WHAT BASIC EDUCATION FOR AFRICA?

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Discussion Paper for Session 3 – Final Version

Guidelines for Constructing a Curriculum Framework for Basic Education

Synopsis

This paper describes a range of trends in education in the 21st century and the challenges facing curriculum developers arising from those trends. In particular, the paper advocates a 'systemic' approach to curriculum development, one which acknowledges the inter-related sub-systems on which successful implementation of curriculum relies.

One of the systemic strategies suggested in the paper is to ensure consistency and quality through the development of a curriculum framework as one element of the documented 'intended curriculum'. The paper suggests a range of strategies that can be used to expand the current basic education from six to nine or eleven years and to provide access to quality education to a broad range of students. The paper also discusses other elements of the intended curriculum, notes the trend towards competency-based curricula and emphasizes the importance of a planned process of curriculum development.

1 Introduction

This paper provides the basis for Session 3, *Critical questions in constructing a Curriculum Framework for Basic Education* of the Regional Workshop, WHAT BASIC EDUCATION FOR AFRICA? The paper canvasses a wide range of curriculum-related issues and questions that arise from expanding basic education from six to nine or eleven years, particularly those relating to a curriculum framework.

The paper takes a very practical approach to the issues being considered at this seminar. While acknowledging and respecting the importance of research and sound pedagogical theory, and while recognising that decisions that affect the learning and futures of young people should never be taken lightly, the paper assumes that our purpose for gathering in Kigali is to make some preliminary plans for putting the vast body of research and theory into practice.

The main purposes of the paper are therefore to

- set a context of contemporary trends in education
- advocate a 'systemic' approach to curriculum development
- define what we mean by 'curriculum framework'
- discuss the purpose of a curriculum framework and its components and

- pose some critical questions related to the development of contemporary curriculum and curriculum frameworks.

Underpinning the paper will be two important themes in all educational change. The first of these is the concept of 'balance'. Education is a 'people heavy' area of public policy and practice, fuelled by human intelligence and emotion. In the process of implementing change in education, we therefore must appreciate and value the emotional investment that people have made in whatever already exists – the pride of principals in their schools, the comfort that teachers feel in the traditional and the familiar, the level of confidence that parents have of the current methods and expectations.

As educational leaders and managers of change, our role is to strike an effective balance between respect for what exists and passion for what could be. We must balance our ideals with what is really achievable. We find a balanced way to satisfy the needs of all our stakeholders – including government, industry, society generally, local communities and students.

Another theme of educational change is 'simplicity'. The paper does not propose that any project designed to bring about educational change is easy or simple. To bring about change, we must respect the views of all stakeholders in education, we must be knowledgeable about the change we want to implement and we must be knowledgeable about change itself. But we must also be 'action-oriented' and understand that well planned change processes can be implemented through a series of identifiable steps, and very frequently the most complex of issues are ultimately resolved by confronting and answering a series of simple questions – should we or shouldn't we? can we or can't we? will we or won't we?

And whatever we do, we must avoid 'ideologically driven inertia' – that state where we think so much about theory and ideology that we either become incapable of action or we use it as an excuse to avoid action.

2 Some fundamental concepts

Before we consider some important questions and issues, challenges and opportunities, it is critical that we share some understanding of terminology. Education debate, especially when conducted across cultures and languages, is often impeded by a lack of shared understanding of fundamental concepts.

For the purposes of this paper, this paper proposes the following working definitions and explanations:

Table 1 – Some working definitions and explanations

Basic education	The learning that is considered to be fundamental and a minimum requirement. In some systems basic education might be the equivalent of compulsory education.
Intended curriculum	The formal and documented record of what should be taught and learned. Intended curriculum is most commonly developed and

	sponsored by the state.
Implemented curriculum	The real and total sum of what is taught and learned in schools. Based on the intended curriculum, it is influenced by school culture, teaching methodologies and strategies, resources and their use and a range of other contextual factors.
Curriculum framework	A document (or set of documents) that sets standards for curriculum and provides the context (available resources, capabilities of teachers and system support) in which subject specialists develop syllabuses.
Learning area	A broad description of a set of knowledge, skills and values, often drawing together otherwise discrete but related intellectual disciplines – for example, social studies (history, geography, culture and commerce) and science (biology, chemistry, physics and geology)
Subject	A specific intellectual discipline within the school curriculum structure
Syllabus	A document, primarily for the use of teachers, that records the aims, objectives, content, outcomes and other information specific to a subject or learning area
Outcome	An anticipated characteristic of students when they have completed a course of study derived from a syllabus. Outcomes can be expressed in terms of knowledge, skills, competencies, values or behaviours.
Competency	The capacity of a person to perform a particular activity or task in a given situation.

3 The context – some contemporary trends in education

As in most areas of our lives, there has been enormous change in educational theory and practice in recent decades. While developing for the IBE a training package for curriculum developers in Bosnia and Herzegovina in 2003-4, I tried to identify and summarise some of the emerging and continuously developing trends in education, especially those with particular relevance for curriculum. These are summarised in table 2.

Table 2 – Some contemporary trends in education[1]

FROM	→	TO
Teaching		Learning
Transfer of facts		Student construction of knowledge
Memorizations of information		Analysis, synthesis, evaluation, application of information

[1] Adapted from Module 1, Curriculum Change: from Reflection, Vision to Action, *Curriculum Developers Resource Pack*, IBE UNESCO (not yet published)

Concentration on acquisition of knowledge	Concentration on development of knowledge, skills, values and attitudes
Summative assessment of academic achievement	Summative and formative assessment of achievement in a range of domains
Rote learning	Applied learning / learning in context
Categorised knowledge (traditional subjects)	Integrated knowledge (broader learning areas)
Schooling	Lifelong learning
Focus on inputs	Focus on outcomes and processes
Didactic teaching	Participatory activity-centered approaches and 'Interactive methodology'
Assumption that there is one "learning style"	Recognition that there are "preferred learning styles"
Curriculum as product	Curriculum as both process and product

Most if not all of these trends have implications for curriculum developers. However of particular interest in the context of this paper are

- the movement away from curriculum focusing on knowledge to be acquired to the development in students of a range of knowledge, skills, values and attitudes – in other words a significant broadening of the range of domains in which we expect achievement from our students and see achievement as valuable.
- the belief that valuable learning should and does occur beyond the years of basic education and even schooling; engagement in learning should in fact be a lifelong activity for which schools must prepare their students by teaching them how to learn.
- the attention now given to the processes of curriculum development as well as the quality of the final product or documentation.

Any discussion of expanding the provision of basic education inevitably leads to a reconsideration of the structure of schooling. The traditional boundaries between primary and secondary education (consisting of 6 + 4/5/6 years) are becoming increasingly blurred as education systems consider alternative structures that include:

- the introduction of a formal early, middle and senior years structural model (resulting in 4 + 4 + 4 or 4 + 3 + 3 years)
- increasing emphasis in secondary school on specialisation through the introduction of elective and optional subjects
- the introduction of a grade 13 as a post school preparation for tertiary education.

The trends described above have significant implications for curriculum developers as they consider curriculum design options. Whether or not to follow trends represent significant decisions in themselves and they need to be made in the context of broad system objectives for education.

4 Contemporary curriculum development

4.1 Some fundamental principles

Whatever approach is adopted to curriculum development or change, there are a number of principles which should guide decision-makers. These include

- The best new curriculum grows naturally out of what has gone before – a respect for the traditions and achievements of the previous curriculum
- Success will depend on understanding the context and planning the achievable
- Change processes begin with defining a vision and purpose for education
- Curriculum developers must acknowledge the co-existence of 'intended' and 'implemented' curriculum
- New curriculum must effectively address issues of relevance, sequence and integration
- Change must achieve a diversity of outcomes – national, economic, social, communal, personal
- New curriculum and related decisions must deliver equity of opportunity – gender, religion, ethnicity, location (urban / rural / isolated), ability (inclusive education, including education for children with disabilities)

4.2 A 'systemic approach' to curriculum development

A 'systemic approach' to curriculum development implies that school curriculum is more that a textbook or set of documents isolated from other parts of the education system. This approach views education as a set of interrelated sub-systems, each of which has as its primary concern one group of issues or responsibilities but which have as their common goal improving the quality of teaching and learning.

These sub-systems include

- curriculum, assessment and certification documents which prescribe curriculum-related standards and policies
- textbook and teaching resources
- human resources – workforce planning, pre-service teacher training and continuing professional development
- school facilities and equipment and
- educational leadership and management.

This 'systemic' approach is particularly relevant when considering major reforms, such as expansion of the grades of basic education. Curriculum developers need to acknowledge the general educational environment and its 'real politic'. Curriculum content that meets international standards is relatively easy to identify, and issues of allocating content to grades, ensuring appropriate sequencing and methods of integration are all possible based on best practice models.

However, developing curriculum without reference to other sub-systems can be a disastrous waste of resources and even put improvement processes back by several years. For example, developing curriculum that relies on teachers being familiar with particular methodologies without reference to teacher training and other support strategies can lead to frustration and resentment. Developing curriculum that relies on standards of equipment and facilities in schools that do not exist or are not achievable will similarly cause confusion and feelings of inadequacy among teachers charged with implementation.

Education bureaucracies can lose focus and effectiveness when they ignore the interrelated nature of these sub-systems. The development of an achievable curriculum requires careful planning and the implementation of a coordinated set of action-focused and carefully monitored strategies in each of the relevant sub-systems.

4.3 Documented components of the 'intended curriculum'

The 'intended curriculum' is *the formal and documented record of what should be taught and learned. Intended curriculum is most commonly developed and sponsored by the state*. In some ways these documents represent an agreement or minimum guarantee between the government and citizens – a statement of what the education system will provide for young people.

This formal curriculum usually comprises at least three components:

Component 1: Curriculum framework

One of the most important tools in ensuring consistency and quality in a 'curriculum system' is a 'curriculum framework'.

Definition of a curriculum framework
A document (or set of documents) that sets standards for curriculum and provides the context (available resources, capabilities of teachers and system support) in which subject specialists develop syllabuses.

A curriculum framework describes the educational environment in which syllabuses (or subject specific outlines of objectives, outcomes, content and appropriate assessment and teaching methodologies) can be developed.

A curriculum framework is most commonly developed at a national level, but a form of curriculum framework could be developed at international level by a group of countries with similar goals and educational environments. One function of a curriculum framework is to define a set of 'curriculum standards' that enable a range of curricula to co-exist, on the proviso that each curriculum complies with specific criteria. A curriculum framework is therefore a very useful mechanism for allowing flexibility and diversity among countries within an affiliation of some kind or ethnic groups within a single state. Each individual system can maintain the 'identity' of its own curriculum while ensuring consistency and quality through compliance with a set of agreed standards expressed in the framework.

A curriculum framework commonly contains the elements described in Table 3. However, one of the advantages of a framework approach is flexibility, and elements can be added to or deleted from the framework structure to suit the needs of the education system or systems developing it.

Table 3 – Common Elements of a Curriculum Framework[2]

Common Elements of a Curriculum Framework	
Element	**Function or Purpose**
1. Introduction: Current Context	describes the social and economic environment in which educational policy is made and in which teaching and learning occur
2. Educational Policy Statements	describes the Government's goals for education, such as universal literacy and numeracy, the development of skills needed for economic prosperity and the creation of a stable and tolerant society
3. Statement of Broad Learning Objectives and Outcomes / standards for each level / cycle	describes what students should know and be able to do when they complete their school education. Outcomes should be expressed in a range of domains, including knowledge, understanding, skills and competencies, values and attitudes
4. Structure of the Education System	describes the school system within which the curriculum framework is to be applied. It should specify: • Number of years of schooling, including compulsory schooling • Stages (or cycles) of schooling and their durations • Number of weeks in the school years, hours / teaching periods in the school week
5. Structure of curriculum content, learning areas and subjects.	describes the organization of content within the framework and the extent to which schools and students can make choices. It might describe: • The pattern of Subjects or Learning Areas to be studied in each stage or cycle (such as core, elective and optional subjects) • A brief description of each Subject or Learning Area outlining the rationale for its inclusion in the curriculum and the contribution it makes to the achievement of the Learning Outcomes defined in Section 3. • The number of hours to be assigned to each subject or Learning Area in each stage or cycle.
6. Standards of resources required for implementation	describes standards as they apply to: • Teachers – qualifications, teaching load (number of classes per week) • Students – number per class in each subject • Materials – textbooks, computers, other equipment; facilities – classrooms, furniture, fittings.
7. Teaching methodology	describes the range of teaching approaches that might be employed in the implementation of the framework
8. Assessing and reporting student achievement	describes • the importance of assessing the extent to which students achieve the outcomes of each subject, and recommends or prescribes types of assessment strategies • how achievement will be certified

[2] Adapted from Module 3, Curriculum Design, *Curriculum Developers Resource Pack*, IBE UNESCO (not yet published)

To the above list can be added other agreed elements. These could include agreed policies on contentious issues (such as agreed positions on the content of history syllabuses or how history should be taught), how content and student learning can be integrated, the incorporation of competencies or any other matter which requires a 'standard' to be defined.

Once a curriculum framework is agreed, other documents can be developed, including most importantly, subject or learning area syllabuses and textbooks. It is the curriculum framework which gives guidance to syllabus and textbook writers and which determines the detail of a range of other policy and funding priorities.

Component 2: Syllabuses

Having articulated the curriculum framework, it is necessary to shift focus to individual learning areas or subjects through the development of syllabuses.

Definition of a syllabus
A document, normally for the use of teachers, that records the aims, objectives, content, outcomes and other information specific to a subject or learning area

Syllabuses should be regulated by and be consistent with the curriculum framework. Syllabuses should provide a range of information and can contain the following elements:

- the rationale for the subject (i.e. why it is included in the curriculum and its relationship to the student outcomes in the curriculum framework)
- the aims and objectives of the subject
- the student learning outcomes (knowledge, skills, values) for the subject (possibly at each stage or year)
- content (expressed as topics, themes or units) to be covered in each stage or year and requirements for teaching the content (core, elective and optional topics)
- teaching strategies appropriate to the subject
- strategies for evaluating student achievement in the subject

Component 3: Textbooks and other teaching/learning resources

To support teachers in implementing the syllabuses, education systems have traditionally relied to a very large extent, if not exclusively, on single textbooks. In turn, teachers base their lessons and classroom practice on those textbooks.

Three very significant variations to this approach can be identified in developed countries:

1 *Market driven textbook development*
Where resources permit, education authorities encourage publishers to produce textbooks which they believe captures the philosophy and content of the syllabus. Schools are empowered and resourced to choose the textbook which they believe will best support their teachers and students in achieving the learning outcomes prescribed in the relevant syllabuses.

2 *Teaching programs and plans*

One part of teachers' responsibilities is to interpret the syllabus and develop a semester or year plan of activities for their individual classes. For this to occur, teachers require extensive training in syllabus requirements and should be provided with a range of relevant samples of programs, plans and activities. In many countries, the teacher's program can be viewed as an additional component of the 'intended curriculum' and serves as a 'connector' between the 'intended curriculum' and the 'implemented curriculum'.

3 *Supplementary resources*

Teachers are trained in developing teaching and learning resources which supplement the textbook and which support particular learning activities in their classroom. These resources can be sourced from the media, the internet or other print, video or digital material. The result is the development of a bank of resources which make learning interesting and cater for the individual differences of students in particular locations and circumstances.

A note on competencies:

Working definition of 'competency'
The capacity of a person to perform a particular activity or task in a given situation.

The notion of 'competencies' is extremely useful for both curriculum developers and teachers. For curriculum developers, competencies can be a 'curriculum organiser' in that they can

- enhance the relevance of content by encouraging the application of knowledge to simulated life situations
- facilitate the formulation of statements of expected student outcomes in concrete, practical statements
- integrate subject content that is traditionally separate in the curriculum. For example, a student competency of 'writing a business letter' might require the integration of reading and composition from a language syllabus, knowledge of commerce from a business syllabus and knowledge of word processing from an information technology syllabus
- provide a mechanism for gathering accurate and meaningful data on student performance and achievement for assessment.

For teachers, competencies provide the opportunity to make learning interesting and enjoyable, and can be used to encourage communication and teamwork. Teachers can be inventive and creative in defining situations in which students apply and demonstrate their learning.

The incorporation of competencies into the school curriculum can be done in a number of ways, as is evidenced from experience around the world. Detailed discussion of models and approaches would normally be undertaken during the process of curriculum development described below. The role of policy makers is to understand the rationale for a competency-

based approach to curriculum and to decide the extent to which that approach is relevant to and achievable in their individual education contexts.

4.4 The process of developing a curriculum

One of the contemporary trends in education mentioned earlier in this paper was the emerging importance of curriculum development processes. This reflects the beliefs that, firstly, better processes deliver better products and, secondly, that there is a range of stakeholders with legitimate albeit diverse interests in school curriculum.

So what are the practical steps that are commonly followed in developing curriculum? Although never a simple process, planned steps could include:

1 Conduct a 'contextual scan'
2 Research relevant best practice
3 Consult with stakeholders
4 Develop a curriculum framework
5 Write syllabuses in agreed subjects or learning areas
6 Develop an implementation plan that sets achievable goals
7 Monitor implementation
8 Review and amend curriculum content and other elements as required.

It is not within the scope of this paper to elaborate the tasks involved in each of these steps. However, it is important to note that each step should be underpinned by careful planning and that adequate resources need to be made available to support each part of the process.

Conclusion

In summary, to implement any curriculum-related change (including expanding basic education), we need to

- Know the educational context
- Acknowledge and take into account all educational sub-systems
- Consult with stakeholders
- Develop a vision
- Plan for the achievable, including staged implementation based on the capacity of the various sub-systems
- Document a curriculum framework, syllabuses and teaching-learning resources in an integrated way
- Be action-oriented
- Monitor progress

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Appendix – Recommended Follow up to the Kigali Workshop

Part A – General

The concept paper distributed prior to the Kigali workshop and discussions at the workshop itself indicated that a number of countries would be selected to conduct pilot projects covering the following fundamental issues:

1 The extension of basic education from 6 to a minimum of 9 years
2 The integration of competencies into the extended basic education curriculum.

The concluding remarks made by the World Bank and Africa Development Bank at the Kigali workshop made no reference to specific funding support for additional work in these areas. The level of support for additional work in basic education, including possible funding for the proposed pilot projects, would therefore need to be clarified.

Recommendation 1
That the funding support for the proposed pilot projects be clarified with the World Bank, the Africa Development Bank and other donor agencies.

Assuming that funding would be available to support the continuation of the work discussed in Kigali and with a view to implementing the Kigali Call for Action, an important principle will be to coordinate all activities in this area, particularly those currently being undertaken by UNESCO. At least two activities are important here:

1 The enhanced learning project being undertaken by the Basic Education Section seeks to identify a number of countries in Africa willing to become case studies. It would seem that some funding has already been made available for this purpose.

   The implications for curriculum of the enhanced learning project are significant, particularly in such areas as recommended teaching methodologies, sequencing of content within specific subject syllabuses, the place of mother tongue and other languages in the curriculum framework and the importance of nutrition and health in the curriculum.

   It would therefore be logical for the case studies to be carried out in those countries already committed to piloting the extension of basic education and the integration of competencies so that a full range of approaches can be piloted and tested.

2 The IBE is currently negotiating to enter an agreement with GTZ on behalf of ADEA to conduct a comparative review of curriculum documents in a number of African countries and elsewhere. This review will examine in particular the extent to which work-related, vocational and life skills are currently incorporated into school (particularly lower secondary) curriculum. The purpose of this review is to inform the ADEA Bienniale on Education in Africa to be held in May 2008.

The general themes and objectives of this review are consistent with the objectives of the pilot projects and enhanced learning project mentioned earlier in this appendix.

Recommendation 2
That the IBE take a prominent role in coordinating the proposed UNESCO activities in African education to ensure that the organisation is well positioned to provide maximum support and assistance.

Should this recommendation be adopted, one strategy to be considered could be the establishment of a UNESCO African Education Coordinating Group on a formal or informal basis, with representation from IBE, UNEVOC, Basic Education (Paris) and others (such as relevant field offices and institutes) as appropriate. The primary purposes of such a coordinating group would be to

1. develop a strategic plan for the implementation of the relevant parts of the Kigali Call to Action, specifically those under (2) International and Regional Actions – UNESCO
2. ensure that available resources are used most efficiently in the implementation of this plan
3. monitor the implementation of the plan and
4. ensure that UNESCO's communication with other agencies (such as ADEA, the World Bank and the ADB) is consistent and clear.

Part B – Pilot Projects

With regard to the countries selected to pilot the extension of basic education and the integration of competencies into the curriculum as a result of the Kigali Workshop, it is essential that countries meet certain criteria, including internal capacity to understand and implement change, commitment to quality improvement by government and some level of resources to support change.

Recommendation 3
That criteria be developed and applied in the selection of countries to participate in the pilot projects.

Careful consideration should be given to developing and implementing a structured and consistent process within each pilot project. This is not to suggest that the needs of these countries will be identical, nor that these countries will be at the same stage of curriculum reform. However, it does suggest that, to be effective and enable comparability, each pilot should follow a similar, broadly defined process.

Recommendation 4
That a consistent process be developed and applied in each pilot country.

The process could include the following stages:

Stage 1: Conduct a contextual scan

This stage would begin with the expansion and improvement of the contextual scan instrument currently contained in the Curriculum Development Resource Pack, possible conducted in consultation with the selected countries. It would then be a requirement for each country to conduct the scan and compile a report on its findings.

Stage 2: Conduct a needs analysis

With the results of the contextual scan in mind, this stage would require each country to complete a detailed analysis of its needs in the area of curriculum reform and could require each country to consider a range of curriculum-related issues, including:

1 Curriculum documents
- *design*
- *relevance* and *currency* of content
- *flexibility* (capacity to meet a range of needs)
- *balance* of knowledge, skills and values
- *process* of curriculum development

2 Teaching and learning resources
- *quality* of textbooks
- *availability* of textbooks
- *process* of textbook development
- *potential* for the development of additional resources (such as sample teaching programs and lesson plans)

3 Curriculum leadership and management
- planning capacity and effectiveness
- the roles and effectiveness of current management structures (e.g. Curriculum Institutes)
- the policy leadership provided by Education Ministries
- curriculum leadership at district and school levels

4 Assessment
- purpose and effectiveness of current examination systems
- capacity of teachers to devise school based assessment activities
- current levels of understanding of basic principles of validity and reliability of assessment activities

5 Communication
- effectiveness of current communication about curriculum-related issues with stakeholder groups, including
  - teachers
  - parents

- broad community
- employers
- universities

The output of Stage 2 would be a structured report provided by each country which summarised the responses to the survey and nominated priority action areas.

Stage 3: Develop an action plan

Based on information gathered from its contextual scan and its nominated priority action areas, each country would devise an action plan detailing

- its goals in each priority action area
- steps to be undertaken in reaching those goals
- resources required to achieve those goals
- timelines for achieving the goals and
- persons responsible for each priority action area.

Stage 4: Implement and monitor the action plan

The process could be supported by a combination of

- regional workshops and meetings
- country-based activities, and
- in-country or regional technical assistance including mentoring.

Recommendation 5
That a range of strategies be employed to provide flexible and targeted support to countries undertaking the pilot.

For example, a regional workshop involving representatives of the nominated countries could address common issues, such as those related to reaching agreed definitions of concepts, outlining and agreeing to the project process and articulating broad agreed principles of curriculum design and assessment. The outcomes of such a workshop could be a regional curriculum framework.

Individual country activities would include completing the needs analysis, nomination of priority action areas and the development of action plans, and would support the ongoing implementation and monitoring of those plans. It should be noted that mentoring could take the form of in-country or distance support.