

Guiding Principles for Quality Textbooks

(Revised June 2016)

Background

To align the curricula with the Aims of Education in the 21st Century, the Curriculum Development Institute has conducted a holistic review of the curricula and developed an open and flexible curriculum framework that caters for students' diverse needs. The current curriculum aims to help students learn how to learn, cultivate positive values and attitudes, and a commitment to life-long learning. Being broad and balanced, the curriculum promotes life-wide learning, whole-person development and the development of generic skills for equipping students with knowledge and skills to cope with challenges in the future.

2. To implement the curriculum effectively, it is necessary to have in place a learning environment conducive to successful learning. The environment requires, among other things, a flexible curriculum adaptable to the needs of students, teachers sharing the same philosophy in the learning/teaching process, a variety of quality learning experiences and the provision of quality learning/teaching resources.

Textbooks

3. Students can learn in different environments and through different ways. Learning may take place beyond the boundary of textbooks and the classroom; it may take place through a diversity of learning materials and experiences. Though textbooks are not the only learning resources, they still play an important role in student learning. Textbooks are not only teaching materials for teachers, but also students' self-directed learning materials for preparation and revision purposes.

4. Quality textbooks, including both printed and electronic textbooks (e-textbooks), which support a learner-focused curriculum contain the core elements of the subject curriculum, as well as learning strategies useful for the study of the subject. Being important sources of reading for students, quality textbooks help develop students' ability to learn through reading. The amount and quality of the texts to be included therefore deserve greater attention. Other desirable features of a good textbook include interactivity, the ability to arouse the interest of students, and the capacity to actively engage and involve them in the learning process. In other words, good textbooks tell, involve and interact with students.

Overview of Guiding Principles for Quality Textbooks

5. The purposes of developing the Guiding Principles for Quality Textbooks are -

- to provide criteria for teachers in selecting quality textbooks for their students;
- to serve as a reference for textbook writers and developers of learning materials; and
- to provide criteria for reviewers for the inclusion of textbooks in the Education Bureau's "Recommended Textbook List" (RTL) and "Recommended e-Textbook List" (eRTL).

6. The Guiding Principles include criteria for quality textbooks in areas such as Content, Learning and Teaching, Structure and Organisation, Language, Textbook Layout (for printed textbooks only), Technical and Functional Requirements as well as Pedagogical Use of e-Features (for e-textbooks only). These principles are generic and central to textbooks for kindergartens, all Key Learning Areas (KLA) and subjects at primary and secondary levels, although some principles may be more applicable to certain subjects and levels than others. It is hoped that school principals, teachers, textbook writers, publishers and educators will all find the Guiding Principles useful for their work. Further details and examples specific to different KLA/subject curricula can be found in the relevant curriculum or subject guides, or in subject-specific textbook guidelines where appropriate.

7. Besides, using electronic learning resources to enhance interactive and self-directed learning has become a global trend in education. The interactive and diversified sets of e-textbooks developed in line with our local curricula are an alternative to printed textbooks. Schools may select to adopt e-textbooks according to their students' learning needs and capacity, as well as the school infrastructure and technical support. This set of Guiding Principles is also applicable to e-textbooks. Comments as well as suggestions are welcome so that further refinement will be made when necessary.

Guiding Principles for Quality Textbooks

8. The Guiding Principles cover the following areas -
- Content
 - Learning and Teaching
 - Structure and Organisation
 - Language
 - Textbook Layout (for printed textbooks only)
 - Pedagogical Use of e-Features (for e-textbooks only)
 - Technical and Functional Requirements (for e-textbooks only)

The following sections describe the main features which characterise quality textbooks.

Content (C)

A textbook of a particular subject area manifests or translates the four components of the curriculum (aims, content, learning/teaching strategies, assessment) for the purpose of student learning.

- C - 1 The aims, targets and objectives align with those laid down in the relevant curriculum or subject guide.
- C - 2 The content is self-contained and sufficient to address effectively the learning targets of the curriculum without requiring the use of additional supplementary materials associated with the textbooks. The core elements of the subject curriculum are included. No superfluous information is covered, in order to leave room for students to learn how to learn. If the materials included are non-core, non-foundation topics or serve for enrichment only, they should be properly indicated.
- C - 3 The content is current. Information and data are relevant and accurate. The sources

- of information are appropriately indicated.
- C - 4 Concepts are correct and precise. Ideas are coherent. There are adequate examples and illustrations. Such examples and illustrations are interesting and relevant to students' experience. In the development of concepts, new ones are built on old ones and are introduced when and where appropriate.
 - C - 5 There is an appropriate balance between depth and breadth in the treatment of the subject content.
 - C - 6 The level of difficulty of the content is consistent with the curriculum requirements and the cognitive level of students.
 - C - 7 Appropriate consideration is given to students' prior knowledge and learning experience. There is continuity in the development of concepts and skills to facilitate a smooth transition between different key stages of learning / year levels. Connections between related topics or concepts are highlighted. There is no unnecessary repetition in content.
 - C - 8 There are multiple perspectives and balanced viewpoints on issues.
 - C - 9 There is no bias in content, such as over-generalisation and stereotyping. The content and illustrations do not carry any form of discrimination on the grounds of gender, age, race, religion, culture, disability etc., nor do they suggest exclusion.
 - C - 10 To encourage and facilitate students to read larger amounts of materials on their own, selected further reading lists or related websites are included to let students read extensively. An index is included to make easy reference.

Learning and Teaching (L/T)

The development of generic skills is fostered by engaging students in various learning activities to help students learn how to learn. There is a balanced coverage of cognitive skills of all levels, e.g. skills in information gathering, remembering, focusing, organising, integrating, analysing, generating, etc.

- L/T - 1 Generic skills are developed through learning and teaching in the contexts of different subjects or KLAs. (Exemplars are available in the relevant curriculum or subject guides.)
- L/T - 2 There is a balanced coverage of cognitive skills of all levels.
 - Higher-order thinking skills which require analysis, evaluation and judgement, and not just recalling and comprehension of facts, are progressively incorporated taking into consideration students' ability and developmental needs.
 - Deep processing, critical and creative thinking are encouraged through involving students in less structured problems and more open-ended questions, and further reading.
 - Students are required to experience the process of learning such as by searching for information from various sources.
 - Meta-cognitive skills, which include the ability to analyse, evaluate and control one's own thinking processes and to plan one's action strategically, are also developed.
 - Learning strategies are included, for example, in the student's guide, or suggested in learning activities.

- L/T - 3 Positive values and attitudes are cultivated through the learning and teaching in the contexts of different subjects and KLAs. (Exemplars are available in the relevant curriculum or subject guides.)
- L/T - 4 The content is arranged in suitable learning chunks, which can be used independently or flexibly linked together to form alternative learning paths to cater for student diversity. The strategies and activities on learning, teaching and assessment allow flexible use to cater for students' ability and learning styles, etc. Appropriate support and challenging tasks are provided to cater for students' different abilities.

Learning activities which are essential to achieving the learning targets are included. Students' performance in these activities provides feedback on how well they learn and directions for further learning and teaching.

- L/T - 5 - Learning activities are designed to facilitate students to actively integrate, practise and apply new knowledge. To achieve such purposes, the CORE or other similar models are used in designing learning tasks. (CORE refers to: Connect to students' prior knowledge, Organise new content, Reflect on what has been learned, and Extend by transferring knowledge to new contexts).
- They foster life-long and life-wide learning, with real life exposure and use of authentic materials and community resources where appropriate.
- L/T - 6 The learning activities are interesting. They involve and motivate students to learn.
- L/T - 7 The learning activities have clear instructions.
- L/T - 8 A range of varied and meaningful activities is provided. Tasks and exercises are appropriate, balanced in number, and congruent with the instructional strategies and learning targets.
- L/T - 9 Suggestions for reflection, self-, peer- and group-assessment can be incorporated as appropriate to the learning objectives and learning activities in order to help improve learning. Activities requiring extended and open-ended responses and a variety of response styles with considerable elaboration are included. The activities help students recognise the objectives of the chapters/units as well as their own learning goals, assess their own learning, and reflect on what and how they have learned so as to enable them to take further steps to improve their learning.

Structure and Organisation (S/O)

An appropriate structure of the content is provided to facilitate learning.

- S/O - 1 The content sequence is appropriate and logical. Key words and concepts are identified and highlighted.
- S/O - 2 The structure of the content is made apparent by means of functional devices including table of contents, chapter titles, headings and outlines.
- S/O - 3 An overview of the learning targets can be put at the beginning and a summary at the end of each unit of study / chapter / module. A simple student's guide can be put in an introductory section to teach students how to use the textbook.

Language (L)

Textbooks are important sources of reading for students. The amount and quality of texts to be included therefore deserves attention.

- L - 1 The texts are of high quality and facilitate students to learn directly and independently from them, and construct meaning on their own (i.e. read to learn). The level of difficulty of the language is commensurate with the language ability of the target students, with new vocabulary progressively introduced in context at appropriate times.
- L - 2 Coherent passages are included to help students process text content.
- L - 3 Students are provided with opportunities to make good use of language to study the subject, i.e. to use reading, writing, listening and speaking as tools to discover, clarify and extend meaning for constructing knowledge in a given subject.
- L - 4 Familiar and interesting language is used to motivate learning and understanding. The text connects with students' prior knowledge, for example, by including analogies and examples that are familiar to students' experience.
- L - 5 The language is accurate and precise.
- L - 6 Students are provided with help in understanding and using the vocabulary and specific patterns of discourse of the subject.

Textbook Layout (TL) – *for printed textbooks only*

- TL - 1 The layout is logical and consistent. The materials are well-organised, with appropriate use of space and margin for ease of reading, but avoiding unnecessary use of blank space.
- TL - 2 Illustrations such as photographs, pictures and graphs are accurate, appropriate, effective and suitably annotated to stimulate and facilitate learning. They serve to direct students to the instructional focus rather than distract them from it. A number of factors come into play to make the graphics useful for learning. Specifically,
 - the graphics are relevant to the text. Photographs and illustrations are not just added to lighten up the presentation. Their reference to the text is obvious, either through direct cueing or proximity to the relevant text segment;
 - the sequencing of the graphics is appropriate to show a developmental process; and
 - an appropriate balance is struck between text and graphics.
- TL - 3 To help reduce the weight of textbooks, lightweight paper is used. Textbooks can be separated into a few thin volumes, printed in separate modules or bound in loose-leaves. This can help develop in students the ability to manage information as part of their learning. They are thin and compact in size. The relative ease of completion can help create a sense of satisfaction in students.
- TL - 4 The design facilitates the reuse of textbooks. For example, materials for one-off use (e.g. stickers that can be used only once) and tearing off pages from the textbook should be avoided as far as possible. The sources of figures and statistics, etc. are appropriately indicated so that students can search for the most up-to-date information if necessary.
- TL - 5 The font type is one that is commonly used. To avoid confusion, the font type and font size are consistent throughout the textbooks. Based on the “Eyecare” Circular

issued by the former Education Department (now the Education Bureau), the minimum font size is equivalent to font size 12 in “Microsoft Word” for legibility. However, in order to avoid eye strain and for more comfort of reading, larger size fonts are recommended, especially for lower levels.

Pedagogical Use of e-Features (P) – *for e-textbooks only*

e-Features, including multimedia, interactive activities, learning tools and hypertexts can enhance the effectiveness of learning, teaching and assessment activities. They are designed in consideration of students’ abilities and pedagogical needs.

- P - 1 Interactive activities and multimedia content such as photographs, pictures, graphs and video clips are accurate, appropriate, effective and suitably annotated to stimulate and facilitate learning. They serve to direct students to the instructional focus rather than distract them from it.
- P - 2 The sequencing of the multimedia content as well as interactive activities for learning, teaching and assessment is appropriate to show a developmental process; and an appropriate balance is struck between text and multimedia content and / or interactive activities.
- P - 3 Multimedia, interactive activities and learning tools are easy to operate in consideration of the needs and abilities of learners with a view to enhancing learning and teaching effectiveness.
- P - 4 The design / selection of the tools for annotation, note-taking, bookmarking, highlighting, online dictionary, etc. are appropriate and effective in facilitating learning.
- P - 5 Key topics / terms within the e-textbook and their hypertexts are available. The glossary of terms is selected in line with the curriculum aims and objectives. Appropriate interface for accessing the glossary is provided.

Technical and Functional Requirements (T/F) – *for e-textbooks only*

- T/F - 1 The e-textbook should be compatible with a multitude of common computing devices and more than one common contemporary operating system. The e-textbook can also be used with more than one free-of-charge contemporary browser or reader. If DRM is employed, the necessary software or plugin should be provided to users free-of-charge.
- T/F - 2 The availability of appropriate interface and features for navigation and search, such as Table of Contents, links to the Table of Contents, location of current page, as well as the next and the previous page buttons, etc. Hypertext, index and keyword search function are available. All hyperlinks are valid and copyright cleared.
- T/F - 3 Consistent and intuitive layout of content. Use common font types with larger font sizes. Content is fit into one page for easy reading. No need to install extra plug-in for playing video and audio clips.
- T/F - 4 Free-of-charge online dictionary and tools that facilitate learning are provided, such as tools for annotation, note-taking, bookmarking and highlighting (as claimed by the publisher).
- T/F - 5 Appropriate content, other than video and audio materials, are capable of being

downloaded to a computing device for offline reading with free-of-charge browsers or readers.

T/F - 6 Other e-features of the e-textbook as claimed by the publisher should function properly.

Concluding Remarks

9. Knowledge transmission alone is no longer adequate, as the realm of knowledge is infinite. Providing students with knowledge alone is inadequate. Rather, we have to equip them with a repertoire of skills for acquiring and building up knowledge and instil in them a positive attitude for life-long learning.

10. Textbooks play an important role in supporting learning and teaching in schools. Textbooks should enable students to learn how to make use of different ways of learning. They should also provide an appropriate amount of quality texts for students to “read to learn” independently. It is also important to ensure that there is no excessive information in order to leave room for students to learn how to learn. Students will then have opportunities for developing diverse skills of learning according to their interests, needs and abilities.

11. The Guiding Principles listed above cover the major criteria for selecting, writing and evaluating quality textbooks. Further details and examples specific to different KLA / subject curricula can be found in the relevant curriculum or subject guides, or subject-specific textbook guidelines where appropriate.

12. This set of Guiding Principles supercedes the “Guiding Principles for Quality Printed Textbooks” dated September 2014.

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