RNCS acknowledges the good sense of this practice by arranging its content in terms of distinct learning areas.

Arguing from the position that logically distinct learning areas are a given, and that these distinctions need to be respected, Hirst and Peters’ (1970: 69) contention is that an interdisciplinary thematic approach should provide a compromise between systematic attention to the distinctive character of learning (or subject teaching) areas and the progressivist ideal of integrating the curriculum.
I pointed out earlier that the integrative ideal may also be achieved by ensuring continuity of teaching method across the curriculum. So, for example, activities are structured in such a way that communication, problem solving, group work, research, and so on take place.

4.2.2.3 The principle of clarity and accessibility

This principle states that the RNCS aims at “clarity and accessibility both in its design and language” (Ministry of Education, 2001: 30). This means that – if it succeeds in its aim – textbook authors should have little difficulty in interpreting and implementing the will of officialdom.

4.2.2.4 The principle of a high level of knowledge and skills for all

This principle should be understood in the context of the RNCS’s advocacy of multi-dimensional learning through the advancement of “knowledge, skills and values” (Ministry of Education, 2001: 28). This could safely be taken to include what Bloom, Kratwohl and Masia (1964: 4) long ago conceptualised as the cognitive, affective and psychomotor dimensions of human response as “desired outcomes of education”.

The previous section showed that it is unwise to emphasise the educative processes at the expense of content, or vice versa. After all, the processes occur in the framework of particular content.

Earlier I also pointed out that skills might refer to cognitive processes as well psychomotor skills. Cognitive skills include the ability to recall specific bits of information, to comprehend, to use methods, concepts, principles or theories in new situations (application), to conduct analyses (e.g. breaking communication into constituent elements), to synthesise parts into a whole, and to evaluate, i.e. judging values, applying standards and criteria. Bloom’s taxonomy of educational objectives also emphasises psychomotor skills, enabling a learner to perform some act requiring neuromuscular co-ordination (Bloom, et al., 1964:
7). Psychomotor skills may be associated with the linguistic and technological skills described by the RNCS (Ministry of Education, 2001: 27).

4.2.2.5 The principle of social and environmental justice, human rights and inclusivity

According to the Ministry of Education (2001: 28) the RNCS “attempts to be sensitive to issues of poverty, inequality, race, gender, age, disability and sexual preference”. Thompson (1995: 1261) defines “sensitivity” as being aware of “fine differences of feeling, attitude, or reaction”. The affective component of learning is clearly evident in this principle. In terms of Bloom’s taxonomy of educational objectives, affective objectives “emphasise a feeling tone, an emotion, or a degree of acceptance or rejection” (Bloom, et al., 1964: 7). These affective objectives may be equated to “values”. In turn, the concept of “values” implies a range of attitudes that are informed by “simple attention to selected phenomena, to complex but internally consistent qualities of character and conscience” (Bloom, et al., 1964: 7).

The principle of social and environmental justice, human rights and inclusivity required redefining pedagogy in ways that “explicitly take up and rebuild the educational dynamics of culture and class, gender and colour” (Cope and Kalantzis, 1993: vii). Infused across the RNCS are the values of social justice, equity and democracy, ensuring “that a national South African identity is built on values very different from those that underpinned apartheid education (Ministry of Education, 2001: 22). These values clearly constitute the essential elements of the South African (not so very) hidden curriculum. Although the values of fairness and impartiality relating to race, ethnicity, religion and gender are not explicitly addressed in the RNCS, they are almost certainly implied in the first of eight Learning Area Statements: “The kind of learner envisaged … will … function effectively and sensitively in a multi-lingual and multi-cultural society” (Ministry of Education, 2001: 23).

I expect that South African textbook authors and publishers have shown a heightened consciousness and far greater sensitivity to the issue of race,
ethnicity, religion and gender since the introduction of *Curriculum 2005* in 1998, although the preponderance of white authors may still produce “inaccurate and unauthentic portraits of black lifestyles” (Taxel, 1991: 115).

Other values explicitly stated in the RNCS include the following:

- Developing “responsibility towards the environment and the health of others” (Ministry of Education, 2001: 23).
- Willingness to deal with the “social, political and economic demands” made on a South African (Ministry of Education, 2001: 23).

4.2.2.6 The principle of achieving critical and developmental outcomes

4.2.2.6.1 Introduction

The critical and developmental outcomes form the essence of the RNCS because they are based on values expressed in the South African Constitution and “guide the overall development of the [Revised] National Curriculum Statement” (Ministry of Education, 2001: 26).

4.2.2.6.2 What they specify

The critical and developmental outcomes are very specific about the skills and values South African learners need to acquire through the education system. The skills include communication, entrepreneurship, creative and critical thinking, problem identification and problem solving, study, organisation and management, functioning effectively in a group, using science and technology in a responsible manner, and conducting research. The values include an acceptance of the world as a set of related systems, the motivation to investigate education and career opportunities, the willingness to participate responsibly in community affairs, and to be sensitive to and tolerant of other cultures.
4.2.2.7 Relevance of the RNCS for the authoring process

Outcomes-based education requires learning activities to be aimed at ultimately achieving the critical and developmental outcomes within the context of appropriate content. This implies that planning the learning activities in a school textbook should consistently involve stating the critical and developmental outcomes and then systematically tracing back from there the steps that will be needed to achieve them.

High standards of performance ought to be insisted upon, while individual learners are enabled to demonstrate their progressive mastery of the outcomes at their own rate and in terms of their own learning styles. In this regard a criterion-referenced system of assessment is the most appropriate.

Learners should be given ample opportunities to create their own knowledge.

The contents of school textbooks could achieve progression and integration in the following manner:

- Knowledge, skills and values become progressively more complex.
- Effective sequencing of the events of instruction would advance conceptual progression.
- Themes, or topics, would promote integration if links were established between learning areas.
- Continuity of teaching method across the curriculum also enhances integration.

4.2.3 Analysis, comparison and interpretation

4.2.3.1 Introduction

This section is structured in terms of the two sets of theoretical considerations (key issues about textbook evaluation, and the attributes of good quality school textbooks) that underpin the theory about the practice of textbook evaluation as articulated in Chapter 3. More specifically, the analysis, comparison and
interpretation of the RNCS will be determined by the attributes of good quality school textbooks. As indicated previously, the criterion clusters have been derived from the attributes, and each criterion cluster contains an array of criteria for good quality school textbooks. What follows is a report in tabular form of a comparison between the criteria forming part of the theory referred to above, and the criteria emerging from an analysis of the RNCS. The key issues about textbook evaluations will be referred to whenever appropriate.

The criteria emanating from the theory about the practice of textbook evaluation are listed in the tables. If the criteria emerging from the analysis correlate with the criteria appearing in the theory, the latter are marked using a v. Conversely, if no similar criteria emerge, the listed criterion is marked using an X. Additional criteria emerging from the comparison are listed separately in each table under the heading “additional criteria emerging from an analysis of the RNCS”. When the criteria for the evaluation of South African intermediate phase textbooks are finally articulated in Chapter 5, the additional criteria will be appended to those forming part of the theory, thereby improving the practice of South African intermediate phase textbook evaluation.

4.2.3.2 Composition of the authoring team

Table 4.1 – Composition of the authoring team

<table>
<thead>
<tr>
<th>Criteria emanating from the theory about the practice of textbook evaluation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>An authoring team is composed of persons who are expert in</td>
<td></td>
</tr>
<tr>
<td>• Converting contents into readable prose,</td>
<td>X</td>
</tr>
<tr>
<td>• learning area content,</td>
<td>X</td>
</tr>
<tr>
<td>• linguistics,</td>
<td>X</td>
</tr>
<tr>
<td>• typography,</td>
<td>X</td>
</tr>
<tr>
<td>• teaching the target group, and</td>
<td>X</td>
</tr>
<tr>
<td>• didactics.</td>
<td>X</td>
</tr>
</tbody>
</table>

| Additional criteria emerging from an analysis of the RNCS | Nil |
Table 4.1 shows that the RNCS does not allude to the composition of an authoring team, nor are the key notions for textbook evaluation implicated in any way. No additional criteria have therefore emerged from an analysis of the RNCS.

The omission of any kind of reference to the composition of the textbook authoring team in a policy document giving details about the content and structure of the new curriculum is to be expected. Textbooks and textbook writers are two of the many peripheral issues supporting the new curriculum and are almost certainly seen as something to be dealt with elsewhere. The publication in 2003 of a draft policy relating to the evaluation and selection of learning and teaching support material and dealing with specific issues relating to, amongst others, evaluating school textbooks, reinforces this notion.

### 4.2.3.3 The authors’ rationale

<table>
<thead>
<tr>
<th>Criteria emanating from the theory about the practice of textbook evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The author briefly and unambiguously states the following:</td>
</tr>
<tr>
<td>• the underlying philosophy of the book, which connects with the values expressed in the given curriculum,</td>
</tr>
<tr>
<td>• the target audience &amp; situation, including demography, motivational level, learning factors &amp; previous learning, and</td>
</tr>
<tr>
<td>• a declaration of aims (linked with the underlying philosophy of the book) and objectives (related to the critical and developmental outcomes).</td>
</tr>
<tr>
<td>v</td>
</tr>
<tr>
<td>v</td>
</tr>
<tr>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional criteria emerging from an analysis of the RNCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nil</td>
</tr>
</tbody>
</table>

While the RNCS does not deal specifically with the authors’ rationale, Table 4.2. shows that it (RNCS) addresses important matters of principle guiding the “overall development” of the new curriculum. The principles deal with an outcomes-based pedagogy in which the critical and developmental outcomes play a vital role. Furthermore, the principles include promoting human rights and
social and environmental justice, “the development of a high level of knowledge and skills for all”, a balanced approach to the achievement of “conceptual progression” and integration between and across learning areas. Finally it strives for “clarity and accessibility both in its design and language” (Ministry of Education, 2001: 26).

Right-thinking South Africans can hardly fault these ideals as they are aimed at redressing the deeply entrenched inequalities of apartheid education.

The RNCS is also precise about the kind of learner that is envisaged at the completion of the educative process, i.e. a learner “who will be imbued with the values … of a society based on respect for democracy, equality, human dignity, life and social justice (Ministry of Education, 2001: 22). Once again, the principle cannot be faulted.

Understandably, the RNCS does not specify the attributes of the target audience, which are details the rationale ought to provide. As shown in the table, these attributes include specific information. Although one of the notions associated with textbook evaluation (i.e. the context of evaluation) suggests that it is important for teachers to know how the textbook is likely to connect with their “needs, wants and circumstances” (Tomlinson: 1999a, 11) as well as those of their learners and their particular educational environment (e.g. a state-funded school in a township or a privately funded institution in an affluent suburb), it is probably too specific for a policy document such as the RNCS.

Authors choosing to ignore the foregoing run the risk of their books remaining unsold. Not only is there pedagogical wisdom in devising learning activities with the aforementioned principles in mind, they should also be emphasised in the rationale contained in the “blurb” and foreword to the textbook. In this manner textbook writers would give a clear indication to users that they are intent on carrying into effect the requirements of the RNCS.

Referring to the last criterion shown in Table 4.2, the aims of a textbook should link with the underlying philosophy of the RNCS as embodied by the principles
referred to above, while the objectives ought to be related to the critical and developmental outcomes. As indicated previously, the critical and developmental outcomes are derived from the South African Constitution and are very specific about the skills and values learners need to acquire through the education system.

4.2.3.4 The authors' observance of the process of learning and instruction

**Table 4.3 - The authors' observance of the process of learning and instruction**

<table>
<thead>
<tr>
<th>Criteria emanating from the theory about the practice of textbook evaluation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The process of learning and instruction requires the following sequential steps:</td>
<td></td>
</tr>
<tr>
<td>• an activity to gain the learner’s attention,</td>
<td>X</td>
</tr>
<tr>
<td>• informing the learner of the desired outcome,</td>
<td>X</td>
</tr>
<tr>
<td>• relating prior knowledge to current learning,</td>
<td>X</td>
</tr>
<tr>
<td>• presenting new knowledge, skills and values; while at the same time explaining new words,</td>
<td>X</td>
</tr>
<tr>
<td>• learner to demonstrate the newly acquired knowledge, skills and values,</td>
<td>X</td>
</tr>
<tr>
<td>• providing feedback,</td>
<td>X</td>
</tr>
<tr>
<td>• assessing performance, and</td>
<td>v</td>
</tr>
<tr>
<td>• enhancing retention and application of knowledge, skills and values.</td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional criteria emerging from an analysis of the RNCS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nil</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.3 lists the events of instruction in the order in which they ought to be dealt with in a school textbook. This emerged from the literature review in Chapter 3. The closest the RNCS comes to criteria with regard to the learning and instruction process is when it identifies four “steps to be taken when developing learning programmes” (Ministry of Education, 2001: 40), which include the need to decide on goals, selecting and organising a series of learning activities, selecting resources and identifying appropriate assessment strategies. These steps are too broad to be of much use in designing learning activities.
As explained before, one has to make allowances for the fact that an official policy document dealing with the broad principles and structure of the RNCS, is unlikely to go into finer details about the process of learning and instruction. If education officials thought that it would be worthwhile to disseminate this kind of information, they would in all probability rather be inclined to provide pamphlets specifically dealing with the topic, or conduct seminars or discussion groups or the like. In any event, one expects that there is a commonly held belief that teachers learn about these things at teachers’ college or university, so why bother? On the other hand, bearing in mind the poor standard of teacher training in this country, perhaps teachers (and authors) need to be reminded about their teaching method lectures.

As expected then, the RNCS does not deal with the events of instruction per se beyond stating that the new curriculum is based on a perception of teachers who are “professionally competent and in touch with contemporary developments”, acknowledge that knowledge skills and values are to be selected and organised into a series of activities (Ministry of Education, 2001: 28). The document does not define “series of activities”. This is most likely due to an assumption on the part of the writers of the RNCS document that one does not need to explain these concepts to capable teachers.

The key notions associated with textbook evaluation have no obvious role to play in this context.

4.2.3.5 Accessibility

Tables 4.4, 4.5, 4.6 and 4.7 show that the RNCS says nothing about typographical issues, readability, style and tone, and the authors’ assumptions. Nor do the key notions associated with textbook evaluation have anything to say about this. As explained previously, there are more efficient ways of distributing such specific information, other than a broadly based official document such as the RNCS. A typical example is the draft policy relating to the evaluation and selection of learning and teaching support material (see paragraph 4.3), which was made public by the Department of Education in 2003.
### Table 4.4 - Typography

<table>
<thead>
<tr>
<th>Criteria emanating from the theory about the practice of textbook evaluation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The binding and cover is sturdy.</td>
<td>X</td>
</tr>
<tr>
<td>Printing is done on 70 – 80 gsm, off-white, uncoated matt paper.</td>
<td>X</td>
</tr>
<tr>
<td>Its format is A5.</td>
<td>X</td>
</tr>
<tr>
<td>Its layout is single-column, portrait type.</td>
<td>X</td>
</tr>
<tr>
<td>The font is 12 point serif.</td>
<td>X</td>
</tr>
<tr>
<td>An orderly system of access devices is inserted in the text.</td>
<td>X</td>
</tr>
<tr>
<td>The text is grouped in units of meaning.</td>
<td>X</td>
</tr>
<tr>
<td>The illustrations are artists’ line drawings in black and white.</td>
<td>X</td>
</tr>
<tr>
<td>The illustrations are placed close to the text referring to it.</td>
<td>X</td>
</tr>
<tr>
<td>Pages are uncluttered.</td>
<td>X</td>
</tr>
</tbody>
</table>

**Additional criteria emerging from an analysis of the RNCS**

Nil

### Table 4.5 - Readability

<table>
<thead>
<tr>
<th>Criteria emanating from the theory about the practice of textbook evaluation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The language competence of the learners is taken into account.</td>
<td>X</td>
</tr>
<tr>
<td>The text shows logical progression of ideas.</td>
<td>X</td>
</tr>
<tr>
<td>The text is subjected to at least one readability test, taking into account both vocabulary and syntax.</td>
<td>X</td>
</tr>
</tbody>
</table>

**Additional criteria emerging from an analysis of the RNCS**

Nil

### Table 4.6 - Linguistic style and tone

<table>
<thead>
<tr>
<th>Criteria emanating from the theory about the practice of textbook evaluation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The linguistic style and tone are similar to that of children’s fiction.</td>
<td>X</td>
</tr>
</tbody>
</table>

**Additional criteria emerging from an analysis of the RNCS**

Nil
Table 4.7 - Authors’ assumptions

| Criteria emanating from the theory about the practice of textbook evaluation | Authors are aware of the learners’ previous learning. | X |
| Additional criteria emerging from an analysis of the RNCS | Nil |

4.2.3.6 Providing teacher support

This is an aspect that features prominently in the first set of variables contained in the theory about the practice of textbook evaluation, i.e. the key notions associated with textbook evaluation. Not only is it important that the educational needs of the learners are addressed in a textbook, the professional needs of the teachers are equally important. Together these two aspects form the context that ought to be reflected on during the school textbook evaluation process.

Table 4.8 - Providing teacher support

<table>
<thead>
<tr>
<th>Criteria emanating from the theory about the practice of textbook evaluation</th>
<th>Teacher support is given concerning</th>
</tr>
</thead>
<tbody>
<tr>
<td>the intended learning outcomes and assessment standards,</td>
<td>X</td>
</tr>
<tr>
<td>checklist of knowledge, skills and values to be dealt with,</td>
<td>X</td>
</tr>
<tr>
<td>learner motivation,</td>
<td>X</td>
</tr>
<tr>
<td>alternative learners’ activities,</td>
<td>X</td>
</tr>
<tr>
<td>alternative teaching strategies,</td>
<td>X</td>
</tr>
<tr>
<td>assessment strategies,</td>
<td>X</td>
</tr>
<tr>
<td>an answer key, and</td>
<td>X</td>
</tr>
<tr>
<td>enrichment, extension and remediation.</td>
<td>X</td>
</tr>
</tbody>
</table>

| Additional criteria emerging from an analysis of the RNCS | Nil |

Table 4.8 shows that the RNCS does not regard the issue providing guidelines for teachers as particularly important. In fact, barring a single comment that the RNCS is based on “the vision of a teacher who is socially and politically critical,
professionally competent and in touch with contemporary developments (Ministry of Education, 2001: 26) teachers and their fundamental role in the educative process are ignored. McDonough and Shaw (1993: 284) aptly describe the situation as “relegating teachers to [a minor] place on the scale of importance”.

Most teachers would view this state of affairs with dismay. The teacher is the “synthesizer” (McDonough and Shaw, 1993: 285) of all the aspects dealt with by the RNCS, and as the prime purveyors of the new curriculum, they deserve better treatment. One way of boosting the teachers’ professional attitudes and behaviour would be to include an additional RNCS principle (along with the principles concerned with outcomes-based education and the critical and developmental outcomes, etc.) dealing with, for example, the kinds of support teachers ought to receive to enhance their professional competence.

4.2.3.7 Accommodating the requirements of the given curriculum

4.2.3.7.1 Introduction

The given curriculum in the context of this chapter is the RNCS. This section deals with an analysis of the RNCS terms of values, pedagogical expectations and skills that are directly linked to the critical and developmental outcomes. These aspects are also closely associated with one of the contextual factors identified as a key notion associated with textbook evaluation, i.e. the educational needs of the learners.

As indicated previously, the critical and developmental outcomes (Ministry of Education, 2001: 27) are of vital importance to South African education. Not only are they “derived from the Constitution”, they unambiguously describe the kind of learner the education system intends to deliver at the conclusion of formal education (Ministry of Education, 2001: 26). The critical and developmental outcomes therefore ought to permeate every aspect of teaching and learning. Teachers should use them to “define, organize, structure, focus and operate” their teaching activities (Spady, 1994: 3). As shown in paragraph 4.2.2.1.3, this means that teachers ought to plan all teaching and learning by
first stating the critical and developmental outcomes and subsequently tracing back the steps that will be needed to achieve them. It is imperative that authors should also keep the latter statement in mind when devising learning activities.

4.2.3.7.2 Values

Table 4.9 - Values

<table>
<thead>
<tr>
<th>Criteria emanating from the theory about the practice of textbook evaluation</th>
<th>v/X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers and learners collectively advance the required values.</td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional criteria emerging from an analysis of the RNCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching and learning advance</td>
</tr>
<tr>
<td>• aesthetic awareness,</td>
</tr>
<tr>
<td>• cultural awareness,</td>
</tr>
<tr>
<td>• a spirit of curiosity,</td>
</tr>
<tr>
<td>• a willingness to adapt to a changing environment,</td>
</tr>
<tr>
<td>• a willingness to deal with the social demands,</td>
</tr>
<tr>
<td>• a willingness to deal with the political demands,</td>
</tr>
<tr>
<td>• a willingness to deal with the economic demands,</td>
</tr>
<tr>
<td>• responsibility towards the environment,</td>
</tr>
<tr>
<td>• responsibility towards the health of others, and</td>
</tr>
<tr>
<td>• a willingness to explore education opportunities.</td>
</tr>
</tbody>
</table>

An influential idea emanating from the theory about the practice of textbook evaluation is that role players in the educative process should collectively advance the required values regardless of each learner’s home culture. This condition is reflected in Table 4.9 under the heading of “Criteria emanating from the literature review”. The RNCS’s prescriptive guidelines as regards the common core of values the South African educational system ought to develop, are clearly at odds with this sentiment. The range of values emerging from the analysis of the RNCS has been recorded under the heading “Additional criteria emerging from an analysis of the RNCS”.

Each of the values listed in the table can be linked to the critical and developmental outcomes.
It is somewhat surprising that the RNCS makes no mention of the uniquely African concept of “ubuntu”. According to Kamwangamalu (1999: 24), ubuntu is a “value system which governs societies across the African continent”. It is acquired by way of oral genres such as fables, myths and legends, and articulates ethical standards with regard to human life and dignity in addition to values associated with interdependence, for example solidarity, sharing and communalism. While ubuntu includes some of the values enunciated by the RNCS, it goes further by emphasising attitudes such as obedience, humility and hospitality.

4.2.3.7.3 Pedagogical expectations

<table>
<thead>
<tr>
<th>Criteria emanating from the theory about the practice of textbook evaluation</th>
<th>v/X</th>
</tr>
</thead>
<tbody>
<tr>
<td>The process of learning is advanced without neglecting the content.</td>
<td>v</td>
</tr>
<tr>
<td>Learning activities are planned to achieve learning area outcomes.</td>
<td>v</td>
</tr>
<tr>
<td>Learning experiences occur repeatedly at ever increasing levels of complexity.</td>
<td>v</td>
</tr>
<tr>
<td>Multi-dimensional learning is advanced.</td>
<td>v</td>
</tr>
<tr>
<td>Constructivist learning is advanced.</td>
<td>v</td>
</tr>
<tr>
<td>Collaborative learning is advanced.</td>
<td>v</td>
</tr>
<tr>
<td>Democratic learning is advanced.</td>
<td>v</td>
</tr>
<tr>
<td>Formative and summative assessment are applied.</td>
<td>v</td>
</tr>
<tr>
<td>Links between and within learning areas are established</td>
<td>v</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional criteria emerging from an analysis of the RNCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science and technology are promoted.</td>
</tr>
<tr>
<td>Environmental awareness is promoted.</td>
</tr>
<tr>
<td>Entrepreneurial activities are promoted.</td>
</tr>
<tr>
<td>Health issues are promoted.</td>
</tr>
<tr>
<td>Social issues are promoted.</td>
</tr>
<tr>
<td>Social justice is promoted.</td>
</tr>
<tr>
<td>Inclusivity is promoted.</td>
</tr>
<tr>
<td>Human rights are promoted.</td>
</tr>
<tr>
<td>Differentiated learning is promoted.</td>
</tr>
</tbody>
</table>
Table 4.10 (continued)

| Learners are encouraged to become world citizens. |
| Whole-learner development is promoted. |
| A balance in terms of the modalities of learning is promoted. |

Table 4.10 shows the criteria enunciated by the theory about the practice of textbook evaluation that are associated with the pedagogical requirements generally stated in given curricula. While there is a high correlation with the pedagogical expectations of the RNCS, the latter goes further as has been shown in the column entitled “Additional criteria emerging from an analysis of the RNCS”.

The RNCS is not explicit by what is meant by “learners are encouraged to become world citizens”. However, if one reads a number of separate RNCS statements as one, it could mean that the intended product of the South African education system understands the concept of “democracy” and is able to deal with the attendant social, political and economic demands, not only in South Africa, but also elsewhere in the world (Ministry of Education, 2001: 23). This seems to entail an understanding of “the world as a set of related systems” (Ministry of Education, 2001: 27) to enable him or her to participate “as responsible citizens” locally, nationally and globally (Ministry of Education, 2001: 27).

Once again, each one of the pedagogical expectations listed in the table can be linked to the critical and developmental outcomes.

4.2.3.7.4 Values

Table 4.11 – Skills

<table>
<thead>
<tr>
<th>Criteria emanating from the theory about the practice of textbook evaluation</th>
<th>v/X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provision is made for</td>
<td></td>
</tr>
<tr>
<td>• problem-solving, i.e. knowing, comprehending, analysing and applying,</td>
<td>v</td>
</tr>
<tr>
<td>• creative thinking, i.e. analysing and applying, and</td>
<td>v</td>
</tr>
</tbody>
</table>
Table 4.11 (continued)

<table>
<thead>
<tr>
<th>Provision is made for skills associated with</th>
</tr>
</thead>
<tbody>
<tr>
<td>• communication,</td>
</tr>
<tr>
<td>• organising activities responsibly and effectively,</td>
</tr>
<tr>
<td>• research, and</td>
</tr>
<tr>
<td>• study.</td>
</tr>
</tbody>
</table>

Table 4.11 exemplifies the criteria emerging from the literature review that are related to the development of skills. Once again there is a high correlation with the skills stated by the RNCS. However, the RNCS goes further as has been shown in the column entitled “Additional criteria emerging from an analysis of the RNCS”.

The word “research” is perhaps too pretentious to be used in the context of the intermediate phase. Perhaps “finding out” would better describe these activities in the lower grades. Finding out involves the advancement of the basic skills of locating information (e.g. using a source such as a person, a book or the internet; interpreting a table of contents; skimming and scanning text), extracting and presenting information (e.g. identifying main ideas, selecting key words within the main ideas and using these to impart information in the learner’s own words) and using information (e.g. concluding and making recommendations).

As in the previous two paragraphs, each one of the skills listed in the table can be linked to the critical and developmental outcomes.

4.2.4 Relevance of an analysis of the national Department of Education’s Revised National Curriculum Statement (RNCS)

The analysis of the RNCS described in this chapter is the first step in the process of ensuring that the criteria for good quality intermediate phase school
textbooks underpinning the proposed procedure for intermediate phase school textbook evaluation and selection meets South African educational needs. This has been done by extracting the criteria located in the RNCS, comparing them with the criteria emanating from the theory about the practice of textbook dealt with in Chapter 3, and ultimately integrating the two sets in Chapter 6 to give the theory a South African intermediate phase bias.

Frequent mention has been made in this section of the vital role played by the critical and developmental outcomes. The matter is so important that it cannot be over-emphasised that authors ought to plan all learning activities by first stating the intended critical and developmental outcomes and then tracing back the steps that will be needed to achieve them. This would ensure that the requisite values, skills and pedagogical expectations are met in a systematic way.

4.3 THE NATIONAL DEPARTMENT OF EDUCATION’S DRAFT POLICY FOR THE DEVELOPMENT OF LEARNING AND TEACHING SUPPORT MATERIALS (LTSM)

4.3.1 Introduction

In August 2001 the Ministry of Education (2001: 15) envisaged the development of a policy for learning support materials by 2002. The national Department of Education subsequently produced an undated document entitled *Learning support material. A draft document*. This document was kindly made available to me by Mr Lindelwe Mabandla of Maskew Miller Longman Publishers in March 2003.

The purpose of the draft document (Department of Education, 2003: 1) is ... to give thrust to the recommendations of the Curriculum Review Committee [Chisholm, 2000] so that there are Norms and Standards which clearly delineate the processes and procedures that should be in place to facilitate the smooth and efficient evaluation [my emphasis], selection and procurement of LTSM [learning and teaching support materials].
It should be noted that learning and teaching support materials (LTSM) are defined as “any materials that facilitate learning” (Department of Education, 2003: 2). They are further described as “useful … in conjunction with textbooks” (Department of Education, 2003: 2), thereby clearly implying that the textbook is the core constituent of the concept. So, while the document deals with LTSM in general, everything in it relates to textbooks.

At the time of writing the departmental guidelines document is still in draft form. It has therefore not yet assumed the status of official policy. In the light of my previous experience, however, official policy is unlikely to vary substantially from the contents of the draft policy.

The document has not been carefully edited. This probably accounts for the fact that the reference to “learning support material” in the title of the document does not correlate with subsequent references to “learning and teaching support material”, or LTSM, in the text. Imprecise formulations, such as “Do the materials focus on the needs [what needs?] of the learners within their various contexts [the “contexts” have not been defined]” (Department of Education, 2003: 26), abound. Many criteria suggest that the writers of the policy have been “influenced by their own ‘ideology’” (Tomlinson, 1999: 10) and not a coherent theory about the practice of textbook evaluation, which could be detrimental to an objective evaluation of a textbook. For example, “Do the materials provide for a variety of meaningful [my emphasis] activities for individual [and] paired … learning… activities? (Department of Education, 2003: 24) rather than “Do the materials provide for individual, paired … learning … activities?” Some criteria are patently incorrect, such as “Do the materials guide the learners to meet the critical and developmental outcomes for the specific learning area [my emphasis]” (Department of Education, 2003: 27). The matter of critical and developmental outcomes is a cross-curricular one and not limited to a specific learning area. Requiring the average learner to somehow gain access to “primary resources” such as diaries and personal letters to investigate “role models for elements of character” (Department of Education, 2003: 18), such as Mr Nelson Mandela and other national icons, is but one of a number of
unrealistic expectations I found in the document. I even observed a reference to “performance indicators” (Department of Education, 2003: 31), which is an outdated concept in the context of the RNCS.

Finally, in my view the draft policy is confusing because it is repetitive and contains too much detail, thereby creating the impression that the persons responsible underestimate the intelligence and professional insight of their target audience. Surely, after almost six years of rigorous exposure to Curriculum 2005 and the RNCS, one would expect role-players to be sufficiently versed in the associated terminology not to need the detailed explanations provided in the document. For example, role-players should by now realise that “language … used appropriate to the age, level and experience of the learners” (Department of Education, 2003: 31) obviates the need for detailed explanations about unclear noun-verb constructions, negative constructions, irrelevant metaphors, archaic language, exotic vocabulary, convoluted constructions, etc. If they do not, the Department of Education’s (2003: 1) intention to “train” teachers to evaluate and select textbooks “in the context of the RNCS”, certainly should.

The draft policy is divided into eight sections and five annexures. I shall limit my review to sections 1, 2, 3 and 4 because they have a direct bearing on the issues dealt with in the theory about the practice of textbook evaluation. Sections 5, 6, 7 and the annexures deal with administrative issues and are therefore not relevant to my study. In view of the document’s somewhat confusing composition and content, it seems prudent to structure this analysis in accordance with the second of the two sets of theoretical considerations influencing textbook evaluation enunciated by the above-named theory (i.e. the attributes of good quality school textbooks), while referring to the first set (key issues about textbook evaluation) when appropriate.

Procedurally the analysis of the draft policy was similar to the analysis of the RNCS. Using the theory about the practice of textbook evaluation as a frame of reference, an analysis of the draft policy enabled me to identify criteria that are likely to have an impact on the quality of South African school textbooks. After
listing the criteria enunciated by the above-mentioned theory, I grouped them in criterion clusters, ensuring that their captions matched up with the determinants of good quality textbooks. I subsequently compared and interpreted the criteria emerging from the analysis and the criteria emanating from the theory about the practice of textbook evaluation. The comparison and interpretation were recorded in tabular form. As shown in the tables below, the criteria appearing in the theory are listed in the tables. If the criteria emerging from the analysis correlate with the listed criteria, the latter are marked using a $v$. Conversely, if no similar criteria emerge, the listed criterion is marked using an $X$. Additional criteria emerging from the comparison are listed separately in each table under the heading “additional criteria emerging from an analysis of the draft policy”. The additional criteria will ultimately be appended to those forming part of the theory articulated in Chapter 3, thereby giving a South African intermediate phase bias to it.

As indicated previously, an official policy document dealing with the broad principles and structure such as the RNCS, is unlikely to go into finer details about various peripheral issues. If education officials were to judge that it would be worthwhile disseminating secondary information, they would be likely to provide pamphlets specifically dealing with the topic, or conduct seminars or discussion groups or the like. That is exactly what the draft policy for the development of learning and teaching support materials does. It is a document that is founded on an interpretation of the RNCS and consequently provides specific information about criteria for the development of LTSM.

I have limited my analysis of the draft policy to sections that have a direct bearing on my research. This means that I have discounted Section 5, which deals with the management of LTSM.
4.3.2 Analysis, comparison and interpretation

4.3.2.1 The composition of the authoring team

Table 4.12 - The composition of the authoring team

<table>
<thead>
<tr>
<th>Criteria emanating from the theory about the practice of textbook evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>An authoring team is composed of persons who are expert in</td>
</tr>
<tr>
<td>• Converting contents into readable prose, X</td>
</tr>
<tr>
<td>• learning area content, X</td>
</tr>
<tr>
<td>• linguistics, X</td>
</tr>
<tr>
<td>• typography, X</td>
</tr>
<tr>
<td>• teaching the target group, and X</td>
</tr>
<tr>
<td>• didactics, X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional criteria emerging from an analysis of the draft policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nil</td>
</tr>
</tbody>
</table>

Table 4.12 attests to the fact that the composition of the authoring team appears not to be a priority with the Department of Education. The only allusion to author credentials appears in section 1.3 (Department of Education, 2003: 3), which is entitled “Who should develop learning and teaching support materials?” The paragraph gives reasons why LTSM is essential to the implementation of the curriculum and identifies the parties by whom it can be produced. However, apart from a vague reference to “knowledgeable individuals in the community” (Department of Education, 2003: 3), the paragraph contains no indication of the specific skills required if a person is to become involved in LTSM development.

The key issues about textbook evaluation have no obvious role to play in this context.
4.3.2.2 The authors’ rationale

**Table 4.13 - The authors’ rationale**

| Criteria emanating from the theory about the practice of textbook evaluation |
|---------------------------------------------------------------|-----------------|
| The author briefly and unambiguously states the following:         |                |
| • the underlying philosophy of the book, which connects with the values expressed in the given curriculum, | X               |
| • the target audience & situation, including demography, motivational level, learning factors & previous learning, and | X               |
| • a declaration of aims (linked with the underlying philosophy of the book) and objectives (related to the critical and developmental outcomes). | X               |

<table>
<thead>
<tr>
<th>Additional criteria emerging from an analysis of the draft policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nil</td>
</tr>
</tbody>
</table>

While the document does not deal directly with the authors’ pedagogical belief system, references to issues that may be associated with the authors’ rationale are to be found in section 3.1 (Department of Education, 2003: 10), which is quaintly entitled, “LTSM as interpretation and resources for the RNCS and NCS.”

This section emphasises the role of curriculum outcomes, teaching methods, and the need for conceptual progression and integration. It further advocates the coverage of transversal issues such as human rights, the environment and health issues of the day, for example HIV/AIDS. Assessment in its various forms is also dwelt on. Finally, the importance of textbooks as “literacy tools” (Department of Education, 2003: 10) is given prominence.

Section 4.3 (Department of Education, 2003: 26) refers to an important aspect of the authors’ educational belief system, which deals with an awareness of the demographic, social and economic realities associated with diverse target groups. These aspects are closely associated with one of the key issues about textbook evaluation dealing with contextual factors related to the educational needs of the learners.
As shown in Table 4.13 there are no supplementary criteria forthcoming from the draft policy.

4.3.2.3 The authors’ observance of the process of learning and instruction

**Table 4.14 - The authors’ observance of the process of learning and instruction**

<table>
<thead>
<tr>
<th>Criteria emanating from the theory about the practice of textbook evaluation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The process of learning and instruction requires the following sequential steps:</td>
<td></td>
</tr>
<tr>
<td>• an activity to gain the learner’s attention,</td>
<td>v</td>
</tr>
<tr>
<td>• informing the learner of the desired outcome,</td>
<td>v</td>
</tr>
<tr>
<td>• relating prior knowledge to current learning,</td>
<td>v</td>
</tr>
<tr>
<td>• presenting new knowledge, skills and values; while at the same time explaining new words,</td>
<td>v</td>
</tr>
<tr>
<td>• learner to demonstrate the newly acquired knowledge, skills and values,</td>
<td>v</td>
</tr>
<tr>
<td>• providing feedback,</td>
<td>v</td>
</tr>
<tr>
<td>• assessing performance, and</td>
<td>v</td>
</tr>
<tr>
<td>• enhancing retention and application of knowledge, skills and values.</td>
<td>v</td>
</tr>
</tbody>
</table>

| Additional criteria emerging from an analysis of the draft policy          | Nil |

Once again, the document includes many references to the process of learning and instruction, but seldom concurrently, nor are they easily accessible. Why important learning and instructional issues stating that concepts must be presented sequentially, learner involvement must be encouraged individually and in groups, and higher-order thinking skills must be developed, are dealt with under the heading, “Social justice and human rights”, only the writers of the document know. Nonetheless, as shown in Table 4.14 the document refers to instructional events such as learner motivation, linking prior learning with new learning, explanation of key concepts, feedback, consolidation, review questions and assessment, but not in the same sequence.
These issues also relate to the contextual factors related to both the teacher’s professional needs as well as the learners educational needs identified by the key issues about textbook evaluation.

4.3.2.4 Accessibility

**Table 4.15 - Typography**

<table>
<thead>
<tr>
<th>Criteria emanating from the theory about the practice of textbook evaluation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The binding and cover is sturdy.</td>
<td>X</td>
</tr>
<tr>
<td>Printing is done on 70 – 80 gsm, off-white, uncoated matt paper.</td>
<td>X</td>
</tr>
<tr>
<td>Its format is A5.</td>
<td>X</td>
</tr>
<tr>
<td>Its layout is single-column, portrait type.</td>
<td>X</td>
</tr>
<tr>
<td>The font is 12 point serif.</td>
<td>v</td>
</tr>
<tr>
<td>An orderly system of access devices is inserted in the text.</td>
<td>v</td>
</tr>
<tr>
<td>The text is grouped in units of meaning.</td>
<td>v</td>
</tr>
<tr>
<td>The illustrations are artists' line drawings in black and white.</td>
<td>X</td>
</tr>
<tr>
<td>The illustrations are placed close to the text referring to it.</td>
<td>v</td>
</tr>
<tr>
<td>Pages are uncluttered.</td>
<td>v</td>
</tr>
</tbody>
</table>

**Additional criteria emerging from an analysis of the draft policy**

- A suggested time allocation per event of instruction is provided
- The font and its size facilitate easy reading

**Table 4.16 - Readability**

<table>
<thead>
<tr>
<th>Criteria emanating from the theory about the practice of textbook evaluation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The language competence of the learners is taken into account.</td>
<td>v</td>
</tr>
<tr>
<td>The text shows logical progression of ideas.</td>
<td>X</td>
</tr>
<tr>
<td>The text is subjected to at least one readability test, taking into account both vocabulary and syntax.</td>
<td>X</td>
</tr>
</tbody>
</table>

**Additional criteria emerging from an analysis of the draft policy**

- Nil
Table 4.17 - Linguistic style and tone

<table>
<thead>
<tr>
<th>Criteria emanating from the theory about the practice of textbook evaluation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The linguistic style and tone are similar to that of children’s fiction.</td>
<td>X</td>
</tr>
</tbody>
</table>

Additional criteria emerging from an analysis of the draft policy

Nil

Table 4.18 - Authors’ assumptions

<table>
<thead>
<tr>
<th>Criteria emanating from the theory about the practice of textbook evaluation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Authors are aware of the learners’ previous learning.</td>
<td>X</td>
</tr>
<tr>
<td>Authors are aware of the learners’ current experience of the world.</td>
<td>X</td>
</tr>
</tbody>
</table>

Additional criteria emerging from an analysis of the draft policy

Nil

Criteria relating to accessibility are to be found in sections 4.1.1 (Department of Education, 2003: 14), 4.2.2 (Department of Education, 2003: 24) and 4.3.7 (Department of Education, 2003: 32). They deal with typographic concerns, textual organisation, layout and design, style and tone, and language usage to a degree. Tables 4.15, 4.16, 4.17 and 4.18 reflect the position.

The draft policy underscores Hartley’s (1994:17) argument that accessibility issues related to texts used in the intermediate phase are complex and are deserving of meticulous planning by the author to provide a consistent frame of reference. A consistent frame of reference makes it easier for the young reader to find his or her way into a textbook, and to move about, leave and return without difficulty.

Accessibility is closely associated with contextual factors related to the learners’ educational needs identified by the key issues about textbook evaluation.
4.3.2.5 Teacher support

### Table 4.19 - Providing teacher support

<table>
<thead>
<tr>
<th>Criteria emanating from the theory about the practice of textbook evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher support is given concerning</td>
</tr>
<tr>
<td>• the intended learning outcomes and assessment standards,</td>
</tr>
<tr>
<td>• checklist of knowledge, skills and values to be dealt with,</td>
</tr>
<tr>
<td>• learner motivation,</td>
</tr>
<tr>
<td>• alternative learners’ activities,</td>
</tr>
<tr>
<td>• alternative teaching strategies,</td>
</tr>
<tr>
<td>• assessment strategies,</td>
</tr>
<tr>
<td>• an answer key, and</td>
</tr>
<tr>
<td>• enrichment, extension and remediation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional criteria emerging from an analysis of the draft policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher support is given concerning</td>
</tr>
<tr>
<td>• the provision of additional resource material,</td>
</tr>
<tr>
<td>• assessment of the teacher,</td>
</tr>
<tr>
<td>• guidance about dealing with complex class situations,</td>
</tr>
<tr>
<td>• the development of own worksheets, games, flashcards, etc., and</td>
</tr>
<tr>
<td>• ideas for experiments and demonstrations.</td>
</tr>
</tbody>
</table>

Once again the aspect dealt with in this section is closely associated with contextual factors related to the teachers’ professional needs identified by the key notions associated with textbook evaluation.

Section 4.1.2.1 (Department of Education, 2003: 19) includes an unambiguous reference to separate teachers’ manuals. The document stipulates that they should be “clear, organized and comprehensive in their presentation ... and closely correlated with the learner materials” (Department of Education, 2003: 19). In section 4.3.2 (Department of Education, 2003: 27), the document identifies a number of matters relating to guidance that may be included in a teacher’s manual as shown in Table 4.19. Two of these are of particular importance. The first is the provision of additional resource material because most South African teachers have very little access to resource material, if at
all. If available, teachers have traditionally turned to their school or public library in their search for resource material. However, Czerniewics et al. (2000: 34) point out that school libraries in South Africa have “suffered a serious decline” since 1994. Public libraries have not fared much better. Many South African teachers therefore have little choice but to rely on the textbooks at their disposal as a sole resource. The second refers to guidance about dealing with complex class situations. Many South African classrooms are over-crowded and under-resourced. I have personally observed a Grade one class in a township school where 60 learners have to share seating for 40 in a classroom designed for a maximum of 35 learners. In other classes, three learners having to share a desk designed for two, is the rule rather than the exception. The fact that many of the learners have little command of the medium of instruction, i.e. English, while others are fluent in it, compounds the already serious problem of over-crowding. So do various cultural groups, each with their unique way of life, having to rub shoulders within the confines of their classroom,

The draft policy also includes an unusual stipulation to the effect that a teacher’s manual ought to “provide guidance for evaluation or assessment of the teacher” (Department of Education, 2003: 31). The policy does not specify whether the intended evaluators are the learners, the parents, their peers, school management or education officials, or all of them. This kind of ambiguity is likely to cause anxiety amongst teachers.

4.3.2.6 The authors’ observance of a given curriculum, i.e. the RNCS

4.3.2.6.1 Introduction
The stipulation that “materials [should] link explicitly with the critical and developmental outcomes …” (Department of Education, 2003: 28), reinforces a statement made several times in this thesis, i.e. that authors ought to plan all learning activities by first stating the intended critical and developmental outcomes and then tracing back the steps that will be needed to achieve them.

Section 4 (Department of Education, 2003: 14) deals comprehensively with the impact of LTSM on the delivery of the Revised National Curriculum. Once again
the contents of the section are important, albeit poorly organised. I shall analyse it in terms of values, pedagogical expectations and skills, which are directly linked to the critical and developmental outcomes.

Meeting the requirements of the RNCS is yet another matter that is closely associated with contextual factors related to the teachers’ professional needs and the learners’ educational needs identified by the key issues about textbook evaluation.

4.3.2.6.2 Values

Table 4.20 - Values

<table>
<thead>
<tr>
<th>Criteria emanating from the theory about the practice of textbook evaluation</th>
<th>v/X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers and learners collectively advance the required values.</td>
<td>v</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional criteria emerging from an analysis of the draft policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching and learning advance</td>
</tr>
<tr>
<td>• aesthetic awareness.</td>
</tr>
<tr>
<td>• cultural awareness.</td>
</tr>
<tr>
<td>• responsibility towards the health of others.</td>
</tr>
<tr>
<td>• responsibility towards the environment.</td>
</tr>
<tr>
<td>• respect for social justice and human rights</td>
</tr>
</tbody>
</table>

See Table 4.20. The draft policy places major emphasis on environmental awareness in order to ensure that learners become “environmentally literate” (Department of Education, 2003: 15). Respect for social justice and human rights are given equal prominence. These core values must play a part across all learning areas by being comprehensively embedded in the content and context for learning activities. They should cover the development of subordinate attitudes to facilitate living in a multi-cultural, ever-changing South Africa, where the health of self and others are important issues.
4.3.2.6.3 Pedagogical expectations

Table 4.21 - Pedagogical expectations

<table>
<thead>
<tr>
<th>Criteria emanating from the theory about the practice of textbook evaluation</th>
<th>v/X</th>
</tr>
</thead>
<tbody>
<tr>
<td>The process of learning is advanced without neglecting the content.</td>
<td>v</td>
</tr>
<tr>
<td>Learning activities are planned to achieve learning area outcomes.</td>
<td>v</td>
</tr>
<tr>
<td>Learning experiences occur repeatedly at ever increasing levels of complexity.</td>
<td>v</td>
</tr>
<tr>
<td>Multi-dimensional learning is advanced.</td>
<td>v</td>
</tr>
<tr>
<td>Constructivist learning is advanced.</td>
<td>X</td>
</tr>
<tr>
<td>Collaborative learning is advanced.</td>
<td>X</td>
</tr>
<tr>
<td>Democratic learning is advanced.</td>
<td>v</td>
</tr>
<tr>
<td>Formative and summative assessment are applied.</td>
<td>v</td>
</tr>
<tr>
<td>Links between and within learning areas are established</td>
<td>v</td>
</tr>
</tbody>
</table>

Additional criteria emerging from an analysis of the draft policy

- Differentiated learning is facilitated.
- A balance in terms of the modalities of learning is ensured.
- Visual literacy is promoted.
- Social justice, inclusivity and human rights are embedded in learning activities.
- Whole-learner development is facilitated.

The document unequivocally conveys a preference for education that is “learner-centred, providing students with opportunities to construct their own understandings through hands-on, minds-on investigations” (Department of Education, 2003: 15). Table 4.21 embraces the pedagogical expectations broached by the draft policy.

4.3.2.6.4 Skills

Table 4.22 - Skills

<table>
<thead>
<tr>
<th>Criteria emanating from the theory about the practice of textbook evaluation</th>
<th>v/X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provision is made for</td>
<td>v</td>
</tr>
<tr>
<td>• problem-solving, i.e. knowing, comprehending, analysing and applying,</td>
<td>v</td>
</tr>
<tr>
<td>• creative thinking, i.e. analysing and applying, and</td>
<td>v</td>
</tr>
<tr>
<td>• critical thinking, i.e. evaluating.</td>
<td>v</td>
</tr>
</tbody>
</table>
Table 4.22 (continued)

<table>
<thead>
<tr>
<th>Additional criteria emerging from an analysis of the draft policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provision is made for skills associated with</td>
</tr>
<tr>
<td>• communication,</td>
</tr>
<tr>
<td>• working effectively within a group,</td>
</tr>
<tr>
<td>• research,</td>
</tr>
<tr>
<td>• study, and</td>
</tr>
<tr>
<td>• building up literacy skills across the curriculum.</td>
</tr>
</tbody>
</table>

As shown in Table 4.22, section 4.1.1 (Department of Education, 2003: 16) calls attention to the development of skills associated with communication, problem-solving, creative and critical thinking, working effectively within a group, research and study.

### 4.3.3 Relevance for this study of the Department of Education’s draft policy for the development of learning and teaching support materials.

The Department of Education’s draft policy for the development of LTSM establishes norms and standards, which inter alia clearly outline the criteria that should be heeded to facilitate the evaluation and selection of LTSM. At the time of writing, the draft document is more up to date and more authoritative than anything else I was able to obtain from the provincial education departments. It is therefore vitally important when giving a South African intermediate phase bias to the theory about the practice school textbook evaluation.

### 4.4 A SURVEY OF THE PERCEPTIONS OF SOUTH AFRICAN INTERMEDIATE PHASE TEACHERS AND AUTHORS OF SOUTH AFRICAN INTERMEDIATE PHASE SCHOOL TEXTBOOKS

#### 4.4.1 Introduction

This section describes the third element of the data collection, analysis and interpretation process, i.e. a survey of the perceptions of South African
intermediate phase teachers and authors of South African intermediate phase school textbooks. It also represents a further step in giving a South African intermediate phase bias to the theory about the practice of textbook evaluation and the ultimate development of a procedure for intermediate phase school textbook evaluation.

My data collection, analysis and interpretation pertaining to the perceptions of teachers and authors, has three components. Firstly, I described the data collection process in terms of Fink and Kosecoff's (1998: 4) recommendation that a credible survey depends on its design, the sample, and its method of administration. Secondly, I analysed and interpreted the responses of teachers and authors separately and with a view to either confirming, rejecting or modifying aspects of the theory in order to give it a South African intermediate phase bias.

4.4.2 The data collection process

4.4.2.1 Design

In order to achieve structural uniformity with the theory about the practice of textbook evaluation, the questionnaire starts with an open-ended question intended to determine the respondent’s point of view about the first set of theoretical considerations comprising a number of key issues about textbook evaluation, i.e. the process of textbook evaluation, the difference between analysis and evaluation, the development of criteria, the checklist and the context of evaluation. The remainder of the items is organised in accordance with the second set of theoretical considerations, i.e. the composition of the authoring team, the authors’ rationale, the authors’ observance of the process of learning and instruction, accessibility, the availability of teacher support, and the authors’ observance of the given curriculum, i.e. the Revised National Curriculum Statement.

The survey of the perceptions of South African intermediate phase teachers was conducted on the basis of face-to-face semi-structured (the questionnaire
contains both open-ended and closed questions) interviews with a sample of South African intermediate phase teachers. I was influenced in favour of semi-structured interviews by Gillham’s (2000: 22) comments about its advantages. He states that content analysis is made relatively easy by identifying substantive statements, recording them and then asking the respondent to verify their correctness.

I decided on this design because it allowed the interviewees and I to explore the issues in far greater depth than a self-administered questionnaire requiring limited, one-dimensional, forced responses.

Open-ended questions enabled the respondents to answer the questions in their own words, making it possible to probe in order to establish exactly what is meant. This was particularly important because English is the second language of the majority of respondents.

I have taken note of Sudman and Bradburn’s (1982: 1) assertion that the wording of questionnaire items is extremely important when “maximizing the validity of survey data” obtained in this way.

A last thought: Gillham (2000: 13) makes the point that a respondent’s certainty as to what happens to interview data could have a major effect on their willingness or not to submit to an interview. I therefore ensured that this information was shared at the start of each interview.

The perceptions of South African intermediate phase authors were surveyed using the same questionnaire. Due to the relative inaccessibility of the authors, personal interviews were not possible and the questionnaires were sent to the respondents who administered them themselves.

4.4.2.2 Sample

Fink and Kosecoff (1998: 43) describe a method called convenience sampling. Gillham (2000: 18) cautions that it is "unreasonable to assume that the resultant
data are representative" if the convenience sampling method is used. Belson (1981: 3) also warns against the use of small samples and the responses of volunteers. This is a valid observation if the questionnaire is the only source of data. In the context of this study, however, such data were supported by data emanating from other sources, i.e. the literature review, an analysis of the Revised National Curriculum Statement, the Department of Education’s draft document on the development of learning support material.

The main features of such a sample are that the respondents have some expertise qualifying them to make a credible judgement about the textbooks in question, that they were willing to take part in the survey and were accessible.

I used the method of convenience sampling for the following reasons:

- Respondents were accessible.
- Follow-up contacts could be easily arranged.
- Random sampling of the populations of South African intermediate phase teachers and authors of South African intermediate phase school textbooks, despite its potential for greater generalizability, would have required the use of forced-choice type questionnaires. In the case of teachers, such questionnaires do not allow for person-to-person interaction to obviate problems encountered when the first language of respondents is not English, for example respondents misunderstanding questions. Convenience samples do allow this. Random sampling also calls for complex statistical methods, which is not compatible with the aim of providing a description rather than reducing data to numerical scores.
- Person-to-person interviews are also in line with the basic principles of the interpretive tradition.
- Although interpretive data is not replicable, Fien and Hillcoat (1996: 28) point out that there is still scope for general principles and themes to be transferred to other settings. Although each situation is unique, there will be commonality among situations in similar settings, for example the perceptions and needs of intermediate phase textbook authors and intermediate phase teachers in various locations in South Africa. This
commonality affords some transferability from what has been learnt in the one situation to another. It is therefore reasonable to conclude that the perceptions of my samples of teachers and authors could very well equate with the views of other teachers and authors in comparable circumstances.

The sample consisted of ten teachers working at rural and urban state and private schools in the Eastern Cape, Western Cape and Gauteng. The sample of authors comprised five persons writing for three different publishers.

4.4.2.3 Method

The survey was administered as follows:

- The survey questionnaire was pilot tested to establish the time it takes to administer, and to ensure the clarity of its language and directions. I remained on the lookout for any difficulty or uncertainty on the part of the respondents as a system for checking the adequacy of the questionnaire and its constituent questions.
- The teachers were then approached in person. All proved to be keen to take part in the survey. The authors were contacted by phone and e-mail. Only five of the seven approached were able to complete the questionnaire.
- I took cognisance of Sudman and Bradburn’s (1982:7) recommendation that one needs to be sensitive to three ethical principles. They are the right of privacy, informed consent, and confidentiality.
- The respondents were informed of the purpose of the survey.
- The survey was conducted at the convenience of each individual respondent.
- The interview questionnaire contains both forced-choice and open-ended questions. When conducting the interviews with the teachers, their responses to the forced-choice questions were directly recorded on the questionnaire while responses to the open-ended questions were tape-recorded. I then transcribed the tapes and recorded a summarised
version of the responses on the questionnaire. The authors themselves recorded their responses on the questionnaire.

- Finally the data were collated and analysed.

4.4.2.4 The survey questionnaire

4.4.2.4.1 Introduction
The purpose of the survey questionnaire was
- to structure my personal interviews with intermediate phase teachers, and
- to structure feedback from authors of intermediate phase school textbooks in order to afford both groups the opportunity of confirming or refuting, refining and adding to the issues dealt with by the theory about the practice of textbook evaluation in Chapter 3.

In this paragraph I shall explain aspects my survey questionnaire relating to its structure and the types of survey items. The reader will be directed to Annexure B for a copy of the questionnaire.

4.4.2.4.2 The structure of the survey questionnaire
As indicated earlier, the purpose of the survey was to canvass the views of South African intermediate phase teachers and the authors of South African intermediate phase school textbooks regarding key issues about textbook evaluation and the attributes of good quality school textbooks for that phase. This constitutes what Fink and Kosecoff (1998: 10) refer to as my information needs. The criterion clusters contained in a theory about the practice of textbook evaluation (see section 3.8), define my information needs.

Sudman and Bradburn (1982: 207) state that care should be given to the construction of the total questionnaire. In particular, if more than one topic is involved, a single topic should be completed before moving on to a new one thereby establishing a logical order to the questionnaire. I applied this principle rigorously. The theory about the practice of textbook evaluation formed a
classification structure (topics) for my interview questionnaire. I shall deal with each cluster or topic in full before moving on to the next one.

While no rules for writing items exist, Sudman and Bradburn (1982: 2) have provided a “tentative formulation” of a few principles to guide researchers. I have found the following suggestions useful:

- Early items should be easy and non-threatening so as to set the respondent at ease.
- The use of emotive and “non-neutral” words is inclined to influence respondents to produce a response consciously or unconsciously desired by the interviewer.
- If items are demeaning, embarrassing or upsetting, respondents might terminate the interview or falsify their answers.
- One should avoid including items asking respondents for information they do not have.
- Judgemental items should be avoided.
- Abstract concepts must be formulated in such a way that the respondents understand them.
- Ambiguity should be avoided.
- Respondent fatigue can be minimized through the use of a variety of item formats.
- Ranking should be limited to no more than four or five alternatives.

4.4.2.4.3 Survey items with forced choices
Fink and Kosecoff (1998: 15) suggest that forced-choice survey items typically consist of a stem presenting a problem in the form of a statement or a question, followed by several alternative choices or solutions. They warn against items that have no readily obvious purpose, contain more than one thought, are biased and are poorly expressed in language that is not Standard English. I have made a conscious effort to heed their advice.

Some of my closed-ended survey items relied on comparative rating scales requiring the respondent to rank order statements. Both types of additive scales described by Fink and Kosecoff (1998: 23) also featured. Additive scales can
either require a respondent to answer in the affirmative or the negative, or he/she may select the appropriate response on a continuum, e.g. from “very satisfied” to “very dissatisfied”. Differential scales requiring respondents to choose the statements with which they agree, were also used.

4.4.2.4.4 Open-ended survey items

Fink and Kosecoff (1998: 13) suggest that the most common use of an open-ended survey is to find out whether people are satisfied with something. Respondents are typically required to indicate what they like best about something and what they like least. It is called the LB/LL technique. The open-ended questions appearing in my survey questionnaire were less open-ended than this example, suggesting that there may be a continuum of open-endedness, i.e. some survey items are less open-ended than others.

The purpose of the open-ended questions in my survey questionnaire was mostly to obtain insights into the reasons for the respondents’ response to the forced-choice items and to provide them with the opportunity of expanding and commenting on them (the forced-choice items). In three instances, though, interviewees enjoyed greater freedom of response when they were required to comment on a number of key issues about textbook evaluation and specific aspects of the Revised National Curriculum Statement.

4.4.2.4.5 The survey questionnaire

See Annexure E.

4.4.3 An analysis and interpretation of teachers’ responses

4.4.3.1 Introduction

This section focuses on the perceptions of intermediate phase teachers in order to give a South African intermediate phase bias to the theory about the practice of textbook evaluation.
4.4.3.2 Key issues about textbook evaluation

As an introduction to the interviews, respondents were asked, “In your view, what key issues need to be addressed when evaluating an intermediate phase school textbook?” The purpose of this open-ended question was to obtain an intuitive response regarding the manner in which they assess the value of a school textbook before moving on to the more structured items of the questionnaire. I particularly hoped to establish whether the respondents took the view that the first set of theoretical considerations is relevant, i.e. whether pre-use, in-use or post use evaluation is the most appropriate, an awareness of the difference between analysis and evaluation, the use of a checklist containing specific criteria, and contextual factors.

I had hoped that it would not be necessary to prompt the respondents. In practice, however, it transpired that it was necessary at times to ask a respondent to clarify some points made. At other times questions regarding the appropriateness of the key issues about textbook evaluation as enunciated by the theory about the practice of textbook evaluation, needed to be asked.

The respondents needed no inducement to emphasise at the outset that contextual factors, i.e. their professional needs and the educational needs of their learners, are of paramount importance. This was clearly apparent when the interviewees indicated that, while they all expect textbooks to provide a workable framework around which teaching and learning in their classrooms can come together, they vary considerably with regard to the extent in which this is so. Some, particularly those working in over-crowded and under-resourced classrooms, show an uncritical dedication to their textbooks, religiously following its directives from front to back. Others use a variety of textbooks as a source of content and activities for self-generated worksheets. At least one of the respondents uses or adapts only the learning activities in a textbook, expecting her privileged learners at an up-market private school to access the school library, the internet, and knowledgeable people in the community as sources of information.
Almost without exception their first action when required to evaluate a school textbook, was to study its table of contents and subsequently to skim through its contents in order to establish whether it covered sufficient factual content. When asked why they regard factual content as so important, their response was that they no longer had access to a syllabus prescribing specific content, and are consequently wary of teaching the “wrong things”. They experienced this state of affairs as a cause for concern and anxiety, mainly because they either have had no previous experience of a particular learning area (particularly Science and Technology and Life Skills, Economy and Society) nor did the general nature of their training equip them to do justice to all the learning areas they are expected to teach. Having said this, it was interesting to observe that most interviewees consider themselves fairly adept at dealing with Languages, Mathematics and Social Sciences. The respondents mostly use the textbook both as a source of content, which they supplement and complement as the need arises, and a guide to teaching approaches.

The accessibility of a textbook is equally important, particularly with regard to the complexity of the language used. The respondents are also wary of contents and activities that might offend some of their learners. They are therefore sensitive to the underlying messages a textbook conveys, i.e. the hidden curriculum. One respondent, a teacher of learners with special needs, expects the drawings to be functional in the sense that they ought to contribute to learning. She also felt that the page-layout ought to be attractive, uncluttered - “not as intimidating as old-style textbooks.”

Clearly, a textbook suitable for a ten-year-old youngster attending a school in a remote area of rural Eastern Cape may be inappropriate for a ten-year-old child attending the local school in suburban Summerstrand. So too are the professional needs of a poorly-trained teacher at an under-resourced township school substantially different from those of a university graduate plying his or her trade at an up-market private school.

When prompted about the most effective way of evaluating a school textbook (pre-use, in-use or post-use), one of the more perceptive respondents ventured,
“I could live with all three.” Most, however, had little hesitation in identifying post-use evaluation as their first choice, but felt that this option is unlikely to be exercised because it would be time-consuming and too expensive. Moreover, switching from one textbook to the next might even disrupt the educative process. All conceded, however, that present South African conditions require pre-use evaluation. They cited the system of approved lists of textbooks as the main reason even though some were irritated because they felt that their freedom of choice and professional judgement was being undermined. One of the respondents pointed out that she often asks some of her more able learners to help her to select textbooks. She said that she is often amazed at their perceptiveness. This correlates with McGrath’s (2002: 184) assertion that the learners’ reaction to textbooks might be elicited as part of the evaluation process.

With the exception of three respondents who were partial to the security of a structured approach to textbook evaluation, all felt that they do not need a checklist of criteria when evaluating textbooks. “It’s in my head,” one volunteered. When pressed for an explanation, he said that he relies on his professional insight and experience to make the right choice. Another relies on her “intuition”.

When asked whether they distinguish between analysis and evaluation, all respondents initially thought that they do not. One enquired, “Isn’t it the same thing?” After it was explained that a perusal of the table of contents to ascertain content coverage, for example, in fact amounted to analysis and the decision to reject or accept meant that evaluation had occurred, they conceded that analysis and evaluation happens “informally”. All the respondents agreed that it ought to be done overtly, using a checklist structured to facilitate the processes of analysis and evaluation.

In summary, the respondents have confirmed that the following aspects of the theory about the practice of school textbooks are also applicable to the South African intermediate phase situation:
• The South African education system requires pre-use evaluation of textbooks in order to predict their possible value for the target group.
• The concepts of analysis and evaluation are logically different, yet they may complement each other in a single procedure.
• Specific evaluation criteria need to be identified.
• A checklist is the most efficient way of systematically gathering data about a textbook in order to conduct an evaluation.
• The contextual factors that are to be taken into account include the professional needs of the teachers and the educational needs of the learners.

No further insights have emerged from this item.

4.4.3.3 The composition of the authoring team

All the respondents agreed that the effectiveness of a school textbook is likely to be enhanced if its authoring team is composed of persons whose qualifications and expertise are appropriate. They believe that the disciplines identified in the item were the minimum needed to deliver an intermediate phase school textbook that would meet most of their needs and the needs of their learners. They were strongly in favour of the inclusion of a teacher who teaches the target group. One respondent was of the opinion that continuity would be enhanced if the panel included a person who not only currently teaches the target group, but also has recently taught the age group prior to the target group (“someone who knows where the kids are coming from …”) and the next age group (“… and where they’re going to.”). While this kind of expertise may be difficult to find, the respondent’s wish clearly demonstrates how important it is to ensure that the authoring panel reflects the skill of teaching the target group.

A respondent, who teaches at a racially mixed private school, felt that authoring panels should include at least one education department official to improve the chances of the textbook being approved by education departments. Considering the current inconsistency of departmental textbook evaluation procedures, one
would conceivably need a representative from each of the nine provincial education departments on the panel to achieve that goal! Clearly, this is an unrealistic ideal. Moreover, I expect that most officials at education departments have not had teaching experience in the intermediate phase as most of them are drawn from the senior phase and secondary school management. The same respondent’s conviction that the composition of authoring panel should be “demographically correct” deserves consideration though. After ten years of democracy, South Africa is a country where race continues to be a dominant issue, despite protestations to the contrary by government officials and many ordinary citizens. Such a textbook is likely to achieve credibility, not least because panel members from different race groups would ensure that racially offensive material are excluded.

Two respondents were of the opinion that a person skilled in illustrating children’s literature would make a textbook more accessible for their learners. One of them has had many years of teaching learners with learning disabilities, while the other teaches at a township school where most of his Grade 6 learners have a poor understanding of English, which is their medium of instruction. Both felt that good illustrations specifically aimed at enhancing the meaning of text would help their learners to interpret text that is often beyond their comprehension.

In the light of the above it seems worthwhile to add the following criteria to the theory about the practice of textbook evaluation in order to give it a South African intermediate phase bias:

- The authoring team has expertise in illustrating children’s literature.
- The authoring team is multi-ethnic.

4.4.3.4 The authors’ rationale

Respondents disagreed about the relative importance of the separate elements of the authors’ rationale. In fact, five respondents queried the need to include the authors’ educational philosophy at all because they prefer to concern
themselves with “practical” educational issues rather than “theoretical” ones. However, they did not insist on its removal from the list of criteria.

In my experience Intermediate phase teachers are notoriously suspicious of what they conceive as “theory”. This is not surprising in view of the fact that they are invariably the first to bear the brunt of any innovations dreamed up by persons who have never seen the inside of an intermediate phase classroom. The Revised National Curriculum Statement (RNCS) is a case in point. I am convinced that many committed teachers, who have lived through several previous innovations only to see them toned down (at best) or discarded (at worst), do not expect the RNCS to survive very long in its current form.

Despite their reservations as a group, four respondents were of the opinion that the authors’ rationale should also give an overview of the topics/themes and related content dealt with in a textbook. One respondent insisted (sensibly, I thought) that the authors should not only state the outcomes they wish the learner to attain, but also which of the pedagogical expectations broached by the Revised National Curriculum Statement (see questionnaire, item 7.2) will be met.

In the light of the above it seems worthwhile to add the following criteria to the theory about the practice of textbook evaluation in order to give it a South African intermediate phase bias:

- The authors’ rationale gives an overview of the topics/themes dealt with.
- The authors’ rationale gives an overview of the content dealt with.
- The authors’ rationale declares which pedagogical expectations broached by the RNCS have been incorporated.

4.4.3.5 The authors’ observance of the process of learning and instruction

The respondents expressed no clear-cut preference for a particular sequence of the events of instruction. This was probably due to the fact that some of the events of instruction could be dealt with simultaneously. For example, two of the more thoughtful respondents felt that presenting new knowledge, skills and
values and explaining new or difficult words should be dealt with simultaneously. Most respondents misunderstood the function of feedback, believing that it is something only to be done after assessing performance. Once again, the more perceptive respondents believed that feedback should be given continuously and not only once in the process of learning and instruction. All the respondents were dubious of the ability of intermediate phase learners to apply self-assessment, feeling that they have not yet acquired the objectivity to do so meaningfully. “On the other hand,” one respondent ventured, “the sooner they learn to be self-critical, the better.”

The sequence of the events of instruction, which emerged from the literature review, was retained in the light of the inconclusive nature of the responses, but the sequential nature of their appearance in the teaching and learning process will not be emphasised.

Two of the more perceptive respondents advocated the inclusion of remedial and extension work as an element of the sequence. It may be difficult to provide remedial help in a school textbook, because of the learners’ individualised needs in this regard. It should be noted that the draft policy for the development of LTSM does not advocate the inclusion of remedial exercises in a textbook. However, setting extension work is entirely achievable simply by asking open-ended questions, for example.

In the light of the above it seems necessary to alter the wording of this particular aspect of the theory about the practice of textbook evaluation in order to de-emphasise the sequential aspect of the elements of the process of learning and instruction, and thus accommodating the perceptions of South African intermediate phase teachers. The criteria will therefore simply state, “the following events of instructions occur” rather than, “the following events of instruction occur sequentially”. Extension work will be included as an additional element of the process of learning and instruction.
4.4.3.6 Accessibility

4.4.3.6.1 Typography

A high percentage (90% to 100%) of the respondents agreed that the sturdiness of the binding and cover, the use of good quality paper, and orderly system of access devices, grouping the text in units of meaning and placing the illustrations close to the text referring to it are likely to contribute substantially to the accessibility of an intermediate phase textbook.

Only 60% of the respondents concurred with the practicality of single-column, portrait-type layout, suggesting that this was not an issue the sample felt strongly about. None, however, proposed an alternative.

Respondents were similarly not convinced about the validity of the statement that the best kinds of illustrations are artists’ line drawings in black and white. Only half supported the notion. As expected, respondents favoured the extensive use of colour. Three felt that a variety of kinds of illustrations is in order, for example photographs, cartoons, diagrams and line drawings. One respondent summed up their collective point of view by saying, “A variety of types of illustrations will help learners to interpret text.” This was an interesting observation and raises the question: to what extent do textbook illustrations translate into learning? Hill (2003: 177) suggests that this is a debatable point deserving of further investigation. An experienced teacher of learning disabled learners was adamant that intermediate phase textbooks should be heavily illustrated to the extent that illustration sometimes supplants text.

While not rejecting it outright, respondents had their reservations about the exclusive use of 12-point serif font. One respondent said, “Small print might be okay for older kids in the senior phase, but definitely not for my nine and ten year olds in Grade 4.” Two suggested that variety appeals to intermediate phase learners and that a mix of fonts and font sizes could be used judiciously. Two respondents were adamant that larger sans-serif fonts are less likely to confuse young learners in Grade 4. One respondent felt that the font and its
size must be suitable for the age of the learners, i.e. 14-point sans-serif for Grade 4, a gradual change-over to 12-point serif in Grade 5, and greater use of it in Grade 6.

Respondents were unanimous in their rejection of the A5 format. Among the reasons offered for this was the likelihood of densely printed, thick textbooks that are certain to intimidate young learners. When confronted with this statement, the first response of many respondents was to show me textbooks which they felt are the optimum size, i.e. approximately 180mm x 250mm, portrait type.

4.4.3.6.2 Readability

The respondents mostly agreed about the relative importance of the three elements of this item. All were unsure about whether it was desirable for the author to apply at least one readability test. Their uncertainty stemmed from the fact that they were unaware that such readability tests existed. After it was explained to them, they readily agreed that it would be worthwhile for authors to apply at least one because it would reassure potential end users that the authors were serious about ensuring that the target group would be able to read and understand the book. One respondent said, “I would feel better about a textbook if the authors had taken obvious steps to ensure that my learners will find it readable.” Most were, however, dubious whether a readability test would “work” for their learners because of wide-ranging differences in reading ability.

One respondent felt that while the target group should have a reasonable chance of being able to read and understand a textbook, the language register should not be patronising. Another (the teacher of learning disabled learners) was of the opinion that text should be heavily supplemented with illustrations, even to the extent where illustrations might replace text. A third respondent believed that meeting the learners’ interest level would also enhance readability.
4.4.3.6.3 **Style and tone**

Respondents were sharply divided about the linguistic style and tone of a textbook. Most believe that it must be similar to the linguistic style and tone of children’s fiction because it is certain to add to the enjoyment of learning and young learners find it more interesting and easier to identify with factual content when presented in fiction format. Heightened enjoyment, this group argued, ensures that learners respond more readily to matters of content. They conceded, though, that it may not be a good idea to present a learning area such as mathematics in story form.

The remaining respondents were adamant that they are against the thought of presenting factual content in fiction format. One respondent summed up the general feeling of the antagonists when she firmly stated, “Facts are facts and stories are stories.” “Young learners are often incapable of distinguishing between fact and fiction,” another ventured. Furthermore, they argued that learners must learn early on that there is a difference between the two genres and that each serves a different purpose.

4.4.3.6.4 **The authors’ assumptions**

While questioning the achievability of the ideal due to the range of backgrounds represented by their learners, all the respondents agreed or strongly agreed that the accuracy of the authors’ assumptions about the target group is best exemplified by their (the authors’) ability to relate the events of instruction (learning activities) to the learners’ previous learning and their current experience of the world. “After all,” one perceptive respondent said, “relating learning experiences to the learners’ life-world underpins outcomes-based education.” Two commented that the accuracy of the authors’ assumptions determine whether a textbook is reader-friendly and relevant.
4.4.3.6.5 Interpretation

Respondents agree that the factors determining accessibility include typography (the style and appearance of a textbook), readability, linguistic style and tone, and the authors’ assumptions.

As far as the typography is concerned, I accept their objections to the A5 format and artists’ line drawings in black and white only. These criteria will therefore be reformulated as follows:

- The optimum size is approximately 180mm x 250mm.
- Illustrations include artists’ line drawings and photographs.

Their reservations about the use of serif font are largely based on personal preference. This is hardly surprising considering Hartley’s (1994: 23) finding that even researchers do not agree on the most appropriate font for school textbooks. On balance, however, most of my sources such as Rowntree (1995), De Guzman II (1989), McLean (1980) and Williamson (1966) prefer the use of serif fonts for the main body of a text. The font size, however, is another matter. Two respondents’ view that larger fonts should be used for younger learners have merit and correlates with the position in the Philippines where the font-size varies from 14 point (grades 3 and 4), to 12 point (grades 5 to 7) (Guzmann II, 1989: 153). So, the following compromise seems appropriate:

- The font and its size used for the main body of the text are suitable for the age of the learners.

The readability criteria were acceptable to the respondents and will therefore remain the same as stated in the theory about the practice of textbook evaluation.

Respondents were sharply divided about the linguistic style and tone of the textbook. In the light of their comments, a synthesis of Perera’s (1986: 57) conclusion that if non-fiction were written in the same linguistic style as fiction, learners in the 9 to 14 year age range would better be able to understand their
textbooks, and Hutton’s (1989: 61) warning that the linguistic style and tone must be consistent with the content, points to the following formulation:

- Where appropriate the linguistic style and tone of intermediate phase school textbooks are similar to the linguistic style and tone of children’s fiction.

The respondents saw no reason to change the criterion dealing with the authors’ assumptions.

4.4.3.7 Providing teacher support

Most of the respondents were in favour of a separate teachers’ manual and agreed that it should provide guidance about all the aspects mentioned, with the possible exception of the stipulation that the teachers’ manual should give guidance about alternative learners’ activities and teaching strategies. “Surely,” one respondent ventured caustically, “any teacher worth his or her salt don’t need that kind of guidance!” Three others responded in similar vein. However, the group did not feel strongly enough about their exclusion, so they will be retained. Of the additions suggested by the sample, were the inclusion of guidelines on how to compile a worksheet and suggestions for further reading.

A third of the respondents believed that the teacher’s manual should double as a resource book; it should provide them with at least some background information about the content they are required to teach. “After all,” said one, “my training prepared me to be a general practitioner and not a subject specialist.” Recalling a recent embarrassing experience with a bright learner, another ventured, “I knew that birds fly, but I didn’t know how!”

In the light of the above it seems worthwhile to add the following criteria to the theory about the practice of textbook evaluation in order to give it a South African intermediate phase bias:

- Guidelines for teachers provide guidance about the compilation of worksheets.
- Guidelines for teachers provide suggestions for further reading.
• Guidelines for teachers double as a resource.

4.4.3.8 Meeting the requirements of the Revised National Curriculum Statement (RNCS)

4.4.3.8.1 Values

Respondents identified a number of values that they believed an intermediate phase school textbook should help teachers to develop. Most respondents felt that respect for people from different cultures is of paramount importance in a society such as ours. Other respondents also pinpointed self respect, respect for “other ideas”, and respect for the environment. Another value closely allied to respect, is tolerance. Two thirds of the respondents were of the opinion that tolerance *per se* is a much-needed value in our country, particularly in the light of the intolerance that was a fact of life in our previous political dispensation. Another popular value is curiosity (“I work best with kids who are inquisitive.”). An African teacher at a township school insisted that “ubuntu” is the most desirable value, particularly in African society. Ubuntu encapsulates core African values such as interdependence (which is at variance with one of the respondents’ preference for competitiveness), humility, hospitality and respect for human dignity. Few would argue that these values would not be out of place in any society.

4.4.3.8.2 Achieving the pedagogical expectations broached by the RNCS

It is disturbing, though not surprising, that many of the respondents reacted negatively to items that are associated with a progressive, child-centred pedagogy. More than two-thirds failed to see, for example, how a textbook could ensure that the individual learning style of each learner is met. One respondent at a township school flatly declared, “It’s not possible.” “I challenge anyone to achieve *that* ideal in my class of grade sixes comprising forty kids from across the whole spectrum of [South African] society,” said another from a middle-class suburban school. One-third of the respondents felt that, while a textbook could possibly facilitate the integration of learning areas, they were not in favour of the idea. The fact that a few did not understand the concept,
probably accounts for their apathy. Another equated integration with “theme work” and argued, “It’s okay, but the kids soon become bored with theme work.” The same respondents were also sceptical of their learners’ ability to construct their own knowledge. When it was pointed out to them that the approach to learning in the new curriculum is “constructivist”, i.e. the learners are expected to construct their own knowledge through, for example, problem-solving activities, one said, “I’d like to see my weaker to average grade fours being able to do that!”

With the exception of the item referring to learners’ individual learning styles, most respondents agreed that the pedagogical expectations broached by the RNCS (and mentioned in the questionnaire) were achievable with considerable help from good quality textbooks.

4.4.3.8.3 Skills

The respondents were fairly unanimous that an intermediate phase school textbook should help teachers to develop the following skills in the learners:

- Communication.
- Learning/study.
- Problem-solving.
- Critical thinking.
- Working systematically.

4.4.3.8.4 Interpretation

In the light of the foregoing it seems worthwhile to integrate the following values with the theory about the practice of textbook evaluation in order to give it a South African intermediate phase bias:

- An awareness of and a respect for the culture of the various ethnic groups comprising the South African population.
- Tolerance.
- Respect for and eagerness to maintain the environment.
- A sense of curiosity.
• Ubuntu.

With the exception of making provision for learners’ individual learning styles, all the pedagogical expectations listed in the questionnaire will be taken into account when giving a South African bias to the theory about the practice of textbook evaluation, as will the development of the skills mentioned in paragraph 4.4.3.7.3 above.

4.4.4 Relevance of the teachers’ perceptions for this study

The perceptions of intermediate phase teachers regarding the attributes of good quality intermediate phase textbooks were described in this section. It was the third step in the process of ensuring that the theory about the practice of textbook evaluation, in terms of which the procedure for intermediate phase textbook evaluation, represents South African educational interests.

4.4.5 An analysis and interpretation of authors’ responses

4.4.5.1 Introduction

The previous section contains an analysis of the perceptions of intermediate phase teachers regarding the attributes of good quality textbooks and the subsequent expansion and/or amendment of the criteria contained in a theory about the practice of textbook selection. This section focuses on the perceptions of intermediate phase textbook authors in order to pinpoint further criteria to supplement and/or modify the criteria identified in the literature review.

I provided questionnaires to a sample of textbook authors, which they were required to administer themselves. The questionnaire was identical to the one used as a basis to conduct interviews with the sample of teachers (see Annexure E).
The purpose and presentation of the analysis and interpretation of author perceptions are similar to the previous section dealing with the beliefs of the teachers. The purpose was to determine whether or not the respondents agree with the criteria incorporated in the theory about the practice of textbook evaluation, and to take cognisance of new and/or revised criteria stemming from the survey.

4.4.5.2 Key issues about textbook evaluation

The questionnaire started with the question, “In your view, what key issues need to be addressed when evaluating an intermediate phase school textbook?” The purpose of this question was to find out how authors went about the task of evaluating their own manuscripts. As it was not possible to prompt the respondents as I had done during the interview with the sample of intermediate phase teachers, the sample of authors were encouraged in a covering letter to structure their response in terms of the following themes related to the first set of theoretical considerations:

- Which of type of intermediate phase school textbook evaluation is the most appropriate, pre-use, in-use or post-use? Why?
- What is the significance of the logical difference between analysis and evaluation of intermediate phase school textbooks?
- Please comment on the use of a checklist containing specific evaluation criteria.
- Please comment on the contextual factors for intermediate phase school textbook evaluation, i.e. the professional needs of the teachers and the educational needs of the learners?

The respondents all favoured post-use evaluation as the most appropriate because, as one explained, “there is no substitute for hindsight.” They questioned the practicability of post-use evaluation, though. One respondent, a former primary school principal, pointed out that pre-use, in-use and post-use evaluation is not an important issue in well-resourced schools where the staff are able to use a variety of textbooks to devise learning activities. If a textbook proved to be ineffective for their purposes, it is simply not used. “In under-
resourced schools,” he wrote, “post-use evaluation would prove to be time-
consuming, expensive and potentially disruptive, and therefore not worth trying.”
In-use evaluation was regarded as the second-best, but equally impractical,
option.

That left pre-use evaluation. Respondents were of the opinion that the
centralised system of approved textbook lists drawn up by specially selected
evaluators, conceivably offered the best alternative for South African conditions.
The likelihood of sub-standard textbooks finding its way into the educational
system is lessened a great deal.

The question about the logical difference between analysis and evaluation
stymied the respondents to a degree. One wrote, “I have never considered it.”
The rest professed uncertainty about its significance for textbook evaluation.

I could not ascertain whether publishers use in-house checklists to evaluate
manuscripts. One publishing director explained that her company has a
manuscript evaluation policy that has been derived from departmental
publications. However, she was not prepared to provide me with a copy
because “it would compromise our cutting edge in the market place.” Two other
publishing directors simply ignored my enquiry. I strongly suspect that there is
little consistency amongst publishers about the attributes of a good intermediate
phase school textbook. This clearly causes difficulties for textbook authors. At
least one of the respondents writes for a publisher that does not have a
checklist of any kind. He has compiled his own, based on the checklists of
various education departments, and writes, “It’s like walking a tight-rope,
though. While different departmental textbook evaluation procedures mostly
emphasise similar things, there are often significant dissimilarities.” The other
respondents experienced similar problems and intimated that a standardised
South African checklist is long overdue.

All the respondents emphasised the importance of writing textbooks with the
professional needs of the teachers and the educational needs of the learners as
a prime consideration. They are intensely aware of the intimidating range of
needs to be found amongst teachers, which range from the basic needs of poorly-trained teachers in over-crowded and under-resourced schools to the more sophisticated requirements of graduate teachers plying their trade in up-market private schools. Moreover, respondents are acutely aware that intermediate phase teachers are often called upon to teach in learning areas of which they know very little. This means that authors should provide sufficient resource material to enable the teacher to conduct his or her teaching with a reasonable measure of confidence. One respondent wrote that he is often confounded by the complex socio-cultural mix to be found in many South African intermediate phase classrooms. He finds it almost overwhelming to maintain a compromise of some sort. “For example,” he writes, “it is extremely difficult for authors to make accurate assumptions of the learners’ previous or current life experiences. Learners will, because of cultural differences and varying standards of previous schooling, differ greatly in their ability to use a textbook.” He also points out that the matter of developing values is an equally daunting task considering that the core values of black South African society emphasise interdependence, communalism, obedience and humility, while competitiveness and a questioning attitude is part and parcel of the European (and therefore of white South African) consciousness.

What this adds up to is that the sample of authors of South African intermediate phase school textbooks therefore responded as follows with regard to the identified key issues about intermediate phase textbook evaluation:

- The South African education system requires pre-use evaluation of textbooks in order to predict their possible value for the target group.
- No strong opinions emerged about the difference between the concepts of analysis and evaluation.
- Specific evaluation criteria need to be identified.
- A coherent checklist is the most efficient way of systematically gathering data about a textbook in order to conduct an evaluation.
- The contextual factors that are to be taken into account include the professional needs of the teachers and the educational needs of the learners.
No further insights have emerged from this item.

4.4.5.3 The composition of the authoring team

The similarity of the teachers’ responses and those of the authors in this regard was remarkable though not unexpected. The authors are all qualified teachers.

All the respondents, bar one, were of the opinion that a multidisciplinary panel of authors would enhance the effectiveness and the credibility of an intermediate phase school textbook. One respondent was in favour of enlarging the panel by two teachers, “one teaching the grade below the target group and the other the grade above the target group”. He motivated his opinion by pointing out, “Vertical progression could be compromised if the teacher is unaware of the levels of expected performance during the preceding and ensuing years”. Another felt that the competencies do not have to be accommodated on a one-author-one-competency basis because it would result in large and clumsy authoring teams. “A more effective authoring team could be composed of persons who are competent in more than one of the identified fields,” he argued. Yet another, who is a vastly experienced intermediate phase teacher, was in favour of involving an artist with a proven track record in illustrating children’s literature. “Children learn almost as much from the right kind of picture as from text,” she argued. The final word on the issue of the composition of authoring teams belongs to the respondent who commented, “Learning area specialists should not only be experts in their specific learning area, but should be acknowledged as such by their peers.” The credibility of authors who are also learning area specialists should therefore be beyond doubt. In my view, this comment applies equally to all the members of an authoring team.

The theory about the practice of textbook evaluation would be given a greater South African intermediate phase bias if reference were made to the effect that the authoring team should include an artist specialising in children’s literature. Moreover, the specific criterion cluster ought to be articulated in such a way that
one is not left with the impression that a large and clumsy one-author-one-competency authoring panel is called for.

4.4.5.4 The authors’ rationale

Once again the views of the authors were congruent with those of the teachers. Firstly, two respondents queried the need to include the authors’ educational philosophy because teachers traditionally prefer to concern themselves with “practical” educational issues rather than “theoretical” ones. One of the respondents commented as follows: “A rationale is often more important to the author than the users who may not even read it.” However, they did not insist on its removal from the list of criteria. Secondly, one of the respondents was of the opinion that the authors’ rationale should be inclusive of an overview of the topics/themes and related content dealt with in the textbook. The latter will be integrated into the theory about the practice of textbook evaluation in order to give it a South African intermediate phase bias.

4.4.5.5 The authors’ observance of the process of learning and instruction

Beyond agreeing that they should occur in a good textbook, the authors (like the teachers) did not agree on the sequence in which the events of instruction ought to come about.

In contrast with the teachers who were dubious of the ability of intermediate phase learners to apply self-assessment, one of the authors felt that self-evaluation by a learner is a good thing.

One of the respondents felt that extension exercises (“a challenge to learners”) should be included. Teachers also called for more demanding tasks in order to extend the more able learners.

The authors’ responses reinforce the appropriateness of altering the theory about the practice of textbook evaluation in order to de-emphasise the sequential aspect of the elements of the process of learning and instruction.
The criterion will therefore simply state, “the following events of instructions occur” rather than, “the following events of instruction occur sequentially”. Extension work will be included as an additional element of the process of learning and instruction.

4.4.5.6 Accessibility

4.4.5.6.1 Typography

Only two-thirds of the respondents concurred with the usefulness of single-column, portrait-type layout, suggesting that this was not an issue the sample felt strongly about. None, however, proposed an alternative.

Most respondents agreed with the teachers that the statement about the best kinds of illustrations being artists’ line drawings in black and white was unacceptable. They felt that black and white photographs as well as colour drawings are not much more expensive and should also be used. This was also the case regarding the exclusive use of 12 point serif font. It was felt that the font and its size must be suitable for the age of the learners. For example, one of the respondents wrote, “Vandat die leerders nie meer lopende skrif skryf nie, maar ‘los’. het ek gevind dat die Century Schoolbook- en Monotype-lettertipe meer geskik is omdat dit met die vorms van hulle letters ooreenstem.”

4.4.5.6.2 Readability

The respondents agreed that the three elements of this item are important. One of the respondents verbalised their concurrence by stating, “The three statements [in the questionnaire] are the key to the learners’ understanding of the text and their ability to interact with it.”

4.4.5.6.3 Style and tone

Authors were divided about the linguistic style and tone of a textbook, as were the teachers. Two-thirds believe that it could be similar to the linguistic style and
tone of children's fiction. One respondent wrote, “The textbook should not appear to be an ‘adult’ or teacher's book. Learners should be able to identify with the style and tone.” Those who disagreed felt that it might not be feasible to present some learning areas in story form, for example Mathematics or Science and Technology. Another respondent commented as follows: “Uit ‘n ander oogpunt beskou – waarom nie? Wat ‘n uitdaging vir ‘n skryfspan!”

4.4.5.6.4 The authors' assumptions

One of the respondents had reservations about the authors' ability to make accurate assumptions about the learners’ previous learning and their current experience of the world. He wrote, “I am unsure because it is extremely difficult for authors to make accurate assumptions of this nature (in spite of the learners having progressed to this level). Learners will, because of cultural differences, varying standards of previous schooling, vary greatly in their ability to use the book.” On balance, though, most respondents strongly agreed that the accuracy of the authors’ assumptions about the target group is best exemplified by their (the authors’) ability to relate the events of instruction (learning activities) to the learners’ previous learning and their current experience of the world.

4.4.5.6.5 Interpretation

The criterion referring to the font and its size should be adjusted to read as follows: “The font and its size used for the main body of the text must be suitable for the age of the learners.”

The readability criteria were acceptable to the respondents and therefore remain the same.

With the possible exception of Mathematics and Science and Technology, the linguistic style and tone of intermediate phase school textbooks ought to be similar to the linguistic style and tone of children’s fiction.

This survey has not affected the criterion referring to the authors’ assumptions.
4.4.5.7 Providing teacher support

Most of the respondents believe that guidelines for teachers should be provided in a separate booklet.

Once again authors and teachers were in agreement, this time about providing guidance on how to motivate learners. One respondent remarked flatly, “n Opvoeder wat nie sy leerders kan motiveer nie, is sy sout nie werd nie.”

Two authors also agreed with teachers that background information about the topics/themes dealt with in the textbook ought to be provided. They pointed out that intermediate phase teachers are general practitioners and do not have insight into the content of all the learning areas for which they are responsible.

The theory about the practice of textbook evaluation would be given a greater South African intermediate phase bias if it were acknowledged that

- teachers are dependent on background factual content being included in a teachers’ manual, and
- teachers do not need guidelines on how to motivate their learners.

4.4.5.8 Meeting the requirements of the Revised National Curriculum Statement (RNCS)

4.4.5.8.1 Values

In common with the sample of teachers, the sample of authors deems respect for self and others as the most desirable attitude in the value system of a South African intermediate phase learner. Tolerance of cultural groups and points of view other than one’s own closely followed respect as a virtue. The following were also included: compassion for underprivileged people, an appreciation of the environment, teamwork, and high moral values such as integrity and honesty.
In summary, respondents were of the opinion that a South African intermediate phase school textbook should impart the following:

- Environmental awareness.
- Cultural awareness.
- Values associated with ubuntu, including respect, tolerance, morality, compassion and interdependence.

4.4.5.8.2 Achieving the pedagogical expectations broached by the RNCS

With the possible exception of “providing for learners’ individual learning styles”, most of the respondents were more tolerant of issues associated with a child-centred pedagogy than the sample of teachers. While they agreed that the list of stated pedagogical expectations was comprehensive and appropriate, some doubt was expressed about the attainability of a few of them. One respondent questioned the selection of content in terms of the assessment standards. He stated that establishing the outcomes first, “then searching [my emphasis] for the content to match the outcomes, and then to ensure that it fits in with the assessment” is one of the “major shortcomings of OBE.” In my view his argument is not entirely valid because the assessment standards give a fair indication of appropriate content. The content derived from the assessment standards is, in turn, compatible with any of the learning outcomes enunciated by the RNCS. Another respondent felt that presenting “learning material at ever-increasing levels of complexity, is difficult to achieve”. As a former author of intermediate phase school textbooks, I found this to be one of the easier objectives to achieve.

The last word belongs to the respondent who stated that the textbook meeting all the expectations of the RNCS is likely to be “’n ware goudmyn en so dik soos die Bybel!” I agree with the assertion that such a textbook would be worth its weight in gold, but disagree that it would be too thick. In my view the pedagogical expectations (barring “providing for learners’ individual learning styles”) can all be met in a normal-size intermediate phase school textbook.
4.4.5.8.3 **Skills**

Respondents felt that an intermediate phase school textbook should help teachers to develop the following skills in the learners:

- Communication.
- Study.
- Problem-solving.
- Research.

4.4.5.8.4 **Interpretation**

The theory about the practice of textbook evaluation encapsulates the values respondents feel an intermediate textbook should seek to develop.

With the exception of making provision for learners' individual learning styles, all the pedagogical expectations listed in the questionnaire will be taken into account when giving the theory a South African intermediate phase school textbook bias.

The skills identified as desirable by the respondents have been accommodated in the theory.

4.4.6 **Relevance of the authors’ perceptions for this study**

The similarity between the responses of teachers and authors was remarkable, if not surprising. It provides some evidence that the expectations of “ground-level” education practitioners have an important bearing on intermediate phase school textbook production and selection.

The perceptions of intermediate phase school textbook authors as regards the attributes of good quality intermediate phase textbooks described in this section, was the fourth step in the process of ultimately giving the theory about the practice of textbook evaluation a South African bias.
4.5 ADJUSTING THE THEORY ABOUT THE PRACTICE OF TEXTBOOK EVALUATION TO REFLECT A SOUTH AFRICAN INTERMEDIATE PHASE SCHOOL TEXTBOOK BIAS

4.5.1 Introduction

South African intermediate phase teachers and authors of intermediate phase textbooks need an evaluation procedure that is brief, practical to use and yet comprehensive in its coverage of criteria.

4.5.2 Key issues about textbook evaluation

4.5.2.1 The process of evaluation

Three basic methods of evaluation occur before a textbook is used. They are referred to as pre-use (predicting the possible value of a textbook for the target group), in-use (used in the teaching environment) and post-use (retrospective appraisal of a textbook’s performance) evaluation. Pre-use evaluation involves gaining an impression of what the textbook contains, and, if it appears to meet expectations, to subject it to closer scrutiny. In-use evaluation occurs while a textbook is being used in the classroom. Post-use evaluation provides a retrospective assessment of a textbook’s performance in the teaching and learning situation.

4.5.2.2 The difference between analysis and evaluation

The concepts of analysis and evaluation are logically different, yet they may complement each other in a single procedure. The analysis focuses the evaluator’s attention on observable aspects of the textbook that need to be taken into account when evaluating what their effect on the target group might be.
4.5.2.3 The development of criteria

Evaluation criteria are needed to ensure that textbook evaluation is performed in a methodical, principled way. This notion has influenced the way in which the attributes of good quality textbooks have been formulated below.

4.5.2.4 The checklist

The checklist is an efficient way of systematically gathering comparable data about a textbook. It articulates the general categories forming the basis on which specific criteria are organised. In addition, unfamiliar concepts need to be explained, the checklist should be piloted, revised, and applied by a group of evaluators evaluating the same textbook. Finally, checklist items could be combined with a numerical response and rating scales to permit qualitative judgements.

4.5.2.5 The context of evaluation

The contextual factors that are to be taken into account include the professional needs of the teachers and the educational needs of the learners. The former requires textbooks that are stimulating and authentic, and selected in accordance with a procedure that is brief, practical to use and yet comprehensive in its coverage of criteria. The latter calls for acknowledgement of age range, proficiency level in the language of instruction, socio-cultural background, and situation.

3.4.3 The attributes of a good quality textbook

4.5.3.1 The composition of the authoring team

4.5.3.1.1 Explanation

The multi-ethnic authoring team of a South African intermediate phase school textbook has proven expertise in the disciplines listed in the criterion.
4.5.3.1.2 **Criterion cluster**

An expert multi-ethnic authoring team of a South African intermediate phase school textbook has proven expertise in

- learning area content,
- writing, i.e. converting content into readable prose,
- linguistics,
- typography,
- teaching the target group,
- didactics, and
- illustrating children’s literature.

4.5.3.2 **The authors’ rationale**

4.5.3.2.1 **Explanation**

The author’s rationale contextualizes the textbook within the whole curriculum and enables the teacher to obtain an early overview of what the textbook is intended to achieve. The authors’ rationale is usually stated in the foreword.

4.5.3.2.2 **Criterion cluster**

The authors’ rationale includes

- a concise explanation of the educational philosophy underpinning the textbook,
- a concise description of the learners for whom the textbook is intended,
- a concise overview of the topics/themes and related content dealt with,
- a concise indication of which of the pedagogical expectations specified by the Revised National Curriculum Statement will be met, and
- a concise declaration about the intended learning outcomes, including the critical and developmental outcomes.
4.5.3.3 The authors' observance of the process of learning and instruction

4.5.3.3.1 Explanation

Credible theories of learning and instruction propose processes of learning and instruction in which distinct events of instruction (or learning activities) occur in the classroom. Such theories have a direct influence on the sequence in which the events of instruction appear in an intermediate phase textbook. Authors are expected to observe the processes of learning and instruction.

4.5.3.3.2 Criterion cluster

South African intermediate phase school textbooks are structured in such a way that the following events of instruction occur:

- An activity to gain the learner’s attention.
- Informing learner of the intended learning outcomes.
- Relating prior learning to current learning.
- Presenting new knowledge, skills and values, while at the same time explaining new or difficult words.
- Learner to demonstrate the newly acquired knowledge, skills and values.
- Providing feedback.
- Assessing performance.
- Enhancing retention and application of knowledge, skills and values.
- Extension work.
- Opportunities for self-assessment.

4.5.3.4 Accessibility

4.5.3.4.1 Explanation

An intermediate phase textbook is accessible if it is easy for the learners and teachers to find their way into the text, and to find their way about in it. Factors determining accessibility include typography, readability, linguistic style and tone, and the authors’ assumptions.
4.5.3.4.2 *Criterion cluster*

**Typography**
- The binding and cover are sturdy.
- 70 – 80 gsm, off-white, uncoated, matt paper is used.
- The size is approximately 180mm x 250mm.
- The layout is single-column, portrait type.
- The font and its size used for the main body of the text are suitable for the age of the learners, for example 14-point sans serif for Grade 4 and a gradual change over to 12-point serif in Grade 5 and greater use of it in Grade 6.
- An orderly system of access devices (numbering, symbols) is inserted in the text.
- A suggested time allocation per event of instruction (learning activity) is provided.
- The text is grouped in units of meaning.
- Functional and culturally appropriate artists’ drawings and photographs are used.
- The illustrations are placed close to the text referring to them.
- Printing and illustrations are spaced in such a way that the pages appear uncluttered.

**Readability**
- The language competence of the learners is taken into account.
- The text shows logical progression of ideas.
- The authors have applied at least one recognised readability test

**Linguistic style and tone**
- The linguistic style and tone is similar to the linguistic style and tone of children’s fiction if appropriate.
The authors’ assumptions

- The events of instruction (learning activities) are related to the learners’ previous learning and their current experience of the world.

4.5.3.5 Teacher support

4.5.3.5.1 Explanation

Teachers are supported to enable them to use a textbook in the way intended, and to deliver the new curriculum in a responsible manner. This calls for a separate book containing guidelines to help teachers to become familiar with the vision of textbook authors and to understand their conceptual goals.

4.5.3.5.2 Criterion cluster

Guidelines for teachers

- double as a resource,
- provide suggestions for further reading,
- provide details about the intended learning outcomes and assessment standards,
- suggest alternative learners’ activities,
- facilitate assessment of the teacher,
- provide a checklist of knowledge, skills and values,
- provide advice about dealing with large, multi-lingual, multi-cultural and multi-level classes,
- provide suggestions for remediation, enrichment and extension,
- provide guidelines to develop own supplementary LTSM e.g. worksheets, games, flashcards, etc.,
- suggest ideas for experiments and demonstrations,
- provide an answer key, and
- provide details about assessment strategies.
4.5.3.6 Meeting the requirements of the Revised National Curriculum Statement (RNCS)

4.5.3.6.1 Explanation

The Revised National Curriculum Statement has been shaped by political, social, economic and pedagogical influences, which played a determining role in the selection of values, pedagogical expectations and skills. The RNCS challenges the education community to ensure that particular values and a high level of skills are inculcated across the curriculum. It further advocates specific pedagogical expectations associated with outcomes-based education.

While authors may not be able to meet all the following criteria in the textbook for a single grade, they may be expected to do so over a period of at least three years. However, the evaluator should take cognisance of the expectations of the RNCS singled out for attention in the authors' rationale and check them against the criteria to see whether they in fact do receive attention.

4.5.3.6.2 Criterion cluster

Values
The development of the following values occur:

- Ubuntu.
- Aesthetic and cultural awareness to function effectively and sensitively in a multi-lingual and multi-cultural society.
- A sense of curiosity.
- Readiness to adapt to an ever-changing environment.
- Willingness to deal with the social, political and economic demands made on a South African.
- Responsibility towards the environment and the health of others.
- Motivation to explore education and career opportunities.

Pedagogical expectations
The following pedagogical expectations are in evidence:
• Learning activities are overtly planned to achieve learning area outcomes and, ultimately, the critical and developmental outcomes.

• The process of learning is promoted without neglecting the content.

• An interdisciplinary thematic approach, which allows for links to be established between the learning areas without neglecting conceptual progression occurring within each learning area, is followed.

• The following are embedded in themes:
  - an awareness of science and technology,
  - environmental awareness,
  - entrepreneurial activities,
  - health and social issues (including HIV/AIDS),
  - issues of social justice, inclusivity and human rights,
  - differentiated learning,
  - encouraging learners to become world citizens, and
  - whole-learner development (physical, intellectual, spiritual, moral & social).

• The principle of multi-dimensional learning, i.e. the advancement of knowledge, skills and values through the judicious use of learning content, is upheld.

• The principle of constructivist learning, i.e. an approach where the learner is encouraged to construct his/her own knowledge by pursuing his/her own fields of interest, is upheld.

• The principle of collaborative learning, i.e. that learners are organised into carefully structured and guided groups to share ideas, test solutions to problems, design and carry out experiments, and conduct teach-backs or peer teaching, is upheld.

• The principle of democratic learning, i.e. that learners are exposed to the kind of teaching and learning that encourages diverse thinking and freedom of expression, is upheld.

• A balance is struck in terms of the modalities of learning (listening, speaking, reading and writing).

• Visual literacy (understanding and interpreting illustrations, diagrams) is promoted.

• Learning experiences occur at ever increasing levels of complexity.
• The principle of *formative assessment* (i.e. the learner himself/herself, his/her teachers and/or his/her peers assess different kinds of oral and written work as they occur and at their completion without awarding marks or grades) is upheld while not altogether discounting *summative assessment* (i.e. a process during which work is tested and marked or graded to establish to what extent the assessment standards have been achieved).

**Skills**

Skills development includes the following:

- Communication.
- Problem-solving.
- Creative and critical thinking.
- Organising activities responsibly and effectively.
- Research.
- Study.
- Literacy.

### 4.6 SUMMARY

The purpose of this chapter was to describe the data collection, analysis and interpretation process. The data was derived from four sources, i.e. a national Department of Education’s Revised National Curriculum Statement (RNCS), its draft policy for learning support materials, and surveys of the perceptions of South African intermediate phase teachers and authors of South African intermediate phase school textbooks.

The RNCS and the draft policy are of the utmost significance to this investigation because they set out the priorities and expectations of the highest education authority in the country. The surveys were equally important because they afforded me access to the perceptions of teachers who use textbooks daily and of authors who produce them.
The RNCS enunciates six principles that guide its development. These principles and their relevance for this study were analysed in some detail and subsequently interpreted. A number of criteria emerged that would ultimately find their way into the proposed evaluation procedure. This was also the case with the draft document setting guidelines for developing, selecting and evaluating LTSM. Thereafter I dealt with the survey in terms of its design, sampling and its method of administration. The survey questionnaire was pilot tested and formed the basis of interviews with a sample of intermediate phase teachers. The survey questionnaire was subsequently applied to a sample of intermediate phase textbook authors.

As expected, the document analyses and the survey provided the opportunity for other criteria to emerge, which enabled me to give the theory about the practice of textbook evaluation resulting from the literature review a South African intermediate phase school textbook bias. The adjusted theory underpins the proposed evaluation procedure for evaluating South African intermediate phase school textbooks, thereby achieving the purpose of the study.

4.7 ABOUT THE NEXT CHAPTER

Chapter 5 describes the development of a procedure to empower South African teachers and textbook evaluators to evaluate intermediate phase school textbooks in a coherent manner, thereby achieving the goal of this study.
CHAPTER FIVE

AN EVALUATION PROCEDURE FOR SOUTH AFRICAN INTERMEDIATE PHASE SCHOOL TEXTBOOKS

5.1 INTRODUCTION

The purpose of this chapter is to devise a procedure for evaluating South African intermediate phase school textbooks based on the adjusted theory about the practice of textbook evaluation articulated in Chapter 4. The following steps will be taken to achieve this goal:

- Originating a procedure for evaluating South African intermediate phase school textbooks.
- Devising and refining a format for evaluating South African intermediate phase school textbook.

5.2 ORIGINATING A PROCEDURE FOR EVALUATING SOUTH AFRICAN INTERMEDIATE PHASE SCHOOL TEXTBOOKS

5.2.1 Introduction

Citing Forrester (1970), Chambers (1995: 29) states there are essentially two types of models: ‘fuzzy’, ... unstated models we all carry in our heads, and ‘explicit’ models that are stated and overtly produced in one form or another. Or as McDonough and Shaw (1993: 63) aver, the options to choose textbooks vary from totally free to extremely circumscribed. The first model, says Chambers (1995: 30), relies on what educators glibly refer to as “professional judgement and expertise”, while at the other extreme we find “highly precise, mathematical systems”.

237
Being a middle-of-the-roader by inclination, I am not comfortable with either of these radical options. Moreover, I know that South African intermediate phase teachers and authors of intermediate phase textbooks are prejudiced in favour of a procedure that is concise, practical and as comprehensive as possible. The object of this and the following sections is to propose a practical, systematic procedure for evaluating South African intermediate phase school textbooks.

5.2.2 The principles underpinning an evaluation procedure

This study has produced a South African version of a theory about the practice of textbook evaluation, which postulates that two sets of theoretical considerations are liable to impact on intermediate phase school textbook evaluation in South Africa. The first set includes a number of key issues about textbook evaluation, i.e. the process of evaluation, the logical difference between analysis and evaluation, the development of criteria, the checklist, and the context of evaluation. The second set includes factors affecting the quality of a textbook, i.e. the composition of the authoring team, the authors’ rationale, the authors’ understanding of the process of learning and instruction, accessibility, teacher support, and the authors’ observance of the Revised National Curriculum Statement.

The theory draws attention to the following principles about textbook evaluation, which, in turn, exerted a fundamental impact on the format of the evaluation procedure:

- South African intermediate phase teachers and authors of intermediate phase textbooks need an evaluation procedure that is brief, practical to use and yet comprehensive in its coverage of criteria.
- The concepts of analysis and evaluation are logically different, yet they may complement each other in a single procedure. The analysis focuses the evaluator’s attention on observable aspects of the textbook that need to be taken into account when evaluating what their effect on the target group might be.
• The South African education system dictates that pre-use evaluation of textbooks in order to predict their possible value for the target group, is the most appropriate method of textbook evaluation.

• Pre-use evaluation involves gaining an impression of what the textbook contains, and, if it appears to meet expectations, to subject it to closer scrutiny by using a checklist of criteria.

• Despite its shortcomings, a checklist is widely recognised as the most efficient way of systematically gathering comparable data about a textbook. A checklist necessitates that specific criteria ought to be organised into general categories that are subsequently sequenced, providing for both analysis and evaluation. Moreover, it proposes a format of prompts and responses, combining questions with a “yes”, “no”, “not applicable” response and a rating scale permitting qualitative judgements to be made, weighting items perceived as more important than others, explaining unfamiliar concepts, revising it (the checklist) after a process of trialling, and requiring group evaluation of the same textbook using the same procedure.

There is little doubt in the minds of South African officials, intermediate phase teachers and the authors of intermediate phase school textbooks that the checklist method is the most appropriate procedure for conducting pre-use evaluations of South African intermediate phase school textbooks.

A checklist is defined as “a list for reference and verification” (Thompson, 1995: 224). The procedure for textbook evaluation proposed by this study is more than a method for reference and verification. It also contains the element of measurement. For that reason I prefer to identify the procedure as an evaluation instrument for South African intermediate phase school textbooks.

I concede that a textbook evaluation instrument is not a watertight procedure. Tyson-Bernstein (1989: 86) is highly critical of “textbook rating checklists” because they have a way of “crowding out thought.” She argues that if the book appeals to politicians, professors, administrators, or even teachers but students
find it too simple, too advanced, boring, frustrating, or unclear, then the book is not a good book, regardless of what anybody else thinks.

On the other hand, McGrath (2002: 40) contends that the checklist (or evaluation instrument) is the most efficient way of gathering comparable data systematically. Woodbury (1979: 92) agrees. She argues that an evaluation instrument will never succeed in bringing together all the necessary information since evaluation is a “multi-dimensional process involved with choice, values and need” and may result in promising books not being chosen. Nonetheless, she believes that they are useful as “attempts to arrive at universal minimum consumer standards for educational products”, and reminds us that evaluation instruments, based on pre-specified criteria, provide the means to examine meticulously and predict the effectiveness of instructional materials (including textbooks) in school situations.

The evaluation instrument to assess the worth of South African intermediate phase school textbooks in a consistent manner represents the achievement of the aim of this research project.

5.3 THE FORMAT OF THE EVALUATION INSTRUMENT

5.3.1 Introduction

I have already explained that Dr Susan Klein (quoted by Woodbury, 1979: 103) of the US National Institute of Education has coined the phrase “criterion cluster”, which refers to a major textbook attribute that is broken down into specific criteria.

The specific criteria are in the form of statements with which an evaluator may agree or disagree as in Table 5.1, or questions as in Table 5.2
Table 5.1 - Criterion cluster A

J. Guidelines for teachers
1. Teacher’s guidebook is available.
2. Teacher’s guidebook provides needed assistance.
3. Answer key is available
4. Goals and objectives of text are clearly stated.
5. Alternative materials are suggested for use with students.

(Source: Tyson-Bernstein, 1989: 80.)

Table 5.2 - Criterion cluster B

II. ORGANIZATION OF MATERIALS (SCOPE AND SEQUENCE)
A. What is the scope of content covered in the materials?
B. How is the scope of the materials organised?
C. Is there a specified sequence in the material?
D. What is the basis for the suggested sequence?

(Source: Woodbury, 1979: 95)

The Sussex (UK) scheme for the analysis of published curriculum materials (reproduced by McCormick, 1981: 8), on the other hand, is more open-ended. Questions containing action verbs such as “state”, “summarize”, “describe”, “list”, and so on imply that fairly detailed responses are expected of evaluators.

While some of the evaluation instruments are elaborate, ranging from 12 to 26 specific criteria per criterion cluster, between 4 and 6 appears to be the norm.

5.3.2 Rating systems

US rating systems vary from specific criteria simply requiring a “yes” or “no” or “not applicable to” (Table 5.3), through a system requiring a tick (denoting a positive response) or cross (denoting a negative response) as shown in Table 5.4, to a major textbook attribute requiring the respondent to rate it on a six-
point scale (Table 5.5). The English seem to prefer more elaborate written responses.

Table 5.3 - Criterion cluster C

<table>
<thead>
<tr>
<th>K.</th>
<th>Teacher’s guidebook</th>
<th>Yes</th>
<th>No</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Teacher’s guidebook is available.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Teacher’s guidebook provides needed assistance.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Answer key is available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Goals and objectives of text are clearly stated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Alternative materials are suggested for use with students</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source: Tyson-Bernstein, 1989: 80)

One of the evaluation instruments (Table 5.4) asks the respondent to place a tick on the blank next to each specific criterion that accurately describes the textbook under review. If a specific criterion is not applicable, “NA” is placed next to it. Books receiving the greatest number of ticks divided by the total number of applicable specific criteria should receive the highest rank for selection.

Table 5.4 - Criterion cluster D

Materials should provide for the development and enhancement of creative and independent thinking.

This material provides

<table>
<thead>
<tr>
<th></th>
<th>activities and experiences that promote exploration, problem-solving and/or discovery;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>for the stimulation of discussion, process, and interaction;</td>
</tr>
<tr>
<td></td>
<td>activities that provoke thinking, discussing, and discovering insights into occurrences and periods of time;</td>
</tr>
<tr>
<td></td>
<td>suggestions for study which promotes and stimulates original thinking;</td>
</tr>
<tr>
<td></td>
<td>a presentation of subject-matter that encourages students to think out solutions rather than to memorise specific facts.</td>
</tr>
</tbody>
</table>

(Source: Woodbury, 1979: 81)
Table 5.5 shows an item in the third type of rating system encountered. The instrument contains five constructs or major textbook attributes, broken down into a number of related questions. Using the questions as a guide, each construct is rated on a six-point scale.

Table 5.5 - Criterion cluster E

III. ORGANIZATION OF MATERIALS (SCOPE AND SEQUENCE)
A. What is the scope of content covered in the materials?
B. How is the scope of the materials organised?
C. Is there a specified sequence in the material?
D. What is the basis for the suggested sequence?
E. On the scale below, rate the scope and sequence of the material.
   Please circle an exact point.

| Scope inadequate, sequence | 1 | 2 | 3 | 4 | 5 | Scope adequate for grade or not logical or incomplete group, sequence tasks carefully interrelated and planned. |

(Source: Woodbury, 1979: 95)

After completing the instrument, the value of each construct is plotted on a simple graph to provide a profile of each book under review as shown in Table 5.6.

Table 5.6 - Rating graph

A profile of two mathematics textbooks
5.3.3 Design principles of the evaluation instrument

5.3.3.1 Configuration

The configuration of my evaluation instrument has been derived from two main sources. The first and most significant are the criterion clusters. The second is an adaptation by the Far West Laboratory for Educational Research and Development of Louise Tyler’s “Recommendations for curriculum and instructional materials” (Tables 5.5 and 5.6) and Susan Klein’s concept of “criteria clusters”, which is described by Woodbury (1979: 95).

5.3.3.2 Phrasing items

Cunningsworth (1995: 1) argues that the key to determining whether a textbook is suitable lies in “asking the right questions first and then evaluating the answers which result from this process”. This implies that the criteria ought to be phrased as questions. Tomlinson (1999: 12) underscores this when he recommends that criterion statements be “converted into questions for use as instruments of evaluation”.

But it is Tomlinson’s (2003: 16) assertion that there is a difference between analysis and evaluation questions that has a direct bearing on the phrasing of the items in the evaluation instrument. He argues that an analysis question requires an objective response. It “asks questions about what the materials contain, what they aim to achieve and what they ask learners to do”. Analysis questions such as “Do the writing activities specify a purpose and an audience”, therefore elicit a “Yes/No” reply. On the other hand, an evaluation “makes judgments about [the] effects [of teaching materials]” and is therefore essentially
subjective. For example, a question such as “Are the activities challenging?” can be answered on a continuum from “Very unlikely” to “Very likely” (Tomlinson, 1999: 12). “A good analysis,” he continues, “… if it is successful it provides a detailed summary of the materials, which can be used for other purposes. Table 5.7 shows that the evaluation instrument accommodates both the aspects of analysis and evaluation. It first analyses the textbook in terms of an attribute and subsequently evaluates it in terms of the same characteristic.

5.3.3.3 Flexibility

The instrument must accommodate varying values and needs and the fact that the criteria used may not be congruent with a particular textbook (Woodbury, 1979: 92). The individual using the instrument must therefore have the option of leaving out the sets of criteria he/she regards as inappropriate. The directions for use states this clearly before the evaluation process commences.

5.3.3.4 Brevity

Woodbury (1979: 92) warns against instruments for evaluation that are time-consuming, disproportionately long and unwieldy because they often do not succeed in conveying the essential worth of the material they attempt to evaluate. “A briefer, more cogent descriptive analysis,” she declares, “can often be more helpful for selection”. I have made a conscious effort to deliver as brief an instrument as possible.

5.3.3.5 Acknowledging the expertise of the users.

One should never underestimate the intelligence or professional insight of education officials and teachers by including minutely detailed criteria. For example, after more than five years’ exposure to the new curriculum, spanning reams of documentation and countless in-house discussion groups, learning area committee meetings, workshops, seminars, and pre- and in-service training courses (to name the most obvious), any education official or teacher worth his or her salt would be fully conversant with the fundamentals of
outcomes-based education or the language ability of intermediate phase learners or the critical and developmental outcomes, etc. Therefore, to define the concept of integration, or to list the critical and developmental outcomes or aspects of language that are beyond the understanding of the average intermediate phase learner, should be unnecessary. I have, however, taken the liberty of defining at least a few terms that are likely to be unfamiliar to the person using the instrument.

5.3.3.6 Avoiding ambiguity

It is imperative that the items be clearly and unambiguously formulated. While no rules for writing criteria items exist, Sudman and Bradburn (1982: 2) provide a “tentative formulation” of a few principles, which I have found useful:

- Early items should be easy and non-threatening so as to set the evaluator at ease.
- The use of emotive and “non-neutral” words is inclined to influence evaluators to produce a response consciously or unconsciously desired by the publisher.
- If items are demeaning, embarrassing or upsetting, evaluators might terminate the evaluation or falsify their answers.
- Abstract concepts must be formulated in such a way that the evaluator understands them.

5.3.3.7 Objectivity

Woodbury (1979: 93) warns against a number of pitfalls when using an evaluation instrument, including the following:

- “The problem of measurability haunts evaluation” – particularly where qualitative issues are concerned. It may also lead to a distortion of the book’s objectives in order to enhance measurability.
- “Less rigorous evaluations have … defects which include … inconsistent reporting”.
- “The personal testimony of participating (in the evaluation) teachers almost always yields positive evaluations … “
Although it was difficult to achieve, I have made an attempt at objective, qualitative textbook evaluations by recommending that it should be conducted by a panel of evaluators using the same instrument.

5.3.4 Structure of the evaluation instrument

5.3.4.1 Introduction

An evaluation instrument involving directions for use and criterion clusters encapsulating the six attributes of effective textbooks, a brief explanation and specific criteria associated with each one, has been derived from the foregoing.

5.3.4.2 The relative value of criterion clusters

In view of the fundamental role of the RNCS in the South African educational environment, it seems justified to assign a greater value to the criterion cluster “meeting the requirements of the RNCS” than the other clusters. Moreover, the fact that “meeting the requirements of the RNCS” contains 43 criteria compared to an average of 10 per other cluster, confirms its relative worth. The investigation of UK and US evaluation instruments, however, produced no evidence concerning the relative value of criterion clusters, nor could I find empirical evidence to justify such a measure. Assigning a numerical value to each criterion cluster would therefore be an arbitrary option. Instead, the solution lies in breaking up the criterion cluster “meeting the requirements of the RNCS” on the basis of its constituent components (values, pedagogical expectations and skills) to form three sub-criteria, each to be assessed separately. In so doing the criterion cluster assumes three times the value of the rest of the clusters. A further advantage lies in the fact that such a division would make the evaluation instrument less cumbersome.
5.3.4.3 A rating system

I am intuitively drawn to a rating system that is a blend of the types described in paragraph 5.4.9 and Tomlinson’s (2003: 16) conception of analysis and evaluation. The latter is instrumental in providing an instrument that requires respondents first to analyse a textbook in terms of certain criteria and subsequently to use their analysis to evaluate the textbook’s suitability in terms of a specific attribute. I am offering Tables 5.7 and 5.8 as examples.

Table 5.7 - The credentials of the authoring team

<table>
<thead>
<tr>
<th>Explanation</th>
<th>Each member of the credible, multi-racial authoring team must have formal qualifications in one of the disciplines mentioned in the criterion statement.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis</td>
<td>Does the authoring team have expertise in each criterion?</td>
</tr>
<tr>
<td></td>
<td>• learning area content,</td>
</tr>
<tr>
<td></td>
<td>• writing, i.e. converting content into readable prose,</td>
</tr>
<tr>
<td></td>
<td>• linguistics,</td>
</tr>
<tr>
<td></td>
<td>• typography,</td>
</tr>
<tr>
<td></td>
<td>• teaching the target group,</td>
</tr>
<tr>
<td></td>
<td>• didactics, and</td>
</tr>
<tr>
<td></td>
<td>• illustrating children’s literature?</td>
</tr>
<tr>
<td>Evaluation</td>
<td>On the scale below, rate the extent of the expertise of the authoring team by circling the appropriate number. Then transfer your rating to the graph (see Annexure D).</td>
</tr>
<tr>
<td></td>
<td>The authoring team</td>
</tr>
<tr>
<td></td>
<td>is entirely lacking in expertise</td>
</tr>
<tr>
<td></td>
<td>has excellent credentials</td>
</tr>
</tbody>
</table>

After the completion of the instrument, the value of each of the six conditions for efficacy is plotted on a simple graph to provide a profile of each book under...
review. The norm could be set at number 4 and represented by a solid horizontal line on the graph. The graph would enable the teacher or evaluator to see at a glance how a book’s attributes have been rated and how it compares with the other books under review. Clearly, Textbook 2 is rated best in the example shown in Table 5.8 below.

**Table 5.8 - A profile of the textbooks under review**

<table>
<thead>
<tr>
<th>RATING</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6.1</th>
<th>6.2</th>
<th>6.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATTRIBUTE</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6.1</td>
<td>6.2</td>
<td>6.3</td>
</tr>
<tr>
<td>Textbook 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textbook 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textbook 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Rating 4 is the norm. All ratings on or above it indicate levels of acceptability, while those below denote levels of unacceptability.

### 5.3.5 Refining the evaluation instrument

The last phase of the evaluation instrument development process was to subject the instrument to a trial in order to refine it. This involved applying the instrument to at least one intermediate phase school textbook produced by South African publishers. According to McGrath (2002: 51), a realistic trial would involve the designer (me), or preferably someone else, using the instrument to evaluate a textbook.
Three persons were involved in trialling the instrument: Reinette du Toit, an outstanding young intermediate phase teacher at Woodhill College, Pretoria East, Joe Pretorius, a vastly experienced former primary school teacher, principal, curriculum developer and highly valued colleague at the erstwhile Natal Education Department, and I. The instrument was evaluated in terms of the following questions:

- Is the wording of the items easy to understand?
- Are there ambiguous items?
- How applicable are the items? Are they worth including in the instrument?
- Are there items that can be conflated into one?
- Are there aspects of the textbook that are not addressed by the measuring instrument?
- Have unimportant aspects been addressed by the measuring instrument?
- Is there anything else that occurs to you – positive and negative?

My own evaluation brought the following to light:

- In accordance with the views of authors such as McDonough and Shaw (1993), Cunningsworth (1995), McGrath (2002) and Tomlinson (1999, 2003), the evaluator must conduct a cursory assessment of the textbook before administering the instrument. As indicated elsewhere, this may be done by reading the “blurb” and table of contents (McDonough and Shaw, 1993: 67), the author’s introduction. This is necessary to obtain an overall impression of the structure and contents of the textbook. If the textbook passes the test, a more detailed analysis and evaluation is done. The following point has been added to the directions for using the evaluation instrument: “You are advised to read the “blurb”, in which the author/publisher enunciates the aims and objectives of the book. Thereafter the table of contents may be examined to establish whether the aims have indeed been accommodated. One may use the foreword and a brief perusal of a single chapter/module/unit or
the same purpose, noting aspects such as organisation, topics, layout and visuals.”

- The evaluator must remain focused on the evaluation criteria. It is easy to be side-tracked by embellishments such as appealing illustrations, inventive layout, and activities that, while interesting and stimulating, do not meet the fundamental requirements of the process of learning and instruction. The evaluation instrument was adapted by adding the following point to Directions for use: “You are advised to be aware of an inclination to become side-tracked by aspects such as appealing illustrations and activities that, while interesting and stimulating, do not necessarily result in effective learning.”

The second evaluation elicited the following comments by Du Toit (2004):

- “I initially skimmed ['impressionistic overview' (Cunningsworth, 1995: 1)] through the book before really analysing one module in depth [according to McDonough and Shaw (1993: 75), the evaluator needs to examine at least two units – preferably more]. The evaluation took about an hour to complete.”
- “The wording of the items is easy to understand. The brief definition of some terms certainly helped.”
- “The items [criteria] are definitely all applicable – but also depends on the type of book you are assessing. I would like to suggest the insertion of a column for N/A [not applicable], which can be ticked if a criterion does not apply to the book being assessed.” [A third button was inserted in point 9, Directions for use, and items have been altered accordingly.]
- “The graph is a very good idea as the evaluation can be seen at a glance.”
- “Space for comments is insufficient.”]

The comments made by Du Preez (2004) have been dealt with as follows:

- Her first comment confirms my first observation, while the second part resulted in the following point 2 under Directions for use: “If the former meets your expectations, continue with a detailed evaluation, using this
instrument to scrutinize at least two (preferably more, if time permits) units/modules/chapters.”

- The evaluation instrument has accommodated her third comment.
- Her final comment has resulted in more space for written comment in the evaluation instrument.

The third evaluation elicited the following comments by Pretorius (2004)

- “A wide spectrum of relevant aspects necessary for a meaningful evaluation instrument has been included.”
- “Consider placing all word definitions at the start of a section”
- “Add to 4.3.2: ‘Does the linguistic style and tone meet the demands of the particular learning area?’ “
- “Section 5: delete ‘In the context of this study …’”

The comments made by Pretorius (2004) have been dealt with as follows:

- His second comment has resulted in the definition of the terms used being placed at the start of a section.
- His third recommendation has been included in the evaluation instrument.
- His fourth recommendation has been followed.

The actions resulting from the abovementioned observations led to further refinement in order to improve the potential of the evaluation instrument to accomplish what is intended.

5.3.6 The advantages and disadvantages of the evaluation instrument

5.3.6.1 Advantages

The evaluation instrument for South African intermediate phase school textbooks has several advantages over other less structured ways of selecting a textbook:
• It is structured in terms of a theory about the practice of textbook evaluation, which takes into account research results and the considered views of eminent commentators in various parts of the world.

• It is credibly South African, because South African official documentation, intermediate phase teachers and authors of intermediate phase textbooks have helped to give the theory a South African intermediate phase bias.

• It is explicit, which forces the evaluator to systematically reflect on what he or she is doing, helping in the decision-making process by reducing the “fuzziness of the logic” (Chambers, 1995: 34) associated with an intuitive evaluation.

• A panel of evaluators can use it, thereby maximising consistency in the application of criteria.

• Professional judgment should not be divorced from the process of evaluation. If a member of a panel of evaluators feels strongly enough that an evaluation is wrong, the option remains to question the outcome of an evaluation based on the evaluation instrument. The objection may even sway the other members of the panel, resulting in the rejection of the textbook in question. The advantage, according to Chambers (1995: 35), is that the judgment “will have been reached openly and hence more democratically, with all the benefits of accrued wisdom brought into the decision-making process”.

• Using the graph would not only enable an evaluation panel to compare their individual assessments at a glance, but also those of any number of competing textbooks.

5.3.6.2 Disadvantages

But the evaluation instrument also has disadvantages:

• Warnock’s (1967: 62) observation that evaluation implies the acceptance (my emphasis) of certain “standards, principles, or criteria of judgment” has important potentially negative consequences for the evaluation instrument. While a person may concede the presence of the features specified, no one is obliged to accept any given feature as a criterion.
This could lead to the partial or even total rejection of the evaluation instrument. While the results of the trialing of the instrument were most encouraging, it remains to be seen if its bona fides will be accepted by South African education officials, intermediate phase teacher publishers and authors of intermediate phase school textbooks at large. Authors and publishers, for example, may object to the range of competencies that are expected to be included in an authoring team. The average size of an authoring team is three. Publishers may argue that it may lead to large and clumsy authoring teams. Authors may bring pressure to bear on their publisher if the authoring team becomes too large, i.e. if three persons cannot be found who have expertise in content, teaching the target group, linguistics, writing, and didactics, because it will mean that they will have to be satisfied with a smaller share of the royalties.

- If publishers and authors reason that teachers can’t be bothered with the theoretical content of the authors’ rationale, it may cause a problem. The study argues that the authors’ rationale is as important for the authors as it is for the teachers. Not only does it enable the teacher to obtain an overview of what the textbook intends to achieve, it forces the author to work within self-imposed parameters.

- The typographical detail could be seen as too extensive, consequently losing credibility as a criterion for good quality intermediate phase school textbooks. For example, the sample of teachers and authors were somewhat divided about the nature and role of illustrative material, giving credence to Tomlinson’s (2003: 177) questions with regard to illustrations, i.e. “Do illustrations translate directly into learning?” and “How can illustrations be used to facilitate learning?”

- The booklet providing teacher support may need so much information that it becomes a bulky and uneconomical teaching methods handbook requiring as much insight, time and energy of the authoring team as the textbook itself.

- The list of criteria in Section 6 of the evaluation instrument could be seen as extensive and intimidating for the inexperienced or less capable teacher evaluating and selecting textbooks for his or her own use.
• The application of the evaluation instrument can be more time-consuming than an intuitive evaluation based on professional judgment. A thorough evaluation using the measuring instrument can take up to between one and two hours per textbook to complete.

5.3.7 In closing

The final Evaluation instrument for South African intermediate phase school textbooks has been enclosed as Annexure F

5.4 SUMMARY

The process of school textbook evaluation engenders two schools of thought. The first faction views textbook writing as a creative undertaking, and as such, deserving of an open-ended approach to evaluation. They disapprove of textbook rating lists, arguing that they are mechanistic and therefore unable to deal with the subtleties at stake. The second school agrees that textbook evaluation instruments are fallible. Nonetheless, they argue that such instruments allow consistent evaluations provided they are based on criteria that have been thoroughly researched. While I have aligned myself with the latter group as shown by the contents of this chapter, the evaluation instrument has been structured to give recognition to the common sense and experience of the evaluator.

5.5 ABOUT THE NEXT CHAPTER

The purpose of the next chapter is to reflect on the study and to make recommendations for future work in the area.
CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

This study set out to find answers to the question, “What would be an efficient and theoretically sound way to evaluate South African intermediate phase school textbooks?”

The following sub-questions applied:

- What are the theoretical considerations relevant to textbook evaluation?
- How do these considerations apply in the South African situation?
- How can these latter be applied to the development of a coherent evaluation procedure for South African intermediate phase school textbooks?

Chapter 3 reflects on the theoretical considerations of textbook evaluation as stated in the first question, Chapter 4 represents an endeavour to apply the theoretical considerations to the South African situation, and Chapter 5 contains the outcome of the process to develop a coherent procedure for the evaluation of South African intermediate phase school textbooks.

The purpose of this chapter is to reflect briefly on its most important conclusions, and to make recommendations for future research in the field of intermediate phase textbook evaluation.
6.2 CONCLUSIONS

6.2.1 Research methodology

The research method was underpinned by the interpretive research paradigm in terms of which relevant data were analysed and interpreted. Data comprised a literature review embracing both older and more contemporary sources in order to extract relevant data related to the quality of school textbooks and methods of evaluating their worth. This, in turn, led to the establishment of a frame of reference forming the basis of an analysis of documentary evidence emanating from the national Department of Education and interviews with samples of local intermediate phase teachers and authors of intermediate phase school textbooks, enabling me to design an evaluation procedure for South African intermediate phase school textbooks.

This being an interpretive study, I expended a great deal of effort analysing and interpreting the Revised National Curriculum Statement and the draft policy for learning support materials of the Department of Education. These documents play a decisive role in the final selection of school textbooks in South Africa. I also spent time, albeit to a lesser degree, investigating the features of current South African intermediate phase school textbooks to obtain a more holistic understanding of how things work at the proverbial chalk face of textbook production.

The interviews with a convenience sample of intermediate phase teachers (they were selected in terms of their accessibility and willingness to become involved in the research project), who are on the receiving end of textbook production, gave me a better, though conceivably incomplete, understanding of the way in which school textbooks affect their job. I expect that I would have obtained more information and better insight into their perspectives had I spent more time with them actually working through textbooks and more closely identifying the ways in which they either promote or detract from effective teaching and learning. Although the sample of teachers was relatively small, Fien and Hillcoat’s (1996: 28) point of view is that general principles and themes acquired in this fashion
may be transferred to other settings. Moreover, McMillan & Schumacher (1993: 373) assert that qualitative researchers need not be particularly concerned about generalizability because the understandings generated are invariably further investigated in subsequent studies. Nonetheless, while extremely difficult to administer, a more representative sample drawn from the total population of South African intermediate phase teachers would have been better.

The same problem with sample size applies to the investigation of the views of authors of intermediate phase school textbooks. The process was rather constrained because relatively few authors responded to my questionnaire. While those who responded provided invaluable information, issues currently affecting decisions about textbook production need further investigation.

Finally and with the benefit of hindsight, I realize that my experience in education and the publishing industry may have influenced my perspectives and may have affected the way in which I set about searching for greater clarity of the issues under review. It is entirely possible that I may have approached these issues with at least a few preconceptions. I am satisfied, though, that I have consciously tried to remain unbiased.

6.2.2 Textbook evaluation is a complex issue

Judging by teaching and learning materials (including textbooks) evaluation guidelines that have proliferated since the early 1980s through the efforts of reputable commentators such as McCormick (1981), Williams (1983), McDonough and Shaw (1993), Chambers (1995), Cunningsworth (1995), McGrath (2002) and Tomlinson (1999, 2003), to name but a few, school textbook evaluation, while a very important professional activity, is a complicated exercise.

Cunningsworth (1995: 5) blames the complexity of school textbook evaluation on a large number of variables that affect the usefulness of school textbooks. In turn, this gives rise to a substantial range of criteria that play a role in the evaluation process. In South Africa, for example, one such a variable is
Curriculum 2005 and its sequel, the Revised National Curriculum Statement. The new curriculum remains the cause of “confusion and anxiety” (Chisholm, 2000: 42) amongst teachers, education officials, authors and publishers despite concerted efforts to demystify it. This situation often results in the publication of unsuitable intermediate phase school textbooks, which are evaluated using inappropriate means.

Accepting the fact that the evaluation of textbooks is a complex undertaking implies acceptance of the fact that one method will not meet all the requirements, or address all the issues. In addition, it underlines the fact that choices need to be made in deciding on a particular method of evaluation.

6.2.3 The context of evaluation

Context is an influential factor in deciding about evaluation methods of South African intermediate phase school textbooks. While the situation in cash-strapped South Africa requires evaluation methods that are quick, comprehensive, cheap and as comprehensive as possible, it should not negate the need to consider other, more exact methods of evaluation. Further complicating factors are the divergent professional needs of the teachers and the complex educational needs of the learners, brought about by, amongst others, dissimilarities in socio-cultural background.

6.2.4 Methods of evaluation

There are three basic methods of textbook evaluation designated as pre-use, in-use and post-use evaluation. The latter two procedures are more comprehensive than the first. Here textbooks are trialed in the teaching situation and re-evaluated a suitable period after the pre-use approval. The various stages of evaluation are described as a cyclical process of evaluation. Various considerations apply when deciding which of these to focus on.

Although post-use evaluation is generally considered to be the best method of evaluation, conditions in South Africa, e.g. limited time (a whole array of new
policies have been put in place in a short space of time), large numbers of schools and learners, limited finances and an inadequate infrastructure, militate in favour of pre-use evaluation. Whichever method is used textbook evaluation remains an important function because “so much depends on making the right decisions” (McGrath, 2002: 13).

The evaluation instrument developed in this study represents a pre-use evaluation strategy to be applied to intermediate phase school textbooks in South Africa.

6.2.5 Evaluation and textbook development

Rubdy (2003: 47) describes a further option identified as “in-production” evaluation, which is based on a learners’ needs assessment during the production process. The evaluation instrument described in Chapter 5 does not deal explicitly with the expressed needs of the learners, suggesting an oversight that needs to be addressed to facilitate appropriate feedback to authors during the writing process. This could play a role in saving both time and money.

6.2.6 Using checklists as evaluation instruments

While the use of checklists as evaluation instruments enjoy widespread support, they are not devoid of deficiencies.

For the purpose of pre-use evaluation, there appears to be enough evidence to justify checklists as evaluation instruments. The evaluation instrument developed in this study hopes to be both cost and time effective, while at the same time being comprehensive and thorough. It represents a checklist type of approach that, because of practical considerations, probably is the only viable option in the current South African situation. It should, however, not limit research into the possibilities and wider applications textbook evaluation has for the production of high quality textbooks.
6.2.7 Opposing views regarding textbook evaluation

Chambers (1995: 29) refers to two extremes in the context of textbook evaluation. The first are undefined ideas we all carry in our heads, and the second are precise versions stated in minute detail. At the centre are those who agree that textbook evaluation instruments are fallible. Nonetheless, they argue that such instruments allow consistent evaluations provided they are based on criteria that have been thoroughly researched.

This study aligns itself with the latter group and consequently takes a centre-right stance by proposing a formal, principled, practical, systematic and rigorous evaluation instrument while leaving ample opportunity for judgments to be made in order to accommodate an element of subjectivity in the evaluation process.

6.2.8 Advantages and disadvantages of the evaluation instrument

From the conclusions listed above, it is evident that because of the complexity of the evaluation process, no single evaluation method can meet all requirements.

In the South African context the evaluation instrument has the advantage of being straightforward, easy to apply, comprehensive and cost effective. It has also taken cognisance of official South African documentation and the perceptions of South African intermediate phase teachers and authors of intermediate phase school textbooks, thereby replicating South African priorities.

One of its disadvantages lies in the fact that it advocates a pre-use approach to textbook evaluation, which is potentially subjective, impressionistic and superficial. It is also constructed around a set of attributes that necessitates the acceptance of these by the evaluator. In addition, the instrument requires the evaluator to make predictions about the textbook’s effectiveness with respect to student learning, without insight into the role of the textbook in the advancement of learning.
In the South African context it can be argued that the advantages outweigh the disadvantages. It is, however important to keep in mind the advantages of other methods of evaluation, so as not to see evaluation by means of the instrument as the only option.

6.3 **RECOMMENDATIONS FOR FUTURE RESEARCH PERTAINING TO INTERMEDIATE PHASE SCHOOL TEXTBOOK EVALUATION**

6.3.1 **Introduction**

The recommendations in this section fall into two categories, i.e. those applicable to the evaluation instrument, and those relating to general textbook evaluation issues.

6.3.2 **The evaluation instrument**

6.3.2.1 **The composition of the authoring team**

Various authors, including Woodbury (1979), Mc Cormick (1981) and Tyson-Bernstein (1989) have indicated that (largely unspecified) author attributes have an impact on the quality of school textbooks. Moreover, Van Rooyen (Blacquiere, 1995) and the Department of Education (Czerniewics et al., 2002) have identified specific competencies required by persons involved in learning materials development. Based on my own experience as an intermediate phase teacher, principal, curriculum developer and publisher, I am able to identify with the need for these competencies to play a role in the textbook authoring process. Samples of intermediate phase teachers and authors of intermediate phase school textbooks concur. While it is reasonable to expect authors of intermediate phase school textbooks to have expertise in various fields, the validity of assertions regarding the competencies and the way in which they are accommodated in the authoring process, are untested and therefore require further investigation.
6.3.2.2 The learning and instructional processes

At least two issues play a central role in developing learning activities in intermediate phase school textbooks. The first relates to time-honoured theories about learning and instruction espoused by educationists such as Bruner (1971), Gagné (1985), and others. The second, which is particularly relevant in the South African context, is Spady and Schlebusch’s (1999) contention that learning activities should be planned by starting with the critical and developmental outcomes identified by the RNCS and then systematically tracing back the steps that will be needed to achieve them. It therefore seems reasonable to suggest that the question, “How can learning activities in an intermediate phase school textbook be structured to maximise learning?” begs an answer.

6.3.2.3 Typographic issues

Hartley’s contention that typographic issues related to intermediate phase school textbooks are often more complex than those in higher education and Rowntree’s (1995: 163) observation that they are deserving of meticulous planning, suggest that further investigation into matters affecting the accessibility of the intermediate phase school textbook is required. For example, answers are needed to questions such as “How can the design (i.e. typesetting, illustrations and textual organisation) of an intermediate phase school textbook be used to facilitate learning?” and “How can the style and tone of an intermediate phase school textbook be used to facilitate learning?”

6.3.2.4 The development of values

Core African values such as solidarity, interdependence, communalism and obedience seem to be at variance with West European values of individualism, competitiveness and assertiveness, which are subscribed to by many South Africans. This gives rise to the research question, “How can a South African intermediate phase school textbook reconcile traditional African values and some of the West European values held by many South Africans?”
6.3.2.5 Other issues

Other questions that have emerged from this investigation, include the following:

- How can an authors’ rationale be written to meet the expectations of intermediate phase teachers?
- Can the evaluation instrument be applied to other teaching and learning materials?

6.3.3 General

6.3.3.1 Post-use evaluation

In the light of an expressed preference for post-use evaluation of textbooks, investigations into the relevance of this type of evaluation in South Africa need to be pursued.

6.3.3.2 Open-ended evaluation

A further issue that may be considered for investigation pertains to the role of open-ended intermediate textbook evaluation in South Africa.

6.3.3.3 Facilitating a paradigm shift in official thinking about textbook evaluation

How can South African education authorities be persuaded that there is more to textbook evaluation than time and financial considerations?

6.3.3.4 Evaluation and materials design

Much time and money can be saved if the textbook evaluation process is implemented in the production phase of the textbook. Whether and how this can
become feasible in the South African context is yet another matter for further research.

6.4 IN CLOSING

Many South African intermediate phase teachers believe that a good textbook is an essential aid to curriculum delivery because it offers them the security of a framework giving direction to the teaching-learning process. Educational publishers, who flood the market with an ever-increasing number of textbooks, share this perception, making the task of selecting suitable material a daunting experience. This study hopes to make a contribution to the matter of making informed and appropriate choices when selecting the right intermediate phase school textbooks and so to play a part in rectifying a situation that Venezky (1992: 443) describes as not having been well served by the academic community.
## ANNEXURE A

**AN ANALYSIS OF SOME US, UK AND SA TEXTBOOK EVALUATIONS**

<table>
<thead>
<tr>
<th>Criterion cluster</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cunningworth (1995: 3)</td>
</tr>
<tr>
<td></td>
<td>McCormick (1981: 8)</td>
</tr>
<tr>
<td></td>
<td>Potenza &amp; Monyokolo (1996: 4)</td>
</tr>
<tr>
<td></td>
<td>Tyson-Bernstein (1989: 80)</td>
</tr>
<tr>
<td>Composition of the authoring team</td>
<td>No details</td>
</tr>
<tr>
<td></td>
<td>Is information available about author’s credentials?</td>
</tr>
<tr>
<td></td>
<td>No details</td>
</tr>
<tr>
<td></td>
<td>Is the author qualified &amp; reliable in the field?</td>
</tr>
<tr>
<td>Authors’ rationale</td>
<td>Do the aims correspond with the aims of the teaching programme?</td>
</tr>
<tr>
<td></td>
<td>Are statements of purpose, aims or objectives included?</td>
</tr>
<tr>
<td></td>
<td>Does the author recognise learners’ ability &amp; prior knowledge?</td>
</tr>
<tr>
<td></td>
<td>No details</td>
</tr>
<tr>
<td>Authors’ observance of the process of learning and</td>
<td>What approaches to learning are taken?</td>
</tr>
<tr>
<td>instruction</td>
<td>Does coverage of knowledge, skills and attitudes occur?</td>
</tr>
<tr>
<td></td>
<td>Are accepted methodological principles applied?</td>
</tr>
<tr>
<td></td>
<td>No details</td>
</tr>
<tr>
<td>Accessibility</td>
<td>Is the layout clear?</td>
</tr>
<tr>
<td></td>
<td>Is the language matched to social situation?</td>
</tr>
<tr>
<td></td>
<td>Are activities suitable for learners’ ability levels, and cultural and</td>
</tr>
<tr>
<td></td>
<td>social contexts?</td>
</tr>
<tr>
<td></td>
<td>Is the presentation form of the material appropriate?</td>
</tr>
<tr>
<td></td>
<td>Is the structure of content, language and concept level coherent?</td>
</tr>
<tr>
<td></td>
<td>Is the book user-friendly and durable?</td>
</tr>
<tr>
<td></td>
<td>Statements about development of concepts, readability, layout and</td>
</tr>
<tr>
<td></td>
<td>presentation of material, graphic materials to enhance understanding.</td>
</tr>
<tr>
<td>Teacher support</td>
<td>Is there adequate guidance for teachers?</td>
</tr>
<tr>
<td></td>
<td>Are teacher materials available?</td>
</tr>
<tr>
<td></td>
<td>Guidelines for teachers are negotiable</td>
</tr>
<tr>
<td></td>
<td>Statements about a teacher’s edition</td>
</tr>
<tr>
<td>Meeting the requirements of the given curriculum</td>
<td>Does it meet external syllabus requirements?</td>
</tr>
<tr>
<td></td>
<td>Is the syllabus adequately covered?</td>
</tr>
<tr>
<td></td>
<td>Is the content compatible with the syllabus?</td>
</tr>
<tr>
<td></td>
<td>Statements about material fitting curriculum needs.</td>
</tr>
</tbody>
</table>
An analysis of some US, UK and SA textbook evaluations (continued)

<table>
<thead>
<tr>
<th>Criterion cluster</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composition of the authoring team</td>
<td>Author’s relevant training and expertise to be described</td>
</tr>
<tr>
<td>Authors’ rationale</td>
<td>Materials to provide for information about target population</td>
</tr>
<tr>
<td>Authors’ observance of the process of learning and instruction</td>
<td>Material to provide for individual differences, learning enhancement, creative thinking, assessment, various skills, logical sequencing</td>
</tr>
<tr>
<td>Accessibility</td>
<td>Material to meet certain technical requirements, learners’ needs and developmental level.</td>
</tr>
<tr>
<td>Teacher support</td>
<td>Materials to be compatible with teachers’ needs and priorities</td>
</tr>
<tr>
<td>Meeting the requirements of the given curriculum</td>
<td>Materials to meet curricular rationale, goals, objectives, scope and sequence.</td>
</tr>
</tbody>
</table>

Notes:

- “a”, “b”, “c” refer to three separate evaluation instruments reprinted by Woodbury (1979).
- Some of the evaluators state their criteria as questions, others as statements.
ANNEXURE B

The authors’ rationale

Preface

The aim of the Learning Platform series is to bring mathematics to life by involving learners in practical activities and experiences. The learners are guided to develop knowledge, understanding, skills, attitudes and values through this hands-on experience. The series consists of a Teacher’s Guide and a Learner’s Book and is intended to guide and support teachers and learners in the implementation of an outcomes-based approach to the Mathematical Literacy, Mathematics and Mathematical Sciences learning programme. This approach rejects the old ‘talk and chalk’ approach in favour of the lifelong learning brought about by the development of the curriculum around critical and specific outcomes.

Not all specific outcomes mentioned in the Teacher’s Guide are addressed in the Learner’s Book. These specific outcomes are applied in the Prior knowledge activities and other activities in the Teacher’s Guide, and are used to develop the knowledge and skills required to successfully do the Learner’s Book activities.

Through the continued use of the Learner’s Book, each learner is given the opportunity to demonstrate his/her individual level of mastered performance, gaining self-confidence and extending the skills acquired through the specific outcomes and assessment criteria in each unit. The series also makes provision for self, group and peer assessment using specific and objective formative strategies. Assessment is recorded in or at the back of the Learner’s Book as a personal graph.

The Learning Platform series is especially directed at assisting teachers and learners who may be geographically isolated and in need of support. Importantly, these books are not meant to be used as workbooks in which learners fill in identical answers. The learners each select their own activities and different outcomes are therefore guaranteed. The activities are functional, learner-centred, exciting and enjoyable, without neglecting the performance indicators which support knowledge and understanding of mathematics. Through these activities, learners develop a positive attitude towards mathematics and their own abilities to learn and achieve individually and as part of a group. Learners are transformed from passive receivers of information into active, thinking, communicating and creative individuals.

By becoming involved in the printed activities, the learners will have every opportunity to identify and solve problems and, with practice, will learn to make responsible decisions using critical and creative thinking.
Learners become sufficiently motivated to organise and manage themselves by completing the activities effectively. They gain experience in collecting, analysing, organising and evaluating the information. As members of the bee pairs or beehives they develop skills to communicate effectively. Through this interaction, learners learn to show responsibility and respect towards the environment and the health of others.

Because the learners do not write in this book, the *Learner's Book* may therefore be used over a number of years by different learners. This also affords the teacher the opportunity to repeat an activity with a learner/learners without the bother of not having a new workbook available. Duplication of worksheets becomes unnecessary and saves on resources.

The *Teacher's Guide* must be used in conjunction with the *Learner's Book* because they function like a lock and a key. The *Learner's Book* is the centre of discussions and skills application, but only relevant text has been included to enrich the language experience of the learners without over-emphasising reading skills. Further detail is always provided in the *Teacher's Guide*.

*The authors*

(Source: Engelbrecht et al., 2001: i)

5.5.1.4.1.1.1
ANNEXURE C

Helping learners to find their way into and around the text
Activity 1: PENGUINS IN THE NEWS

Read this newspaper report together with your educator and discuss the questions that follow:

Peter, Pamela and Percy survive the oil

On 12 June 2000, a large cargo ship, the Treasure, asked for shelter in Cape Town harbour – the beginning of what was to become a major oil-pollution disaster, but one with a happy ending.

The Treasure was carrying iron ore from Brazil to China and the captain thought that one of the ship’s holds was leaking.

The South African authorities inspected the ship but saw no damage. Inside the harbour, divers were unable to locate the ship underwater and found a large hole in the hull. The damage was immediately traced to Treasure’s hold for repairs at sea.

But on 23 June the Treasure sank in 50m of water near Muizenberg, leaking 460 tons of oil before divers could plug the hole. Too large a leak from the ship leaked against the water’s pressure and polluted beaches around Cape Town – and especially the ecologically sensitive beaches of Shelley Island and Danger Island. These islands are the breeding grounds for more than 100,000 penguin colonies in the world.

Penguins swim through oil, covering their bodies and feathers in a sticky coat. This damages the insulating properties against the cold and may be prevented by their feathers, and oil absorbed by their skins poisons their blood cells. They usually freeze to death.

Realising the extent of the threat, the South African National Foundation for the Conservation of Coastal Birds (SANCCOB) began a campaign to save about 60, 000 oil-soaked penguins. The whole world became involved in the struggle. International organisations such as The World Wide Fund for Nature (WWF) and the International Fund for Animal Welfare (IFAW) sent money and staff experts to help with penguins.

Some news media focused on their campaigns. There were many reports about what was happening in the newspapers, on radio, television and on the internet.

The penguins were washed clean and returned to Port Elizabeth. Penguins have a natural cleaning method. They always breed with the same partner – so they always go back home to breed. Because of the polluted water they were not allowed to go home and they stayed elsewhere for a few days. Some divers worked on the task of cleaning up the penguins, while others stayed on the boats. Workers dressed in protective suits cleaned up the oil. Black oil damaged colonies, like penguin nesting sites.
SANCCOB chose three out of the thousands of penguins and gave them names. Peter, from Robben Island, was named after stories of a finger-slashing penguin written by a scientist at the University of Cape Town. Pamela was the first girl’s name with a “p” that came to mind. The collection boxes used by SANCCOB are called “percys”, and so the third penguin was named Percy. Pamela and Percy came from Dassen Island.

track of them. Peter, Pamela and Percy were set free a few days apart and the whole world read daily reports of their long swim home. Everyone worried about sharks and seals because they eat penguins.

This real-life conservation story had a happy ending. Peter arrived safely at Robben Island on 18 July 2000. Percy arrived a day later, followed a few days later by Pamela. It took nearly three months, about 25 thousand volunteers and fifty-five million rands to get all the penguins home safely. The campaign became known as an international success story. Only 10% of the oiled penguins lost their lives. In the previous oil spill in 1996, 50% of the oiled penguins died.

For more information about the penguins, go to these websites:
http://www.sanccob.org/
http://www.snmp.org/
http://www.pen.x.co.za/
ANNEXURE C (CONTINUED)

Build your word power

1. Look at the words that have been underlined.
2. See if you can work out what they mean by looking at how they are used in the report.
3. Look up the words in the dictionary at the back of the book to see if you are right.

What do you think?

The disaster with the penguins makes us think about our environment and how important it is to look after it. Here are some ideas that relate to the environment and this story. In your groups, discuss what these ideas mean. If you are not sure, then look them up in the dictionary at the back of your book:

- oil pollution
- endangered species
- nature conservation

Source: Du Plessis et al., 2001: 111)
ANNEXURE D

Various typographical features

Nina and Samantha’s parents were chimps donated to the zoo by Emery University in the United States five years ago. Rajah’s parents were Bengal tigers donated to the zoo by a nature reserve in Malawi. Rajah and his older brother, Shariff, were both born at the zoo and rejected by their parents.

How well did you understand?

- Why did Rajah and Nina live at the Roux’s house?
- Why did people stop and stare at Nico Roux on his way to work?
- What is so unusual about the friendship between Rajah and Nina?
- Why did the authorities decide to split them up?
- Rajah and Nina’s parents had something in common. Can you discover what that is from the passage?
- Why do you think their parents rejected them at birth?

(Source: Du Plessis and Richards, 2000: 40)
ANNEXURE E

QUESTIONNAIRE

PREAMBLE

- I am currently engaged in a doctoral study at the University of Port Elizabeth, investigating the effectiveness of intermediate phase textbooks.

- As an experienced intermediate phase teacher or author, I am sure you know a good textbook from a bad one. I shall therefore be asking you questions about the evaluation of intermediate phase school textbooks.

- Some questions are forced-choice questions and some are open-ended.

- Your responses will help me to design an evaluation procedure that is intended to enable teachers and education department officials to determine the effectiveness of intermediate phase textbooks.

- Your answers will be treated as confidential.

<table>
<thead>
<tr>
<th>Details of respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
</tr>
<tr>
<td>Institution</td>
</tr>
<tr>
<td>Town/City</td>
</tr>
<tr>
<td>Province</td>
</tr>
</tbody>
</table>
1 Key notions about textbook evaluation

1.1 In your view, what key issues need to be addressed when evaluating an intermediate phase school textbook?

2 The composition of the authoring team

The credibility of the authors of an intermediate phase school textbook is closely allied to their expertise.

2.1 Please place a v in the box next to the statement you find most acceptable.

1 A textbook should be written by one or more learning area specialist(s). For example, mathematicians should write mathematics textbooks, social scientists should write social sciences textbooks, and so on.

2 A textbook should be written by a team made up of the following experts:
   - A learning area specialist (a mathematician or a social scientist and so on)
   - A linguist (someone who has made a scientific study of South African languages and their structure).
   - A typographer (someone who specialises in book printing and layout).
   - A teacher who teaches the target group.
   - A didactitian who has a thorough understanding of outcomes-based education and the Revised National Curriculum Statement.
2.2 Answer the following question ONLY if you chose the second statement in Item 2.1. Place a v in the box of your choice.

Would you like to extend the list of experts? Please v “yes” or “no”.

1  Yes
2  No

2.3 If your answer to the previous item is “yes”, what should their field of expertise be?

2.4 Please comment on the authors’ credentials dealt within this section.

3.  The authors’ rationale

The purpose of the authors’ rationale is to enable the teacher to obtain a clear picture early on of what the textbook is intended to achieve.

3.1 Please rate the following statements that deal with the authors’ rationale. Put 1 in the box against the one that you think is most important, 2 in the box against the one that you think is the second most important, and so on.

1  The authors must explain the educational philosophy underpinning their textbook.
2  The authors must describe the learners for whom the textbook is intended, particularly with regard to their previous learning and their current experience of the world.
3  The authors must declare what outcomes they wish the learners to achieve.
3.2 What other information should the authors provide in their rationale in addition to those mentioned in Item 3.1, and where should it appear in your rank order?

3.3 Please comment on the aspects of the authors’ rationale described in Items 2.1 and 2.2.

4. The authors’ observance of the process of learning and instruction

Credible theories of learning and instruction propose that distinct events of instruction (or learning activities) occur in the classroom.

4.1 The events of instruction that may appear in a textbook are stated below. In what sequence would you prefer these events of instruction to occur in a textbook? Put 1 in the box against the one that should occur first, 2 in the box against the one that should occur second, and so on.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Linking prior learning with current learning.</td>
</tr>
<tr>
<td>2</td>
<td>Learners working with the new knowledge, skills and values.</td>
</tr>
<tr>
<td>3</td>
<td>Gaining the learners’ attention.</td>
</tr>
<tr>
<td>4</td>
<td>Presenting new knowledge, skills and values.</td>
</tr>
<tr>
<td>5</td>
<td>Explaining new and difficult words.</td>
</tr>
<tr>
<td>6</td>
<td>Informing learners of the intended learning area outcomes and assessment standards.</td>
</tr>
<tr>
<td>7</td>
<td>Learners using new knowledge, skills and values in new Situations</td>
</tr>
<tr>
<td>8</td>
<td>Providing learners with feedback.</td>
</tr>
<tr>
<td>9</td>
<td>Assessing learners’ work.</td>
</tr>
<tr>
<td>10</td>
<td>Informing learners of the intended critical and developmental outcomes.</td>
</tr>
</tbody>
</table>
4.2 What other events of instruction should appear in a textbook in addition to those mentioned in Item 4.1, and where should they appear in your rank order?

4.3 Please comment on the events of instruction described in Items 4.1 and 4.2

5. Accessibility

A textbook is accessible if it is easy for the learners to find their way into the text, and to find their way about in it. Factors determining accessibility include typography (the style and appearance of a textbook), readability, linguistic style and tone, the authors’ assumptions and the availability of guidelines for teachers.

5.1 Below are statements about the typography of a textbook. Please place a v in the boxes next to the statements with which you agree.

1. The binding and cover must be sturdy.
2. It must be printed on 70 – 80 gsm, off-white, uncoated, matt paper (similar to the paper used for this questionnaire).
3. Its format must be A5.
4. Its layout must be single-column, portrait type.
5. The font used must be 12-point serif (e.g. Times New Roman)
6. An orderly system of access devices (e.g. index, headings, a consistent numbering system, verbal & visual signposts, summaries and a glossary) must be inserted in the text.
7. The text must be grouped in units of meaning.
8. The best kind of illustrations are artists’ line drawings in black and white.
9. The illustrations must be placed close to the text referring to it.
10. Printing and illustrations must be spaced in such a way that the pages appear uncluttered.
5.2 What would you like to add to the statements in Item 5.1?

5.3 Please comment on the issues relating to the typography of a textbook dealt with in Items 5.1 and 5.2.

5.4 Readability refers to the ease with which a learner is able to understand the meaning of and interact with the content of a textbook.

Please rank the following statements in your order of preference. Put 1 in the box against the one that should appear first, 2 in the box against the one that should appear second, and so on down to the last one.

1 The language competence of the learners must be taken into account.
2 The text must show logical progression of ideas.
3 The authors should apply at least one readability test.

5.5 What would you like to add to the statements in Item 5.4?

5.6 Please comment on the issues of the readability of a textbook described in Items 5.4 and 5.5.

5.7 Do you agree with the following statement about the style and tone of a textbook? v “yes” or “no”.

The linguistic style and tone of an intermediate phase textbook must be similar to the linguistic style and tone of children’s fiction.

1 Yes
2 No

5.8 Give reasons for your response to Item 5.7.
5.9 Please rate the following statement. Place a v in the box of your choice.

*The accuracy of the authors' assumptions about the target group is best exemplified by their (the authors') ability to relate the events of instruction (learning activities) to the learners' previous learning and their current experience of the world.*

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I strongly agree.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I agree.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I am unsure.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>I disagree.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.10 Please give reasons for your response to Item 5.9.

6. Teacher support

6.1 *It is often stated that guidelines for teachers enable teachers to use a textbook in the way it is intended.*

Please place a v in the box next to the statement with which you agree.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Guidelines for teachers are not needed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Guidelines for teachers should be provided in a separate booklet.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Guidelines for teachers should NOT be provided in a separate booklet, but should be integrated with the text in the textbook.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6.2 Please give reasons for your answer if you think that guidelines for teachers are NOT needed.

6.3 Respond to this item ONLY if you think that guidelines for teachers should be provided. Below are a number of aspects that teachers may
need guidance about. Please place a v in the boxes next to aspects that are indispensable.

- [ ] 1 Details about the intended learning outcomes and assessment standards.
- [ ] 2 Checklist of knowledge, skills and values to be dealt with.
- [ ] 3 How to motivate learners.
- [ ] 4 Alternative learners’ activities.
- [ ] 5 Alternative teaching strategies.
- [ ] 6 Assessment strategies.
- [ ] 7 Answer key.
- [ ] 8 Suggestions for enrichment, extension and remediation.

6.4 What other aspects of teacher guidance would you like to add to those mentioned in item 6.3?

6.5 Please comment on the guidelines for teachers dealt with in Items 6.3 and 6.4.

7 Meeting the requirements of the Revised National Curriculum Statement (RNCS).

The Revised National Curriculum Statement has been shaped by political, social, economic and pedagogical influences, which played a determining role in the selection of values, pedagogical expectations and skills. The Revised National Curriculum Statement challenges the education community to ensure that particular values and a high level of skills are inculcated across the curriculum. It further advocates specific pedagogical expectations associated with outcomes-based education. These values, pedagogical expectations and skills must be reflected in intermediate phase school textbooks to help intermediate phase teachers to deliver the new curriculum in a responsible manner.
7.1 In the light of the above statement, name at least five specific values that an intermediate phase school textbook should impart?

7.2 Can an intermediate phase textbook achieve the following pedagogical expectations broached by the RNCS? Use the continuum after each expectation to indicate the degree of achievement.

1. Selecting content in terms of the assessment standards. No 1 2 3 4 5 6 Yes
2. Encouraging divergent thinking. No 1 2 3 4 5 6 Yes
3. Presenting learning material at ever increasing levels of complexity. No 1 2 3 4 5 6 Yes
4. Pursuing learning area outcomes and assessment standards. No 1 2 3 4 5 6 Yes
5. Pursuing critical and developmental outcomes. No 1 2 3 4 5 6 Yes
6. Providing for learners’ individual learning styles. No 1 2 3 4 5 6 Yes
7. Enabling learners to create their own knowledge. No 1 2 3 4 5 6 Yes
8. Collaborative learning in groups. No 1 2 3 4 5 6 Yes
9. Differentiated learning. No 1 2 3 4 5 6 Yes
7.3 What other aspects would you like to add to item 7.2?

7.4 Please comment on the aspects dealt with in Items 7.2 and 7.3.

7.5 Name at least five skills that an intermediate phase school textbook should seek to develop.

7.6 Please comment on your response to Item 7.5.
ANNEXURE F

AN EVALUATION INSTRUMENT

FOR

SOUTH AFRICAN INTERMEDIATE PHASE SCHOOL TEXTBOOKS

<table>
<thead>
<tr>
<th>Date of evaluation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Title of textbook</td>
<td></td>
</tr>
<tr>
<td>Name of author(s)</td>
<td></td>
</tr>
<tr>
<td>ISBN</td>
<td></td>
</tr>
<tr>
<td>Name of evaluator</td>
<td></td>
</tr>
</tbody>
</table>
DIRECTIONS FOR USE

1. You are advised to read the “blurb”, in which the author/publisher enunciates the aims and objectives of the book. Thereafter the table of contents may be examined to establish whether the aims have indeed been accommodated. One may use the foreword and a brief perusal of a single chapter/module/unit or the same purpose, noting aspects such as organisation, topics, layout and visuals.

2. If the former meets your expectations, continue with a detailed evaluation, using this instrument to scrutinize at least two (preferably more, if time permits) units/modules/chapters.

3. You are advised to be aware of an inclination to become side-tracked by aspects such as appealing illustrations and activities that, while interesting and stimulating, do not necessarily result in effective learning.

4. In the interests of objectivity it is recommended that a panel of at least three evaluators using this instrument should evaluate the same textbook.

5. Some of the criteria used may not be congruent with a particular textbook or may even have become outdated. You therefore have the option of leaving out those you regard as inappropriate.

6. The evaluation instrument contains six sections.

7. Each section deals with a major attribute of an effective intermediate phase school textbook.

8. Firstly, an explanation of the attribute is provided in each section.

9. Subsequently, criterion clusters relative to each of the six major attributes have been given. Criterion clusters are intended as a checklist to help you to focus on worthwhile aspects of a textbook. The following should be noted:
   - A tick should be placed in a corresponding “Y” block if you find evidence that supports a criterion.
   - A tick should be placed in a corresponding “N” block if you do not find any evidence in the textbook that supports a criterion.
   - A tick should be placed in the corresponding “NA” block if the criterion is not applicable.
   - If you wish to write a comment about the criterion cluster, you may do so in the space provided.

10. Some of the terms used in the criterion clusters have been explained.

11. The evaluation of the textbook in terms of the attribute in question is done on the continuum provided. The continuum consists of a negative statement about the attribute, followed by numbers ranging from 1 to 6, followed by a positive statement about the attribute. Number 4 is the norm. All ratings on or above it indicate levels of acceptability, while those below denote levels of unacceptability. You are requested to scale your evaluation from negative to positive by circling one of the numbers.

12. Once you have completed the assessment, you may transfer each of the scaled evaluations to a simple graph (see annexure) in order to obtain an evaluation profile of the textbook. The graph may be used (a) to compare evaluations of the same textbook, and/or (b) competing textbooks may be compared in the same way.
SECTION 1
THE COMPOSITION OF THE AUTHORING TEAM

Definition of terms

Linguistics    A scientific study of South African languages and their structure.

Typography    Textbook layout and printing.

Didactics     Teaching method, particularly in regard to outcomes-based education and the Revised National Curriculum Statement.

Explanation
The multi-ethnic authoring team has proven expertise in the disciplines mentioned in the criterion cluster.

Analysis

1.1 Does the authoring team have proven expertise in
1.1.1 learning area content,
1.1.2 writing, i.e. converting content into readable prose,
1.1.3 linguistics,
1.1.4 typography,
1.1.5 teaching the target group,
1.1.6 didactics, and
1.1.7 illustrating children’s literature?

Your comments

Evaluation

By circling the appropriate number on the scale below, rate the extent of the expertise of the authoring team. Then transfer your rating to the graph on the last page.

The authoring team is entirely lacking in expertise

1 2 3 4 5 6

The authoring team has excellent credentials
SECTION 2
THE AUTHORS’ RATIONALE

Explanation
The author’s rationale places the textbook in the context of the curriculum and enables the teacher to obtain an overview of what it is intended to achieve. The authors’ rationale is usually stated in the foreword.

Analysis

2.1 Does the authors’ rationale provide

2.1.1 an explanation of the educational philosophy underpinning the textbook,

2.1.2 a description of the learners for whom the textbook is intended,

2.1.3 an overview of the topics/themes dealt with,

2.1.4 an overview of the content dealt with,

2.1.5 an indication of which expectations specified by the RNCS have been dealt with, and

2.1.6 a declaration about the intended learning outcomes including critical and developmental outcomes?

Your comments

Evaluation
By circling the appropriate number on the scale below, rate the extent of the comprehensiveness of the authors’ rationale. Then transfer your rating to the graph provided.

Authors have not stated their rationale

Authors have stated their rationale comprehensively

1 2 3 4 5 6
SECTION 3
THE AUTHORS’ OBSERVANCE OF THE PROCESS OF LEARNING AND INSTRUCTION

Explanation
The process of learning and instruction calls for distinct events of instruction (or learning activities) to occur in a logical sequence.

Analysis

3.1 Do the following events of instruction occur?  
3.1.2 Activities to gain the learner’s attention.  
3.1.3 Informing the learners of the intended learning outcomes.  
3.1.4 Relating current learning to prior learning.  
3.1.5 Explaining new and/or difficult words.  
3.1.6 Presenting new knowledge, skills and values.  
3.1.7 Requiring learners to demonstrate newly acquired knowledge, skills and values.  
3.1.8 Providing feedback.  
3.1.9 Assessing performance.  
3.1.10 Extension work.  
3.1.11 Applying new knowledge, skills and values.  
3.1.12 Self-assessment.

Your comments

Evaluation

By circling the appropriate number on the scale below, rate the extent of the authors’ observance of the process of learning and instruction. Then transfer your rating to the graph on the last page.

Authors have not observed the process of learning and instruction

Authors have observed the process of learning and instruction
SECTION 4
ACCESSIBILITY

Definition of terms

*Typography* The style and appearance of a textbook.

*Linguistic style and tone*  *Style* applies to the use of humour, being conversational, using stories, examples, etc. By *tone* is meant how the text ‘sounds’ to the reader, e.g. is it too simplistic or patronising or academic?

*Authors’ assumptions* The authors’ demonstrated knowledge about the learners’ previous learning and current experience of the world.

*Access devices* A system of numbering and symbols to assist the learners to find their way through a text.

Explanation

A textbook is accessible if it is easy for the learners to find their way into the text, and to find their way about in it. Factors determining accessibility include typography, readability, linguistic style and tone, and the authors’ assumptions.

Analysis

<table>
<thead>
<tr>
<th>4.1</th>
<th>Typography:</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1.1</td>
<td>Is the binding and cover sturdy?</td>
</tr>
<tr>
<td>4.1.2</td>
<td>Has 70 – 80 gsm, off-white, uncoated, matt paper been used?</td>
</tr>
<tr>
<td>4.1.3</td>
<td>Is the size approximately 180mm x 250mm?</td>
</tr>
<tr>
<td>4.1.4</td>
<td>Is the layout single-column, portrait-type?</td>
</tr>
<tr>
<td>4.1.5</td>
<td>Is the font and its size suitable for the age of the learners?</td>
</tr>
<tr>
<td>4.1.6</td>
<td>Has an orderly system of access devices been inserted in the text?</td>
</tr>
<tr>
<td>4.1.7</td>
<td>Is a suggested time allocation per event of instruction provided?</td>
</tr>
<tr>
<td>4.1.8</td>
<td>Is the text grouped in units of meaning?</td>
</tr>
<tr>
<td>4.1.9</td>
<td>Are the artists’ drawings and photographs functional?</td>
</tr>
<tr>
<td>4.1.10</td>
<td>Are the illustrations culturally appropriate?</td>
</tr>
<tr>
<td>4.1.11</td>
<td>Are the illustrations placed close to the text referring to them.</td>
</tr>
<tr>
<td>4.1.12</td>
<td>Are the printing and illustrations spaced in such a way that the pages appear uncluttered?</td>
</tr>
</tbody>
</table>
SECTION 4 (continued)

4.2 Readability:
4.2.1 Has the language competence of the learners been taken into account?
4.2.2 Does the text show logical progression of ideas?
4.2.3 Have the authors applied at least one recognised readability test?

4.3 Linguistic style and tone:
4.3.1 Is the linguistic style and tone similar to the linguistic style and tone of children’s fiction?
4.3.2 Does the linguistic style meet the demands of the learning area?

4.3 Accuracy of the authors’ assumptions:
4.3.1 Have the authors been able to relate the events of instruction to the learners’ previous learning and their current experience of the world?

Your comments

Evaluation

By circling the appropriate number on the scale below, rate the extent of the textbook’s accessibility. Then transfer your rating to the graph provided.

The textbook is not accessible

The textbook is accessible
SECTION 5
TEACHER SUPPORT

Explanation

Teacher support enables the teachers to fulfil their need to use a textbook in the way it is intended. This calls for a separate book containing guidelines to help teachers to become familiar with the vision of the authors and to understand their conceptual goals.

Analysis

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>Do the guidelines for teachers</td>
<td>Y</td>
</tr>
<tr>
<td>5.1.1</td>
<td>double as a resource,</td>
<td></td>
</tr>
<tr>
<td>5.1.2</td>
<td>provide suggestions for further reading,</td>
<td></td>
</tr>
<tr>
<td>5.1.3</td>
<td>provide details about the intended learning outcomes and assessment standards,</td>
<td></td>
</tr>
<tr>
<td>5.1.4</td>
<td>suggest alternative learners' activities,</td>
<td></td>
</tr>
<tr>
<td>5.1.5</td>
<td>facilitate assessment of the teacher,</td>
<td></td>
</tr>
<tr>
<td>5.1.6</td>
<td>provide a checklist of knowledge, skills and values,</td>
<td></td>
</tr>
<tr>
<td>5.1.7</td>
<td>provide guidance about dealing with complex (large, multilingual, multi-cultural and multi-level) classes,</td>
<td></td>
</tr>
<tr>
<td>5.1.8</td>
<td>provide suggestions for enrichment, extension and remediation,</td>
<td></td>
</tr>
<tr>
<td>5.1.9</td>
<td>provide guidelines to develop own worksheets games, flashcards, etc.,</td>
<td></td>
</tr>
<tr>
<td>5.1.10</td>
<td>suggest ideas for experiments and demonstrations,</td>
<td></td>
</tr>
<tr>
<td>5.1.11</td>
<td>provide an answer key, and</td>
<td></td>
</tr>
<tr>
<td>5.1.12</td>
<td>provide details about assessment strategies?</td>
<td></td>
</tr>
</tbody>
</table>

Section 5 continues overleaf.
SECTION 5 (continued)

Your comments


Evaluation

By circling the appropriate number on the scale below, rate the extent to which the guidelines meet the professional needs of the teacher. Then transfer your rating to the graph on the last page.

The guidelines do not provide teacher support

1 2 3 4 5 6

The guidelines provide teacher support
SECTION 6

MEETING THE REQUIREMENTS OF THE REVISED NATIONAL CURRICULUM STATEMENT (RNCS)

Explanation

The Revised National Curriculum Statement (RNCS) has been shaped by political, social, economic and pedagogical influences. These influences played a determining role in the selection of values, pedagogical expectations and skills. The Revised National Curriculum Statement challenges the education community to ensure that particular values and a high level of skills are inculcated across the curriculum. It further advocates specific pedagogical expectations associated with outcomes-based education.

In view of the fundamental role of the RNCS in the South African educational environment, a greater value has been assigned to this section than the other sections by breaking it up on the basis of its constituent components (values, pedagogical expectations and skills) to form three sub-sections, each to be assessed separately. In so doing the criterion cluster assumes three times the value of the rest of the clusters.

While authors may not be able to meet all the following criteria in the textbook for a single grade, they may be expected to do so over a period of at least three years. However, the evaluator should take cognisance of the expectations singled out for attention in the authors’ rationale (Section 2) and verify their inclusion below.

Section 6 continues overleaf.
Definition of terms

*Ubuntu*  
Core African values, e.g. humility, solidarity, caring, hospitality, interdependence, communalism, respect for human dignity, respect for human life, etc.

6.1 Analysis: Values

6.1.1 Do the development of the following values occur?

6.1.1.1 Ubuntu.  
6.1.1.2 Aesthetic awareness.  
6.1.1.3 Cultural awareness.  
6.1.1.4 A sense of curiosity.  
6.1.1.5 Willingness to adapt to a changing environment.  
6.1.1.6 Readiness to deal with prevailing social demands.  
6.1.1.7 Readiness to deal with prevailing political demands.  
6.1.1.8 Readiness to deal with current economic demands.  
6.1.1.9 Responsibility towards the environment.  
6.1.1.10 Responsibility towards the health of others.  
6.1.1.11 Willingness to explore education opportunities.  
6.1.1.12 Willingness to explore career opportunities.

Your comments


Evaluation

On the scale below, rate the extent to which the requirements of the RNCS have been attained by circling the appropriate number. Then transfer your rating to the graph on the last page.

- The requirements of the RNCS have not been met.  
- The requirements of the RNCS have been met.  

Section 6 continues overleaf.
SECTION 6 (continued)

Definition of terms

Multi-dimensional learning  The advancement of knowledge, skills and values.

Constructivist learning  The learner is encouraged to construct his/her own knowledge by pursuing his/her own fields of interest.

Collaborative learning  Learners are organised into carefully and structured groups to share ideas, test solutions to problems, design and carry out experiments, and conduct teach-backs or peer teaching.

Democratic learning  Learners are exposed to the kind of learning that encourages diverse thinking and freedom of expression.

Modalities of learning  Listening, speaking, reading and writing

Visual literacy  The ability to interpret illustrations and diagrams.

Formative assessment  The learner him-/herself, his/her teachers and his/her peers assess different kinds of oral and written work as they occur without awarding marks or grades.

Summative assessment  Work is tested and marked or graded to establish to what extent the assessment standards have been achieved.

6.2 Analysis: Pedagogical expectations

<table>
<thead>
<tr>
<th></th>
<th>Y</th>
<th>N</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.2.1 Have the following expectations been met?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2.1.1 Themes/topics promote the critical and developmental outcomes.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2.1.2 Themes/topics promote the learning area outcomes.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2.1.3 Theme/topic content is appropriate.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2.1.4 Themes/topics have established links between the learning areas.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2.1.5 Themes/topics promote science and technology.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2.1.6 Themes/topics promote environmental awareness.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2.1.7 Themes/topics promote entrepreneurial activities.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2.1.8 Themes/topics promote health issues.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2.1.9 Themes/topics promote social issues.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2.1.10 Themes/topics promote social justice.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2.1.11 Themes/topics promote inclusivity.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2.1.12 Themes/topics promote human rights.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2.1.13 Themes/topics promote differentiated learning.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2.1.14 Themes/topics encourage learners to become world citizens.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Section 6.2 (continued)

6.2.1.15 Themes/topics promote whole-learner development.

6.2.1.16 Themes/topics promote multi-dimensional learning.

6.2.1.17 Themes/topics promote constructivist learning.

6.2.1.18 Themes/topics promote collaborative learning.

6.2.1.19 Themes/topics promote democratic learning.

6.2.1.20 Themes/topics ensure balance in terms of the modalities of learning.

6.2.1.21 Themes/topics promote visual literacy.

6.2.1.21 Themes/topics promote formative assessment.

6.2.1.22 Themes/topics promote summative assessment.

6.2.1.23 Events of instruction occur at ever-increasing levels of complexity.

Your comments

Evaluation

On the scale below, rate the extent to which the requirements of the RNCS have been attained by circling the appropriate number. Then transfer your rating to the graph on the last page.

The requirements of the RNCS have not been met.  

| 1 | 2 | 3 | 4 | 5 | 6 |

The requirements of the RNCS have been met.

Section 6 continues overleaf.
SECTION 6 (continued)

6.3 Analysis: Skills

6.3.1 Does the development of the following skills occur?

6.3.1.1 Communication.
6.3.1.2 Problem-solving.
6.3.1.3 Creative thinking.
6.3.1.4 Critical thinking.
6.3.1.5 Organising activities responsibly and effectively.
6.3.1.6 Research.
6.3.1.7 Study.
6.3.1.8 Literacy.

Your comments


Evaluation

On the scale below, rate the extent to which the requirements of the RNCS have been
Attained by circling the appropriate number. Then transfer your rating to the graph
on the last page.

The requirements of  The requirements of
the RNCS have not  the RNCS have
been met.  been met.
### EVALUATION PROFILE OF THE TEXTBOOKS UNDER REVIEW

#### RATING

<table>
<thead>
<tr>
<th>Attribute</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6.1</th>
<th>6.2</th>
<th>6.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Rating 4 is the norm. All ratings on or above it indicate levels of acceptability, while those below denote levels of unacceptability.


McKENZIE, J. 1997. *In defense of textbooks, lectures and other aging technologies* in *From now on*, Volume 6(8), 1 - 7.


    Pretoria: Government Printer.

MORISON, S. 1936. First principles of typography. London: Cambridge
    University.

    Publishing for Democratic Education. Johannesburg: The Sached
    Trust.


    P. and Heyneman, S. P. Textbooks in the developing world: Economic

PERERA, K. 1986. Some linguistic difficulties in school textbooks in Gillham,

PETERS, R. S. 1958. The concept of motivation. London: Routledge and
    Kegan Paul.

PHILLIPS, D. C. and BURBULES, N. C. 2000. Postpositivism and

    Press.

    New York: The Falmer.

POPPER, K. 1957. Philosophy of science in Mace, C. A. (Ed.). British

PRETORIUS, C. 2001. *To read or not to read: The question mark over textbooks is vital for all our pupils* in *The Sunday Times* (further details not available).


