







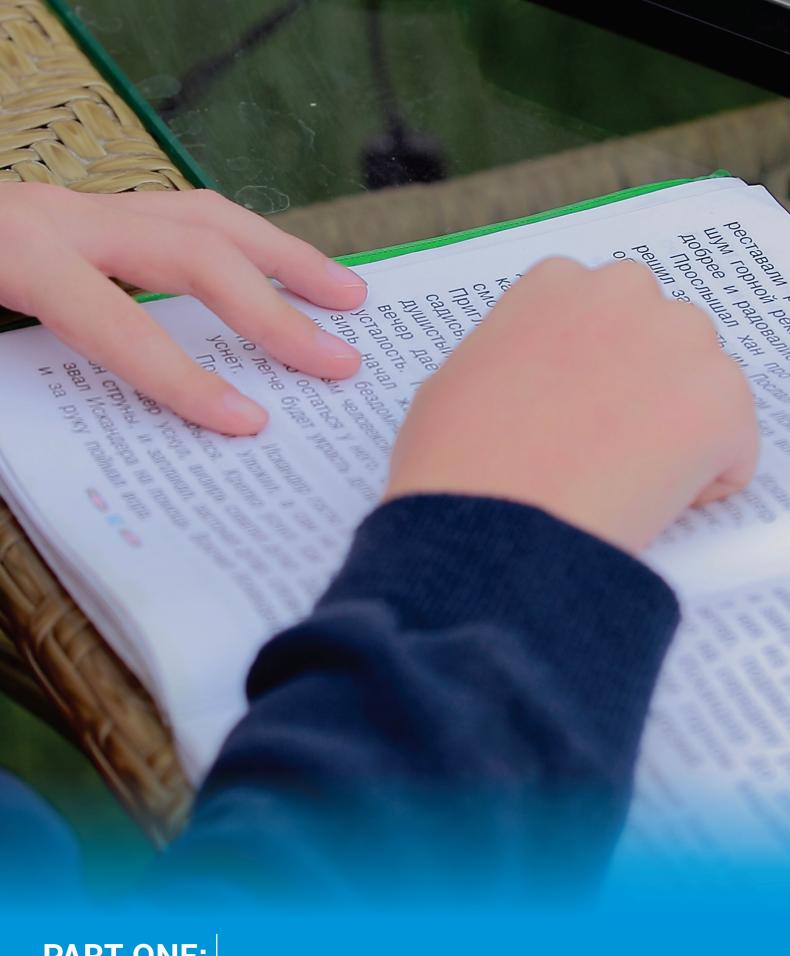
# AN ANALYSIS OF TEXTBOOK POLICY REGULATIONS IN UZBEKISTAN

## MINISTRY OF PUBLIC EDUCATION OF THE REPUBLIC OF UZBEKISTAN UNITED NATIONS CHILDREN'S FUND IN UZBEKISTAN

## AN ANALYSIS OF TEXTBOOK POLICY REGULATIONS IN UZBEKISTAN

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### PART ONE:

THE CONTEXT OF TEXTBOOK POLICY AND TEXTBOOK-WRITING 01

## PART ONE: THE CONTEXT OF TEXTBOOK POLICY AND TEXTBOOK-WRITING

#### 1. Textbooks within competency-based approaches

The Education Sector Plan (ESP) (GoU, 2018, section 4.4.3: 'Curriculum, pedagogy and assessments') targets the following priority outcomes: '21st century skills, soft skills (including personal development and employability skills) and higher order thinking skills'. These two dimensions of *personal development* and *employability* are different, alternative views of the purpose of learning that are intended to be addressed through the development of students' competencies.

The ESP describes the role of textbooks in this process: 'The shift from a content-driven current curriculum to a more competency-based learning approach would require reforming the associated teaching-learning materials, especially the textbooks, together with an adaptation of the pre-service and in-service (re-)training of teachers and the overall approach to examinations and assessments of learning outcomes' (GoU, 2018, p. 82). This ambition is common among countries that seek to move beyond the 'basic reproduction of accumulated knowledge' by means of competency-based approaches (OECD, 2005).

The ESP therefore clearly refers to the place of textbooks in the wider process of competency-based reform, which includes teacher development and approaches to student assessment. In centralised education systems, where textbooks are a key lever of any planned improvement in the quality of the education system, the textbooks cannot provide solutions in themselves but they can make concrete a government's policy intentions regarding teaching and learning and can reinforce other policy interventions. They can translate broad statements of policy into practical plans for what should happen in the classroom.

In order for textbooks to be able to play this role in a new competency-based approach, a clear vision is needed regarding the concept of competencies. Even if there is wide agreement that a competency-based approach is preferable to an approach based only on factual recall (or 'content-based', in the words of the ESP), this is only the first step in defining what is envisaged by the notion of competencies.

Internationally, there are many definitions of competencies, with a frequent emphasis on competencies for work. In such contexts, competencies are more of a priority for *post-primary* rather than *primary levels* and are conceived of as enabling students to draw on a depth of knowledge and range of skills and to apply this knowledge and these skills appropriately to a task that is presented to them. The origins of a focus on competencies as a basis for curriculum planning lie in the idea of preparation for the world of work and are therefore more focused on secondary and especially senior secondary education<sup>1</sup>.

On the other hand, 'personal development' is an important aim for all levels of education, from pre-school to post-secondary, while 'skills' such as compassion might usually be considered as being more central to personal development in the early years of school rather than at the secondary level. Furthermore, in many education systems, the scope for including 'soft skills' in secondary school curricula is often squeezed by an increasing focus on high-stakes national examinations.

The term '21st century skills' is even more often linked to debates about education for employment. In their widely-referenced study, Pellegrino and Hilton (2012) tell us that

<sup>1</sup> For example, see Schenck (1978), A guide to identifying high school graduation competencies: issues and examples.

'Business leaders, educational organizations, and researchers have begun to call for new education policies that target the development of broad, transferable skills and knowledge, often referred to as "21st century skills." For some education systems, competencies are often considered as inextricable from 21st century skills. For example, in the Singapore maths syllabus, most references to competencies are paired with the descriptor '21st century'<sup>2</sup>. The Singapore primary science syllabus states:

The competency domains gaining prominence in the 21st century are Civic Literacy, Global Awareness and Cross-cultural Skills, Critical and Inventive Thinking, and Information and Communication Skills. The competencies encompassed in these domains have been termed the 21st Century Competencies<sup>3</sup>.

Given Uzbekistan's intention to take part in PISA in 2021, it is useful to refer to the OECD's foundational definitions of competencies, which are set out in 'The Definition and Selection of Key Competencies', sometimes known as DeSeCo (OECD, 2005), which states that 'At the centre of the framework of key competencies is the ability of individuals to think for themselves as an expression of moral and intellectual maturity, and to take responsibility for their learning and for their actions.' Although there is no suggestion in DeSeCo that these competencies relate to secondary more than primary, the inclination towards the secondary cycle is implied in the idea of 'moral and intellectual maturity'.

This brief review of the nature of competencies indicates that writers of textbooks for the new curriculum will need to consider the broad competencies for each level of schooling, and how these might be reflected in the textbooks. It also suggests that in an emerging debate about the nature and role of competencies within a redefined statement of the purpose of education, textbooks can help to focus minds on the concrete, practical implementation of a competency-based approach. This focusing of minds will take time, since it involves changing the practices of tens of thousands of people – namely, the teachers and administrators.

The role of textbooks in providing practical clarity for new, competency-based curricular thinking should be considered within the wider implications of a national textbook policy. Education systems in countries with very different economic levels have moved to competency-based approaches and face different challenges. However, centralised systems must address the challenge of promoting new skills by means of a single textbook per subject. See for example the very different experiences of Japan<sup>4</sup> and Kenya<sup>5</sup>. Although a competency-based approach is intended to introduce scope for higher-order thinking and learning, in which students are given greater agency over their learning, this is an even bigger challenge for systems in which the textbook is not only a very dominant force in the classroom, but where there is a single, common textbook for all students. The principle of a single textbook for all students is conventionally a signal from policy-makers, reinforced over many years, that there is therefore a single body of knowledge. This in itself creates a tension with a desire for a competency-based approach that includes creativity, problem solving, critical thinking and communication skills.

Moving from a content-driven curriculum to a more competency-based learning approach

<sup>2</sup> https://www.moe.gov.sg/docs/default-source/document/education/syllabuses/sciences/files/mathematics\_syllabus\_primary\_1\_to\_6.pdf

<sup>3</sup> https://www.moe.gov.sg/docs/default-source/document/education/syllabuses/sciences/files/science-primary-2014.pdf

<sup>4</sup> Japan: Competencies for 2030: Curriculum, assessment and teaching.

https://read.oecd-ilibrary.org/education/education-policy-in-japan/competencies-for-2030-curriculum-assessment-and-teaching\_9789264302402-5-en#page1

<sup>5</sup> KICD. (2017). Issues and Implementation of the 2015 Revised Curriculum.

 $<sup>\</sup>frac{http://www.kice.re.kr/boardCnts/view.do?boardID=1500253\&boardSeq=5015396\&lev=0\&m=0301\&searchType=S\&statusYN=W\&page=1\&s=english$ 

will be gradual and cannot be seen as a *binary* option, whatever the level of resources available in schools. The development of students' knowledge should always be integrated with competency-based approach. A new generation of textbooks can demonstrate ways to achieve this integration, within a textbook policy that continues to be centralised or evolves into a more decentralised system.

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#### **Conclusions**



- Textbook policymakers should consider the implications of how a competency-based approach can be implemented within a singletextbook system.
- Materials writers should reflect on the nature and role of competencies at different levels of schooling, and how to reflect this in textbook and other teaching and learning materials.
- The process of designing criteria for textbook evaluation, and the planning and writing of textbooks themselves, can help to sharpen the focus on the nature and role of competencies, which should align with parallel changes in teacher development activities and approaches to student assessment.

#### 2. Textbooks and subject-specific competencies

Having discussed in general terms the implications of a competency-based approach for textbook policy, we can look at how competencies are applied within subjects and levels and what this might mean in terms of the teaching and learning materials provided

For many countries, there are at least two kinds of competency: cross-cutting competencies that may be described as 'general', 'core', or 'key competencies', and those that are seen to be specific to particular disciplines or subjects. The process of unpacking the competencies for particular subjects can reveal challenges. Curriculum developers in New Zealand, for example, found that each subject required its own interpretation: after completing their revision of the curriculum, the curriculum developers described how they passed through what they saw as three phases:

- Phase 1: Learning about the nature of Key Competencies
- Phase 2: Key Competencies and learning to learn
- Phase 3: Integrating Key Competencies into learning areas [i.e. subjects]<sup>6</sup>

In phase 3, 'Researchers who had been working with the key competencies for some time could see that a generic description of each key competency was no longer adequate. They were beginning to unpack and describe their many different aspects. The teachers they worked with also perceived that it was not possible to derive one generic meaning for any given key competency.' This challenge is faced of course by textbook developers as well as by curriculum planners.

Estonia's new curriculum of 2014 describes three levels of competencies, which are general, subject-specific, and level-based subject competencies<sup>7</sup>:

In the sense of the national curriculum, competence is the aggregate relevant knowledge, skills and attitudes that ensure the ability to operate creatively, in an enterprising way and flexibly in a particular area of activity or field. Competence can be categorized as general competences or [i.e. 'and'] subject field competences.... The national curriculum differentiates between *general competences*, *subject field competences* and *competences expected in stages of study*. (italics added)

The curriculum gives a very practical summary of the target competencies for each level. The following example of the competencies for grades 4–6 (called 'the second stage') helps to highlight the challenge for textbook developers:

At the end of the second stage of study, the pupil:

- 1. has an appreciation for harmonious human relationships, understands his or her role as a family members, friend, peer and pupil; shall keep agreements, be trustworthy and be responsible for his or her actions;
- 2. is able to focus on fulfilling study tasks, is able, with guidance, to use age-appropriate techniques (including pair and group techniques) depending on the special nature of the study assignment;

<sup>6</sup> https://www.researchgate.net/publication/325389433\_How\_the\_key\_competencies\_evolved\_over\_time\_Insights\_from\_the\_research

<sup>7</sup> https://www.hm.ee/sites/default/files/est\_basic\_school\_nat\_cur\_2014\_general\_part\_1.pdf (p. 4)

- 3. values his or her ethnicity and culture among other ethnicities and cultures, espouses an attitude toward people that is free of prejudices, recognizes the differences between people, views and situations and understands the need for compromise;
- is capable of planning and evaluating his or her activities and, to attain the result, select and implement the necessary actions, see his or her errors and correct his or her activities;
- 5. is capable of expressing, justifying and defending his or her opinion, knows his or her strengths and weaknesses and tries to become clear on his or her interests;
- is capable of listening to and reading in a mindful fashion age-appropriate texts, creating linguistically correct and situation-appropriate oral and written texts and understanding spoken speech;
- 7. gets by in at least one foreign language in everyday communication situations that require direct and simple exchange of information on familiar and routine topics.
- 8. has mastered computational and measurement skills and knows and is able with guidance to use rules of logic in solving problems in different walks of life;
- 9. values a sustainable lifestyle, is capable of asking questions in the field of natural sciences and obtaining information on natural sciences, knows how to act in nature, takes an interest in nature and exploring nature;
- 10. is capable of using a computer and the Internet as a means of communication and is able to perform word processing with a computer;
- 11. is able to find answers to his or her questions, obtain the necessary information from various sources, interpret, use and convey it, and is able to distinguish between fact and opinion;
- 12. senses that he or she is a citizen of his or her state and follows social norms;
- 13. values art and is able to express him or herself using artistic means;
- 14. values healthful lifestyles, is aware of factors that harm health and of the hazards of substances that cause dependency;
- 15. has found a hobby to his or her liking and has a general idea of the employment world.

In the above list, the general competencies have been interpreted appropriately for the level, with the addition of broad, *subject-specific* competencies. It is useful to reflect, firstly, on what constitutes the *knowledge*, *skills* and *attitudes* (which the curriculum defines as contributing to the meaning of competencies). Secondly, we can ask how the above statements might be reflected in the textbooks for grades 4–6? For example, how might textbook writers target the development of particular *attitudes* among students? How might such attitudes be developed in primary school *literacy* textbooks? One example might be to encourage or require the practice of reading aloud, in which teachers demonstrate their own interest in the text and encourage students' personal commentary and analysis, in which the teacher and the textbook show the students that diversity of interpretation is valued. This kind of reflection by the textbook itself is necessary to provide the bridge between *curriculum thinking*, *resource planning* and *textbook development*.

A final concrete example will be valuable, taken from the recently introduced (2015) competency-based curriculum in the Republic of Korea, which discussed how to develop students' skills of critical reflection in the upper primary Korean Language textbooks:

... there was a limit that reading activities developed in the existing classroom were conducted based on the texts in textbooks. In other words, there had constantly been the problem that the texts in textbooks encourage fragmented and segmental reading. Of course, the contents of the curriculum were assumed and organized so that students would read a complete article. Nevertheless, it was difficult to post an article due to the physical limits of the textbook from beginning to end. The way to extract or omit a portion of an article was used to prepare materials. As a result, it was difficult for students to read a complete article properly. Moreover, it was criticized to neglect the cultivation of life-long readers enjoying reading voluntarily as reading for learning was forced too much.

For these reasons, it is encouraged for students to read at least one book per semester in class through the achievement standards, learning elements, teaching and learning methods, and precautions in the 2015 Revised Korean Language Curriculum. Integrated reading activities are emphasized so that students can read books, share their thoughts, and write articles<sup>8</sup>.

This reveals the implications of a competency-based approach in terms of the range of teaching and learning resources. A single textbook for the teaching of literacy was found to be inadequate for a competency-based approach to literacy teaching. A variety of sources is essential for promoting critical literacy and to help students navigate the vast range of sources of news and opinions on the internet.

We can conclude this analysis of the nature of subject-specific competencies by referring again to OECD's changing focus in terms of how it has prepared assessments of literacy since the first PISA assessments were carried out in 2000. For the OECD, the notion of literacy has changed since that time: 'success in reading literacy should no longer be defined by just being able to read and comprehend a single text. Although the ability to comprehend and interpret extended pieces of continuous texts – including literary texts – remains a valuable one, success will also come through deploying complex information-processing strategies, including analysing, synthesising, integrating and interpreting relevant information from multiple text (or information) sources.' (OECD, 2018) And finally, from the same document: 'Changes in our concept of reading since 2000 have led to an expanded definition of reading literacy, which recognises motivational and behavioural characteristics of reading alongside cognitive characteristics.'

Specialists in all subjects on the curriculum should engage in such a discussion of the needs of their own domain in the context of the competency-based approach. This will apply not only to the textbook writers but also to the curriculum developers whose words provide the basis for publishers and textbook writers to build on.

#### **Conclusions**

- In addition to considering general curriculum competencies, the textbooks need to reflect subject-specific competencies, which may vary from level to level.
- The range and types of teaching and learning materials for each subject and level may need to be revised in order to support a new, competency-based approach. This range of materials is sometimes known as the 'teaching and learning materials profile'.
- Expanding from a single textbook for some social science subjects in certain grades is valuable for promoting critical literacy.

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8 Issues and implementation of the 2015 revised curriculum. (Korea Institute for Curriculum and Evaluation) (p. 52) http://www.kice.re.kr/boardCnts/view.do?boardID=1500253&boardSeq=5015395&lev=0&m=0301&searchType=null&statusYN=W&page=1&s=english

#### 3. Textbooks and autonomy

One of the distinguishing characteristics of education systems in countries at different economic levels is the degree of autonomy allocated to each level of the system. In a study of school characteristics in sub-Saharan Africa (Bashir et al, 2018, p.98), the authors reported that ...

The impact of school autonomy on student achievement is highly heterogeneous and varies across countries and education systems. Among OECD countries, education systems with greater school autonomy have higher PISA mathematics scores than those with less autonomy. However, school autonomy does not improve student learning outcomes in middle-income countries. At lower levels of economic development, increased school autonomy — particularly in the decision-making areas related to instructional content but also in the areas of personnel and budgeting — is associated with lower student outcomes If overall institutional structures are weak, the danger of school autonomy lies in the possibility that individual schools pursue goals that are not related to improving student learning. This also contributes to increasing inequity.

Autonomy within education systems can, therefore, be a double-edged sword, creating risks and opportunities, with implications for textbook policy and planning.

In the education systems of OECD countries, a certain amount of autonomy is taken for granted. For example, one of the most striking differences between countries at different economic levels is how the curriculum itself is described and deployed. In low- and middle-income countries, there is often no or little difference between the national curriculum framework and the curriculum that is taught in schools: schools have little autonomy to shape the curriculum they teach, and teaching and learning has to take a similar form in every school, regardless of its location or community. In middle to higher-income countries, the national curriculum is a framework within which schools plan their own *curriculum*.

A further consequence of a centralised curriculum is how this is reflected in the way that textbooks are perceived, elevating the textbook to an almost sacred position that teachers are required to cover, week by week, page by page. In such contexts, the textbook plays a hugely important role in the classroom. For under-resourced education systems, the textbook is a means for central education authority to ensure compliance and accountability. It is in effect a policy document that can shape both the curriculum *content* as well as the teaching *methodology*. It legitimises *what* is to be taught as well as *how*. Even the wording of the textbook takes on an untouchable status, whether or not the words are written at an appropriate reading level for the student.

In decentralised systems where schools have more autonomy, schools may use different textbooks – the responsibility for textbook evaluation and approval may be at least partly decentralised to local level, if not to school level. The ministry of education may provide a list of approved textbooks from which the local education authority or school may choose. Or, in other countries, schools have a completely free choice of textbooks, with no system of textbook approval at all. (Issues of multiple textbook policy are further discussed below, in section 11).

The transition to a decentralised textbook system is sometimes justified based on the perceived relationship between centralised textbooks and an over-reliance on recall-based examination systems. It is argued that the existence of a single textbook leads to examination writers basing their items on the content of the textbook rather than on the curriculum standards. This rationale for a multiple-textbook policy may be described as 'breaking the link' between the textbook and the exam: by approving more than one textbook, the MOE obliges schools and teachers to refer to the curriculum itself, not only the textbook. When Shanghai province pioneered China's earliest multiple-textbook system, it was designed to overcome examination-oriented school practices so as to

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build quality-oriented education. Similarly, when Taiwan made the transition to a multiple-textbook policy, the ministry of education sought to move from a system in which students were able to succeed in their senior high school entrance exams simply by memorizing the contents of the textbooks.

A final observation should be made on how issues of autonomy pervade the entire school system. Autonomy within schools and within the curriculum is linked to the autonomy that is afforded to teachers and to students. The notion of student autonomy is closely related to the notion of a competency-based approach: in order to develop higher-order skills and a sense of agency, students need to feel that critical thinking is encouraged and that their opinions are respected. This in turn has implications for the design of textbook evaluation criteria and for textbook writers, both of which need to promote opportunities for lower to higher order learning, including critical thinking and creativity.

#### **Conclusions**

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- Textbook policymakers might consider the relationship between textbooks and national exams, and whether offering schools a choice of textbooks – perhaps for some subjects and levels – might reduce the amount of 'teaching to the test'.



• Textbook evaluation criteria and textbook writers should consider appropriate ways of giving both teachers and students some autonomy in the teaching and learning process.

#### 4. Textbooks and pedagogy

In order to move away from an approach based on factual recall, it is useful to reflect on the reasons for such an approach in the classrooms of so many countries. Why do many teachers default to recall-based teaching methods? There are several possible reasons, including broader cultural contexts<sup>9</sup> but one of the reasons is the way that many textbooks are written, which does not encourage new pedagogical approaches.

Many textbooks have no apparent pedagogical basis and may sometimes consist of little more than lists of definitions to be learned by rote. The result is a teaching and learning methodology that is often neither *teacher-centred* nor *student-centred* but, instead, 'textbook-centred'. These kinds of self-study textbooks contain large amounts of text followed by comprehension questions. This is an approach used by writers who have not considered the importance of pedagogy, especially in subjects such as language and literature, science and social studies. The series editor for the textbook can play a part, to ensure that appropriate pedagogy is embedded in the textbook planning. This editor may be the editor-in-chief for a series, within a particular subject and level, or may be an overall editor-in-chief across all subjects.

In the workshop delivered in Tashkent in December 2019, I included a discussion of what I refer to as turning textbooks 'from barriers to carriers'.

<sup>9</sup> For example, see Suzana Brinkman, 'Teacher's beliefs and educational reform in India: from 'learner-centred' to 'learning centred' education (2018). <a href="https://www.tandfonline.com/doi/full/10.1080/03050068.2018.1541661?needAccess=true&ins">https://www.tandfonline.com/doi/full/10.1080/03050068.2018.1541661?needAccess=true&ins</a> tName=University+of+Sussex

The workshop used the following table:

learning barriers	Learning carriers
Concepts lifted straight from syllabus	Big, engaging, organisational ideas
Narrow ephasis on low level cognitive learning	Includes social, emotional and higher-level cognitive learning
Language is above learners` reading level	Appropriate reading level

Teaching barriers	Teaching carriers
Overloaded content forces teacher to adopt rote-learning approach	Reduced content allows for supportive and remedial teaching
Textbook consists of list of definitions	Fewer concepts, treated in depth
No pedagogy (the self-study approach)	Structed pedagogy
No recognition of classroom conditions	Practical for large classes and limited resources

Equity and inclusion: barriers	Равноправие и инклюзия: проводники
Non-inclusive content	Inclusive content
No recognition or learner identity and voice	Regognition of learner identity and voice
Not in learners` language	Written in learners` language

Table 1: Textbooks: from barriers to carriers

A definition of pedagogy is required here. In different contexts and languages, the terms 'methodology', 'didactic' and 'pedagogy' can all take different meanings. This analysis distinguishes 'pedagogy' from 'methodology' and is based on *beliefs about learning*, using Robin Alexander's definition of pedagogy: 'the act of teaching together with the ideas, values and beliefs by which that act is informed, sustained and justified'<sup>10</sup>.

Beliefs about learning, in turn, encompass general ideas as well as ideas that are specific to particular subjects and levels. Well-founded beliefs about learning provide the foundation for writing better textbooks (see National Research Council, 2005). Therefore, textbook writers should begin the journey to improving textbooks by studying subject-specific pedagogy. This applies more to primary levels than secondary, by which time many students are more able to learn directly from the textbook, with less mediation from the

<sup>10</sup> Robin Alexander. (2008). Essays on Pedagogy, p. 4. Routledge.

teacher. However, writers of textbooks for both primary and secondary levels will benefit from analysing the process in terms both of content and of pedagogy.

By starting with an analysis of subject-specific pedagogy, textbook writers can rethink the meaning of a high-quality textbook. It is almost impossible to define the qualities of a high-quality textbook in generic terms (even if we will attempt to do so in the section below regarding textbook evaluation criteria), without providing plenty of examples of what is meant by high quality. It is as difficult to define a high-quality textbook in a list of statements as it is to define a high-quality curriculum. However, it is a more reliable and evidence-informed matter to define high-quality pedagogy. In effect, this is what the developers of the new competency-based curriculum will need to do:

The intensified focus on learner-centeredness will result in teachers being expected to change their approaches in an area which is at the core of their professional activity. the initiation and management of learning processes. While the goal of learning processes used to be the acquisition of knowledge and its reproduction, school education is now to a considerable extent perceived as a means for the development of the learner's personality. Competences related to the domains of 'learning to learn' and 'interpersonal and civic competences' are to be developed through the teaching of all subjects. (GoU, 2018, section 4.4.5).

Textbook writers can therefore support improved teaching and learning by basing their planning and writing on a clear pedagogical approach, which is sometimes described as 'structured pedagogy'. A well-known example of how investing time in developing a clear, structured pedagogy for a particular subject is Singapore's approach to teaching primary maths, which led to internationally admired textbooks that have been adapted by several other countries<sup>11</sup>.

Social and emotional learning plays a large part in successful pedagogy. Learning, in a classroom setting is social, and the stated purpose of education for most ministries of education is social as well as academic. The emotional also plays an important part, in how it engages learners (or has the opposite effect).

Textbooks can provide resources for and legitimise an approach to teaching and learning that is less narrowly focused on the 'simple' transferring of definitions from the textbook page to the students' memory. Textbooks based on appropriate language and structured pedagogy can enable teachers to provide students with a range of learning opportunities that include not only the acquisition of factual knowledge but also skills of interpretation, expressing and exchanging opinions, effective communication, and creativity. A discussion of how to include such opportunities should form a necessary part of preparing to write the new textbooks in support of the new curriculum, and time should be allowed for this to happen.

The emphasis that the ESP places on the relationship between curriculum, textbooks and teaching time (e.g. section 5.2.2, strategic area 3) is critical. Textbooks for a new competency-based approach will need new kinds of learning activities that allow the teacher to monitor and support his/her students, with opportunities for problem-solving, higher order and creative approaches, where students are more cognitively challenged and where students are able to take risks in their learning. These open-ended kinds of activities should be in addition to other more conventional learning activities of a 'right or wrong' nature, where students can develop their factual knowledge.

Improving the kind of activities included in textbooks, and developing appropriate teacher competencies to enable teachers to monitor and support students while they are working, all requires that the textbooks provide enough classroom time for this different approach.

<sup>11</sup> See 'Mathematic Education in Singapore' (2015):

This applies particularly in the early grades, where teachers need enough time to be able to provide support to children who are struggling with reading, writing and mathematics. Addressing the needs of all learners in the early grades is fundamental. Teachers in these grades need time to prioritising the learning of the children who are facing the most difficulty. If the challenges are not addressed in the early years, children will almost certainly not catch up later on.

Competency-based approaches can be reflected in the learning experiences included in textbooks. In some high-attaining education systems, the curricular documents themselves provide examples of approaches to teaching and learning within subject domains. For example, the Singapore maths syllabus refers to 'content and learning experiences' that ...

... enhance conceptual understanding through use of the Concrete-Pictorial-Abstract approach and various mathematical tools including ICT tools; apply concepts and skills learnt in real-world context; communicate their reasoning and connections through various mathematical tasks and activities; build confidence and foster interest in mathematics.

The notion of quality can be reconsidered. For example, how do the teachers and the students perceive quality? For students, it is perhaps in terms of work that is high-quality because of how it engages their interest and because the result is something that they might be proud of, as well as being 'correct'. For learning experience to be authentic, high-quality work should mean more than a high score in an exam that is based on factual recall.

Textbook writers also need to be aware of how the textbook's approach to assessment affects how teachers teach. Assessment that measures responses as being 'right' or 'wrong' will inevitably influence the way that textbooks are written and the way teachers teach: the textbooks are more likely to be written as a series of factual definitions and the teacher will very likely be influenced to teach using a rote-learning methodology. Although each individual subject determines the actual pedagogy used in the textbook, most international, high-quality textbooks for any subject include an appropriate balance of narrow, factual assessments as well as open-ended assessments in which more than one response can be 'correct' or appropriate. It is the role of the textbook to provide a range of learning experiences, from narrow to open-ended, supported by assessment methods that reflect the same range.

#### **Conclusions**

- It is important for curriculum developers as well as textbook writers to know and understand subject-specific pedagogy.
- Creating a new generation of textbooks takes time and requires collaboration between subject specialists, pedagogy specialists, and textbook writers (and editors).
- Textbooks should include a range of learning experiences, some of which

   appropriate to the subject and level, and to the concepts or skills being taught will be aimed at developing higher order competencies, openended competencies and creative work.



PART TWO:

THE PROCESS OF TEXTBOOK DEVELOPMENT

## PART TWO: THE PROCESS OF TEXTBOOK DEVELOPMENT

#### 5. Selecting textbook writers

Selecting the right authors, along with the general editor, for a textbook is probably the most important moment in the process of improving textbooks, whether it is carried out by a central education authority or by a publisher. Textbooks in higher-achieving education systems are usually written by teams of writers who combine academic authority and classroom experience. Teachers with experience in the target subject and cycle should be included in writing teams in order to ensure that concepts are presented in a way that is appropriate to students, with appropriate language and pedagogy. This is particularly important for primary school textbooks<sup>12</sup>. Textbooks that are developed purely by curriculum specialists are less likely to be effective. Where practicing teachers are included in writing teams, they should be given parity with the academic specialists.

Resolution 548 of 2004: Selection of textbook authors, publishers and suppliers describes the criteria and process for selecting an author (or institution) to write a textbook manuscript. The process for selecting the author evaluation committees, the profiles of the authors, and the transparency and fairness of the process seems to be well described in Annex 3: On the procedure for selection and approval of authors for the development of textbooks for educational institutions of general secondary and secondary special, and professional education.

Authors or organisations are required to submit:

- application for participation;
- participant profile;
- the concept for the manuscript (up to 0.5 pp), which should reflect the goals and objectives of the materials, the theoretical and methodological approach to the content and structure, the didactic principles on the basis of which the methodological apparatus of the educational literature is created;
- a plan-prospectus of the manuscript (summary of the content of sections and topics up to 1 pp
- a sample text of one chapter.

This may be described as a pre-selection process. This makes the process efficient, since only those authors who have a genuine possibility of having their textbook approved will invest the time in developing a complete manuscript. Authors who are pre-selected may then submit complete proposals, as described in Annex 4: On the competitive selection of textbooks and for educational institutions of general secondary and secondary special, and professional education: 'Tender documentation is sent only to applicants – winners of the competition for the selection of authors – with whom an agreement has been concluded to develop a draft textbook.'

The committee members for the selection process are described as follows:

<sup>12</sup> In Japan and the Republic of Korea, teachers have traditionally led elementary school textbook writing teams (Tani et al. 1993, p. 75; Usiskin & Willmore 2008, pp. 99–101).

- customer representatives The Ministry of Public Education or the Center for Secondary Special, Professional Education of the Ministry of Higher and Secondary Special Education of the Republic of Uzbekistan (by affiliation);
- specialists of the Republican Education Center of the Ministry of Public Education or the Center for the Development of Higher and Secondary Special, Professional Education of the Ministry of Higher and Secondary Special Education of the Republic of Uzbekistan; representatives of interested ministries and departments (the Uzbek Press and Information Agency, the Ministry of Health, etc;
- representatives of the scientific and pedagogical community;
- leading practicing teachers, teaching staff, members of parent committees.

For the evaluation of the submission itself, the committee appoints 'an expert group in the relevant disciplines composed of the scientific and pedagogical community, scientists, practicing teachers, methodologists and other specialists of the required profile'.

The process appears to be fairly transparent and fair, and appears to include the following:

- the evaluation criteria are provided to the authors and organisations who intend to submit proposals;
- the submitted proposals are evaluated anonymously;
- submitting authors are invited to attend the opening of their submissions.

However, Annex 3 of Resolution 548 does not indicate the criteria used for the purpose of selecting the author or organization, nor does it state how many authors or institutions may be approved. Much of the following observations are therefore based on personal assumptions.

Three main observations may be made. The first relates to the fact that textbook publishing is currently divided into three phases:

- Selection of writer(s)
- Selection of textbook
- Selection of printer

While the rationale for this division into phases may be well-founded, the outcome is unlikely to lead to a 'new generation of textbooks', as called for in REC's own analysis<sup>13</sup>. Multiple stages of quality assurance, with multiple actors in each evaluation, will almost certainly lead only to conserving the *status quo*. No high-achieving education system operates in this way, because the quality of the author's manuscript is not proportional to the potential rewards: when the writing is separated from the publishing, it is the publisher who is likely to gain most of the financial benefit. In addition, the process of developing a manuscript through a collaboration between the writers and the editors usually leads to a better result.

Although the first two phases in the process followed in Uzbekistan have something in common with two-stage manuscript submission processes that operate in other countries<sup>14</sup>, the system in Uzbekistan is significantly different because the first stage does

<sup>13 &#</sup>x27;Systemic problems obstructing the creation and publication of textbooks' (Undated document provided to UNICEF by the REC in November 2019)

<sup>14</sup> See Smart & Jagannathan, p. 28:

not provide feedback to enhance the submission. The reason for this, of course, is that the ultimate aim in the current system is to select a *single textbook only*: therefore the first step cannot give feedback on all approved submissions.

The following box provides examples of systems in which governments provide feedback to publishers in one or more stages. It should be noted that in these systems (apart from the PRC), the aim of government is to ensure that a number of high quality books are available for selection, not only one.

#### The two-stage submission process

In the People's Republic of China (PRC), the evaluation committee provides detailed feedback to the publishing house. After modification, the textbooks have to be re-examined. A former textbook editor in both the PRC and Singapore, both of which operate a two-stage submission and evaluation process, reports that 'when I served as a chief editor in both countries, I received detailed feedback and sometimes even recommendations.'

In Hong Kong, the Curriculum Development Council follows a multi-stage consultation process, which begins with publishers submitting an outline and samples of the proposed manuscript(s).

In Taiwan, the Reviewing Committee offers suggestions for revisions to the publishers, who might revise their textbooks or seek to justify their decisions. There may be two or three review cycles.

A second observation relates to the overall pool of expertise on which MOPE is able to draw, when it announces a tender: in other words, no matter how many changes are made to the procurement process, will the outcome be different unless the submitting organisations are able to develop new approaches? The answer to this question will depend both on the opportunities for capacity development of the writers and editors, as well as on MOPE making clear what it expects from the writers and editors, and to what extent it *encourages* innovation.

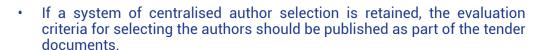
As a third observation, I assume that the overall objective of both the committee and the expert groups is only to reject applicants who clearly do not meet the minimum criteria. In other words, most applicants would expect to be approved by this pre-selection process. In this case, the condition stated in paragraph 17-1, that at least three submissions must be received, will generally lead to at least three submissions being approved. As a consequence, the 'high stakes' moment is transferred to the selection of the completed textbook manuscript, which is part of a process that also includes a price factor. Given that only one textbook can ultimately be selected, the consequence is that price will very probably become the most significant factor in deciding which textbook is successful.

One of the main points made by REC in its own analysis of the author selection process is the lack of creativity among current authors. This problem is unlikely to change, with the process described above. Despite the well-founded reasons for dividing quality assurance (or evaluation) into three phases, this is unlike the systems in most high-achieving countries. Apart from rare exceptions, such as Republic of Korea's process of developing lower primary textbooks – in which the Ministry of Education commissions its own authors, before tendering the publishing of the manuscripts – most middle to high income countries operate textbook procurement systems in which the publisher is entirely responsible for the selection of the authors. Even in the case of the Republic of Korea, it

is a two-stage system – of selecting the author, and then selecting the publisher – rather than the three-stage system in operation in Uzbekistan.

#### **Conclusions**

- The selection of the author should be included within the process of selecting the publisher. Publishers should submit textbook outlines and samples. This can be for a single textbook or even for a series.
- Threshold criteria can be used to eliminate submitted proposals that are unsuitable.
- A two-stage submission process can be highly effective, in which the first stage provides feedback that will enable the publisher/author to improve their submission. However, a two-stage submission process of this kind cannot form part of a high-stakes submission process, in which only one proposal is accepted, because in this case the client is not able to provide transparent feedback.







#### 6. Textbook planning and writing

Before they begin writing, writers need a system and a plan. How will the writers work together, and how will they work with the general editor? And how will they together create an overall plan for the book?

The general editor is usually an important person in this process, providing a link between the curriculum and the writers and ensuring an overall vision for the textbook, based on a wide understanding of the curriculum and of appropriate pedagogy.

Textbook planning should lead to a framework for the book that reflects the curricular approach for the subject and level, organises the content of the syllabus into an appropriate sequence (which might not always be the sequence followed in the syllabus), with outline units of study that are conceptually coherent without being overloaded with content, and which will embody a well-planned structured pedagogy.

There are challenges and risks for textbook writers for any new curriculum, including the temptation to overload the content at the expense of pedagogy. Writers should avoid falling into the trap of the 'curriculum list': a glance at many curricula around the world reveals that the syllabus for each subject includes lists of topics that are often transferred into the textbook as lists or as series of definitions within paragraphs. Instead, writers can organise the content of the textbook around big, engaging themes. For example, in science see 'Working with Big Ideas of Science Education<sup>15</sup>'.

The more thought that writers put into the planning stage, the better the result will be. Writing a textbook around a well-planned structure and led by a general editor will motivate the writers to write a better textbook. They will enjoy writing it because they know teachers will enjoy teaching it more and students will enjoy their learning more.

Writers should reflect again on what is meant by *quality* (already referred to in section 4 above). Almost all the references to quality in the ESP equate to 'high-attaining', i.e. high quality means high academic outcomes. However, section 4.4.3, 'Curriculum, pedagogy and assessments', proposes other notions of quality including 'quality time' in terms of teaching as well as the 'quality of nature' of the tasks to be carried out in the classroom. The nature of the tasks, or learning experiences provided in the textbook, is an important aspect of quality.

How far does quality extend? Writers should reflect on what kinds of work students themselves will consider to be high quality. This is likely to be work that is both interesting for the students and which also allows them to show what they can do. The work will also allow students to think about how to solve problems, whether in language/literature, maths, science or the humanities. In designing high quality learning experiences for the textbook, the writers should also allow time for teachers to monitor and support students during their work. This is how high quality formative assessment can be provided.

Learning experiences can allow students opportunities to think about their learning and to make choices. This can be as individual students, or pairs, or even groups. The writers may therefore need to have challenging discussions about the role of student collaboration. For example, how will teachers manage the activity in the classroom?

Writers also need to reflect on how the textbook will deal with student assessment, both formative and summative. Educators often debate how teaching becomes too narrow when the only purpose is to succeed in an exam. In the same way, many textbooks are written mainly with the aim of testing the student's learning. Furthermore, the approach taken by many textbook writers is to test students' right/wrong responses, rather than balancing such 'closed' questions with more open-ended responses where students

<sup>15</sup> https://www.ase.org.uk/bigideas

are able to demonstrate their broader knowledge and competences. Textbooks provide influential models for national assessment but they should also give the teacher – and the student – useful information about the students' progress.

A fundamental aspect of most competency-based approaches is the importance of real-life application. However, apart from the challenge of defining what real life consists of for each subject, there is the question of whether conditions inside a classroom can actually recreate conditions outside the classroom. Therefore, as well as attempting to match learning experiences to 'real life', textbook writers can reflect on what will most motivate the students, to both reflect and stimulate their interest. Writers can also sometimes research actual, real-life examples that have the authentic nuances that are often lacking when writers try to invent examples in their textbooks.

#### **Conclusions**

- 06
- An editor in chief, who combines academic and pedagogical knowledge of the subject and grade, can give valuable guidance to authors.



- The organisational framework for a textbook should be based on a coherent sequence of cognitive and engaging themes.
- Learning experiences should always be designed to develop the appropriate knowledge and competencies.
- Writers should reflect on how the textbook impacts both positively and negatively on the approach to assessment.

#### 7. Textbook specifications

Resolution 146 sets out in detail the physical specifications of all printed educational materials. Specifications for content and pedagogy of textbooks will be addressed in section 8 below.

The specifications set out in Resolution 146 are described as being health-related. With the exception of the quality of inks and glues, most of these specifications would not be considered as relevant for legislation within the textbook approval systems of most high-achieving countries (although specifications for paper might set standards for the origins of the paper used).

I would challenge several requirements in the document such as specifying how many hyphens may be used in a grade 1 textbook, the percentage of white space to be provided in the pages of a workbook, the total area allocated for illustrations, and the use of serif and sans serif fonts. The following is a more detailed analysis according to international standards and research.

#### **Text specifications**

Graphic specifications for textbooks are covered by chapter III of Resolution 146, and are expressed in terms of the health of the students as well as educational reasons. The specifications are more detailed than would normally be expected.

For example, regarding text fonts and sizes, in most contexts international publishers follow conventions that lie within a range. Although some textbook evaluation systems, such as Hong Kong, require certain font sizes ...

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<sup>16</sup>.

... research into fonts and sizes does not provide solid evidence. For example, 'children are very tolerant in relation to variation in the use of horizontal space in terms of reading rate and accuracy' (see Reynolds & Walker, 2004).

Although it is expected that Resolution 146 would be based on research, there are several cases where there is either no evidence or the evidence is sometimes contradictory. For example, there is little evidence to show that serif or sans serif fonts are more legible: 'our data exhibited no difference in legibility between typefaces that differ only in the presence or absence of serifs' (see Arditi & Cho, 2005).

For special schools, I do not have the evidence to comment on, with the exception of dyslexic reading difficulties. Timothy Shanahan, a leading specialist in reading, wrote about fonts for dyslexics in one of his influential blogposts in 2019: 'Only one study reported a benefit of any kind—the dyslexic students in this study read faster (Marinus, et al., 2016). This benefit apparently came, not from the font design, but from the spacing within and between words. The researchers increased the spacings in the standard fonts and the same effect was seen. Masulli (2018) likewise found that larger spacings improved the reading speed of dyslexics—but that effect was apparent with non-dyslexic readers, as

<sup>16</sup> https://www.edb.gov.hk/en/curriculum-development/resource-support/textbook-info/GuidingPrinciples/index.html (TL-5)

#### well<sup>17</sup>.'

On the other hand, consistency in the use of fonts is one of the most important considerations. Many examples of textbooks can be found in various countries, in which the editor of designer has used too many variations in the typeface (bold, italic, capital, coloured), headings, and even in the page layout itself. Variations in fonts should be limited and should have clear educational purpose.

#### Layout

The use of more than one column should be left to the publisher.

Regarding line lengths (i.e. the number of characters within a line, rather than within a sentence), the convention that I have always used (based on publishing industry conventions) was a maximum of around 65 characters per line (including word spaces as characters): <a href="https://eric.ed.gov/?id=EJ749012">https://eric.ed.gov/?id=EJ749012</a> However, the following article suggests that for online texts, the number of characters can safely be increased: <a href="https://www.viget.com/articles/the-line-length-misconception/">https://www.viget.com/articles/the-line-length-misconception/</a>

#### **Images**

The use of colour is hardly mentioned in Resolution 146, which is fine.

It should be noted that precise specifications for some graphic elements are of a different order from the kind of guidelines or criteria that might be applied when designing textbook evaluation criteria. For example, the function of an image is arguably more important that its area or its use of colour, both of which should serve the function of the image. This is a judgement that should be made by the publisher (including the designer and illustrator working for the publisher) and by the textbook evaluation process in countries where such procedures exist.

With regard to some of the specifications given in the document, there are wide-ranging debates between specialists. For example, the use of images in materials for early grade reading is accepted by many specialists as an important part of learning to read<sup>18</sup>. On the one hand, cognitive psychologists such as Helen Abadzi, who often advises the World Bank in such projects, says, 'Pictures may be useful only if relevant and after automaticity, when working memory can hold both letters and pictures'<sup>19</sup>. For most professional textbook writers and international publishers of textbooks and children's books, the convention of using pictures in books for young readers, in a stimulating and appropriate way, is a good one.

An example from Hong Kong's textbook evaluation criteria might be useful<sup>20</sup>:

- 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

<sup>17</sup> https://www.sciencedirect.com/science/article/pii/S0042698918302074

<sup>18</sup> https://readingrecovery.org/the-three-cueing-systems-in-beginning-reading-instruction-good-idea-or-hoax/

<sup>19</sup> http://www.usfq.edu.ec/eventos/mbe/Documents/recursos/MBE-2013-reading-Abadzi.pdf

<sup>20</sup> https://www.edb.gov.hk/en/curriculum-development/resource-support/textbook-info/GuidingPrinciples/index.html

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.

#### Physical specifications and weights of books

Resolution 146 sets out the specifications for the weight and type of text and cover paper required for textbooks. These are important specifications that will impact the life of the textbook and therefore the system cost. If revisions are to be made to these specifications, a book production specialist can provide up to date advice.

Paragraph 19 of this Resolution also sets out the maximum weight for textbooks for each cycle. The weight of individual textbooks is rarely specified in other countries, although many countries have sought to reduce the overall weight of schoolbags. In India in 2018, due to concern about the harm that heavy bags were causing to young children, the maximum weight of bags was set at 1.5 kg for grades 1–2, and 2–3 kg for grades 3–5<sup>21</sup>. The American Academy of Pediatrics recommends that the weight of schoolbags should not be more than 10 to 20 percent of the child's weight.

#### **Conclusions**

07

 In general, the specifications for text and graphics should be revised and made much less restrictive. REC should provide evidence for any specification that is required.



- For manufacturing specifications, specialist advice should be obtained.
- The maximum weight of books can be revised through consultation between pedagogy specialists (regarding the maximum number of pages required) and book production specialists.

<sup>21</sup> https://scroll.in/latest/903556/no-homework-for-students-of-class-1-and-2-weight-of-school-bags-capped-at-1-5-kg-says-hrd-ministry

#### 8. Textbook evaluation and approval

The majority of countries worldwide operate some kind of textbook evaluation and approval. Even within centralised system, where the ministry of education is the publisher of textbooks, a nominal system of evaluation usually exists, although the nature of centralised systems means that the impact of such evaluation is limited.

Section 5 above described how the selection of writer and of completed manuscript are two separate stages, which are defined in Annexes 3 and 4 of Resolution 548. The process of forming a tender committee and expert group are the same for the selection of textbooks as they are for the selection of writers.

Paragraph 21 of Annex 4 provides the general evaluation criteria. It also says that evaluation 'is based on the criteria specified in the tender documentation', which suggests that more precise criteria may be provided to submitters. On the other hand, paragraph 22 says that 'Detailed evaluation criteria are made by the tender committee until the opening of envelopes with tender offers', which suggests that the tender committee may also revise the criteria between the time of announcing the tender and the time of receiving submissions.

#### Paragraph 21 states:

The main evaluation criteria for educational literature are:

- its degree of compliance with state educational standards, curricula and programs;
- the level of ensuring the continuity and consistency of the proposed course material, as well as ensuring inter-subject communication;
- scientific and pedagogical validity of the proposed educational material;
- the degree to which the idea of national independence is introduced into the subject;
- compliance of the educational material with the psychological and age characteristics of students, as well as the level of their knowledge;
- accessibility of the language of presentation, visualization and illustrativeness of the proposed material;
- the optimality of the ratio of theoretical material with exercises, tasks and practical exercises;
- design quality of the proposed layout.

In themselves, these criteria are broadly comparable with those used in many other countries. It would be surprising if they were not. However, given the importance of a good pedagogical basis for a textbook, there is little to reflect this in the above criteria. Also, since the 'scientific and pedagogical validity' is highly dependent on each subject and level, the criteria should be appropriately supported for each domain.

Ultimately, the effectiveness of the criteria will lie in how they are interpreted by authors and publishers, how they are applied during the evaluation, how they accommodate the particular needs of the subject and level, and the personnel responsible for carrying out the evaluation.

The way that authors and publishers interpret the criteria will depend on the supporting documentation provided by REC. If the curriculum provides good guidance as to the role of

textbooks in supporting standards and programmes, including pedagogical approaches, this will probably lead to the submission of better textbooks.

The application of the criteria should probably be carried out in a very different way from the way that the criteria are used for the selection of authors. The size of the Competitive Commission described in paragraph 5 of Annex 4 suggests that it would be too large to be able to carry out the fine-grained work that is necessary for evaluating the quality of the textbook content.

The selection of the expert group to carry out the evaluation is described in paragraph 19 of Annex 4. This group is tasked with completing their work in 30 days. The quality of their work will depend on several factors, including the presence of a good 'moderator'<sup>22</sup> who will ensure the reliability and validity of the evaluators' judgements (including carrying out prior, practice evaluations), the format of their work (including whether they work together in the same room, or meet from time to time, or work mainly remotely), the kind of justifications they are asked to provide for the scores they give. A further important factor will be the degree to which the practising teachers are given parity of respect in the process, and that they are not afraid to express their own views in the presence of academic experts who have much greater authority.

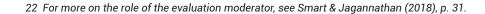
The document does not describe how errors of fact or language are corrected, once a manuscript has been evaluated and approved. This is an important omission.

#### **Piloting**

There is no regulation concerning the piloting of textbooks. Although this is surprising, piloting of textbooks is not in my view a necessary element of a textbook evaluation process. If a textbook evaluation process includes well-chosen evaluators, including teachers who have been recommended as having experience of teaching the specific subject in the required level, this should provide the evaluation process with an efficient method for judging the likely effectiveness of the textbooks. Piloting textbooks in schools for a month or longer can be a very intensive use of resources — especially if a range of schools in different contexts are included in the pilot — and may provide little more information than be gained from teachers' own judgements.

#### Conclusions

- Evaluation criteria should reflect both the general requirements and subject-specific requirements and should be provided to offerors at the time of announcing the tender.
- The quality of the syllabus standards and the supporting pedagogical narratives is likely to influence the quality of the submitted textbooks.
- As at present, the textbook evaluators (the expert groups) should include both experienced practising teachers and academic experts and will benefit from being led by an experienced moderator.
- Textbook evaluators should provide justifications for the scores that they award.
- Textbooks that have been evaluated and approved should be reviewed for their factual and language accuracy before being passed for press.



#### 9. Textbook costing and financing

There appear to be three ways that textbooks are made available in Uzbekistan: Presidential decree 362 describes a process for ensuring that in addition to textbooks that are provided free of charge to grade 1 and low income families, other copies can be available to buy through retailers. For the majority of students in all grades above the first grade, a rental fee system is in operation.

In most countries, the difference between using a textbook for one year or for several years represents the single largest cost variable. Although many high-performing high-income systems use a textbook for one year only, a well manufactured textbook – even in the early years of primary, when it may be less easy to ensure that children take good care of their books – should last for 2–3 years. Reusing textbooks of course requires improvements to the paper, cover board, and binding quality. It appears that the specifications and treatment of textbooks in Uzbekistan are able to provide for a long textbook life. Presidential decree 363, on 'Measures for the organization of the Republican target book fund in the Ministry of Finance of the Republic of Uzbekistan' (1 June 2006), describes the textbook rental system, which has now been in operation for 15 years and appears to be effective. From published reports and the limited evidence of the visit to schools, textbook availability is good. Shortage of textbooks was not mentioned as a problem in any of the interviews carried out.

The rental fee is set by the board of trustees of the Republican Targeted Fund (the textbook rental fund). The fund calculates and pays the rent for textbooks and sets the annual rent for textbooks (paragraph 8 of decree 363). This includes also the supply of the consumable workbooks for foreign languages (English, French, German) in grades 3–6.

The link between the process of setting the rental fee and the prices agreed with the winning offer is not yet clear. Is the rental fee set after the bidding process has been completed?

#### Conclusions

No change to the rental fee system is proposed.



#### 10. Textbook payment systems

#### **Current process**

Schools collect textbook fees from parents apart from students in grade 1 and low income families. The rental fee is calculated by the Ministry of Finance on an annual basis. Schools collect rental fees from students and remit the funds to MOPE. The fund is managed at national level by trustees, regulated by decree #963. This system has worked well for almost 20 years, is stable and is apparently not under pressure. Unless the government intends to introduce free basic education, with free textbooks for all students in government schools, it is advisable to build on this well-established cost-sharing system. A rental system can serve a multiple-textbook policy<sup>23</sup>.

#### Selecting textbooks in a multiple-textbook system

In a multiple-textbook system, in which commercial publishers print and supply the textbooks, the responsibility for selecting the textbooks from an approved list usually lies with either (a) the school or (b) the local education authority. (In countries such as Japan, it is the local education authority which selects the textbook.)

The location of the textbook selection is linked to the question of how the publishers are paid.

#### Delivery of textbooks in a multiple-textbook system

It is preferable for publishers to deliver direct to schools. When delivery is the responsibility of the publishers, they have incentives to get the delivery right, in order to get paid.

MOPE may of course prefer to manage the delivery of the textbooks itself (this is the system in Georgia, for example, but it is an unusual system), in which case, the publishers would deliver to MOPE.

#### Payment for textbooks in a multiple-textbook system

If rental fees continue to be collected by the school, there are two main options:

- Either the school would send the money to MOPE, who can then pay the publishers
  or
- The school would pay the publishers directly.

The choice will depend partly on how the textbooks will be distributed. If publishers deliver the textbooks to the schools, it is simpler for the schools to pay the publishers directly. This means that the school is responsible for checking that the books have been correctly supplied – it is a typical commercial transaction. Even if the local authority is responsible for selecting the textbooks, the books may be delivered direct to the schools, who are responsible for paying the publishers.

If MOPE opts to manage the delivery of the books itself, it would be more logical for MOPE to pay the publishers.

The decision as to where to locate the payment process will depend a lot on the overall

<sup>23</sup> In Armenia's textbook rental system, for example, government provides textbooks free of charge in grades 1-4, while textbooks for grades 5-12 are paid for through a rental system. In some subjects and grades, there is a choice of 2 textbooks, but in other grades only one textbook is approved. All textbooks are published by commercial publishers.

financial structures of the education system, and the degree of autonomy of individual schools.

#### Controlling the costs in a multiple-textbook system

There is no reason why a multiple-textbook system should be much more expensive than the current single-textbook system. A small increase in costs might be necessary, because in most multiple-textbook systems each publisher is responsible for delivering their own books – therefore, there is some duplication of delivery costs (at system level). This small increase in costs could be balanced against an increase in textbook life. For example, in post-primary grades, textbooks in grades 2–4 should be able to last for three years instead of the current two years, if specifications were improved a little. This would dramatically reduce the system cost. (Some research would be needed for this.)

At a suitable moment, MOPE should engage the publishers in a discussion about the proposed new textbook policy, so that the publishers are part of the process of solving the issue of costs to parents.

#### Mitigating the risks

The following risks may be considered:

Perceived risk	Rationale	Response
The textbooks may be delivered to the schools late	If MOPE is not directly in charge, there will be chaos.	Publishers will not be paid unless they deliver the books.
The textbook orders may not be correct (incorrect books or quantities)		Schools have a direct responsibility for ensuring that their textbook orders are delivered accurately.
Remote schools may not be as well served as urban schools.	The profit margin to publishers for delivering to remote schools may be a disincentive to invest in delivery.	This is possible the main risk. MOPE will need to have a good information system in order to track any lateness, and will need to communicate with publishers. Penalties can be built into MOPE's contracts with all publishers of approved textbooks
The schools will not be able to manage the funds properly	Schools are places of education, not cost centres.	Schools are already managing the collection and remittance of textbook fees.

System costs may rise

If commercial publishers are brought into the process, the profit principle will inevitably lead to prices increasing.

MOPE is capable of controlling textbook prices. MOPE can also make other changes (for example, to textbook life). MOPE can also engage the publishers in the process, so that publishers have more responsibility to parents who will bear the cost of any increase in prices.

#### Conclusions





Some countries that have made the transition to local selection of textbooks have done so partly in order to reduce the risks of corruption – it is argued that by decentralising the selection of textbooks, there is less risk of publishers seeking to influence the process, simply because publishers are unable to influence the choice made by every school. This is a question of how the government assesses such a risk.

#### 11. Textbook manufacturing and distribution

Annex 5 of Resolution 548: On the procedure for tendering for publication and reprinting of textbooks and teaching aids for general secondary and secondary special, and vocational education describes the tender process for printing the approved textbooks. It states that the tender for the printing and delivery of textbooks is a one-stage, two-envelope process, in which bidders submit their price separately from their technical offer. Paragraph 57 states: 'The winner is the tenderer whose proposal has scored the most points in the amount of evaluation of technical and commercial proposals. With an equal total score, the provider with the lowest price offer gets the advantage.'

It appears that Resolution 548 sets a maximum price that bidders' offers must not exceed: paragraph 33 refers to 'the title, number of copies and maximum cost of the educational literature intended for publication and reprint'. This seems to be an effective way of controlling costs.

All textbooks are currently printed within Uzbekistan, although Paragraph 17 of Annex 5 of Resolution 548 states that foreign bidders may participate.

Interviews that were held during the inception visit suggested that in many cases, MOPE contracts with more than one offeror – not only with the offeror who has offered the lowest price. This process of dividing the contract among up to three offerors is not described in the regulations and does not appear to be very transparent.

The criteria for awarding to offerors do not seem to be provided in the regulations. Paragraph 54 states: 'Evaluation of tender proposals and determination of the winner of the tender is based on the criteria approved by the tender commission before its meeting.'

#### **Conclusions**

- If printing and delivery continues to be contracted separately from the writing and publishing, the evaluation criteria should be included in the call for proposals.
- Also, any flexibilities that the client takes to itself, to award to more than one offeror, should be made clear in the call to proposals.
- The main recommendation is that manufacturing (and delivery) of textbooks is normally part of a publisher's activities. Transforming the process from the current three phases author, publisher, printer/deliverer to a single phase would make the system comparable to systems in most educationally high-achieving countries. The argument for combining the writing and publishing into a single activity is partly for improved quality (the benefits of collaboration between author and editor) and partly for financial reasons (the incentives to the authors). The argument for combining publishing and printing into a single activity is mainly for financial reasons (the incentives to the publishers).

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#### 12. The roles of the public and private sectors

Resolution 281: On the creation and use of alternative textbooks for secondary schools (5 April 2019) describes MOPE's plan to introduce alternative textbooks and therefore to introduce competition and choice into the textbook system. The introduction to this regulation describes it as being intended to improve the quality of textbooks. It also refers to it being a gradual process, by means of the experimental testing of new procedures.

The resolution adds that alternative textbooks can be used *in addition to or instead of* existing textbooks. The alternative textbooks are required to be piloted for a full year (paragraph 12). In addition to feedback from the piloting, the alternative textbooks will be placed online for public feedback.

This process is unusual. Multiple-textbook systems in most countries are designed to benefit from the skills and expertise provided by commercial publishing companies and to result in continuous, consumer-led improvements by means of competition. They are also intended to break the link between the single textbook and recall-based examination systems (see section 3 above). Systems in which alternative textbooks compete with the government's own textbooks are rare. I do not know whether MOPE developed this concept independently or whether they studied it in other education systems. Currently, Vietnam<sup>24</sup> and Indonesia<sup>25</sup> are experiencing the challenges of such policies and it remains to be seen whether such a policy will be sustainable in either country.

The principle of commercial textbooks competing with government's own textbooks is a difficult one. Examples of the private sector competing with the public sector include of course private and public schools, as well as examples in health care, but in those two cases the public has a free choice between two alternative offers. In the case of alternative textbooks, the textbooks would be chosen by the school or the local education authority, and are therefore part of the same education sector that is providing the government's own textbooks. Even if the price of the alternative textbooks was identical, there would not be a 'level playing field' – the school or local authority would be under pressure to select the government textbook. When price is introduced as an additional factor, following the rationale that a better quality textbook justifies a higher price, the pressure on the school or local authority would become even greater.

Paragraph 16 of Resolution 281 is not very clear: 'The provision of secondary schools with alternative textbooks is voluntary, at the expense of parents, school teachers and sponsors, and other sources not prohibited by law.' If the intention of this paragraph is that parents who are already paying a rental fee (which covers all the textbooks that their child needs in that grade) can pay an additional price or fee for an alternative textbook for a particular subject, this is clearly not equitable — it favours higher-income parents.

Furthermore, the procedure for publishers to promote and sell copies of the approved alternative textbooks is not clear. There is also a risk that in a system in which schools are accustomed to using a single approved textbook, the schools might expect that they should acquire copies of all the textbooks approved for a particular subject and grade. Otherwise, their students would be disadvantaged, particularly in grades leading to national exams.

There is no statement regarding how many textbooks for each subject and grade may be approved, nor whether the textbooks should be submitted as a series (e.g grades 1-4) or as individual titles.

<sup>24</sup> https://english.vietnamnet.vn/fms/education/219271/vietnam-s-teachers-should-have-a-choice-of-textbooks.html

<sup>25</sup> In 2013, as a response to poor enforcement of a multiple-textbook policy, the Government of Indonesia brought all textbook publishing back under its own roof during the introduction of the new curriculum. Under Indonesia's planned National Book System Law, publishers will again develop textbooks subject to evaluation by the MOe, with a choice of textbook for each subject. The MOE's own textbooks will compete for endorsement against books developed by third parties.

In the workshop that was held in December 2019, as well as during a meeting with U'kituvchi publishers, it was clear that the topic of alternative textbooks is a high priority for publishers.

In recent decades, high-performing education systems and emerging economies worldwide have moved toward a liberalised, multiple-textbook policy in which commercial publishers play a large part. Around the world, countries now operate with varying levels of autonomy in terms of textbook selection. Several Asian countries follow a policy in which textbooks are evaluated and approved by the MOE for selection by users. In contrast, in most European countries there is no prior approval: a school may use any textbook it wishes and government schools therefore operate exactly like private schools but with public funding. The variations lie mainly in whether a system of approval operates or whether schools are completely free to select books from the market. Much of Europe operates an open system, while some of the individual states of the USA follow an approval system while others operate an open market.

The impact of a competitive, multiple-textbook market in which the customer is the driving force is undeniable from the perspective of continuous improvements in textbook content. In such a system, in order to be successful, publishers and authors must continuously seek to improve. However, the transition to such a system needs to be carefully managed in order that all actors can play their part effectively without disruption to students' learning and teachers' support. Without the support of the teaching community, any major reform is at risk. Local publishing capacity needs to be developed gradually to enable an emergent publishing sector to play its part. This takes time, which governments are not always able to provide. It may be noted that many OECD countries which now operate an open system followed an approval system until fairly recently<sup>26</sup>.

A variation has been implemented on occasion, in which a *limited number* of textbooks are approved, from which schools can select. For example, in the Republic of Korea (RoK), a total of five textbooks were allowed to approved until 1980, which was then increased to eight in the 1980s–90s<sup>27</sup>. Now, the number of approved textbooks in RoK, in post-primary cycle, is unlimited.

On the other hand, there have been some recent signs of reversal of this trend. For example, in China, Hungary and Poland, the government has increased its control over textbook publishing.

In multiple-textbook systems, 'users' have a choice of textbooks. The users may be the schools themselves or local authority representatives of the schools. The OECD identifies greater autonomy for schools, including a choice of textbooks, as being directly related to educational achievement (although, of course, relation does not mean causation): 'Results from PISA suggest that school autonomy in defining curricula and assessments relates positively to the systems' overall performance .... For example, school systems that provide schools with greater discretion in making decisions regarding student assessment policies, the courses offered, the course content, and the textbooks used, tend to be school systems that perform at higher levels' (OECD 2011, p. 42).

In most multiple-textbook systems, the school itself selects its textbooks. Exceptions include Japan (primary and middle schools), where the local school board consisting of supervisors, head teachers, classroom teachers and parents makes the selection on behalf

<sup>26</sup> For example, Sweden operated an approval system until 1991. See Anna Johnsson Harrie, 'The Swedish State Approval of Textbooks 1974-1991'

https://repository.gei.de/bitstream/handle/11428/25/818102888\_2015\_A.pdf?sequence=1&isAllowed=y.p. 361

of local schools, and China, where the provincial education department or city government decide. The rationale for the China's textbook selection process appears to be to ensure coherence between in-service training, textbook pedagogy, and the assessment system. Post-primary schools in Korea select from among textbooks authorized by the MOE.

Implementing a successful multiple-textbook policy requires an understanding by all stakeholders – not only by policymakers – of the policy rationale and objectives. Several countries have experienced confusion after the introduction of a multiple-textbook policy. According to one observer (personal communication) in Taiwan, professors who are responsible for designing examinations for the college entrance exam are expected to design their questions based on the contents of different versions of textbooks. If most questions of their examination sheet are found highly related to the content of a specific version, students and parents will question the impartiality of these professors or even the fairness of the examination itself. Most professors tend to adopt equal amounts of material from all major textbooks. Since this practice is well known to students and their teachers, it is not uncommon to find students from prestigious schools studying from more than one textbook, particularly in English and mathematics.

Parents are also vital stakeholders in such a policy shift. Whether or not the textbooks are provided free of charge, parents as well as schools need to be aware that the textbook does not represent the content that will be examined at the end of the year or cycle. In addition to a likely period of confusion during policy transition, critics of multiple-textbook systems argue that the evaluation process may not be robust enough to filter out low-quality textbooks, and that end users may not be able to make the best choice. Such critics may also argue that the end users prefer to get on with the core activity of teaching and have their textbooks chosen for them. experience in many countries shows that as long as the conditions are controlled and there is no undue influence on those making the choice, the role of the school and its teachers in the selection of textbooks is generally positive.

#### **Conclusions**



A transition towards liberalising the textbook policy should be carefully managed through a gradual process. All stakeholders, including schools and parents need to be fully informed about the plan and its rationale.



## PART THREE:

POLICY RECOMMENDATIONS

# PART THREE: POLICY RECOMMENDATIONS

# 13. Main textbook policy scenarios

The following is a brief overview of the features of the main types of textbook system. For more detail, see Smart & Jagannathan 2018: <a href="https://www.adb.org/sites/default/files/publication/478946/textbook-policies-asia.pdf">https://www.adb.org/sites/default/files/publication/478946/textbook-policies-asia.pdf</a>.

The most centralized textbook systems are found in Central Asia, South Asia (India, Bangladesh, Sri Lanka) and the Arab World, while most OECD countries operate either textbook approval systems – in which more than one textbook may be approved for use in schools – or open markets. In open market systems, publishers publish according to their own commercial priorities and market the textbooks directly to the schools, without any approval mechanism.

Several countries of the former Soviet Union follow a system in which centralised textbook publishing is split into three separate stages: writing, publishing and printing. In Tajikistan and Kyrgyzstan, the first two stages are carried out by the government itself, unlike in Uzbekistan which holds tenders for each stage.

Between the extremes of fully centralised government publishing and completely open markets, there are several other models. While it may be possible to position countries on a scale according to their degree of centralisation or liberalisation, there are examples of successful mixed models in terms of textbook policy, such as the Republic of Korea (South Korea), where the government publishes the textbooks for the primary schools and operates a multiple-textbook system for post-primary.

In competitive, multiple-textbook markets — whether they follow an approval system or open markets — having a choice of textbooks is part of schools' greater legal and professional autonomy. In this model, the school has the power — as a customer — to be a driving force for continuous improvement in textbook content. However, in some multiple-textbook approval systems (for example, China and Japan), it is the local authority that selects the textbooks from an approved list.

Multiple-textbook systems can have great benefits for the development of a national publishing industry, which in turn can have economic and social benefits for the book sector in general and for wider literacy. Most high-achieving education systems operate multiple-textbook systems, though these systems do not necessarily lead to improvements in education outcomes.

There are several examples, in Asia, Europe, and sub-Saharan Africa, of countries that are currently seeking to recentralise some or all of their government textbook publishing. These include several higher-income countries. Although very few OECD governments develop their own textbooks, governments in Hungary and Poland have recently moved to recentralise some or all of their textbook publishing<sup>28</sup>. The rationales for liberalisation or centralisation may be a combination of political imperatives and cost-effectiveness as well as for technical reasons. In general, greater economic development is accompanied by greater liberalisation of textbook policy (ie by greater role for commercial publishers), although this is not always the case.

Occasionally, governments may move from a fully open market system 'back' to an approved multiple-textbook system, such when the government of Portugal in 2006 introduced textbook evaluation and approval into a previously unregulated system as a

<sup>28</sup> https://www.dw.com/en/turkey-hungary-and-poland-the-politics-of-school-textbooks/a-41032191

response to the country's low PISA scores<sup>29</sup>.

In a transition to a multiple-textbook policy with government approval of alternative textbooks, publishing companies usually emerge in response to opportunities. Where there is limited existing publishing capacity, because the private sector education system is small and the retail sector is weak, educational publishers may be created by entrepreneurial educational institutions or by other organisations with financial capacity, such as printing houses. Several former Soviet Union countries – including Georgia and Armenia but also of course countries that are now part of the European Union, such as Estonia, Latvia and Lithuania – have made a successful transition to a multiple-textbook policy, leading to lively educational publishing sectors with publishers that participate in international associations and book fairs. Estonia is a good example, which is now among the highest-achieving countries in PISA assessments.

However, governments that decide to embark on a transition from a centralised, single-textbook system to a multiple-textbook system can find the process challenging. The process requires government to maintain its political will and adapt to emerging problems, while holding on to the longer-term objectives. Local publishing capacity also needs to be allowed to develop in order to enable an emergent publishing sector to play its part. This all takes time, which governments are not always able to provide.

In summary, and in general, the trend worldwide for textbook policies over the past 30–40 years has been away from centralised government publishing towards greater liberalisation. In OECD countries, in particular, the trend during this period has been away from multiple-textbook approval systems towards open markets. For example, Finland moved from an approval system to an open system in the 1980s, as did Singapore and Sweden in the 1990s<sup>30</sup>.

Centralised government/ state publishing	India, Bangladesh, Iran, Vietnam (although it has announced its intention to move to a multiple-textbook policy), Kyrgyzstan, Tajikistan, Uzbekistan, Hungary	
Mixed economy	Republic of Korea, Poland, Mexico	
Approval system	USA (some states), Germany (most states <sup>31</sup> ), Austria, Czech Republic, Chile, Japan, Shanghai, Indonesia, Hong Kong, Singapore, Turkey, Georgia	
Open market	UK, US (some states), Australia, France, Canada, Netherlands, Sweden, Denmark, Finland, Italy, Spain	

Table 1: Types of textbook policy system and examples of countries

See Annex 1 for examples of textbook evaluation criteria.

<sup>29</sup> Joana de Sousa and Maria de Lourdes Dionísio. (2009). 'Between the market and the school: Textbook approval, selection and evaluation in Portugal'. <a href="http://repositorium.sdum.uminho.pt/bitstream/1822/12663/1/Sousa%20%26%20">http://repositorium.sdum.uminho.pt/bitstream/1822/12663/1/Sousa%20%26%20</a>
<a href="mailto:Dioni%CC%81sio%2c%202010.pdf">Dioni%CC%81sio%2c%202010.pdf</a>

<sup>30</sup> https://iartemblog.files.wordpress.com/2012/03/8th\_iartem\_2005-conference.pdf, p. 361

<sup>31</sup> https://journals.sagepub.com/doi/full/10.1177/2158244014552430

# 14. Controlling textbook system costs

Governments that are considered reforms to textbook policy are naturally concerned about the cost implications.

There are several ways to keep the overall costs of supplying textbooks down. These fall into one or more of the following categories:

- Reduce the quantity of materials to be provided
- Improve the life of the materials provided
- Reduce the cost of each of the materials provided

Section 9 of the accompanying document, *An analysis of current textbook policy regulations in Uzbekistan*, recommends maintaining the current system of textbook rental, which to a large extent satisfies the second and third of the above bullet points: the life of the textbooks appears to be long enough, with few textbook shortages in schools. The overall textbook system cost is calculated on an annual basis by MOPE. The only change to the current system that might be considered would be to reduce the number of consumable workbooks. This may be considered within the context of the current reforms of the national curriculum.

As long as there is public support for textbook rental systems and as long as the annual increase in the level of the fee is well managed, so as to absorb any increases in the costs of producing the textbooks, such systems – which have been sustained successfully for many years in Uzbekistan, as well as in Armenia – are a great asset to government.

Most OECD countries now provide textbooks free of charge to students. Ireland is an exception at all grades, while in Italy, students in secondary education must buy their own books<sup>32</sup>.

Some governments that have begun to make textbooks free of charge to parents in recent years – for example, in central and eastern Europe – have found different solutions to addressing the increase in overall costs. When Hungary began to provide free textbooks from 2013, it was accompanied by much greater control of textbook publishing by the ministry of education<sup>33</sup>. Poland has also followed a similar path to Hungary, with a government-published textbook supplied free of charge<sup>34</sup>. This was therefore a return to monopoly textbooks<sup>35</sup>.

Although textbook prices in most OECD countries are determined by publishers, according to the market, governments in some higher income countries do have systems for controlling the prices of textbooks supplied by private sector publishers:

 In Japan's well established system, the government<sup>36</sup> sets ranges of prices. For example, primary school Japanese language textbooks currently range from ¥633 to ¥799<sup>37</sup> and primary school science textbooks are ¥608–927. Junior high school

<sup>32</sup> More information on other countries can be found at: <a href="https://edu-data.edumeres.net/en/textbook-systems/countryselection/">https://edu-data.edumeres.net/en/textbook-systems/countryselection/</a>

<sup>33</sup> https://www.internationalpublishers.org/news/866-educational-publishing-in-hungary-an-interview-with-dr-ildiko-toeroek

<sup>34</sup> https://www.premier.gov.pl/en/news/news/beginning-of-a-great-change-at-schools-free-textbook-and-subsidy-system.html

<sup>35</sup> Also see: https://www.dw.com/en/turkey-hungary-and-poland-the-politics-of-school-textbooks/a-41032191

<sup>36</sup> Prices are determined by the Working Group for Textbook Prices at the Council of Survey for Reviewing and Authorization of Textbooks at the Ministry of Education (MEXT).

<sup>37 100</sup> Japanese yen are equivalent to just under US\$1.00.

textbooks are ¥766-¥794.

• In Austria's Schulbuchaktion system, government also limits prices. The system is believed to work well because of high competition, clear guidelines and transparency in the approval process and in the adequate financing of the system.

Other governments – for example, in Kenya and Georgia – have used a system of limiting the number of approved titles as a way of putting downward pressure on prices. In such systems, publishers must submit a price at the same time as submitting a textbook for approval. In this case, a score for the price element is added to the score for the technical element (ie, the content).

In systems that provide textbooks free of charge, this is usually managed by providing schools with capitation grants, which give them a budget to spend on textbooks. School-based budgets can of course also be used to buy other resources, not just textbooks. For example, essential library books. Occasionally, in some systems with free textbooks, government may buy the textbooks from the publishers – according to the orders provided by the schools – and carry out its own distribution. (In Georgia, the government carries out both the printing and the distribution.)

# 15. Proposal for strategy for Uzbekistan

In 2019, MOPE announced a new policy direction of 'alterative textbooks'. However, the strategy for turning this policy statement into reality has not been clear.

In order to recommend with confidence a particular strategy for Uzbekistan, more information is needed about the publishing and educational publishing sector. However, the following outlines a possible way forward.

A policy of multiple textbooks depends on (a) developing the textbooks, (b) evaluating and approving textbooks by publishers, and (c) selecting from among the approved textbooks.

The development of the proposed new multiple-textbook policy can therefore be divided into two separate challenges for MOPE/REC:

- How to ensure that the capacity is available to publish alternative textbooks of a good quality
- How to ensure that schools or local education authorities are able to play their role effectively in terms of textbook selection

In terms of the first of these two challenges (ensuring that publishing capacity is available), the forthcoming curriculum pilot in Uzbekistan is an opportunity to learn not only about how to implement the new curriculum, but also about how to develop and work with local publishing capacity.

In terms of the second challenge (ensuring that stakeholders understand their new roles and support the policy), government will find the process easier and more effective if it adjusts the current policy statement regarding 'alternative textbooks' to a policy of 'multiple textbooks', in which all textbooks are equally approved. Maintaining a government-published textbook alongside competing textbooks, when the culture of schools has for so many years been locked into the idea of a single government textbook, would probably be a 'kiss of death' for the alternative textbook.

#### The potential for a mixed economy

MOPE might consider the possibility of a mixed system, in which certain subjects or grades continue to be provided with centralised textbooks, while other subjects and grades have the options of more than one textbook. This is the system very successfully developed in the Republic of Korea (RoK), where primary school textbooks are developed by the government, while secondary school textbooks are regulated by an approval system. For details of RoK's system, see: <a href="https://elaw.klri.re.kr/kor\_service/lawView.do?hseq=37171&lang=ENG">https://elaw.klri.re.kr/kor\_service/lawView.do?hseq=37171&lang=ENG</a>

#### **Learning from the curriculum pilot**

MOPE is planning for a pilot to run throughout school year 2020–21, with grades 1–2 of the new curriculum to be introduced into all schools in the country in school year 2021–2022. MOPE also intends to continue to pilot each new grade(s) on a gradual basis. With this decision, there is now time not only to pilot the curriculum but also to pilot methods to support the curriculum with new textbooks.

A curriculum pilot is a kind of large-scale action research. It is not the kind of research that selects a test group of schools and a control group of schools, and then compares the outcomes. That kind of research might result in knowing what hasn't worked but it would not show how to scale the curriculum up at the end of the pilot.

In action research, the practitioners who are responsible for making the curriculum work are able to respond to the particular conditions of their setting during their normal working practice. The teachers, principals, supervisors and other frontline stakeholders would help to *lead and re-shape* the pilot, rather than simply being the *subjects* of the pilot.

At the same time, the managers of the pilot, i.e. MOPE and REC, would learn from these frontline stakeholders and coordinate responses across all the schools and districts where the pilot is being implemented.

It is therefore necessary to identify what is specifically being tested in the pilot. This should include the textbooks. Since the pilot is targeting grades 1–2 in the first phase, it is important to identify what will be the role of reading materials.

Writers and publishers (particularly the editors) can be given training in developing new kinds of textbooks and other teaching and learning materials. A competition can be held, following the training, for publishers to submit proposals to develop the materials for the pilot. The competition might be divided into 3–4 separate lots: one per subject. In order to use the pilot to learn about the publishers' capacity, the competition can be designed so that each lot is awarded to a different publisher. Teachers from the schools that are participating in the pilot should be included in the materials writing teams. This is a sine qua non<sup>38</sup>.

The publishers would develop the materials for the first term first, and would learn from the experience of the schools during term 1, as they work on materials for term 2.

Provisional textbook evaluation criteria can be developed before the training of the writers and publishers. (I can work on these with REC in my next visit.) These criteria can be revised during term 1 of the pilot, based on the lessons learned. The criteria will then be

<sup>38</sup> As an example of the risks of not including teachers in the materials development process, see Marton (2006), describing the introduction of a new curriculum and new textbooks in Shanghai: 'The fact that the new geography textbooks in Shanghai took more than ten years to develop and implement perhaps indicates that more attention should have been given to teacher involvement and training rather than as a hastily considered after-thought to the development of the new curriculum.' Andrew M. Marton (2006) The Cultural Politics of Curricular Reform in China: a case study of geographical education in Shanghai, Journal of Contemporary China, 15:47, 233-254, DOI: 10.1080/10670560500534855

finalised before announcing a call for proposals for textbooks for the scale-up.

By the end of term 1, MOPE will therefore be able – if it wishes – to announce a call for proposals for the grades 1–2 textbooks for the scale-up. This call for proposals could (should) be on the basis that publishers will have the complete responsibility for developing the manuscripts, and publishing, printing and delivery of the textbooks.

MOPE will be able to learn from the pilot to what extent the educational publishing sector is able to support a multiple-textbook policy.

# 16. Evaluation criteria as a measure of quality

All countries with evaluation and approval systems face the challenge of turning ambitious curriculum statements into specific criteria that capture the vision without constraining textbook publishers and writers.

There is no reliable basis for defining the characteristics of an effective textbook. National systems of textbook evaluation criteria reflect a country's traditions and conditions, as well as beliefs about teaching and learning. Nevertheless, there have been an increasing number of attempts to design reliable systems of evaluation (i.e. measurement). Unsurprisingly, much of this work has come out of the USA, where many states operate a textbook evaluation and approval system.

Much of the research in the USA has been focused on maths and science. In particular, maths is the subject of much textbook research, partly because of the central importance of maths for all education planners (!) but also because teachers around the world tend to follow the content and methodology of maths textbooks more than they do for other subjects.

The American Association for the Advancement of Science (AAAS) has published several studies, including a study called Project 2061<sup>39</sup>. In 1998, this began 'the first-ever benchmarks-based evaluation of middle grades mathematics and science textbooks', using subject-specific criteria. The research found that although in terms of the maths textbooks 'the best series contain both in-depth mathematics and excellent instructional support', and 'a majority of textbooks do a reasonable job in the key instructional areas of engaging students and helping them develop and use mathematical ideas', there were also some less welcome findings (AAAS, 1999):

- There are no popular commercial textbooks among the best rated.
- Most of the textbooks are inconsistent and often weak in their coverage of conceptual benchmarks in mathematics.
- Most of the textbooks are weak in their instructional support for students and teachers.
- Many textbooks provide little development in sophistication of mathematical ideas from grades 6 to 8, corroborating similar findings of the Third International Mathematics and Science Study.

The first of these findings is worrying for education planners who depend on teachers

making good choices of textbooks. Regarding science textbooks, Project 2061 found in a study of secondary school biology textbooks 'an overemphasis on technical terminology, the lack of a meaningful narrative to weave the key ideas into a coherent story that students can make sense of, and the absence of support for teaching these ideas all serve to undermine the best intentions of authors, publishers, and teachers. Most textbooks end up promoting an outdated paradigm, presenting the cell as a static "bag of parts" rather than the active and dynamic entity that modern molecular biology has revealed<sup>40</sup>.'

More recently, EdReports<sup>41</sup>, established in the USA in 2014, makes use of evaluations carried out mostly by practicing teachers but also by academic coaches and school and district leaders who have been trained using EdReports' instruments<sup>42</sup>. A large part of EdReports' work so far has been carried out on maths textbooks. The National Council of Teachers of Mathematics in the US has found much to criticise in EdReports methodology and findings<sup>43</sup>.

A study (open access) of the effectiveness of maths textbooks, carried out by the University of Maryland and Harvard University (Blazar et al, 2019), found that 'While our findings certainly cast doubt on the proposition that there are quick and easy payoffs to curriculum changes, the bigger error may be in thinking of curriculum choice and teaching reforms as alternatives. It could be that in order to gain the benefits of either, districts must do both.' What is referred to as curriculum changes in this quotation is the role of the textbooks.

In the view of commentators such as Dylan Wiliam (2011, p. 13), 'It is only when the programs change teaching practices and student interactions that a significant impact on achievement occurs. (italics added)

In many cases, therefore, the key factor in effective textbooks is how they impact what happens in the classroom; that is, how they treat the pedagogy. This requires innovative and creative approaches by writers, which the evaluation criteria can encourage. The Republic of Korea's textbook evaluation criteria, for example, include a heading: 'Originality: this domain is specially intended to ensure selection of original textbook differentiated from existing or other textbooks.'

# 17. Developing evaluation criteria

Developing textbook evaluation criteria is an opportunity to customise criteria for the national context.

The administrators of the process that is designed to lead to improved results should spend time thinking about and discussing what they believe to be the characteristics of good textbooks and how the textbooks can embody the aims and principles of the curriculum. Once they have done this, they can move on to designing evaluation criteria that reflect the results of their discussions. This is better and more effective than just taking a design

<sup>40</sup> http://www.project2061.org/publications/articles/articles/cellbioed.htm

<sup>41</sup> https://www.edreports.org/

Also: <a href="https://www.the74million.org/article/textbook-adoption-was-once-about-going-to-the-right-dinner-with-publishers-now-edreports-is-disrupting-the-8-billion-industry-by-putting-teachers-in-charge/">https://www.the74million.org/article/textbook-adoption-was-once-about-going-to-the-right-dinner-with-publishers-now-edreports-is-disrupting-the-8-billion-industry-by-putting-teachers-in-charge/</a>

<sup>42</sup> See https://www.edweek.org/ew/articles/2014/11/05/11edreports.h34.html

<sup>43</sup> https://www.nctm.org/News-and-Calendar/News/NCTM-News-Releases/NCTM-Calls-for-Changes-to-EdReports-Reviews-of-Common-Core-Instructional-Materials/

Also: https://www.nctm.org/News-and-Calendar/News/Other-News/Concerns-Regarding-the-Use-of-EdReports-Mathematics-Materials-Reviews/

(off the shelf).

The relationship between the policy-making authority and the quality assurance agency is an important part of ensuing transparency and objectivity of the textbook evaluation and approval process. For comparison, in the Republic of Korea the respective roles of Ministry of Education (MoE) and Korea Institute for Curriculum and Evaluation (KICE) in the process of textbook quality assurance are as follows:

#### MOE

- 1. Prepare textbook development master plan;
- 2. Determination which textbooks will be government-issued or approved.

#### KICE

- 1. Determine the process for compilation;
- 2. Determine the approval standards and criteria;
- 3. Announce the start of the approval process;
- 4. Determine, announce & receive the approval fee;
- 5. Select the approval panel;
- 6. Solicit/appoint the secretary & research commissioners;
- 7. Review applications for approval & receive comments;
- 8. Determine the eligibility of textbooks for approval;
- 9. Announce textbooks eligible for approval;
- 10. Notify publishers of ineligibility, with corresponding reason.

There is no correlation between the overall impact of textbooks and the use of subject-specific criteria in a textbook evaluation process. Many highly successful education systems with textbook evaluation process – such as Hong Kong and the Republic of Korea – do not include subject-specific evaluation criteria, while others, such as Japan, use a combination of generic and subject-specific criteria. Furthermore, even though its evaluation criteria are generic, Hong Kong also provides subject-specific guidance to publishers<sup>44</sup>. In my own view, subject-specific criteria should be included, or at least a subject-specific interpretation of the generic criteria should be available to evaluators.

<sup>44</sup> For English textbooks, see: https://www.edb.gov.hk/attachment/tc/curriculum-development/resource-support/textbook-info/writing/2019/PTB%20Writing%20Guidelines%20ELE%202019.pdf

The number of criteria is itself a challenge. The AAAS study was based on the belief that for high quality textbook evaluation, 'an in-depth examination of the quality of a materials treatment of a few, carefully selected, learning goals is more revealing than a superficial look at many learning goals'. (AAAS, 1999) It is advisable – for ease of implementation – for a new evaluation system to limit the number of main headings, as long as they are supported by an appropriate set of key questions and examples for reference by evaluators during the evaluation process.

A major priority in any evaluation process must be to check the overall teaching and learning load, which requires comparing textbook content with the actual teaching time available. Many textbooks around the world provide too much content for teachers to cope with, which further increases the tendency to memorisation. It may be noted that none of the attached examples make this explicit. Also, the language used in the textbooks must be of an appropriate level. Language that is too difficult also exacerbates the tendency to memorisation. The Hong Kong criteria address this better than the Korean criteria.

The examples of evaluation criteria that are provided here are only intended to show the range of criteria within a national system, and to show the variations between systems.

Annex 1A sets out the criteria in the Republic of Korea, as developed by KICE<sup>45</sup>. Annex 1B lists the criteria for Hong Kong. Annex 1c is an example of evaluation criteria from a US state that operates an approval system (Virginia).

<sup>45</sup> In the Republic of Korea, textbooks may be either (a) developed by MOE or an agency appointed by MOE (the majority of which are universities but may also be research institutes and other government agencies); this is the case for most primary textbooks: these are known as compiled textbooks, (b) authorised by MOE. Textbooks submitted for authorisation are first evaluated against threshold (pass/fail) criteria, before being evaluated against a range of technical criteria.



CONCLUSIONS
FOR POLICY DEVELOPMENT

# CONCLUSIONS FOR POLICY DEVELOPMENT

The publication of a new national curriculum framework is a good opportunity to review textbook policy, particularly if changes to textbook policy are based on the same rationale as the new curriculum framework. The combination of a new curriculum and new textbook policy or strategy has the potential to be a powerful force for change that can be aligned with a review of the approach to teacher education and development and student assessment. However, this opportunity needs to be supported with appropriate resources and given enough time, and it needs the key actors to be aligned. A competency-based curriculum is built not only on a new vision for student competencies but also on a vision for teachers' own competencies.

In most countries, improvements in textbooks are most likely to come from one or more of three locations: the ministry of education, universities, or educational publishers. These are the potential centres of excellence, as long as the conditions for change are present: namely, the commitment, expertise, resources and continuity.

Competency-based textbooks *can* be developed even within a textbook policy that remains centralised, although this examples of this are not common. A multiple-textbook policy may also encourage the breaking of the link between textbooks and national exams and therefore reduce a dependence on rote-learning.

On the other hand, any move to a liberalised textbook policy should be gradual and needs not only to allow publishers to develop the necessary capacity, it also needs to ensure that all stakeholders understand the rationale for moving to the new policy. Such a move should genuinely decentralise authority to local and school levels and give the decentralised levels the necessary support.

In order to encourage new kinds of textbooks that build on good international practices and reflect a competency-based curriculum, teams of specialists need to be formed. These could be formed in partnerships between government and publishers, or formed within publishers. Each subject team needs to study how to reflect on the implications of a competency-based approach, both generically and in terms of the subject. Examples of innovation should be encouraged.

The current three-part textbook tender process is not conducive to innovation. It also likely to be a bureaucratic exercise, rather than emphasising the need for approaches to teaching and learning that reflect a new, competency-based pedagogy.

Content and pedagogical criteria might take account of the potential for textbooks to be carriers rather than barriers to learning, including the role of the emotional/affective and the social dimensions of learning. In all cases, the criteria for evaluating textbook content should be supported by appropriate instruments for evaluators, within a process that provides an adequate voice to practising teachers but is also guided by a recognised authority as evaluation panel moderator.

The current manufacturing specifications appear to require little modification but the technical specifications regarding text, layout and graphics would benefit from substantial revision.

The regulations regarding the system of alternative textbooks would benefit from modifications.

The textbook rental system appears to work and should not be changed.

These brief conclusions do not include the role of reading books, which do not appear to be specified in national regulations. Nor does there appear to be a national book policy. However, the new national curriculum framework may provide some guidance for the use of reading books in the teaching of language and literature. In all cases, reading books should form an essential element of any revised teaching and learning materials policy.

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# **ANNEXES**

# Annex 1a: The Republic of Korea<sup>46</sup>

All textbooks – whether authored by government or by publishers – go through a Basic Review stage followed by a textbook evaluation stage:

# A. BASIC REVIEW (yes/no – any textbook that receives a 'yes' to any question is considered to have failed):

- 1. Compliance with the spirit of the National Constitution
  - O Are there any contents that deny or criticize the national regime of the Republic of Korea?
  - O Are there any contents that promote/favour or distort/slander a specific country, religion, group or class?
- 2. Compliance with education model act, school curriculum
  - O Are there any contents that violate the vision and goals of education?
- 3. Infringement of copyright
  - O Are there any contents that constitute unapproved plagiarism of unpublished third-party work or significant reproduction of published third-party work?
- 4. Universal likelihood of contents
  - O Is there any academic fallacy or generally unaccepted personal bias of the author?

#### **B. MAIN TEXTBOOK REVIEW:**

- 1. Compliance with the school curriculum
  - O Are the nature, goals, contents, teaching and learning methods and evaluation suggested in school curriculum fully reflected?
- 2. Content selection and organization
  - O Is the level and scope of the content aligned with the features of applicable grades and considerate of consistency across all school grades?
  - O Is there any fallacy or biased theory in the content?
  - O Is any specific person, gender, region or product unduly slandered, distorted, promoted or favoured?
  - O Is subject-neutral education (democratic value, environmental education, economic education, energy education, work spirit promotion, consumer education, re-unification education, Korean cultural heritage education, global understanding, maritime education, IT education and gender equality education, etc.) reflected properly in appropriate sections?

<sup>46</sup> Published by Korean Educational Development Institute, in 'Curriculum and Textbook Policy', as part of Understanding Korean Educational Policy (2011).

- O Is the learning material adequate to support in-depth education? 3. Teaching and learning methods O Are proper teaching-learning methods suggested to ensure achievement of education goals of the subject? O Are proper methods for gathering, analysing and utilizing data and information necessary for class activity suggested?

  - Are evaluation methods and exercises consistent with the goal-contents-methods of subject presented?
- 4. Expression and notation (Korean spelling system)
- 5. Editorial design and outward configuration
  - O Does the design in terms of format, page number and chromaticity follow the author guidelines?
  - O Is the editorial design up-to-date, utilizing printing space effectively?
  - Are pictures and illustrations vivid and in harmony with narratives?
- 6. Originality (the originality domain is specially intended to ensure selection of original textbook differentiated from existing or other textbooks)
  - O Is any academic fallacy or generally unaccepted personal bias of author included?
  - O Are teaching-learning processes and activities original?

#### **TEACHER'S GUIDE REVIEW**

- 1. School curriculum and textbook guidance
  - O Does the guidebook fully explain school curriculum and introduce the latest trends of school curriculum?
  - Are the teaching-learning and evaluation methods proper for textbook presented?
  - O Are the textbook compilation policy and structure, guidebook contents configuration and utilization references, annual guidance?
  - O plan presented specifically?
  - O Is an approach to operating school curriculum and utilizing textbook with flexibility suggested?
- 2. Configuration
  - O Are the general introduction, additional sections, and supplements configured in consideration of ease of use?
  - O Are sections organized logically to enable teachers to teach the class efficiently?
  - Are the teaching materials for in-depth & supplementary lesson (or teaching-

learning by student's proficiency) presented along with proper guidance plan?

- 3. Teaching and learning method
  - O Are the proper teaching-learning methods aligned with the subject presented to improve interest and enthusiasm of students?
  - O Are the teaching-learning methods suitable for teaching goals, configuration, contents presented?
  - O Are the evaluation standards aligned with learning goals, contents, teaching-learning methods presented along with specific evaluation cases?
- 4. Reference material utilization and guide
  - O Are the latest domestic/global reference materials contributory to the teaching/learning process and subject research introduced in specific details?
  - O Are the strategies to utilize various reference materials such as multimedia content related to specific sections presented and their sources explicitly identified?
- 5. Expression and notation (spelling system)
- 6. Editorial design
  - O Is the editorial design up-to-date, utilizing printing space effectively?
- 7. Originality
  - O Are the up-to-date contents selected and configured ingeniously?

# **Annex 1b: Hong Kong**

#### **Guiding Principles for Quality Textbooks**

https://www.edb.gov.hk/en/curriculum-development/resource-support/textbook-info/GuidingPrinciples/index.html

#### **Content**

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.

- O The aims, targets and objectives align with those laid down in the relevant curriculum or subject guide.
- O 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.
- O The content is current. Information and data are relevant and accurate. The sources of information are appropriately indicated.
- O 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.
- O There is an appropriate balance between depth and breadth in the treatment of the subject content.
- O The level of difficulty of the content is consistent with the curriculum requirements and the cognitive level of students.
- O 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.
- O There are multiple perspectives and balanced viewpoints on issues.
- O 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.
- O 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**

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.

- 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.)
- O 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.
  - O Deep processing, critical and creative thinking are encouraged through involving students in less structured problems and more open-ended questions, and further reading.
  - O 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.
  - O Learning strategies are included, for example, in the student's guide, or suggested in learning activities.
- O 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.)
- O 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.

- 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.
- O The learning activities are interesting. They involve and motivate students to learn.

- O The learning activities have clear instructions.
- 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.
- O 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**

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

- O The content sequence is appropriate and logical. Key words and concepts are identified and highlighted.
- O The structure of the content is made apparent by means of functional devices including table of contents, chapter titles, headings and outlines.
- O 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

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

- O 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.
- O Coherent passages are included to help students process text content.
- O 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.
- O 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.
- O The language is accurate and precise.
- O Students are provided with help in understanding and using the vocabulary and specific patterns of discourse of the subject.

Other criteria relate to textbook Layout.

# **Annex 1c: Virginia (USA)**

# **Evaluation Criteria Used by Textbook Review Committee**

Section I: Correlation with the Standards of Learning

Determine the degree to which content found in these textbooks is correlated with the Standards of Learning and the Curriculum Framework for this subject.

ADEQUATE A	LIMITED L (Note: Provide examples to support this rating)	NO EVIDENCE N (Note: Provide examples to support this rating)
Lessons are aligned with the standards.	Limited connections between the standards and the lessons are noted.	No correlation between the standards and the lessons.
Content appears accurate, clear, and in sequential order.	Content appears to contain some inaccuracies or is not always clear.	A logical sequence of content cannot be identified and/or there appear to be significant content inaccuracies.
Most of the essential understandings, knowledge, and skills are supported.	Essential understandings, knowledge, or skills are not sufficiently addressed.	Essential understandings, knowledge, or skills are not addressed.
Many opportunities are provided for students to practice essential skills.	There is limited opportunity for students to practice essential skills.	Opportunities to practice essential skills are not included.

Comments or concerns related to content accuracy, bias, or editing:

### **Evaluation Criteria Used by Textbook Review Committee**

Section II: Rubric for Instructional Design and Support (Reported and may be used in correlation and approval considerations)

#### **ADEQUATE NO EVIDENCE** LIMITED (Note: Provide examples (Note: Provide examples to support this rating) to support this rating) Criterion 1 - Textbook is presented in an organized, logical manner and is appropriate for the age, grade, and maturity of the students. Textbook is logically Textbook lacks consistency Textbook is not reasonably organized and grade/age in organization and organized and is inappropriate for the grade/ appropriate for students. appropriateness for the grade/age of students. age of the students. Criterion 2 - Textbook is organized appropriately within and among units of study. Scope and sequence Scope and sequence is easy Scope and sequence to read and understand. is difficult to read is confusing and not easy to understand. and understand. Criterion 3 - Format design includes titles, subheadings, and appropriate cross-referencing for ease of use. Organizational properties Organizational properties Organizational properties

Criterion 4 - Writing style, syntax, and vocabulary are appropriate.

of the textbook offer

limited assistance in

understanding and

processing content.

Readability is appropriate for the grade level. Writing style and syntax are varied and appropriate to enhance student understanding. Vocabulary consists of both familiar and challenging words.

of the textbook assist

in understanding and

processing content.

Readability may be appropriate but is inconsistent throughout the text. Writing style and syntax may be inappropriate or lack variety, offering limited support for student understanding. Vocabulary may be too challenging or too familiar.

Readability is not appropriate for the grade level. Writing style and syntax are often inappropriate and lack variety to enhance student understanding. Vocabulary is too challenging or unfamiliar.

of the textbook do not assist in understanding

and processing content.

#### Criterion 5 - Graphics and illustrations are appropriate.

Visuals are accurate, support the text, and enhance student understanding.

Visuals are somewhat unclear and offer limited support for the text and student understanding.

Visuals are inaccurate, do not support the text, and do not enhance student understanding.

Criterion 6 - Sufficient instructional strategies are provided to promote depth of understanding.

Materials provide students with opportunities to integrate skills and concepts.

Materials provide students with limited opportunities to integrate skills and concepts. Materials provide students with no opportunities to integrate skills and concepts.

Note: Any subject area criteria that are required in state statute will be included as part of the state review. The Department of Education may establish criteria indicators that are subject-area specific.





