

# Comparative Analysis of the National Curriculum Frameworks of Five Countries: Brazil, Cambodia, Finland, Kenya and Peru



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## Open Note of the IBE

The IBE has launched the series In-Progress Reflections on *Current and Critical Issues in Curriculum, Learning and Assessment* to open a communal space for a global conversation, collective production and discussion on those issues of high concern for Member States. It intends to support country efforts in mainstreaming challenging issues within the processes of curriculum renewal and development across different levels, settings and provisions of the education system.

Initially, the focus areas of the In-Progress Reflections series encompass, among others,: (i) Early Childhood Care and Education (ECCE) as a foundation of holistic child development and learning; (ii) Reading and writing in early grades to support the development of essential competencies; (iii) Youth Culture and competencies for Youth in the early 21st century (covering formal, non-formal and informal education); (iv) ICT curricula and inclusive pedagogy contributing to relevant and effective learning outcomes; (v) STEM (Science, Technology, Engineering and Mathematics) curricula to foster sustainable development; (vi) Curriculum for Global Citizenship Education (peace, human rights, sustainable development, values, ethics, multiculturalism, etc.); (vii) Assessment to enhance and support learning opportunities; and (viii) Inclusive education as an over guiding principle of education systems.

The series of reflections covers a wide array of knowledge products, among them: discussion papers, policy briefs, frameworks, guidelines, prototypes, resource packs, learning tools and multimedia resources. These materials are discussed, refined, used and disseminated engaging education and curriculum agencies / institutes, and in particular curriculum developers and specialists, development experts, policy makers, teacher trainers, supervisors, principals, teachers, researchers and other educational stakeholders. In addition, they serve as reference materials for the IBE menu of capacity-development training on curriculum, learning and quality education – namely masters, diplomas, certificates and workshops – to forge policy and technical dialogue involving a diversity of stakeholders and to support sustainable country fieldwork.

Through blogs and e-forums, we encourage the audience to actively interact and bring in diverse perspectives. Effectively, the online space for reflection allows us to stay connected, facilitates exchange between experts from different regions of the world, and truly fosters continuous reflection on the issues concerned. The blog is structured to gather diverse resources, which include tools and documents (as previously mentioned) under specific themes to provide a complex and rich set of materials targeted to the specific needs of Member States. The In-Progress Reflections will capture relevant visions, views and comments shared by the audience, and serve as a key resource to support Member States' efforts in mainstreaming relevant findings and effective practices in national policies, curriculum frameworks and developments and in professional practices.

**Dr. Mmantsetsa Marope: Director, International Bureau of Education**



# Comparative Analysis of National Curriculum Frameworks of Five Countries: Brazil, Cambodia, Finland, Kenya and Peru<sup>1</sup>

**Abstract:** Within the SDG4-Education 2030, the IBE-UNESCO sees curriculum as a key component for building robust education systems. The curriculum leads all core aspects of education that are known to determine quality, inclusion and relevance, such as content, learning, teaching, assessment and teaching and learning environments among others. It is through the curriculum that we can understand the goals, the social imaginary and the aspirations that a country wants to achieve. In this sense, the curriculum is the foundation for an effective education system that ensures quality learning for all learners and the preparation of active glo-local citizens. Flexibility is the key for the curriculum to be effectively implemented throughout the education system and a well-designed curriculum framework serves this purpose. Based on the idea that education reforms that have achieved positive outcomes are grounded in solid curriculum proposals, this report proposes an in-depth comparative analysis of the curriculum frameworks of five countries, namely, Brazil, Cambodia, Finland, Kenya and Peru. This exercise was carried out to understand the extent to which countries present and discuss the scope of their education systems, new pedagogical approaches as well as teaching and learning methodologies and assessment techniques, among others. The results of this document has allowed to have a clearer picture of the implications that a curriculum framework has for countries that are or have recently undergone an education reform as well as to understand what are the current education trends in terms of curriculum reform that are happening worldwide.

**Keywords:** Brazil – Cambodia – competency-based approach – curriculum – national curriculum framework – curriculum reform – Finland – Kenya – Peru

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## 1. Introduction

Sustainable Development Goal 4 (SDG 4), “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” (UNESCO, 2017, p. 7) and the Education 2030 Agenda, agreed by international education stakeholders during the World Education Forum (WEF) held in Incheon, Republic of Korea, in 2015, position education as an indispensable factor for the sustainable, inclusive, fair and cohesive development of a given country as well as of the lives of its people. The Agenda also considers learning as the core purpose of education in which the curriculum becomes a pillar and a platform for the realization of relevant learning opportunities for all leading to sustainable lifestyles and development. As such, curriculum has been considered as a basis for successful educational reforms ensuring the attainment of high quality learning outcomes. With this increasing role of curriculum in the 21<sup>st</sup> century, a robust demand arises for a paradigm shift in understanding the meaning and importance of the role of curriculum (Marope, 2017; Stabback, 2016; Opertti, 2017).

Then, what means effectively curriculum? What are the underpinning values, which foresee curriculum in its broader, holistic sense, as development-relevant? Curriculum is a systemic collection of the *what*, the *why*, the *when* and the *how* learning takes place within a specific context. The nature of a curriculum is comprehensive and structured around a clear and strategic vision of holistic and inclusive development of all learners aimed at equipping them with the essential knowledge, skills and competencies, reassuring quality learning (Marope, 2017; Stabback, 2016; Opertti, 2017).

The International Bureau of Education-UNESCO, hereafter called ‘the IBE’, with its renowned expertise in curriculum, learning and related matters, defines curriculum as “a roadmap for achieving socially agreed development and education goals” (IBE-UNESCO, 2015b, p. 8). Continuous efforts in reconceptualizing and repositioning curriculum within the new global agenda have been crucial in regards to moving the new paradigm shift forward towards the understanding of curriculum as development-relevant. Indeed, it is through curriculum that each society determines, through knowledge and competencies, the type of social imaginary that it aspires for its current and future generations. Curriculum, therefore, undertakes a significant role towards the realization of global agendas acting as a “bridge between education and development” (IBE-UNESCO, 2015b, p. 8).

For this multifaceted quality of curriculum to be effectively understood and implemented across the education system, from policy to practice, flexibility is key. One of the instruments that can allow this is a curriculum framework, which lays strong foundations to the provision of high quality learning opportunities by “set[ting] the parameters, directions and standards for curriculum policy and practice”, while permitting flexibility and variability to respond promptly to the different needs and situations (IBE-UNESCO, 2017a, p. 6). With a strong urge to implement quality learning and, at the same time, fully grasping the role of curriculum in this process, more and more countries have begun to appreciate the impacts of well-designed curriculum frameworks, placing additional efforts in their development while seeking for guidance.

By responding to the needs of the countries and directing attention towards holistic and sustainable development-relevance of education, the IBE has become a global frontrunner in curriculum, learning and related issues. For this reason, it has advanced in the implementation of the Education 2030 Agenda by introducing innovative approaches to the curriculum development and reform processes and positioning its resources to support Member States (MSs)’ efforts in providing quality, equitable learning opportunities for all (IBE-UNESCO, 2015a). Additionally, with its knowledge brokerage role,

the IBE has produced a series of training tools and normative documents on curriculum design and development, duly grounded on evidence-based research and theory as well as on its expertise gained through providing technical assistance to MSs<sup>2</sup>. These documents have guided and enabled MSs to gain deeper understanding in aligning their national aspirations, practices and goals within the curriculum reforms and curriculum development and implementation processes.

IBE's knowledge brokerage function is also the idea that pushed for the conceptualization of this paper, which aims to provide valuable information about the regional and global trends of curriculum frameworks. In this regard, the IBE analysed comparatively the national curriculum frameworks of five countries – Brazil, Cambodia, Finland, Kenya and Peru to promote MSs' understanding in this area. The intention of this thorough analysis is to explore symmetries and asymmetries of the curriculum frameworks of different regions and further uncover any regional and global trends and directions. As such, the five curriculum frameworks have been selected because the aforementioned countries have recently undergone curriculum reform or curriculum revision processes.

This analytical report includes five sections. The first section explains the implication of a curriculum framework, unfolding in-depth on its development process. Following this, the second section examines the analytical framework developed and used for this analysis. Five criteria have been developed, upon which the five curriculum frameworks are analysed: (i) rationale; (ii) scope and component of the curriculum framework; (iii) new curriculum approaches introduced; (iv) teaching and learning methodology; and (v) assessment. Then, the analysis of the five curriculum frameworks follows in the third section. After this, the fourth section focuses on revealing any present trends observed by looking deeper into commonalities and differences among the five curriculum frameworks. Finally, the report ends with a conclusion.

## 2. Unfolding a Curriculum Framework

### 2.1 Understanding curriculum frameworks within the education policy debates around curriculum

A continuous discussion on *what* is being taught and *how* it is being taught in schools and classroom level is inevitable, particularly in this rapidly changing world. This needs to occur, at the local, regional and global levels. As mentioned in the introduction, curriculum is considered to be valued for its quality and attributes in aligning the developmental aspiration of countries with the substance of learning and the holistic development of the learners. For the curriculum to take this leading, integrating role, it is important to foster ongoing debates around curriculum and its related matters. For a long time, curriculum has been understood as a topic difficult to digest, grasp and apply in education systems by many educators and practitioners. This is mainly due to traditional perspectives, which have emphasized the role of curriculum as an educational input for the teaching and learning processes, rather than a process that goes beyond this by providing the learning content and the teaching strategies (Opertti, 2017, p. 5). However, such a narrow vision and application of curriculum has been challenged in recent decades, and to this, the Education 2030 Agenda encourages revisiting the theory and practice of curriculum by explicitly questioning its position as an agent of change, supporting the processes of educational transformation and contributing to strengthen educational

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<sup>2</sup> The full series of Training Tools for Curriculum Development is accessible here: <http://ibe-unesco.org/training-tools-for-curriculum-development/>

proposals (Opertti, 2017). In this regard, the IBE has discussed four main reasons, which build the rationale underpinning the transformation of the curriculum:

1. The fast pace with which the breadth and depth of human knowledge is expanding, which creates the challenge of having to 'pick' which knowledge is relevant and needs to be comprised in a curriculum;
2. It is acknowledged that producing 'competent' and confident young people, along diverse life, citizenship and work domains, is the most important aim of the curriculum, against a traditional conception of students memorizing and repeating information, with the purpose of passing examinations. As competent individuals, students are expected to graduate with a basic set of knowledge, skills, attitudes, beliefs and values that will enable them to be successful in their lives. Knowledge cannot be assumed as fitting into one discipline in a strict manner, but as applicable to multiple situations, where the connection of different pieces of knowledge can lead to imagining multiple ways of doing things and solving problems;
3. As a result, in order to form competent individuals, not all students need to learn the same content. Students can become competent by learning the foundational skills and knowledge, and then pursuing their interests within the curriculum, so that learning is more enjoyable and relevant to their lives; and
4. There is a growing belief that school years should not be the only time of students' lives when they learn in structured ways. Learners should be encouraged to be inquisitive and to continue learning throughout their lives. In order to achieve this, curriculum should be connected to pre-school learning, to learning outside the school and to post-school learning. It is to say, curriculum should reflect lifelong learning opportunities and processes (IBE-UNESCO, 2017a, p. 4).

The above-mentioned aspects encourage for a more holistic and comprehensive view of the curriculum across countries, acknowledging their diverse cultural, political and economic realities. Within the current debates around curriculum, some essential aspects are being acknowledged, like the fact that curriculum should reflect a "process of collective construction and the political, policy and technical agreement among the various institutions and stakeholders, from both inside and outside the education system, on why, what, how, when and where to educate and learn" (Opertti, 2017, p. 6). In light of such remarks, its 'upgraded' relevance responds to the fact that it is no longer, as depicted under previous conceptions, a mere instrument prescribing facts to be rote-learned by students, but a "powerful agent of education policy that contributes to the realization of the type of society pursued" (Opertti, 2017, p. 6). Moreover, under this holistic view of curriculum and education, it appears to be a wider concern around pupils' feelings, students' uniqueness and the creation of conditions for a personalized curriculum. Subsequently, taking into consideration all mentioned forces at work, what emerges as a crucial requirement for a modern curriculum is further flexibility within a robust guidance. In order to achieve that, curriculum developers have resorted to build a 'curriculum framework' as the foundation for describing what should be learned in schools (IBE-UNESCO, 2017a).

## 2.2 The what and the why of a Curriculum Framework

It is essential to distinguish the nature of a curriculum framework from a curriculum, as well as the complex dynamics behind their preparation, development and subsequent implementation. A framework implies the existence of specific ways of organizing and managing content - policies, procedures, concepts, etc. - in a systematic manner. A curriculum framework provides a set of



“parameters, directions and standards for curriculum policy and practice” (IBE-UNESCO, 2017a, p. 6). That being said, it should organize, control and/or regulate the content of the curriculum – the subject descriptors or syllabi, textbooks and other teaching and learning approaches and materials. Meanwhile, flexibility is also a crucial feature that should be present in curriculum frameworks, and should not constitute a set of rules, but rather a set of guidelines, allowing for variation and use of discretion when implementing it, while adhering to underlying principles and specified standards (IBE-UNESCO, 2017a). It is important to note that a curriculum framework is not the solution to all challenges and issues of a curriculum, which is why it is essential to keep the targets of a curriculum framework clear (IBE-UNESCO, 2017a, p. 8).

A curriculum framework may include a wide range of matters, which will generally provoke direct impact on processes of curriculum development and implementation. Some possibilities include, for instance, the way in which curriculum is aligned with the country’s future needs; teachers’ governance aspects; teacher recruitment and selection processes; methodologies adopted in the classroom; assessment practices; and class sizes or even time allocation for the different subjects or areas of knowledge per education level. All these features should allow for levels of flexibility, established according to each country’s specific needs and by keeping in mind that countries may hold different approaches and philosophies to education and differ in their national priorities. In addition, flexibility can be provided in a number of ways, for instance, allowing available time for curriculum to meet local needs; or expressing time allocation in terms of ‘minimum hours’. In this way, schools or local authorities can use that time at their discretion or establish pathways for students to choose according to their interests and skills (the same purpose can be satisfied by setting elective subjects) (IBE-UNESCO, 2017a). Likewise, curriculum development structures, policy priorities and human and financial resources are just few of the many aspects that make each context a unique milieu and hence influence the development process of a curriculum framework.

### 2.3 The development process of a curriculum framework

Departing from an understanding of a curriculum framework as a principal, regulatory document with plausible impacts in all parts of the education system, special attention should be given to the development process. For this, the IBE (2017a) notes six general features of the development process of a curriculum framework that should be taken into account when elaborating a curriculum framework, which are:

- **Planned and systematic:** Understanding the difficulties faced in any educational changes, the development process of a curriculum framework should be planned in an efficient, cost-effective and systematic way to bring about the desired outcomes, making certain that all stakeholders and government officials from both within and outside the Ministry of Education and other relevant organizations understand the process, and are involved in ways that ensure the best possible results;
- **Comprehensive:** What is crucial in the development process of a curriculum framework is to ensure the coverage and address all relevant issues and challenges in the curriculum, so that a nearly perfect initial curriculum framework is developed;
- **Informed:** The process should be led, guided and executed by adequate, experienced people, who have a thorough understanding of current curriculum needs for the specific context. All decisions should be grounded in and informed by contextualized evidence and research;
- **Targeted:** A rationale for the development of a curriculum framework and the intended objectives to accomplish should be clearly set and presented;

- **Broadly supported:** In recognizing that the overall education system will be influenced by a curriculum framework, the assurance of a broad systemic support across the relevant government ministries within and beyond education and of the financial and human resources is essential; and
- **Inclusive:** An ongoing consultation with key stakeholders should be encouraged and practised, valuing and validating their inputs to the process (IBE-UNESCO, 2017a).

Built upon these characteristics, the IBE introduces a five-stage model for developing a curriculum framework: (1) Evidence gathering, (2) Preparation, (3) Development, (4) Implementation, and (5) Monitoring and evaluation (IBE-UNESCO, 2017a, p. 9). This comprehensive model outlines the development process of a curriculum framework and provides fundamental information and training activities for each stage. At the same time, it acknowledges the importance of flexibility to alter this logical sequence or any activities suggested for each stage depending on the context and needs.

The first stage, *Evidence Gathering*, is a pre-stage, as it attests the needs for a curriculum framework and provides an evidence-based rationale for the whole development process through an assessment of the existing curriculum and current educational practices. A key for this stage is to develop a consensus among educational authorities and stakeholders, so that a clear commitment for the development of a curriculum framework is understood and agreed across the education system. This is a sort of pre-stage; the other four stages are arranged in a sequence. The second stage, *Preparation*, is considered the most crucial one as it oversees the way in which the curriculum will be developed, both in terms of content and practice, and this is where the planning and determination of feasible time frame, required human and financial resources and the strategies undertaken for the rest of the process occur. Then, during the third stage, *Development*, a curriculum framework is actually elaborated and developed, where a set of envisaged activities, such as writing workshops, consultation meetings, etc. is carried out as part of the working process. It is the fourth stage, *Implementation*, where the curriculum framework is put into effect across the education system, from policy to practice. This implies, more specifically, from any relevant policies and issues, such as language of instructions, teacher/principal recruitment, class sizes and facilities, to overall educational practices, such as syllabi, teaching pedagogies, assessment strategies, examinations and teacher trainings. Having said that, it is crucial to engage the developers of the curriculum framework in this stage to provide adequate support and guidance. The practical applicability and achievability of the newly developed curriculum framework should also be thoroughly examined at this stage. Finally, during the last stage, *Monitoring and Evaluation*, the effectiveness and efficiency of the entire development and implementation process of the curriculum framework should be assessed continuously with the aim to improve the curriculum framework. In fact, although it is listed as the last stage here, this can be recommenced at any stage, exhaustively, as an ongoing process (IBE-UNESCO, 2017a).

### 3. The Analytical Framework for the Comparative Analysis

The analytical framework of this comparative analysis is mainly developed on the basis of one of IBE's normative documents, 'Prototype of a National Curriculum Framework' (IBE-UNESCO, 2017b), and it has been broadened with the support of various IBE documents introduced throughout the report, including 'Developing and Implementing Curriculum Frameworks'. The section below provides a brief introduction of the normative document and explains how it has been used to develop both the analytical framework and the criteria for the comparative analysis.

### 3.1 'Prototype of a National Curriculum Framework' as an overarching guiding document

The Prototype, drawing on IBE's experience and expertise in providing technical support to MSs' curriculum reforms, was initially introduced to guide users, such as policy makers, curriculum developers and other educational specialists, throughout the process of elaborating and refining of the National Curriculum Framework within their own country setting. Serving its purpose as a thorough guideline, this document presents an archetype of a Curriculum Framework with a variety of examples from different countries. While the scope of the curriculum framework can vary from country to country, the one for this prototype, in particular, covers Primary, Lower Secondary and Upper Secondary education. Additionally, as reiterated in this document, it is important to note that, considering that the nature of Curriculum Framework depends substantially on the development priorities established by each country, the prototype should not be used as a prescriptive tool (IBE-UNESCO, 2017b).

In order to help users better understand the extent to which a curriculum framework modulates and embarks on in regards to curriculum and related matters, this prototype is organized around eleven components.

1. **Introduction** – This lays the foundations for the whole document, by providing the background of the framework, legal and contextual, and the asset of the new approach as curriculum governance for the country. This section may include: (i) a message from the Minister of Education and Training, (ii) the purpose and function of this curriculum framework, and (iii) the scope of the curriculum framework. It is crucial to agree on the breadth and scope of the document, vertically (levels of education) and horizontally (range of issues, such as teacher training, learning materials, etc.), and have them clearly stated.
2. **Curriculum Vision** – Developed within the framework of the overall national vision and goals, the Curriculum Vision clarifies the unified, common, long-term purpose, orienting the entire curriculum development and implementation process of the country.
3. **Aims and Objectives** – The aims and objectives of the curriculum set and define the educational goals and intentions and the expected learning outcomes for the curriculum in a broader sense, to which the design of any curriculum materials as well as any teaching and learning programmes and practices should be aligned and construct.
4. **Values and Principles** – The curriculum values, upon which a curriculum framework is built, should be in line with and reflect the values of the broader society and the types of citizens to which it aspires. Curriculum principles should be well elaborated in the curriculum framework to guide the design and development of curriculum and any educational practices.
5. **Philosophy of Teaching and Learning** – As a rounded document, a contemporary curriculum demonstrates, either implicitly or explicitly, the approaches to teaching and learning. It should clearly state the beliefs behind teaching learning and assessment.
6. **Curriculum Architecture** – A list of curriculum components and the relationships between them is described in this section, taking into account the complexity of curriculum design in the modern era, due to the expansion of learning expectations, learning areas, etc.

7. **The Importance of Competency** – ‘Competency’ can be defined as the capability to duly apply acquired knowledge, skills and attitudes built upon appropriate, underpinned values of the society in the real situation. This prototype encourages to promote the relevance and interconnectedness of learning, moving away from traditional, simple acquisition of knowledge of a subject, as well as to foster key competencies, agreed among education stakeholders of the country.
8. **Areas of Learning** – To foster relevant, integrated learning and flexibility in learners’ experience, Key Learning Areas (KLAs), assembled with a set of subjects similar to one another, and Key Stages (KS), a grouping of grade levels, are introduced alongside indicative time allocations for each subject and grade level in the National Curriculum Frameworks. In addition to the broadened parameters of learning areas, this section includes cross-cutting issues/cross-curriculum learning areas that are common and legitimate for each country or even across the world, such as the use of technology, media awareness, sustainability and environment, which need to be taken into account.
9. **Teaching Methodology and Strategies** – Echoing its comprehensive, regulatory quality, providing advice to teachers about the types of teaching approaches, pedagogies and activities in their classroom practice is critical. This ensures that teaching practices are in line with the framework, specifically the country’s intended innovation in the curriculum.
10. **Assessment** – Its main focus is to evaluate learners in alignment with established learning outcomes. In addition, a curriculum framework also works as a tool to inform teachers about their teaching quality and areas for improvement. The purpose of assessment, from informal to formal, needs to be clearly defined and practised as a process and, therefore, the specification of the assessment is a crucial element of the National Curriculum Framework.
11. **Monitoring and Evaluation** – This continual, well-designed practice of quality assessment and control systemically informs how the curriculum meets its benchmarks for its quality and its implementation, allowing to identify and uncover any shortcomings in a timely manner, and provide guidance for any essential amendments that need to take place (IBE-UNESCO, 2017b).

Along these lines, additional broader and more comprehensive criteria that are to be used for this comparative analysis were developed, taking into account these eleven components alongside other supplementary documents. These criteria are presented below.

### 3.2 Criteria for the comparative analysis

Drawing upon these eleven components of the National Curriculum Framework, the following five criteria have been elaborated, determined and applied for the analysis:

- (i) **Rationale:** it includes the process of evidence gathering and preparation stages involved in the development of a curriculum framework. This criterion involves an analysis of the background of the countries’ needs, values, and vision for the curriculum framework. As part of this section, there are the first four components of the *Prototype of a Curriculum Framework* document, which are, ‘Introduction’, ‘Curriculum Vision’, ‘Aims and Objectives’, and ‘Values and Principles’;

- (ii) Scope and Component of the Curriculum Framework: it is where the vertical and horizontal scope of education as well as the components of the curriculum will be described. In relation to this, it is important to point out that the scope and breadth of the curriculum framework are in reality part of the 'Introduction' of the document; however, because of their relevance, it was agreed that discussing them separately from the rationale criteria and combine them with the 'Curriculum Architecture' have resulted in a better approach to the analysis;
- (iii) Curriculum Approaches: it is the part where the innovations added to the new or revised curriculum are highlighted and examined. This aspect, as part of the reflection on the 'Importance of Competency' and 'Area of Learning', includes any efforts of learning, such as contents, key learning areas, cross-cutting issues, and various approaches to learning;
- (iv) Teaching and Learning Methodology: it is an analysis about the way in which, if any, a variety of teaching pedagogies and strategies are presented in the curriculum framework. This section corresponds to the components of the prototype related to 'Philosophy of Teaching and Learning' and 'Teaching Methodology and Strategies'; and
- (v) Assessment: it entails largely two parts. One is the summative and formative monitoring of the students' learning process and outcome and the other is the implementation of the curriculum framework itself. These are respectively the components of 'Assessment' and 'Monitoring and Evaluation' in the prototype.

Given the description of the way in which the analytical approach to this comparative study has been elaborated, in the following section a comprehensive analysis of the curriculum framework of each of the five countries will be presented.

## 4. Analysis of Five Curriculum Frameworks: Brazil, Cambodia, Finland, Kenya and Peru

For this comparative analysis based on an intentional sample, five countries, namely, Brazil, Cambodia, Finland, Kenya and Peru, have been attentively selected to understand the differences and similarities between their curriculum frameworks and contribute to capture regional and global trends by looking deeper into the content and processes that characterized their development. In addition, this analysis helps gain a broader understanding of the way in which these five countries have framed their curricula to ensure a successful reform of their education systems.

### 4.1 Brazil: Base Nacional Comum Curricular (BNCC, National Common Curricular Base), 2017

#### *Rationale*

The 2017 Brazilian National Common Curricular Base (BNCC) is introduced by a message from the Minister of Education. The BNCC is portrayed as the beginning of a new era for the education of Brazil and it aligns with the best and most qualified educational systems of the world. In this message, the Brazilian Government ensures its commitment to the promotion of an education system and the implementation of education policies that embrace the full development of all students while respecting their differences and discouraging discrimination and prejudice. It also states that this document is the result of a long process led by education specialists from various areas of knowledge and counted with the critical and propositional participation of teachers and civil society. After the document was designed, public hearings in all the five regions of the country were organized and several modifications were made before agreeing on the final version, which was approved in December 2017.

In the Introduction, the purpose of the curriculum framework is described as “to overcome the fragmentation of education policies, to strengthen the cooperation among the three government spheres (National, State and Municipal), and to be the basis for a quality education” (MEC, 2017, p. 8). In this sense, it is argued that the advantage of this approach to the country is that it will contribute to the alignment of actions and policies at national, state and local level in relation to teacher training, assessment, design and development of educational resources and infrastructure. In terms of its function, the BNCC is considered as a compulsory national benchmark to the preparation and adjustment of the curriculum in public and private education institutions. The curriculum framework is presented as a pluralistic and contemporary document that clarifies the set of essential learnings that shall be taught to all students, children, youth and adults. Yet, the curricula will have the autonomy to trace the paths to achieve the outcomes outlined in this document.

The BNCC addresses its vision through the concept of ‘comprehensive education’. Within this idea, Basic Education aims at developing the individual in an all-inclusive manner, recognizing the complexity and non-linearity of this development and leaving behind the reductionist perspectives that privilege the cognitive or the emotional aspect. It proposes to view the student as an active subject of learning and to promote a type of education that embraces, recognizes and develops while at the same time respects the learners’ singularities and diversities. In this sense, the goals of the BNCC are to overcome the fragmentation of knowledge into subjects, to stimulate knowledge application in real life situations, to contextualize what is learned and to have students as main actors of their learning process and of the design of their life project.

The values to be interpreted and expressed within the educational context are listed as equality, diversity and equity. The BNCC characterizes Brazil as a country marked by cultural diversity and deep social inequalities. Educational inequalities are present in terms of access, retention and learning outcomes and are argued to be influenced by race, gender and socioeconomic condition. In this context, the value of diversity acknowledges students' linguistic, ethnic and cultural identities, thus taking into consideration their diverse needs, possibilities and interests in the pedagogical practice. The BNCC approaches equality and equity through the recognition of the fact that all learners are unique, including those that have been historically excluded, and stresses the importance for the education system to satisfy their diverse demands and needs.

The BNCC also outlines a number of principles and guidelines on how it should be applied taking into account the local context, the autonomy of the education systems and of schools and the characteristics of each learner. It establishes that the contents of the subjects should be adapted to the local context through strategies to present, represent and exemplify them. It is also argued that strategies to organize the contents in an interdisciplinary manner should be agreed to make the learning more dynamic, interactive and collaborative. Methodologies and didactic strategies are expected to embrace the different needs of the students. Moreover, learning is proposed to be based on situations that motivate and engage students in learning processes. As for assessment, the approach suggested is the formative one, which considers the learning context and conditions. This will allow collecting evidence to improve the performance of school, teachers and students. Didactic and technological resources will be selected, produced, applied and validated. Guidelines for teachers are expected to be produced and made available, together with continuous training to improve teaching and learning processes. Finally, continuous training for educational stakeholders on pedagogical and curriculum management will also be implemented (MEC, 2017).

The components expected to be part of the Rationale of the curriculum framework (Introduction, Curriculum Vision, Aims and Objectives, and Values and Principles) are all found in the first sections of the BNCC. Although presented in a different way from the order given in the Prototype, we can state that the introductory part of the BNCC is comprehensive.

### *Scope and component of the curriculum framework*

There is no section particularly on the scope of the BNCC, but this is defined in a general way through the presentation of the BNCC architecture and principles. Basic Education in Brazil is comprised of three levels: Early Childhood, Primary Education and Secondary Education (MEC, 2017). Specification of the age range and learning objectives are made available for Early Childhood and Basic Education. However, the BNCC does not address the competencies and curriculum guidelines for the Secondary level, which will be described in another separate document, specific only for this level of education. In addition, when discussing the principles, the document asserts that the curriculum should take into consideration all education modalities available in the education system, such as: Special Education, Youth and Adults Education, Rural Education, Indigenous Education, Quilombola Education, and Distance Education (MEC, 2017). However, no actual specification of these education modalities is given in the BNCC.

The section 'BNCC's structure' describes the innovative curriculum architecture precisely through presenting and describing the design and components of the curriculum and the relationship between them. The BNCC is structured around ten general competencies that students should develop

throughout all levels of Basic Education. For Early Childhood Education, six learning and development rights (living together, play, participate, explore, express, know and getting to know oneself and others) need to be ensured through five specific areas of experience. In each area of experience, a set of ‘learning and development objectives’ are defined and divided within age groups. In the same manner, Primary Education is organized among five Areas of Knowledge (Language, Mathematics, Natural Sciences, Human Sciences and Religious Studies). Each area has its specific general competence as well as its specific curricular component. In the Areas of Knowledge that involve more than one curricular component, specific competencies to be developed in each one of them are also defined. In order to achieve the specific competencies, each curricular component encompasses a set of associated skills. The skills represent the essential learning outcomes that should be achieved.

### *Curriculum approaches*

The BNCC is designed around 10 key general competencies. The document defines competence as “the mobilization of knowledge (concepts and procedures), skills (practical, cognitive and socioemotional), attitudes and values to solve complex issues in everyday life, in fully exercising citizenship and in the labor market” (MEC, 2017, p. 8).

The BNCC is structured under the idea of developing ten general competencies throughout Basic Education (Early Childhood and Primary Education). These are listed as:

1. To value and use the historically constructed knowledge about the physical, social, cultural and digital world to understand and explain the reality, to continue learning and to contribute to the construction of a fair, democratic and inclusive society.
2. To exercise intellectual curiosity and to resort to original approaches in sciences, including research, reflection, critical analysis, imagination and creativity; investigate causes, elaborate and test hypothesis, formulate and solve problems and create solutions (including technological ones) based on the knowledge from different areas.
3. To value and experience diverse local and international artistic and cultural expressions, and participate in various artistic-cultural practices.
4. To use various languages – verbal (written, oral or visual-motor, as Brazilian Sign Language), physical, visual, sonic and digital-, and knowledge coming from artistic, mathematical and scientific languages to express and share information, experiences, ideas, and feelings in diverse contexts and to create senses that enable mutual understandings.
5. To understand, use and create digital information and communication technologies in a critical, significant, reflexive, and ethic manner in various social settings (including schools) to communicate, access and disseminate information, to produce knowledge, to solve problems and to be protagonist and owner of one’s personal and collective life.
6. To value the diversity of knowledge and cultural experiences and to use one’s own experience and knowledge to understand the specific relations of the job market and make choices in line with both citizenship values and life project, also informed by freedom, autonomy, critical thinking and responsibility.



7. To argue based on facts, data and reliable information, to formulate, negotiate, and defend ideas, viewpoints and common decisions that respect and promote human rights, socio-environmental responsibility, and responsible consumption at the local, regional and global levels, in an ethical behavior towards oneself, others and the planet.
8. To know, appreciate and take care of one's physical and emotional health, acknowledging oneself in human diversity, and recognizing oneself and others emotions with self-criticism and ability to deal with them.
9. To exercise empathy, dialogue, conflict resolution and cooperation by making oneself respected and by promoting respect to others and to human rights, by embracing and valuing the diversity of individuals and social groups, their knowledge, identities, cultures and potentialities and by avoiding any kind of prejudice.
10. To act personally and collectively with autonomy, responsibility, flexibility, resilience, and determination, taking decisions based on ethical, democratic, inclusive, sustainable, and solidarity principles (MEC, 2017, pp. 9-10).

These competencies are interrelated throughout Basic Education and aim at building knowledge, developing skills and consolidating values and good practices. In addition, as mentioned before, a set of specific competencies for each Area of Experience/Area of Knowledge and subject are also established in order to reach the ten competencies.

In this sense, competencies are central to the BNCC. The importance of developing competencies is addressed in all sections, together with a detailed explanation on what should be developed in each general and specific competence (MEC, 2017).

With its focus on competency-based approach, the BNCC adopts the concept of Key Learning Areas. For Early Childhood Education, five Areas entitled as 'Areas of Experience' are established: 'Myself, the other and the us'; 'Body, gestures and movements'; 'Traits, sounds, colors and shapes'; 'Listening, speaking, thinking and imagining'; and 'Spaces, times, quantities, relations and transformations' (MEC, 2017, p. 25). For Primary Education, five other Key Learning Areas named as 'Areas of Knowledge' are established: Language, Mathematics, Natural Sciences, Human Sciences and Religious Studies. The creation of these areas aims at stimulating dialogues and connections among a group of subjects that have their own characteristics. The area of Language puts together Portuguese, Arts, Physical Education and English. Human Sciences comprise the subjects of Geography and History. Mathematics, Natural Sciences and Religious Studies involve only one subject each: Mathematics, Sciences and Religious Studies respectively. This approach and the different learning areas of the BNCC are presented in Diagram 1 below.

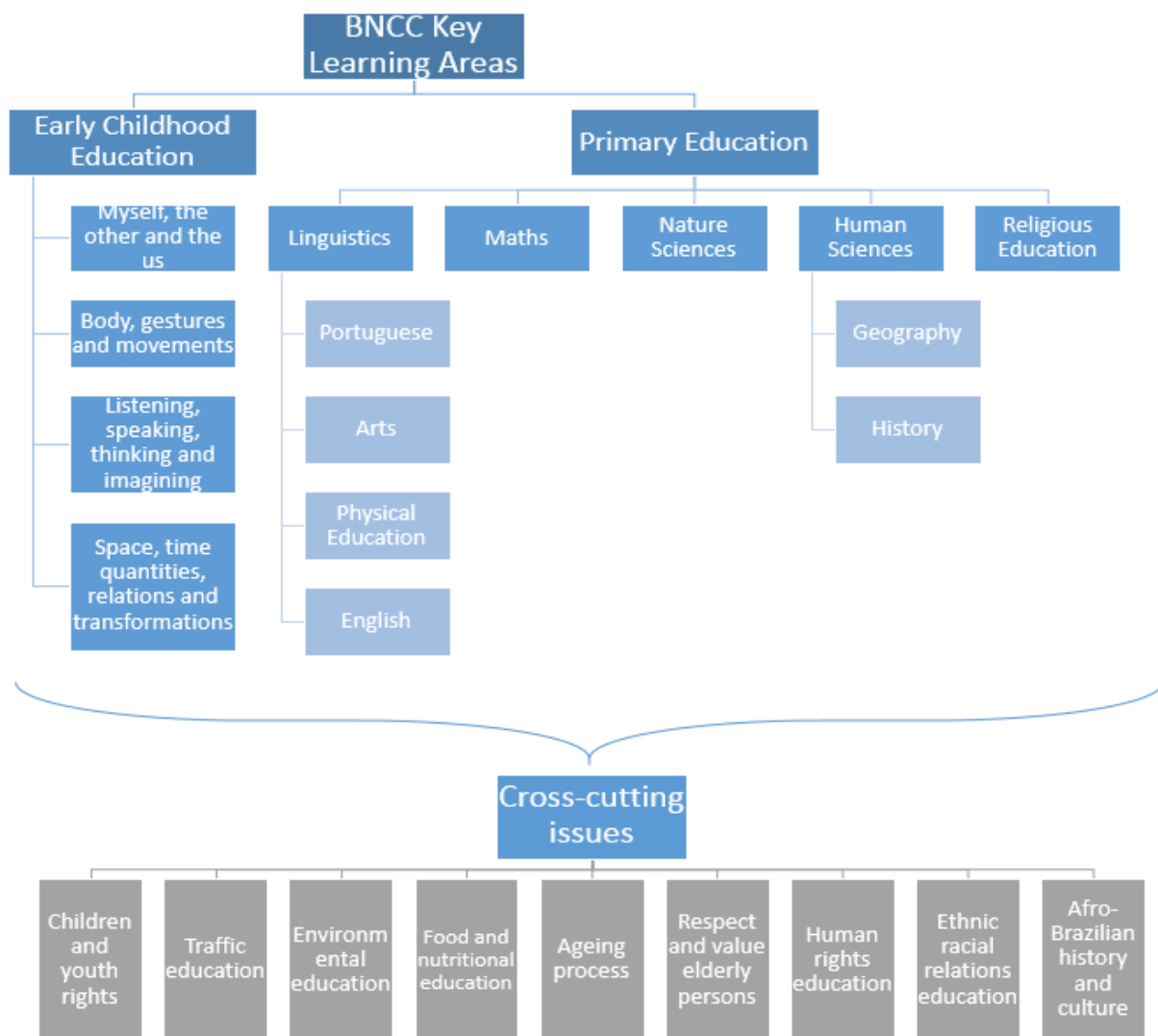


Diagram 1: BNCC Key Learning Areas

It is important to note that in the structure of Primary Education there is also a mentioning of the fact that the use of specific competencies supports the vertical articulation, establishing a learning continuity and progression between the first years and the final years of Primary Education, as well as the horizontal articulation among the Areas of Knowledge.

In addition, the BNCC indicates contemporary issues that are affecting human life at local, regional and global level and that should be approached by the curricula within its different learning areas through a transversal and integrated perspective. The main ones are listed as children and youth rights; traffic education; environmental education; food and nutritional education; ageing process, respect and appreciation of elderly people; human rights education; ethnic-racial relations education; and the teaching of Afro-Brazilian history and culture (MEC, 2017).

### *Teaching and learning methodology*

The philosophy of teaching is described very briefly, but it is in line with the idea that the curricula will have the autonomy to trace the paths to achieve the outcomes outlined in this document. The BNCC proposes a new approach to the philosophy of teaching in which pedagogical decisions are informed by the development of competencies. In this context, it is advised that teachers should not only

dedicate themselves to what students should learn, but they should also focus on developing their 'know-how'. In addition, the text suggests to select and apply different teaching methodologies and strategies that are taking into account the use of a different teaching pace and of supplementary content, when necessary to address the needs of the different groups of learners.

The BNCC takes an approach in which the competencies and guidelines should be common, but the curriculum should remain diverse. In this sense, teaching methodologies and strategies are not defined by the document. Students are expected to be taught through thematic units that involve a group of 'knowledge objects' in which specific skills should be achieved by learners aiming at constructing their competencies. However, the curriculum framework specifies that these skills do not describe a particular choice of methodologies or approaches nor the actions or expected behaviors to be used by teachers. Instead, the document proposes that these skills will be defined by each local curriculum and pedagogical project by taking into account the reality of the educational institutions as well as the characteristics of the students (MEC, 2017).

### *Assessment*

In-depth details on assessment and evaluation could not be identified in the BNCC. Indeed, the document only states that assessment methods should be created and applied by taking into consideration local contexts and learning conditions. It also argues that assessment should take a formative approach, in which the results are used to improve the performance of schools, teachers and students.

In terms of monitoring, there is only a short mention of this issue in the section related to the implementation of the curriculum framework, specifically in the section discussing the collaboration and coordination for its adequate implementation. In this part, it states that the monitoring process should be carried out by the Ministry of Education in collaboration with national organizations working in the field of education such as the UNDIME, the National Union of Municipal Directors of Education (MEC, 2017).

## 4.2 Cambodia: Curriculum Framework of General Education and Technical Education (CFGETE), 2015

### *Rationale*

Cambodia's Curriculum Framework of General Education and Technical Education of 2015 begins with a message of the Minister of Education. It clearly highlights that the development of human resources with adequate knowledge, competencies and skills is aligned with Cambodia's national aspiration, which is to develop its economy and become "a medium-high income country by 2030 and a developed country by 2050" (MoEYS, 2015, p. I). The Cambodian Government further elaborates how the CFGETE will act as an agent of educating Cambodians to be citizens who reach their full potential, so that they can be prepared to live fulfilling lives as active citizens contributing to the nation, region and the world. To achieve this, the Ministry of Education, Youth and Sport (MoEYS) considers teacher education and this curriculum framework to be the integral elements for the curriculum reform process of the country. The commitment of the government stated in this message further encourages government officials and national and sub-national stakeholders to actively engage in the implementation of this framework (MoEYS, 2015).

The introduction describes that the development of the CFGETE is based on a new vision and mission of education that respond to global trends, the National Constitution, the Third Rectangular Strategy, the Law on Education, the National Strategic Plan on Education for All, the Education Sector Strategic Plan 2014-2018, and a series of curricula from the 1980s and 1990s. The reform process is particularly related to the Third Rectangular Strategy, which defines the priority plan of reforms, focusing especially on teacher education, and the curriculum framework for general education (MoEYS, 2015).

Since 1979, the Cambodian curriculum has been through four different development stages. Structural deficiencies generated conscience on the need of elaborating a curriculum framework for this fifth phase of the curriculum development and reform. The main reasons that called for this change were the low quality of general education and the low pass rate of examinees (less than 50%), both revealed by the result of the 2014 National Examination of Upper Secondary Education, as well as high dropout rates and limited functional literacy of students, even after the completion of Primary or Lower Secondary Education (MoEYS, 2015). Equally important, the findings of the analysis of in-use curriculum and textbooks exposed some technical and content mistakes in the latter. Additionally, the way some subjects were being taught was deemed irrelevant to the daily lives and the emerging and constant world changes. As a result, graduates from all levels of education were not equipped with adequate skills to meet the demands of today's world.

Therefore, the CFGETE was developed responding to the educational changes in ASEAN<sup>3</sup> countries and in the world, as well as the needs of the market. The vision of the CFGETE is clearly stated as “to ensure all citizens develop their full potential. Every Cambodian will progress with balanced physical appearance, knowledge, behaviours and love of nation and humankind so they can contribute to national development and iteration of Cambodia in the region and the world” (MoEYS, 2015, p. 2). The CFGETE is considered a guiding document for all stakeholders to use when developing teaching and learning resources as well as guidelines for teaching and assessing students' learning outcomes and for training teachers. For this, a series of multi-facet consultation meetings, including in-house consultation involving key stakeholders (MoEYS Curriculum Development Department, 25 Provincial Departments of Education and educational, development partners) has been carried out in the CFGETE development process (MoEYS, 2015).

Eight main goals are emphasized in the CFGETE, among others, the acquisition of languages (Khmer and foreign), science, technology and Information and Communications Technology (ICT), civic, critical thinking and life-long learning skills (MoEYS, 2015).

As reiterated throughout the introductory part, (Foreword, Preface, Introduction, Vision of the curriculum framework, and goals of the curriculum framework), the CFGETE focuses on providing opportunities for all Cambodians to successfully reach their full potentials, with knowledge, skills, and attitudes to support their daily lives and further studies. Having said that, in the Foreword and Introduction of the Cambodian curriculum framework, as well as in the Vision and Goals of the curriculum framework section, most background information, particularly the rationale for this document, such as vision, aims, and objectives, are clearly present.

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<sup>3</sup> The Association of Southeast Asian Nations (ASEAN), established on 8 August 1967, consists of the following countries: Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam.

### *Scope and component of the curriculum framework*

There is no specific mentioning of both ‘vertical’ and ‘horizontal’ scopes of the curriculum framework, however, this can be assumed through observing the architecture and component, as well as the title of this document. In the section, ‘Subjects and Study Hours’, the expected learning outcomes, subjects and designated study hours are addressed specifically for Early Childhood<sup>4</sup>, Primary, Lower Secondary, Upper Secondary and Technical Education. The title of the document also shows that the curriculum framework is aimed at both general education and technical education. As for the 2005-2009 curriculum, the vertical scope is grades K-12. The document does not go into specific details for grades 1-9; however, it introduces for the first time, two different pathways, Science and Social Science, for grades 10-12.

The recommendation list proposed by the curriculum reform committee informs the architecture of the CFGETE. It aims to develop a comprehensive, coherent curriculum framework which ensures that what students learn from ECCE to Upper Secondary/Technical Education are well aligned and consistent throughout all educational levels. It will focus on developing expected learning outcomes for all learning and developing language (grades 1-6), ICT (grades 4-12), and local life skills (grades 4-9). In addition, Health Education, Arts Education and Physical Education and Sports are to be divided as an individual subject. Inclusive education and special education are aimed to be included to achieve sustainable education. Students of Upper Secondary Education, from grade 10, will have a choice to select different study pathways (referred as strand, in this document), Science, Social Science and Technical Education. It also includes strengthening teachers’ capacity, by providing modern teaching methodology and guidelines as well as compiling all curriculum related document (teacher manuals, educational indicators, evaluation, etc.) into one document, which is this curriculum framework.

The new framework also acknowledges the previous education policies and enlarges the scope of curriculum elements. The salient point from the approach mentioned above is the attempt to extend vertical curriculum elements, emphasizing the incorporation of subjects such as Life Skills, ICT, and Health Education.

### *Curriculum approaches*

Adopting competency-based approach to the curriculum reform, the CFGETE is built upon eight core competencies, which are: (i) literacy and numeracy, (ii) foreign languages, (iii) ICT, (iv) communication and teamwork, (v) analysis and creativity, (vi) applying knowledge and skills, personal, (vii) family and society development, and (viii) entrepreneurship and leadership. These core competencies are further defined, and constantly reflected and applied to the discussion of content and subject areas. The description of the competencies clearly shows how the learners should be equipped with the practical skills that can benefit their daily lives in local, national, regional and global settings (MoEYS, 2015).

The understanding of education that underlies the Cambodian curriculum framework sees education as a means to fully develop talents and capacities of all students with parallel and balanced intellectual, spiritual, mental, and physical growth and development. Essentially, both traditional academic competencies (i.e., literacy, numeracy and science skills) and practical competencies (i.e., problem solving, critical thinking, decision-making, entrepreneurial and leadership skills) play an imperative role and are embedded in the objectives. The emphasis on both knowledge and practical skills corresponds to the

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<sup>4</sup> This level of education is referred in the national document as “Kindergarten”, but will be referenced as “Early Childhood” in this report, for consistency purposes.

ultimate goal of the CFGETE, to equip Cambodian learners with the knowledge, skills, and attitudes needed to support their daily lives and further studies. This, in turn, facilitates towards the overall goal of strengthening the Cambodian economy (MoEYS, 2015).

The subjects' objectives and the distribution of study hours in the CFGETE indicate a shift of emphasis to competencies that the Ministry aims to promote at different age levels, seeking to address the issues that existed in the previous curricula. In quest for addressing low attainment of functional literacy skills, there is a strong focus on enforcing learners' basic language, social studies, and mathematics skills at all levels of education.

The overall subjects (key learning areas) for Early Childhood, Primary, Lower Secondary, Upper Secondary, and Technical Education, as described by the Ministry of Education, Youth and Sports (MoEYS, 2015, pp. 4-9), and which are structured around the aforementioned competencies, are presented in *Diagram 2*, below.

<b>Khmer Language and Khmer Literature</b>	•Reading, writing, listening, speaking, core principles in use, and linguistics
<b>Mathematics</b>	•Numeracy, measurement, geometry, statistics and probability, arithmetic, analytical mathematics, and trigonometry
<b>Social Studies</b>	•History, geography, moral-civics, home economics, arts education
<b>Science</b>	•Science (physics, earth-environmental science, chemistry, and biology)
<b>ICT</b>	•Basics of computer literacy, daily use of computer, graphic computer, sending documents and information via computer systems, and technology in presentation
<b>Foreign Languages</b>	•English and/or French, listening, reading, speaking, and writing
<b>Physical Education and Sports</b>	•Appropriate exercises, physical fitness, athlete, football, basketball, volleyball, popular games
<b>Health Education</b>	•Primary health care, mental health, sexual and reproductive health, health and environment, health and beliefs, and health and economics
<b>Arts Education</b>	•Singing, dancing, playing musical instruments, painting and drawing, and handcrafts
<b>Local Life Skills</b>	•Agriculture, services and small handcrafts, and others

*Diagram 2: Key Learning Areas - Cambodian National Curriculum Framework*

It must be noted that there is no explicit mentioning to the inclusion of cross-cutting issues in all subjects, like sustainable development, human rights education, gender equality or others, which are related not only to the local context but also to the global context. Within the goals of the curriculum framework, it is mentioned that students should understand the tasks and practices of human rights as responsible citizens and at the same time as members of their families, their communities, the society, the region and the

world and respect the values of human rights based on the national and international laws. However, the specific approach to reach this vision, particularly in line with the global relevant issues, is not described in the curriculum framework, while human rights and gender are only briefly mentioned in the learning area of Health Education (MoEYS, 2015).

The CFGETE incorporates the “local content” component into the detailed national curriculum. For example, local life skills are incorporated as a core subject of study from grade 4-9 (MoEYS, 2015).

It is also interesting to note that the curriculum framework is structured around expected learning outcomes as well as a set of competencies. Each education level (Early Childhood, Primary, Lower Secondary, Upper Secondary and Technical Education) encompasses expected learning outcomes, divided into knowledge, skills and attitudes that students are expected to develop by the end of the learning cycles. Allocated subjects and study hours for the education level are also provided. Up until Upper Secondary education, only prescribed subjects are indicated; however, as mentioned before, three different pathways are offered in Upper Secondary education: Science (physics, chemistry, biology), Social Sciences (history, geography, morality, economics), and Technical Education (MoEYS, 2015).

### *Teaching and learning methodology*

One of the priorities of Cambodian curriculum framework is to strengthen teachers’ capacity and teaching principles, as outlined in one of its sections. These principles mirror the adoption of an approach where students are at the centre of the learning process and teachers are conceived as facilitators, aiming to equip students with the knowledge, skills and attitudes, in line with a competency-based approach to curriculum development. The learner-centred approach implies the use of knowledge and skills as useful tools for solving daily life problems.

The need for ensuring appropriate teacher professional development is also addressed in one section, in order to guarantee high efficiency in the implementation of the CFGETE. It is mentioned that teachers need to receive training for teaching methodologies and assessment, to be equipped with the necessary materials and technical support, and to improve their research abilities for lifelong learning. The role of teachers in conducting assessment is also highlighted in the section, ‘Learning and Teaching Assessment’. Assessment that occurs at the school and grade levels informs school managers and teachers about how to improve the quality of their teaching (MoEYS, 2015).

Notwithstanding the importance of these highlighted aspects, there is an absence of how the development process is going to be approached or which institutional body will be responsible for this. It is specified, though, that the CFGETE should be integrated into the programmes of the provincial and regional teacher training centres, the National Institute of Education as well as into the trainings programmes for teacher trainers, school administrators and teachers. As stated in the CFGETE, sub-committees established by the Ministry will develop teachers’ standards, indicators, as well as training programmes. Even though the CFGETE addresses teaching principles and places a high emphasis on teachers and teacher education, there are no specific guidelines on teaching methodology. It is not described in details what roles or actions educators or other stakeholders should play in implementing the curricula.

## Assessment

When it comes to assessment, the CFGETE seeks to collect, analyse and reflect on students' competencies and achieved learning outcomes after teaching and learning activities. This is summarized in five main principles: (1) Assessment of learners' competencies (the knowledge, skills, attitudes and application skills); (2) Assessment of the education system (human and material resources, and management and leadership); (3) Assessment units (Accreditation Committee of Cambodia (ACC), Department of Curriculum Development, stakeholders involved in schools and relevant agencies); (4) Assessment levels (Regional and international assessment, National assessment, School and grade level assessment, and Grade level assessment); and (5) Use of Assessment results (how assessment results will be used for the improvement of the quality of education at all levels) (MoEYS, 2015).

While the role and target of assessment are concisely covered and defined in the curriculum framework, the document does not go in-depth on specific assessment strategies. Some general examples of assessment approaches (quiz, problem solving exercise, class discussion, monthly text and small research projects) are mentioned for the assessment at the grade level, without going into specific examples (MoEYS, 2015, p. 17).

### 4.3 Finland: National Core Curriculum for Basic Education (NCCBE), 2014

#### Rationale

The National Core Curriculum for Basic Education 2014 of Finland is an all-inclusive framework, which has been elaborated to function as a foundation for the preparation, development and implementation of the local curriculum as well as the annual school plans by presenting a thorough structure and a set of principles and guidelines that can be used by stakeholders and decision makers. Its purpose is noted as "to promote the continuous improvement of education quality and to reinforce the continuum of education" (FNBD, 2016, p. 10). It aims to ensure to guide the learners through their transitions from Pre-Primary to Basic Education and then Basic Education to the next stages of learning and training. It also sets the basis for instruction and for school culture; it is a strategic and pedagogical tool, which elucidates the policies for the work carried out by the schools and directs the daily school work and culture. It is formulated in alignment with the legal basis, such as the Basic Education Act and the Decree, the Government Decrees and the National Core Curriculum (FNBD, 2016).

As such, the NCCBE is strongly grounded on the purpose of Basic Education, which is "to ensure the equality and high quality of education and to create favourable conditions for the pupils' growth, development and learning" (FNBD, 2016, p. 9) as well as its mission and goals. Basic education, as "the cornerstone of the education system" (FNBD, 2016, p. 19), nurtures learners<sup>5</sup> to live as active members of the community and a democratic society by undertaking educational, social, cultural and future-related tasks. This is achieved through providing and supporting quality learning and holistic development and well-being of learners in close collaboration with their parents, guardians and education providers (teachers, school administrators, etc.). Along the same lines, national goals of Basic Education are also named as: (i) growth as human being and membership in society; and (ii) requisite knowledge and skills; promotion of knowledge and ability, equality and lifelong learning (FNBD, 2016, p. 20).

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<sup>5</sup> Referred in the Finnish curriculum framework document as "pupils". For the coherency of this report document, 'learners' will be used, except for direct quotations.



The shared underlying values and the conception of learning lay the foundation for Basic Education as well as for the development of the NCCBE. The four underlying values are uniqueness of each pupil and right to a good education; humanity, general knowledge and ability, equality and democracy; cultural diversity as a richness; and necessity of a sustainable way of living (FNBD, 2016, pp. 15-16). In addition, the conception of learning considers learners as ‘active actors’, who are equipped with self-regulating and learning-to-learn skills, able to plan and fix goals for themselves, solve issues individually as well as collaboratively, and promote their own learning (FNBD, 2016). Having said that, the NCCBE aims to prevent any types of inequalities and exclusion and further foster gender equality, while valuing Finland’s unique cultural heritage. In addition, it calls for the schools to collaborate to bring about a positive transformation that contributes to both the nation and the world. It is also framed in line with the international human rights treaties, that seek for the opportunities of learning and welfare of each child, such as the Convention on the Rights of the Child, the International Covenant on Economic, Social and Cultural Rights, and the Convention on the Rights of Persons with Disabilities (FNBD, 2016).

To sum up, it can be inferred that all the components for the *Rationale* are present and covered in the Finnish NCCBE, except for a message from the Director-General or Director. Instead, the printed, English version of the NCCBE begins with a regulation, which indicates a specific implementation plan for the curriculum framework. In addition, the aim and objectives of the NCCBE can be found in the first five chapters as in the case of the principles of Basic Education.

### *Scope and component of the curriculum framework*

The regulation for the NCCBE clearly states that learners, who are attending Basic Education are the intended target of this document. This is also apparent based on the title of the document, which is ‘National Core Curriculum for Basic Education’. Basic Education includes grades 1-9, and is divided into 1-2, 3-6 and 7-9. Each education level<sup>6</sup> is comprehensively covered and contains four main sections at large. Each section starts by discussing the way in which transition from the previous education level to the current one (e.g., from Pre-Primary to Basic Education) should occur as well as the expected key tasks of the specific education level. Then, it explains the transversal competencies that are expected to be acquired by learners, followed by issues that are subject to local decisions. Lastly, it goes in-depth describing the subjects for each grade, and the list of objectives of instruction for each subject as well as the relation between each subject area and the transversal competencies (FNBD, 2016).

As observed from the ‘Rationale’ section, the Finnish NCCBE is structured around strong education values, aims and objectives. In this sense, the architecture of the document consists of specific description for grade level 1-2, 3-6, and 7-9 as well as a variety of concrete implementation mechanisms. Each education level includes four broad parts discussing how to make the transition from the previous level of education; transversal competencies and its objectives; issues relevant to local decisions as well as a detailed description of each subject, the objective of instruction and assessment; and types of skills for the specific grade level. In terms of the set of mechanisms introduced for the effective implementation of the curriculum framework, there are, namely, the operation of school culture, the organization of school work, assessment, provision of support for learning and school attendance, the welfare of the learners, language and culture, bilingual education, pedagogical system and optional studies (FNBD, 2016).

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<sup>6</sup> Referred as “grade unit” in the Finnish curriculum framework document.

It does not specify the ‘horizontal’ scope of the document, but one can easily assume it from reading through the content of the NCCBE as well as through its architecture. It is comprehensive designed, guiding readers, particularly education stakeholders, through every detail on the way in which this curriculum framework should be implemented at national, school and classroom levels.

### *Curriculum approaches*

As observed in the ‘Operating Culture of Comprehensive Basic Education’ section, the Finnish curriculum framework highlights the need to create a healthy, empowering culture for the effective implementation of the curriculum framework which encompasses school culture, learning environment and working methods. Integrative approaches and multidisciplinary modules are noted as the key methods.

The importance of school culture lies in the impact it carries for the quality of learning and the types of educational practices that learners will be exposed to. This infers that everything that happens, either consciously or unconsciously, within a school setting matters and has a great influence on the holistic growth of the learners. Placing the learning community at the heart of this, as one of the main principles, encourages learners to collaborate among each other by ensuring equal access to guidance in order to learn both individually and collectively, so that they can live a proactive life. It further encourages the collaboration between schools guardians and other partners of the community, by taking into account the local needs.

In this ideal learning environment, where the learners can work independently as well as with others, experiment-oriented, creative, participatory and active learning is promoted, through a variety of physical activities and plays. This helps build trust and respect as well as understand the value of diversity within a society. Active participation and the values and practice of democracy, human rights, equity and equality and sustained life are also fostered as essential elements for the learners’ growth and for them to become active citizens (FNBD, 2016).

In addition, delivering instructions with an integrative approach and multidisciplinary learning modules is considered a crucial element for school culture. What it means by integrative instruction is to focus on the development of an understanding on the interconnectedness and interdependencies between learning contents and further its relations to the real situations. Through this holistic approach, learners will be able to apply the knowledge and skills gained in their lives and their worldview will be expanded. Multidisciplinary learning modules are the integrative tools that support the realization of the educational goals, particularly by developing and strengthening transversal competencies. The vital factor for successfully developing and implementing these multidisciplinary learning modules is the interconnection between the subjects and their approaches as well as between the subjects and other school activities.

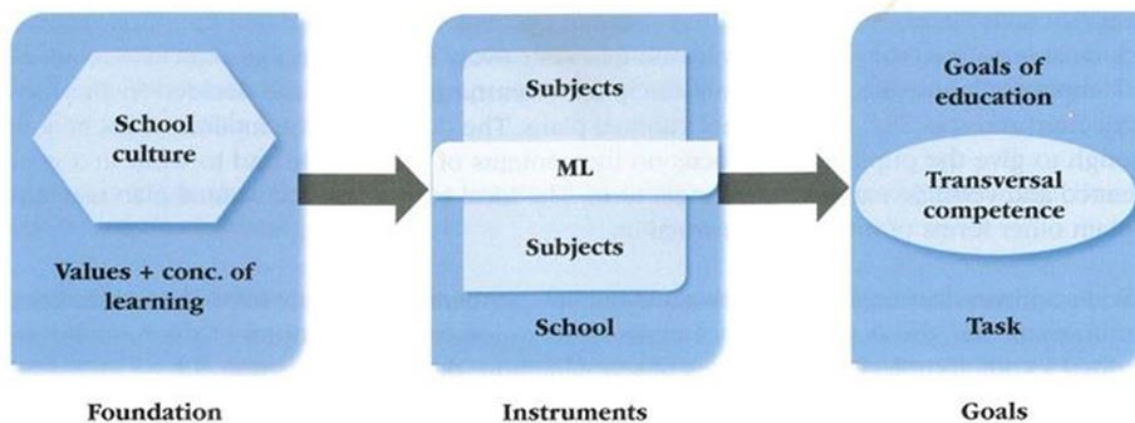


Diagram 3: Multidisciplinary learning modules as instruments (KICD, 2017, p. 34)

As mentioned before, the Finnish NCCBE promotes the transversal competence across all subject areas and grade levels. Transversal competence is “an entity consisting of knowledge, skills, values, attitudes and will” (FNBD, 2016, p. 21) and further implies the ability to use them in a real situation. Seven transversal competence areas have been developed on the basis of the three key pillars of this curriculum framework: the underlying values, the conception of learning and the school culture. These competence areas are interrelated and together aim to raise the learners to live sustained, democratic lives while being able to understand and appreciate their potential and strengths. These include: (T1) Thinking and learning to learn, (T2) Cultural competence, interaction and self-expression, (T3) Taking care of oneself and managing daily life, (T4) Multiliteracy, (T5) ICT Competence, (T6) Working life competence and entrepreneurship, and (T7) Participation, involvement and building a sustainable future (FNBD, 2016).

These transversal competencies have been taken into account in how the objectives and content areas of each subject are defined. The way in which they have been integrated for subject areas is addressed for each education levels. For grades 1-2, subjects such as Mother Tongue and Literature (Finnish, Swedish, Sami, Roma, sign language, other mother tongue), Second National Language (Finnish or Swedish), Foreign Languages (English, other foreign language or the Sami language), Mathematics, Environmental Studies, Religion, Ethics, Music, Visual Arts, Crafts, Physical Education and Guidance Counselling are taught. For grades 3-6, Social Studies and History are added while the other subjects remain the same as the previous grades. For grades 7-9, Biology, Geography, Physics, Chemistry, Health Education and Home Economics are included in addition to the existing subjects, and Environmental Studies is removed (FNBD, 2016).

The Finnish NCCBE comprehensively presents various curriculum approaches aimed at achieving the goals of Basic Education. In addition to the abovementioned approaches, it extends its guidance on school club activities, school library activities, school meals, recesses, and even learners’ transportation means to schools. What is interesting to note from this curriculum framework is the fact that how it gives an equal, all-encompassing attention to all areas that may influence learning and the development of the learners. It elaborates from what to be taught (subjects, skills, competencies, etc.) and how they should be fostered, to the modes of transports to schools. This comprehensive curriculum framework provides a deep understanding of the extent to which the holistic growth of learners is receptive to, and influenced by every matter. Also, the promotion of equity, equality, fairness and cultural diversity among the learners and learning environment is prevalent throughout the text in all aspects of curriculum approaches and pedagogy.

### Teaching and learning methodology

The objectives of instruction for each subject across all education levels are addressed, in alignment with the relevant content areas and transversal competencies. This directs the teachers in the preparation and development of their lessons by setting specific objectives, and shapes the teaching and learning practices. However, specific approaches to teaching are not proposed.

For example, a succinct discussion on the role of teachers is noted within the section, 'Learning Environments and Working Methods'. It mentions that teachers are the ones who choose which working methods should be adapted based on the interaction with the learners and guide them to use the selected working methods to enhance their self-regulating capacity. In addition, engaging the learners in planning and evaluating their working methods will also help them to be responsible for their own learning, eventually leading them towards the achievements of objectives (FNBD, 2016).

It is also important to note that the conception of learning, which is one of the pillars for the curriculum framework, considers the learners as active actors who "set goals for themselves and solve problems independently and together with others" (FNBD, 2016, p. 17). This infers how the role of teacher is more that of a guide and a facilitator. This is further reiterated in the section, 'Shared Responsibility for the School Day,' where the role of the involved actors in learning, such as learners, school management, teachers and parents/guardians, are described. Teachers are accountable for the activities, learning and assessing, and the well-being of the learners, by applying well-suited pedagogical, guidance approach and regularly interacting with the learners and their parents/guardians (FNBD, 2016).

The NCCBE also indicates how assessment can be used as one of the important pedagogical instruments, where, through assessing learners, teachers can be also self-assessed, reflect on their teaching, and improve their approaches to teaching. This process is a basis for differentiated instruction based on the needs of learners (FNBD, 2016).

### Assessment

The Finnish NCCBE promotes strengthening of learners' capacity for self-assessment, with the support of teachers and parents or guardians. Teachers' role, in this sense, is to provide constructive feedbacks and guide the learners with their learning progress and achievement, by taking fair, ethical and versatile assessment approach through continuously interacting with learners and other teachers. This will support the overall growth of learners, particularly with the development of a healthy self-conception towards themselves (FNBD, 2016).

It aims to assess, mainly, learning, working skills and behaviors of the learners based on assessment principles. Assessment needs to be carried out based on the planned objectives and criteria and by taking into account the age and capabilities of learners, using a versatile and flexible approach and developing preconditions for self-assessment (FNBD, 2016, pp. 50-51). The Finnish NCCBE adopts two types of assessment as assessment methods in a broader sense. *Formative* assessment occurs on a constant basis during the school year as part of daily learning process, and *summative* assessment is carried out mostly at the end of each school year, as a final, overall evaluation of learners' performances during the year and a determinant for their promotion to the next grade. For the latter, verbal or numerical grades, or both will be used for the grade 1-7, and numerical grades will be used for grade 8-9. Also, additional assessment mechanism for the transitional points, such as at the end of

grade 2 and 6, as well as for the final assessment of Basic Education, which can occur either grade 7, 8, or 9, depending on the local curriculum are established. It further goes into describing the details of the school year report and certificates during Basic Education.

In addition to the general description of assessment, specific guidelines on assessing learners' progress for each subject for the specific grade level is included across all education levels. As such, the assessment targets in all subjects are outlined in line with the instructional objectives, content areas and competencies.

It is important to note, as reiterated several times for different components throughout the whole document, that assessment as well is and should be carried out with the aim to ensure fairness, equity and equality across regions, gender and social background (FNBD, 2016).

#### 4.4 Kenya: Basic Education Curriculum Framework (BECF), 2017

##### *Rationale*

Kenya's Basic Education Curriculum Framework (BECF) was developed after an intensive process of consultations, assessments, studies and conferences aimed at identifying and discussing the main issues of Kenyan National Curriculum. Several concerns were identified and raised, each of which pushed for the need of initiating a reform process. As the Cabinet Secretary addressed in the Foreword, the curriculum has been developed in order to tailor the curriculum reform process with a common outline, adapting a comprehensive view of education embracing all levels of Basic Education: Pre-primary, Primary, Secondary and Special Education (referred as *Special Needs Education* in the document). It also indicates that the BECF is developed in alignment with the Constitution of Kenya, Vision 2030 and the East African Community Curriculum Harmonization Structures and Framework as well as Sessional Paper No. 2 of 2015 on 'Reforming Education and Training in Kenya' (KICD, 2017).

The BECF addresses the challenges of inflexible education pathways for the learners which restrained them from adequately being prepared for the career progression in this rapidly changing world. This also influenced the increase of drop out and talent wastage rates which have led to high unemployment. In addition, highly academic-, examination-oriented curriculum, curriculum overloads, insufficient teacher training and teacher preparation, lack of attainment of entrepreneurial skills, and intensive focus on summative assessment called for a curriculum reform. In this sense, the BECF manifests the need to renovate past methodologies as these have failed to be aligned with the aspiration of the country, which situates education at the core of the human and economic development. It is recommended that, while aiming for an individual learner's holistic and integrated development, in general, the curriculum reform should focus on "competency-based curriculum; establishment of a national learning assessment system; early identification and nurturing of talents; the introduction of national values and national cohesion and their integration into the curriculum; and the introduction of three learning pathways at senior secondary school level" (KICD, 2017, p. vii).

Considering the recommendations set after deliberative consultations, the curriculum was reformed with a vision to "enable every Kenyan to become an engaged, empowered and ethical citizen" (KICD, 2017, p. viii). In addition, the reformed curriculum aims to raise the future generations of Kenyan citizens to be both patriotic and global, by equipping them with the adequate values and skills to be confident in their own national heritage and culture, and bring these attributes together to contribute to the world. It also anchors with the mission of the curriculum reform for the Basic Education, which is to nurture all learners' potential.

According to the Kenyan National Goals of Education, education in Kenya should:

1. Foster nationalism and patriotism and promote national unity;
2. Promote the social, economic, technological and industrial needs for national development;
3. Promote individual development and self-fulfillment;
4. Promote sound moral and religious values;
5. Promote social equality and responsibility;
6. Promote respect for and development of Kenya's rich and varied culture;
7. Promote international consciousness and foster positive attitudes towards other nations;
8. Promote positive attitudes towards good health and environmental protection (KICD, 2017, p. x).

These goals are guided by three major components, referred in this document as “pillars”, which are values, theoretical approaches and guiding principles. By taking a values-based approach to education, the BECF aims to facilitate the holistic development of learners, where they are educated to become ethical citizens. The values promoted in this curriculum framework, which has initially been stated in the Constitution of Kenya, 2010, are “responsibility, respect, excellence, care and compassion, understanding and tolerance, honesty and trustworthiness, trust, and being ethical” (KICD, 2017, p. 2). In addition to these, the BECF also ensures to impart values for stewardship, empathy, diversity and teamwork and communication. In terms of theoretical approaches, the BECF introduces various educational theories, upon which the curriculum framework has been built and expected pedagogical practices are presented. They include, among others, the Instructional Design Theory, Visible Learning Theory and Constructivism Theories. Finally, the six guiding principles of the BECF are: (i) opportunity, (ii) excellence, (iii) diversity and inclusion, (iv) differentiated curriculum and learning, (v) parental empowerment and engagement, and (vi) community service learning (KICD, 2017).

Considering the *Rationale* criterion of the BECF, the Kenya Institute of curriculum Development (KICD) thoroughly describes the background information to the development of the curriculum framework within the curriculum reform process. As can be seen from above, the vision of the Kenyan government, the mission and aims of the curriculum reform as well as the guiding values and principles to education are clearly discussed.

### *Scope and component of the curriculum framework*

The ‘vertical scope’ of the curriculum framework is initially informed by the title, which is ‘Basic Education Curriculum Framework’ and is further clearly indicated in the ‘Organization of Basic Education’ section. The BECF is largely organized into three education levels: Early Years Education, Middle School Education, and Senior Education. Early Years Education is organized into two age-based groups, which are Pre-Primary (ages 4-5) and Lower Primary (ages 6-8, grades 1-3). Middle School Education comprises of Upper Primary (ages 9-11, grades 4-6) and Lower Secondary (ages 12-14, grades 7-9). Following this, the BECF introduces another grouping of the education levels, indicating a specific section for Secondary Education, which includes Lower Secondary (ages 12-14, grades 7-9) and Senior School (ages 15-17, grades 10-12). Lastly, the three years of Senior School provide three different pathways, which are Arts and Sports Science, Social Sciences and Science Technology, Engineering and Mathematics (STEM), within which, the learners will be allowed to choose from 9 tracks. The Basic Education structure and this approach to pathways and their tracks of the BECF are presented in Diagrams 4 and 5, below.

## ORGANIZATION OF BASIC EDUCATION

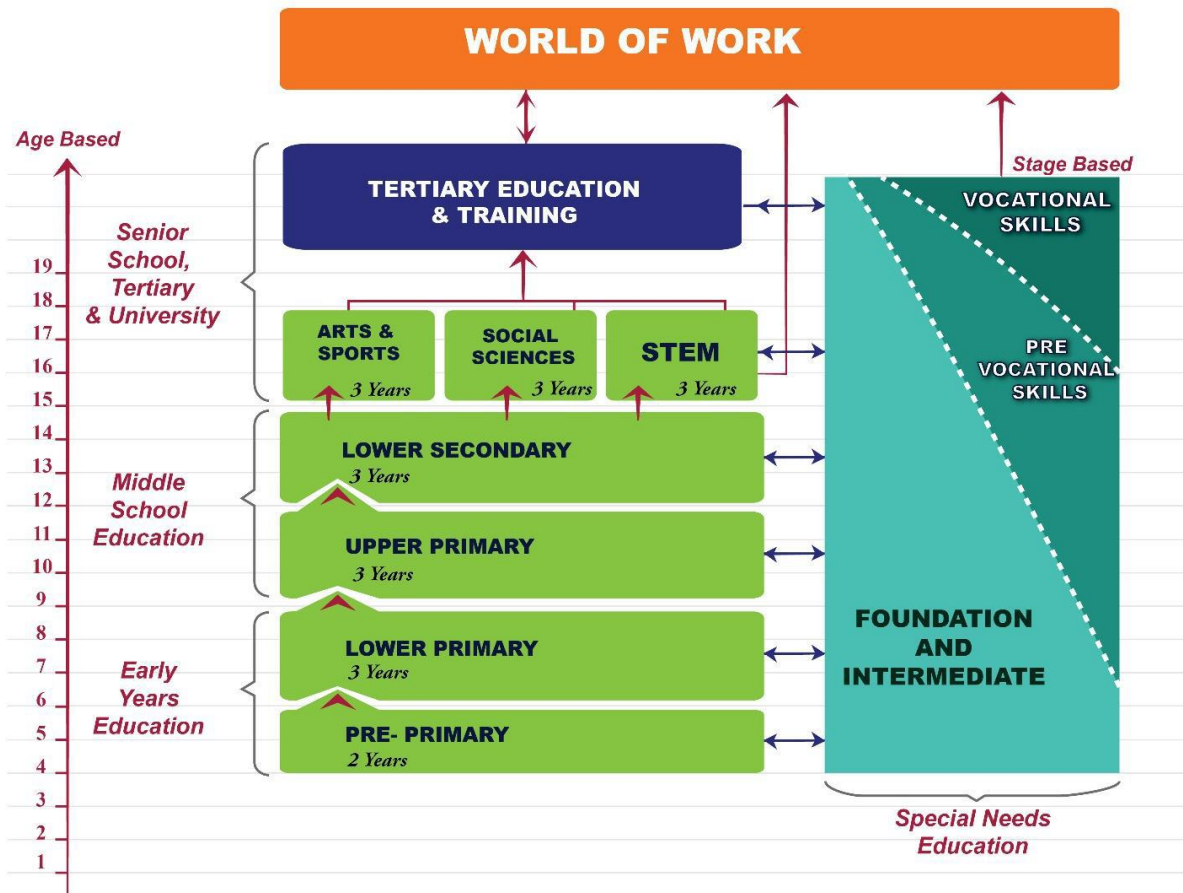


Diagram 4: Basic Education Structural Model (KICD, 2017, p. 15)

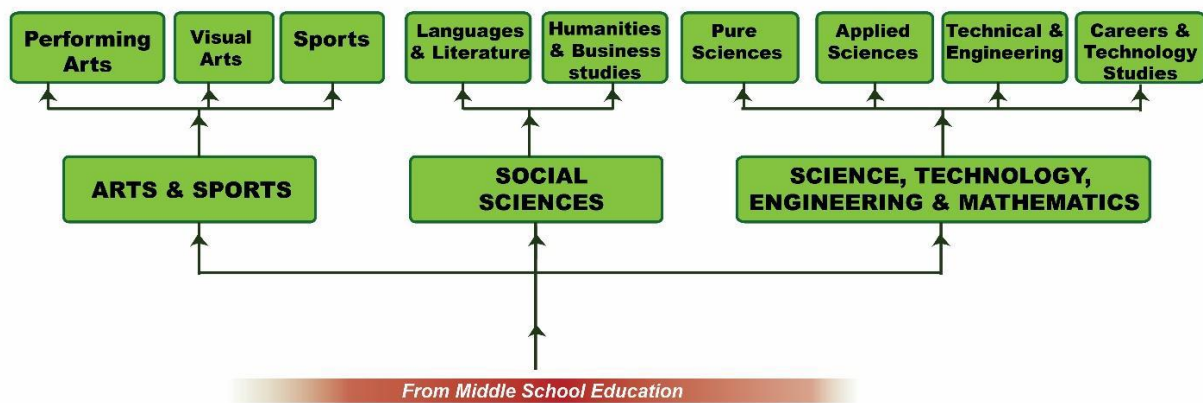


Diagram 5: Tracks within the Pathways (KICD, 2017, p. 46)

While the structure and expected learning outcomes are specified for the three large education levels, each sub-education level includes key and optional learning areas and subjects as well as the rationale and the overview of each learning area and subject. The details for key learning areas will be discussed in the 'Curriculum Approaches' section.

In addition, the BECF allocates a section for learners with Special Educational Needs by developing a special needs education curriculum framework within the BECF. A Special Needs Education curriculum framework is elaborated and included within the BECF, to ensure that the curriculum content and instructional approaches are appropriate for all learners by taking inclusive approaches that are flexible to meet everyone's needs. It provides two different modalities for the learners who are able to follow the regular curriculum and for those who may not be able to do so. The former group of learners are identified as "gifted and talented, visual impairment, hearing impairment, physical handicap, mild cerebral palsy, learning disabilities, emotional and behavioural difficulties, communication disorders" (KICD, 2017, pp. 100-101). For these learners, adaptation of regular curriculum, content areas, resources, and teaching and assessment approaches are the key to ensure their learning process. The latter are the learners with "mental handicap, deaf blindness, autism, cerebral palsy, multiple handicaps, and profound disabilities" (KICD, 2017, p. 101). Four different levels of education are designed specifically for those, which are Foundation, Intermediate, and Pre-Vocational and Vocational Level (Key learning areas for each level will be discussed in the 'Curriculum Approaches' section). What is crucial for this modality is that this specific curriculum is stage-based not age-based and highly regulated by individualized learning, with its ultimate aim to enabling the learners to live an independent life (KICD, 2017).

Moreover, the BECF further introduces a detailed Capacity Building Framework for a Competency Based Curriculum, in other words, which can be understood as a framework for teacher education and professional development. This denotes the necessary elements that need to be taken into account when strengthening the capacities of the teachers with the skills for implementing a competency-based curriculum. The areas to be considered for developing training manuals are also listed. Among these, appropriate pedagogy and approaches, assessment methods, inclusiveness, community service learning, differentiated learning, etc. are included. This section proves the role of the KICD being responsible for the preparation of teachers and implementation of the curriculum (KICE, 2017).

### *Curriculum approaches*

The Sessional Paper No. 2 of 2015 (MoEST, 2012), along with other national and regional policies, called for a strong need to adopt a competency-based approach to the educational reform in Kenya. The Kenyan Competency Based Curriculum (KCBC) defined competence as "the ability to apply appropriate knowledge and skills to successfully perform a function" (KICD, 2017, p. 9). Especially, taking competency-based approach would allow students to be able to apply the acquired skills in real life situations. The BECF introduces seven core competencies: (i) communication and collaboration, (ii) self-efficacy, (iii) critical thinking and problem solving, (iv) creativity and imagination, (v) citizenship, (vi) digital literacy, and (vii) learning to learn. These core competencies are expected to be achieved by all learners, and learning and assessment in the BECF are designed to meet this expectation. To mainstream a competency-based curriculum, a specified framework focused on strengthening the capacities of teachers has also been included in the BECF. Such efforts placed competency-based approach at the heart of Kenyan curriculum reform (KICD, 2017).



Key learning areas for Pre-Primary level are Language, Mathematical, Environmental, Psychomotor and Creative and Religious and Moral Activities, and for Lower Primary Education, Literacy, Kiswahili Language/ Kenya Sign Language (KSL) for learners who are deaf, English Language, Mathematical, Environmental, Hygiene and Nutrition, Religious Education and Life Skills, and Movement and Creative Activities (Art, Craft, Music and Physical Education).

For Upper Primary level, the learning areas include English, Kiswahili or KSL, Home Science, Agriculture, Science and Technology, Mathematics, Religious, Moral and Life Skills Education, Creative Arts, Physical and Health Education, and Social Studies (Citizenship, Geography, History). At the Lower Secondary level, the learning areas are divided into two categories: core and optional subjects. For core subject, most of the key learning areas of the Upper Primary level remain the same. Science and Technology are replaced by Integrated Science, Pre-Technical and Pre-Career Education, and Business Studies, while Home Science and Creative Arts are categorized as optional subjects, along with Visual and Performing Arts, Computer Science, Foreign Languages, KSL, and Indigenous Languages.

When learners reach the Senior School level, they have to choose a pathway from these three options: Arts and Sports Science, Social Sciences and STEM. Learners are thus able to develop specified, employable skills during time. The Arts and Sports Science pathway is divided into Performing Arts, Visual and Applied Arts, and Sports Science track. The Social Science pathway includes Humanities, Business Studies, Languages and Literature track. Finally, in regards to the STEM pathway, a learner can choose between Pure Science, Applied Sciences, Technical and Engineering, and Career and Technology Studies, as well as obtaining Dual Certification. Core and optional subjects are indicated for each track of the three pathways.

Differentiated key learning areas have been considered for the learners with special education needs, particularly for those who may not be able to follow the regular curriculum that is age-oriented. The four levels of education, Foundation, Intermediate, Pre-Vocational, and Vocational Level, as similar to the regular curriculum, encompass the learning outcomes and the key learning areas and further expand with the modalities for non-formal learning. In addition to the four modalities, a Home-Based Programme is also proposed for the learners with profound disabilities (KICD, 2017).

The learning areas to be obtained during the Foundation Level are Communication and Social Skills, Activities of Daily Living Skills, Sensory Integration, Pre-Numeracy and Pre-Literacy, Psychomotor and Creative Arts, Orientation and Mobility and Digital Literacy. As for the Intermediate Level, the key learning areas remain the same, except for Pre-Numeracy and Pre-Literacy, which is now advanced as Numeracy and Literacy Skills. During the Pre-Vocational Level, learners are exposed to the work-oriented skills in order to develop a sense of self-worth among them. It is about this time, where the interest and ability of learners will be identified so they can be placed to the specific learning areas for the Vocational Level. Due to this, the learning areas for the Pre-Vocational and Vocational Level almost overlap with each other. These are Weaving and Animal Husbandry, Cookery, Hair Dressing and Beauty Therapy, Ornament Making and Beadwork, Garment Making (Dress Making, Tailoring, Knitting, Crocheting and Embroidery), Carpentry and Carving, Metalwork, Leatherwork and Shoe Polishing, Building Construction, Horticultural Framing, Home Making Skills (Laundry, Detergent Making, Candle Making), Paper Technology. For both levels, the support areas for attaining the key learning areas include Communication and Social Skills, Activities of Daily Living Skills, Mathematics, Music and Movement, Religious Education, Physical Education, Health and Safety, Entrepreneurship. It is also noted that Digital Literacy should be integrated into all learning areas (KICD, 2017, pp. 101-106).

Alongside the key learning areas, six transversal values referring to Pertinent and Contemporary Issues (PCIs) are elaborated and added to the curriculum in order for all learners to acquire and apply the core competencies in a real world setting. PCIs are:

1. Citizenship (Peace education, integrity, ethnic and racial relations, social cohesion, patriotism and good governance, human rights and responsibilities, child's rights, child care and protection, gender issues in education);
2. Health Education (HIV and AIDS education, alcohol and drug abuse prevention, life style diseases and personal hygiene, preventive health, common communicable and chronic diseases);
3. Life Skills and Values Education (Life skills, values, moral education and human sexuality and etiquette);
4. Education for Sustainable Development (Environmental education, disaster risk reduction, safety and security education (small arms, human trafficking), financial literacy, poverty eradication, countering terrorism, extreme violence and radicalization);
5. Non-Formal Programmes (Guidance services, career guidance, counseling services, peer education, mentorship, learning to live together, clubs and societies, sports and games); and
6. Community Service Learning and Parental Engagement (Service learning and community involvement, parental empowerment and engagement) (KICD, 2017, pp. 107-108).

Integrating PCIs in formal, non-formal and informal education by taking inquiry-based, experiential approach such as guided age appropriate projects and action research can help learners attain skills, competencies, attitudes and values. This can also help them build healthy characters, eventually leading them to experience behavioral and psychological transformation (KICD, 2017).

The BECF suggests for these PCIs to be integrated across all learning areas of all education levels, as cross-cutting issues. In addition to these, digital and financial literacy should be integrated for Pre-Primary Education and ICT will be a learning and delivery tool for all learning areas from Lower Primary onwards.

Moreover, as one of the unique curriculum approaches to education, the BECF emphasizes the role of parents and the community in the holistic development of learners and in ensuring opportunities for learners. It provides guidelines to empower them with specific strategies and activities and the way in which they can be easily engaged in their child's learning process (KICD, 2017).

### *Teaching and learning methodology*

In the 'Curriculum Reforms Vision' section, the provision of well-prepared teachers as well as the learning environments and resources is identified as one of the crucial factors in achieving curriculum reform vision for equipping learners with essential values, skills and competencies to become productive and responsible citizens. The role of teachers is clearly presented in this section as a coach, facilitator, mentor and role model for learners. The teacher should be trained to be confident and flexible in applying a variety of contemporary pedagogical approaches based on the needs and interests of the learners. It is also important for teachers to work with other stakeholders, such as parents and the community.

The learner-centred approach to teaching, where teachers are considered as facilitators, while learners are encouraged to take initiatives and be active in their own learning, is reiterated in the description of the BECF's theoretical approaches. The theoretical approaches, as abovementioned, act as one of the pillars for accomplishing the Kenyan national education goals by providing guidance for practice. For example, Visible Learning Theory, which is one of the main theories introduced, inspires the teachers to take a role as assessors of their own teaching from the learners' point of view and the learners to become their own teachers through self-assessments. This theory is an essential element for the competency-based curriculum, because it can inform the nature of engagement in the learning process, and serve as the basis for a criterion-based, formative assessment. Also, when a set of Constructivism Theories pertinent to the BECF is identified, various pedagogies that can facilitate a competency-based curriculum as well as 21<sup>st</sup> century skills and competencies are proposed. This is again where learners can act as active participants in the learning process through exploring and collaborating with peers and teachers take the role of a guide or facilitator.

There is no separate, designated section for the teaching methodologies and approaches in the curriculum framework; however, it is important to note how they are present and evoked throughout the document. As part of the Capacity Building Framework, appropriate pedagogy and approaches that need to be taken into consideration for developing training manuals briefly recapture how teachers need to take learner-centred approach. In fact, the way in which the curriculum framework provides detailed description and examples for each component and curricular approaches, such as theories, assessment, etc., also allows this document to take role as a guiding tool for teachers and many other educational stakeholders.

### Assessment

Assessment is comprehensively covered throughout the Kenyan curriculum framework. The BECF not only assigned a separate specific section for assessment, but it also included assessment as sub-sections for each education level, as well as in the section on learners with special educational needs. This may be due to the strong emphasis the Kenyan Government placed on competency-based assessment in its curriculum reform process (KICD, 2017, p. 113).

Competency-based assessment is defined in the BECF as “a collection of evidence demonstrating how a learner can perform or behave according to a specific standard” (KICD, 2017, p. 112). It aims to continuously assess the extent to which and the way in which the learners are capable of applying the acquired knowledge and understanding, practical skills, attitudes and values and generic competencies in a real life situation. It is also aligned with a criterion-referenced assessment, where the focus is to ascertain whether individual learners obtained specific concepts and competencies rather than comparing their learning process and achievement against the others (KICD, 2017).

The five guiding principles of competency-based assessment are validity, reliability, fairness, flexibility and access. On the basis of these principles, three broad approaches to assessment are noted, which are formative assessment (assessment *for* learning), summative assessment (assessment *of* learning) and assessment *as* learning. Among these, the BECF particularly promotes formative assessment, in line with the learner-centred approaches, since it focuses more on the learning process of each learner over time. This goes in-depth by listing and further describing a set of instruments for formative assessment, such as observation, checklists, rating scales, rubrics, questionnaires, project method, journaling, question and answer, profiling, anecdotal records, written continuous assessment tests, homework and progress report card (KICD, 2017).

National assessments will also be conducted by the Kenya National Examination Council (KNEC) using standardized tools at the end of Early Years (Lower Primary School), Upper Primary, Lower Secondary Education, and Senior School. This summative evaluation is to have an overall understanding of acquisition of learners of the expected competencies when they are at the grade level (grades 3, 6, 9) right before transitioning to Middle School Education (Upper Primary and Lower Secondary) and Senior School (to be used for the placement of students for the pathways).

The BECF provides comprehensive guidelines on how competency-based assessment at classroom, school and national level, as well as teacher education should be understood and carried out. It also provides indicators and various tools that can be used. However it does not particularly address a specific monitoring and evaluation process of the curriculum framework.

#### 4.5 Peru: Currículo Nacional de la Educación Básica (CNEB, National Curriculum for Basic Education), 2016

##### *Rationale*

The Peruvian National Curriculum for Basic Education outline its aims in the first section named as ‘Presentation’. The aims are:

- *to prioritize values and citizenship education to put in practice students’ rights and duties and to develop competencies that enable them to respond to contemporary demands aimed at sustainable development, associated to proficiency in English, professional education and Information and Communication Technology (ICT) education;*
- *to achieve a comprehensive education that strengthens the knowledge related to arts and culture and to physical and health education, within an intercultural, environmental and inclusive perspective that respects each student’s characteristics, interests and abilities (MINEDU, 2017, p. 8).*

The ‘Presentation’ section also addresses the purpose of the curriculum framework, identified as to be *the element that coordinates policies and initiatives that improve the investment, management and strengthen the capacities within the education sector, its infrastructure and renewal of educational environments as well as the improvement of educational resources, teaching policies and standardized assessment (MINEDU, 2017, p. 8).*

In addition, this section explores the processes preceding the elaboration of Peruvian CNEB. These involved using the experience and progress made during the development of the learning standards produced in 2010 by the Peruvian Institute for Assessment, Accreditation and Certification of Basic Education and several national public hearings that took place from 2012 and 2016 and involved public actors, civil society, teachers, education specialists and national and international curriculum experts (MINEDU, 2017).

The background for the curriculum framework is presented in the section named ‘Challenges to Basic Education and Expected Educational Outcome’. The aspirations of the Peruvian people for this century’s challenges are described in a context of constant global changes that require new combinations of knowledge and skills. It pointed out the importance for an inclusive and democratic education that contributes to both the personal fulfillment of each citizen and the development of the

country. The national education aspirations are argued to demand a change regarding what the students learn in Basic Education to build the tools that enable them to fully develop themselves and ensure their social inclusion; to perform an active role in society; and to keep learning throughout their lives. Within this context, the CNEB is portrayed as an advantage because it puts together a common and comprehensive perspective around competencies and knowledge that students should achieve on Basic Education. This allows for a unification of criteria and the establishment of a roadmap to common outcomes respecting the right to quality education, to personal development, to exercise citizenship and to be able to enter the job market (CNEB, 2016).

Moreover, a unity of purpose and a long-term vision are also present in the section, which claims that “at the end of Basic Education Peruvian students will exercise their rights and duties as citizens in an ethic manner, valuing diversity through intercultural dialogue to contribute actively, both individually and collectively, to the sustainable development of the Peruvian society within a democratic context” (MINEDU, 2017, p. 13).

Furthermore, eleven expected learning outcomes of Basic Education are listed, which can be understood as the objectives of the curriculum framework. Those objectives address a range of topics concerning cultural and self-awareness, civic literacy, health skills, creativity, communication and literacy skills, scientific literacy, numeracy, entrepreneurship, ICT literacy, self-reliance and religious belief and tolerance.

The values of the curriculum framework are identified as quality, equity, ethics, democracy, environmental awareness, interculturality, inclusion, creativity and innovation, gender equality and sustainable development (MINEDU, 2017). The curriculum framework portrays these educational values as crosscutting approaches that must be present in the daily routines of schools, orienting the pedagogical work and characterizing all educational processes. Although initially called principles, these are most frequently referred as ‘the values that orient education’. The framework argues that as the education system follows them, they will shape the attitudes and behaviors of students. Complementarily, the principles that will guide the implementation of the curriculum framework are defined in the last section of the document ‘Orientation for Curricular Diversification’. According to it, the curriculum should be flexible, open to changes, diversified, inclusive, embedded with values, significant and participatory (MINEDU, 2017, p. 185).

Even though the structure of the Peruvian CNEB differs from the Prototype of a National Curriculum Framework, the elements expected in the Introduction, Curriculum Vision, Aims and Objectives, Values and Principles are present throughout its sections and subsections. It should be noted, however, that the document does not contain a message from the Minister of Education and Training, which sets the Government’s commitment to the framework.

### *Scope and component of the curriculum framework*

Because of its title and the content of all the sections of the document, one can assume that this curriculum framework is aimed at basic education. Its ‘vertical’ scope is defined towards the end in the section entitled ‘Basic Education Organization and Study Plans’, where Basic Education is presented as the first step in the Peruvian education system and it is divided into three modalities: Special Basic Education (SBE), Alternative Basic Education (ABE) and Regular Basic Education (RBE).

SBE is the modality targeting children and youth with special education needs associated to disabilities, talents or intellectual giftedness.

ABE is the one designed for students that could not follow the RBE at the appropriated age and need to combine studies with their working routines and it is offered in three modalities: full-, semi-attendance and online. This education modality is organized around a system of Cycles -Initial, Intermediate and Advanced– which are divided into grades in the following way: Initial Cycle, grades 1 and 2; Intermediate Cycle, grades 1, 2 and 3; Advanced Cycle, grades 1, 2, 3 and 4. The combination of the Initial and Intermediate Cycle is the equivalent of Primary Education, while the Advanced Cycle corresponds to Secondary Education. This organization allows not only for a more flexible approach in terms of duration, but it also allows for the implementation of the competency-based approach on which the curriculum is based (see discussion in the section below ‘Curriculum Approaches’).

Finally, RBE is presented as comprising three levels: Early Childhood, Primary and Secondary Education. These levels are divided into the following education cycles and age groups (for ECCE Early Childhood only) or grades (for Primary and Secondary): ECCE: Cycle I, 0-2 years old and Cycle II, 3-5 years old; Primary, Cycle III, grades 1 and 2, Cycle IV grades 3 and 4, Cycle V, grades 5 and 6; Secondary, Cycle VI, grades 1 and 2, Cycle VII, grades 3, 4 and 5. RBE is organized around different Learning Areas, called Curricular Areas, which vary depending on the education cycle, as it will be explained later in the text (MINEDU, 2017).

The Peruvian CNEB presents in the section entitled, ‘Key Definitions that Sustain the Educational Outcomes’ structured around four key curricular concepts: competencies, skills, learning standards and performance. Competencies are defined as the ability to combine a set of skills in order to achieve a specific goal. To be competent is to be able to understand the situation faced and evaluate the possibilities available to tackle it as well as being able to combine different skills in light of a new scenario. Skills, in this sense, are understood as the resources to act in a competent manner, such as theories, concepts and procedures in different areas of knowledge. The learning standards are presented as descriptions of the development of competencies organized in a rising level of complexity. They are argued to be the references to evaluate learning both at classroom and system level (national, samples or census). In this regard, the curriculum framework acknowledges that different levels of learning are present in the same school grade. The standards, in this context, are the references of how far or close a student is in relation to the achievement of competencies for a given grade. They can further be used to provide information to students on their progress and to plan classroom activities accordingly. Finally, performance is the specific description of what the student does regarding the levels of development (learning standards). It illustrates the student’s actions in their process of achieving the expected competency level.

### *Curriculum approaches*

The Peruvian CNEB is built upon the idea that developing competencies throughout Basic Education is essential to achieve the desired educational outcomes. Competencies are expected to be developed throughout the educational experience in a correlated, simultaneous and sustained manner. In this context, the development of competencies is understood as a lifelong process that should be stimulated by teacher and education institutions and that will then be combined with other competencies acquired throughout life. The relevance of structuring the curriculum around competencies is highlighted in several sections of the document (MINEDU, 2017).

The Peruvian CNEB further establishes 31 competencies that are expected to be developed on Basic Education, 29 of them are general competencies for all education levels, while 2 are specific competencies to Religious Education, which is an optional subject. These competencies refer to diverse topics such as construct your own identity, read and speak in Spanish and English, construct historical interpretations, design and build technological solutions to solve problems, manage social and economic entrepreneurship projects, etc. For each competence, a group of skills are associated, coupled with learning standards and levels to assess students' achievement on that matter. As mentioned before, competency-based approach plays a central role in the Peruvian CNEB.

Areas of Learning included as Curricular Areas in the Peruvian case differ for each level of Basic Education. In Early Childhood Education, they account for Communication, Spanish as a Second Language, Social and Personal, Psychomotor, Discovering the World, Science and Technology and Math. In primary education, Discovery the World and Psychomotor no longer apply, but instead new areas are introduced: English, Art and Culture, Religious Education (optional) and Physical Education. In secondary education only Social and Personal are not continued, being replaced by Personal, Citizen and Civic Development and Education for Work. In addition, some subjects are grouped into broader key learning areas and each curricular area is interwoven with specific competencies aimed to be developed while mastering the learning areas (MINEDU, 2017).

The CNEB also describes 7 transversal approaches that should orient all the pedagogical work in the classroom as they permeate competencies. These transversal approaches constitute the values and attitudes that students, teachers and authorities should have and determine people's behavior in relation to other people and the environment. These are: Rights Approach, Inclusive and Attention to diversity Approach, Intercultural Approach, Gender Equality Approach, Environmental Approach, Common Good Approach and Pursuit of Excellence Approach.

### *Teaching and learning methodology*

While focusing on the importance of constructing competencies among learners, as mentioned in the previous section, the document places high importance on the role of the teacher as the facilitator in the development of students' competencies and skills. The curriculum framework provides a number of guidelines and recommendations in the section entitled 'Pedagogical Orientation to the Development of Competencies'. The focus is to guiding teachers to teach in a way that students learn not specific contents, but how to act in a competent manner. Teachers are oriented to support the development of their students' skills through a variety of strategies, such as project-based learning, problem-based learning, and case studies. They are encouraged to select the strategy according to what will provide the most meaningful experiences for their students. In this sense, guidelines to orient how to plan, implement and evaluate the teaching and learning processes are offered. Teachers are encouraged to design or select experiences that are significant for the students, to generate interest, to develop competencies based on the idea of learning by doing, to acknowledge and trigger previously acquired knowledge and to stimulate the construction of new knowledge. They are also advised to encourage students to learn from their own mistakes, to propose challenges, to follow closely their advances, to promote teamwork, and to trigger critical thinking (MINEDU, 2017).

The orientations on how to teach according to this approach are also in line with the socio-constructivist perspective of pedagogy. Teachers' role is to be mentors that generate the conditions for learning. The curriculum framework also proposes that teachers and students should construct an emotional bond, in

which teachers promote the wellbeing of the students and strengthen their social, emotional and cognitive skills. To do so, teachers are entitled to follow students closely and support them in their diverse personal and social needs. The CNEB portrays two modalities of mentorship teacher-students: group or individual. Group mentorship is understood as an orientation that takes place with the whole classroom group, stimulating each student to interact and express their ideas, feelings, values and life projects. On the contrary, individual mentorship involves only the mentor and the student and is targeted at the ones that demand customized attention. Additionally, the possibility of working closely with the families of the students to support students in their learning process is also mentioned in the document. This is seen as a very important aspect to creating an active commitment of the families in relation to the learning process of their children (MINEDU, 2017).

### *Assessment*

When it comes to students' assessment, as well as the monitoring and evaluation of the curriculum framework, the Peruvian CNEB presents how assessment is to be understood within this particular context. The document describes assessment as a process centred around students' learning that "diagnoses students' achievements, provides feedback and enables actions towards the students' learning progress" (MINEDU, 2017, p. 177). In this sense, it is considered a comprehensive and continuous learning process, in which the progresses, difficulties and achievements of the students are identified in order to offer them the appropriate pedagogical support. For this reason, the document recognizes assessment as formative, comprehensive and continuous.

Because the CNEB is based on a competency-based approach, the target of the classroom assessment are the competencies that are evaluated through criteria, levels of achievement as well as different tools and techniques that collect specific information which will be used to take decisions regarding the pedagogical process of the student. The assessment takes the learning standards for each grade as a common and precise measure of how far or close a student is from what s/he is expected to achieve. As a complement to the classroom assessment, a national assessment is also envisaged. Different from the classroom assessment that is targeted at each student's development, the national one uses standardized methods to evaluate the education system as a whole and to identify achievements and challenges at the school, local, regional and national levels. In this sense, it can be understood as a tool to evaluate and monitor the CNEB and pedagogic practices at place, as it aims to help design policies to improve educational outputs (MINEDU, 2017).

The curriculum framework provides a comprehensive explanation of how assessment at classroom and national level should be conducted and interpreted. However, it does not specify the tools to perform them, instead maintaining that normative provisions will regulate this matter. Furthermore, there is not specific section on the monitoring and evaluation processes of the CNEB. However, as mentioned before, the subsection on the national assessment provides some brief information on how the data collected is planned to be used to provide feedback and further design policies that improve the education system.



## 5. Discussion

### *Rationale*

The Brazilian, Cambodian and Kenyan documents are introduced by a message from the Minister of Education, or from the Cabinet Secretary in the case of Kenya. In these messages, the officials ensure the commitment of their governments to the implementation of the new curriculum framework towards the fulfillment of the development goals and national aspirations of their own country. In the case of Brazil, the message of the Minister also explains that the document has been approved after several public hearings with different stakeholders in the five regions of the country. The message of the Kenyan curriculum framework also highlights that the document is the result of an extensive process, which encompasses the involvement of several stakeholders as well as the conduction of a series of studies, such as needs assessment and benchmarking studies. Other countries also describe in their curriculum framework the process that led the development of the final document. Cambodia for instance, went through a series of multi-faceted consultation meetings, including in-house consultation involving key stakeholders from the MoEYS, from the Departments of Education of the 25 provinces and other partners. The document of Peru is also the result of a series of national public hearings that took place between 2012 and 2016 and involved different stakeholders, such as civil society, teachers, education specialists and national and international curriculum experts.

In terms of purpose, it was common among the Brazilian, Kenyan and Peruvian documents to refer to the curriculum framework as a tool to coordinate and align education policies and strengthen the education sector by providing a roadmap to foster quality education. The improvement of education quality is also one of the main purposes of the Finnish curriculum framework, together with the reinforcement of the transition mechanisms from one education level to another. The mainstreaming of equity and inclusion within the education system is another key component that are valued in the Finnish document. Cambodia, on the other hand, describes the purpose of its curriculum framework as part of an education reform that responds to the structural deficiencies of the Cambodian education system, to the educational changes in ASEAN countries as well as to the market needs.

All countries portray the curriculum framework as a *compulsory national benchmark* to guide the design and development of the curriculum. In the case of Brazil and Finland, the documents will be supporting the development of local curricula, by taking into account the local context and priorities. For Brazil, the autonomy within the education system—public and private in making decisions about teacher training, assessment, design and development of educational resources and infrastructure is reiterated through this document. Similarly, the Cambodian document highlights the importance of the curriculum framework for developing textbooks, enhancing the skills and competencies of teachers and learners, and providing guidelines on teaching and learning methods and on indicators to assess learning outcomes. In the same manner, the Peruvian case approaches its function as to unify criteria and to establish a route to common outcomes in terms of the improvement of the educational environment, resources, teaching policies and assessment, among others. The Kenyan document, as stated in the foreword section, is to “actualize the curriculum reforms” (KICD, 2017, p. ii) by conceptualizing Basic Education and further taking its crucial role to pave the way for the success of the country’s Vision 2030.

The aims of the curriculum frameworks vary according to the different countries; however, the majority of them agree that the curriculum framework is an instrument that support the holistic development of learners. The Cambodian document explores the idea for learners to develop their full potential. In the

same manner, the Brazilian aims to overcome the fragmentation of knowledge into subjects, to stimulate knowledge application, to contextualize what is learned and to put students in the centre of their learning process of learning. Brazil, Kenya and Peru explicitly adopt an approach that aims to facilitate the comprehensive development of the learner, which integrate their intellectual, emotional and physical development. Additionally, the Kenyan curriculum framework argues for a next generation of Kenyan citizens, who are looking both at their own countries and at the world; who are equipped with the right employability skills and knowledge, and who are confident and protective towards their national heritage and culture. Similarly, the Peruvian document aims at developing comprehensive education that strengthens knowledge according to an intercultural, environmental, and inclusive perspective that respects each student's interests and abilities, while at the same time putting in practice students' rights and duties to develop competencies to respond to the contemporary demands.

The aforementioned aims of the curriculum frameworks are connected to the countries' education visions and values. Brazil puts a strong emphasis on equality, diversity and equity. For Cambodia, the idea is to equip learners with knowledge, skills, and attitudes to become citizens able to fully participate in the national development. The Finnish document focuses on the prevention of inequalities and exclusion; and the promotion of gender equality, the Finnish culture and the collaboration between schools to bring a positive change at the national and international level. For Kenya, education needs to enable every Kenyan to become an engaged, empowered and ethical citizen. Finally, Peru sees as a long-term value of Basic Education, the ability of students to exercise their rights and duties as citizens, value diversity through intercultural dialogue and contribute actively to the sustainable development of the Peruvian society, among others.

### *Scope and components of the curriculum framework*

The scope of the five curriculum frameworks does not have a specific section designated for its explanation; instead, it is well-defined throughout all five documents. The scope of the Brazilian and Finnish curriculum frameworks can be assumed through the curriculum architecture, while the one of the Cambodian, Kenyan and Peruvian documents can be found in different sections, such as organizations or distributions of subject and study plans/hours. It is important to note that the scopes are all distinct from each other: for Finland, it consists of Primary and Lower Secondary Education; Brazil, Early Childhood and Primary Education; Peru, Early Childhood, Primary and Secondary education; Kenya<sup>7</sup>, Early Childhood, Primary, Lower Secondary and Upper Secondary Education; and Cambodia, General (Early Childhood, Primary, Lower and Upper Secondary) and Technical Education. Some countries, such as Kenya and Peru, have their own terminology in categorizing the educational level for their context, and the effort was made to come up with comparable educational levels up to a certain point in this analysis.

When looking through the various components of the curriculum framework, it can be stated that most countries had a coherent architecture. Indeed, except for the one of Peru, the other four curriculum frameworks are structured around education levels within which the overall expected learning outcomes and objectives as well as the associated specified knowledge, values, skills and competencies are described. As for Peru, its architecture is based on four key curricular concepts, namely, competencies, skills, learning standards and performance.

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<sup>7</sup> As noted in the Kenyan analysis part, it is in fact divided broadly into three education levels: Early Years Education (Pre-Primary and Lower Primary), Middle School Education (Upper Primary and Lower Secondary) and Senior School.

The Brazilian and Peruvian documents are designed around a set of key competencies – 10 in the case of Brazil and 29 in the case of Peru- that are expected to be developed by learners throughout their Basic Education, identified for each education level alongside a specific curricular component in the case of Brazil, and according to 8 levels of competency development in the case of Peru. For Cambodia, this revised curriculum framework enlarges to incorporate subjects such as Life Skills, ICT and Health Education across the education levels. What is distinct about the Finnish curriculum framework is that, it provides a set of tangible implementation mechanisms, which go beyond the structure for and content of learning areas that are organized around the transversal competencies. These mechanisms encompass school operation and organization, provision of support for learning and school attendance, the welfare of learning, etc. In the case of Kenya, two additional detailed sections are included in addition to the competencies and expected learning outcomes promoted by education levels: one for the learners with Special Education Needs, where a special needs education curriculum framework was introduced; and another called ‘Capacity Building Framework for a Competency Based Curriculum’, a curriculum framework specifically for teacher education and professional development.

### *Curriculum approaches*

Based on this analysis, the five countries endeavour to introduce and mainstream new curriculum approaches focusing vastly on *constructing competencies* among learners. More precisely, *competency-based approach* has been embraced as the core of the curriculum framework and of the countries’ curriculum reform process, mainstreamed across all sections and within all learning areas. All the five frameworks aim to *position learners and their learning process at the heart of education*, and develop skills, knowledge, values and attitudes that can be used by the learners in real life situations.

Grounded on the competency-based approach, most countries structure their learning contents around key learning areas in a broader sense rather than subject-oriented approaches, along with the adoption of transversal competencies that can be fostered across the learning areas. For Brazil, as mentioned before, the curriculum framework is built around 10 general competencies, as the solid basis to educate their children to grow as ‘fully exercising citizens’, aimed at building a fair, democratic and inclusive society. Upon these general competencies, specific competencies as well as additional contemporary issues that needs to be delivered through a transversal and integrated approach are also further developed. Likewise, the Kenyan document is developed around 7 core competencies along with 6 transversal values (Pertinent and Contemporary Issues), and these competencies are equally applied for the learners with special education needs and teachers education. In the case of Peru, a total of 31 competencies – 29 general and 2 specific for Religious Education – and 7 transversal approaches are introduced. The transversal approaches are mainly the values and attitudes that learners as well as anyone who is involved in their learning process are expected to carry along their lives. The Cambodian document also focuses on 8 core competencies, however, unlike from other countries, cross-cutting areas are not particularly mentioned even when some topics, such as sustainable development, human rights education and gender equality, relevant to the global context are discussed. For Finland, 7 transversal competencies are promoted across the education system, regardless of the education level or key learning areas. With this, the Finnish curriculum framework considers integrative approaches and multidisciplinary modules as the key working methods.

There are certain skills and values that are commonly promoted across most countries. For example, all five countries gives special attention to *equipping children with linguistic skills*, where, particularly in Brazil, Finland and Kenya, local language as well as sign languages are included in the language learning areas.

Likewise, *communication skills, digital literacy, ICT, problem solving, critical and creative thinking, collaboration, respect for the environment, conflict resolution* and many more are promoted across all countries' documents. *Moral/ethics* education is also considered as an important component for all countries, with Cambodia and Kenya giving more attention to it. *Respect for diversity* is intensively promoted in the Brazilian, Finnish, Kenyan and Peruvian documents while *civic/citizenship* is fostered in the Brazilian, Cambodian, Kenyan and Peruvian documents. *Human rights* and *equality* are covered in the Brazilian, Cambodian, Finnish and Kenyan documents. Cambodia only briefly mentions these terms, while Finland emphasizes the concept of equality and inclusion across all learning areas. *Entrepreneurship* is fostered in the Cambodian, Finnish, Kenyan and Peruvian documents.

Brazil, Finland, Kenya and Peru highlight the essential need for collaboration between and among schools, parents and guardians, and the community in fostering children's learning, as it will be further discussed below. Both Cambodia and Kenya provide different pathways for the Upper Secondary level.

Since a competency-based approach is placed at the heart of the five countries' curriculum frameworks and their curriculum approaches, numerous commonalities between the countries have been observed, as discussed so far. However, it is important to note that unique features for each country do exist, since each country addresses its competencies according to its own vision for educating their learners and their citizens. For instance, Brazil puts great emphasis on contemporary issues affecting the everyday life of people at the local, regional and global level that should be approached through a transversal and integrated perspective, throughout all learning areas. The topics include, among others, children and youth rights; environmental education; food and nutritional education; respect and appreciation of elderly people; human rights education; ethnic-racial relations education; and the teaching of Afro-Brazilian history and culture. Cambodia, on the other hand, developed its curriculum framework upon the expected learning outcomes, and included local life skills as one of the core learning areas. The Cambodian document also focuses on ensuring the linkages and alignment of contents and subjects across K-12 levels. The Finnish curriculum framework emphasizes the impact of a healthy, empowering culture in children's learning process and its quality as well as their holistic growth. This culture refers to all surroundings that children are exposed to when learning takes place in and it gives attention to all areas that may influence learning and development of learners. School culture, learning environment and working methods and even the modes to transport to schools can be the influential factors and are taken into consideration. Kenya, as reiterated, develops specific curriculum frameworks for the learners with special educational needs and teacher education, within the umbrella of the curriculum framework. This is to ensure that competency-based approach is applied comprehensively and inclusively throughout the education system. While the Peruvian curriculum framework aims at encouraging learners to achieve the expected learning outcomes, it also acknowledges competency-based approach as a lifelong process, where the acquisition of essential competencies will occur throughout the lifetime. In addition, the Peruvian document guides towards how the facilitators must act in a competent manner, and how it is necessary for them to establish an emotional bond with their learners in order to promote the well-being of the students and strengthen their socio-emotional and cognitive skills.

### *Teaching and learning methodology*

The introduction of a competency-based approach in the curriculum frameworks of the five countries has also influenced the discussion around pedagogy and philosophy of teaching that can be found in the documents. The Brazilian curriculum framework, for instance, clearly states that the pedagogical decisions should be made in relation to the development of competencies, by taking into account the

needs of different groups of learners. Similarly, in the case of Finland and Peru, the documents specify that students are expected to be taught through the use of pedagogical approaches and strategies, which will allow learners to explore and develop their own competencies.

The curriculum frameworks of Cambodia, Finland, Kenya and Peru examine teachers' role. Teachers are seen as the facilitators of students' learning process, in charge of generating the conditions for learning and of equipping learners with the necessary knowledge, skills and attitude. In addition, the Brazilian document discusses the fact that teachers need to focus not only on the learners but also on the development of their "know-how" and the Kenyan one stresses the importance of having confident and flexible teachers, able to apply a variety of pedagogical approaches based on the needs of the learners. In this regards, the Finnish and Peruvian documents highlight also the important role played by teachers in ensuring the well-being of learners and acting as mentors to address diverse personal and social needs, with the Peruvian curriculum framework proposing also the construction of an emotional bond between teachers and learners. For this to happen, training teachers is a very important step. Specifically, the curriculum frameworks of Cambodia and Kenya mention the need to train teachers, emphasizing that well-prepared teachers are key towards the achievement of a successful curriculum reform.

The Cambodian, Finnish and Kenyan documents also mention learner-centred approach as part of the teaching methodology. Particularly, in the documents of Finland and Kenya, learners are described as active actors of their own learning process. This last point is also true for the document of Brazil, in which students are depicted as active subjects of learning. However, the majority of the curriculum frameworks (specifically the ones of Brazil, Cambodia, Finland and Kenya), do not discuss in-depth the specific strategies or methodologies that teachers are expected to use. For Brazil, this is to allow a certain autonomy to the different local curricula, so that they can select and establish their own strategies according to their specific needs. The Peruvian document provides detailed pedagogical orientations to help teachers in the planning, implementation and evaluation of the teaching and learning processes.

Finally, the involvement of different stakeholders in the teaching and learning processes is discussed in the Brazilian, Finnish, Kenyan and Peruvian documents. In the case of Brazil, the involvement of families and communities in the selection of teaching and learning strategies and methodologies. The Finnish document has a specific section describing the shared responsibilities of the different stakeholders involved in the learning process, namely learners, school management, teachers and parents/guardians, while the Kenyan document mentions the importance for teachers to work with other stakeholders such as parents and the community. The last but not least, in the Peruvian document, a specific emphasis is made for teachers to collaborate closely with the families to ensure their commitment in the support of students' learning process.

### *Assessment*

When it comes to assessment, it can be noticed that the approach of the five countries included in this analysis is somewhat similar, while remaining, at the same time, distinctive. Finland, Kenya and Peru discuss assessment in-depth, and provide not only the description of its different types, but also the ways in which different strategies can be used in accordance with the grade levels or learning areas; whereas, in the Brazilian and Cambodian documents, this aspect is only briefly mentioned.

Four curriculum frameworks, the ones of Cambodia, Finland, Kenya and Peru, define assessment comprehensively and discuss the use of its results. The Kenyan document focuses more on the description of competency-based assessment, which is in the centre of the current curriculum reform in the country. This is described as a collection of evidence that demonstrates how learners can perform according to specific standards; it is a way to see learners' ability to apply knowledge, skills and competencies in real life situations and the results will support teachers in making decisions about students' learning. An important point raised by the document is the specification that assessment is not a way to compare students' achievements, but a way to understand their acquisition of competencies. In terms of the Cambodian document, it mentions that assessment is used to collect, analyse and reflect on students' acquisition of competencies and learning outcomes and results are used to improve the quality of education at all levels. Similarly, Peru considers assessment as a comprehensive and continuous process to identify, diagnose and address the progresses, achievements and difficulties of learners as well as to reflect on the pedagogical processes and improve the education results and teaching practices. The same is also highlighted in both the Cambodian and Finnish documents, which state that teachers can use assessment as a way to improve their teaching practices. Finally, Finland, Kenya and Peru discuss the importance of establishing a self-assessment mechanism among students.

Formative assessment is one of the commonalities that can be found among all five countries' documents, which discuss it as a significant part of the daily learning process. In this regard, the Brazilian document also mentions that the results of this type of assessment will be used to improve not only the performance of students, but also the one of schools and teachers. The curriculum framework of Kenya specifies that this type of assessment is in-line with learner-centred approaches and provides a list of instruments that can be used to carry out this assessment practice. Cambodia does not specifically use the term, 'formative assessment' in its document, and yet, based on the way in which assessment was described by and large, it can be assumed that it is promoted as one of the important approaches to assessment. For example, it mentions how learners' learning process should be assessed at a regular basis. Also, among the four assessment levels that were indicated – Regional and International Assessment, National Assessment, School and Grade Level, and Grade level –, it can be inferred how when it comes to the classroom level assessment, it fosters more on evaluating students' progress on a continuous basis.

Summative assessment is discussed specifically in the Finnish and Kenyan documents as another assessment option. Both documents describe this type of assessment as the overall evaluation of learners' performance during the school year. The Finnish document introduces this as an assessment that provides information about students' learning process and progress and their readiness to transition to other levels of education. In addition, it also discusses the use of either verbal or numerical grades that are used by teachers to provide students with constructive feedback. Kenyan curriculum framework explains that this particular form of assessment is part of the national evaluation that is carried out at the end of grade 3, 6 and 9 to assess learners' acquisition of the expected competencies for the transition to other levels of education. The Finnish curriculum framework, on the other hand, leaves assessment under the authority of local municipalities based on the local curriculum. The exact timing to carry out the final assessment of Basic Education can be decided according to the local curriculum as long as it happens at grade 7, 8, or 9.

National assessment is also discussed in the Cambodian and Peruvian documents. In the first case, a definition of national assessment is provided as well as a few details about some of the subjects where it will be applied. It also further extends to consider assessment at the regional and international levels. In the case of Peru, the discussion is around the use of standardized methods to evaluate the education system as a whole and to identify achievements and challenges at the school, local, regional and national levels.

## 6. Conclusion

In this analysis, the IBE aimed at progressively gaining a broader and deeper understanding of regional, global trends about a contemporary curriculum framework by comparing the curriculum frameworks of five countries: Brazil, Cambodia, Finland, Kenya and Peru. Overall, it is evident how countries value the impacts of well-thought-out curriculum frameworks to achieve quality learning for all learners. Countries may aspire to establish curriculum frameworks that lead to and ensure quality learning that equips students with the essential knowledge and practical skills, so that they can become active citizens, live a healthy life, and be prepared to become competent citizens for the nation and the world.

The analysis further demonstrates the implication of a curriculum framework for each country, particularly in line with its educational reform process and development. What we can learn from the analysis is that each country has constructed its own curriculum framework in accordance with the national needs, context and vision but, at the same time, bringing in trends and issues that inform the international educational agenda (glo-local approaches). Also, it reveals different levels of clarity and specificity among the five countries in how the curriculum framework guides the teaching and learning processes and assessment of learners.

Finally, it is important to note that this analysis is an exploratory study that could lead to a series of in-depth analysis of national curriculum frameworks across the world. This initiative will help understand any existing, new trends in curriculum frameworks as well as education reforms of a nation, region and the world. Further study on more countries can contribute to the exploration and enrichment of the knowledge on curriculum frameworks and reforms across the globe, and the IBE is willing to continue performing a significant role in providing Member States an evidence-based guidance.

## References

- Finnish National Board of Education. 2016. *National Core Curriculum for Basic Education 2014*. Finland, Finnish National Board of Education.
- IBE-UNESCO. 2015a. *International Bureau of Education: In focus*. Geneva, IBE-UNESCO. <http://unesdoc.unesco.org/images/0024/002473/247329e.pdf> (Accessed 09 May 2018.)
- \_\_\_\_\_. 2015b. *Repositioning and Reconceptualizing the Curriculum for the Effective Realization of Sustainable Development Goal Four, for Holistic Development and Sustainable Ways of Living*. Discussion paper presented at the World Education Forum, Incheon, Republic of Korea.
- \_\_\_\_\_. 2017a. *Training Tools for Curriculum Development: Developing and Implementing Curriculum Frameworks*. Geneva, IBE-UNESCO.
- \_\_\_\_\_. 2017b. *Training tools for Curriculum Development: Prototype of a National Curriculum Framework*. Geneva, IBE-UNESCO.
- Kenya Institute of Curriculum Development (KICD). 2017. *Republic of Kenya: Basic Education Curriculum Framework*. Republic of Kenya, KICD.
- Marope, M. 2017. *Reconceptualizing and Repositioning Curriculum in the 21st Century: A Global Paradigm Shift*. Geneva, UNESCO-IBE.
- Ministério da Educação (MEC), República Federativa do Brasil. 2017. *Base Nacional Comum Curricular: Educação é a Base*. Brasil, Ministry of Education.
- Ministry of Education, Science and Technology (MoEST), Republic of Kenya. 2012. *Sessional Paper No 2 of 2015: Reforming the Education and Training Sector in Kenya*. Nairobi, Government Press.
- Ministry of Education, Youth and Sport (MoEYS), The Kingdom of Cambodia. 2015. *Curriculum Framework of General Education and Technical Education*. The Kingdom of Cambodia, Ministry of Education, Youth and Sport.
- Ministerio de Educación (MINEDU), República del Perú. 2016. *Currículo Nacional de la Educación Básica*. Peru, Ministry of Education.
- Opertti, R. 2017. Curriculum in the Education 2030 Agenda: Latin America and the Caribbean. *In-Progress Reflections on Current and Critical Issues in Curriculum, Learning, and Assessment*, No. 10. Geneva, IBE-UNESCO.
- Stabback, P. 2016. What makes a Quality Curriculum? Geneva, IBE-UNESCO. *In-Progress Reflections on Current and Critical Issues in Curriculum and Learning*, No. 2. Geneva, IBE-UNESCO.
- UNESCO. 2015. *Incheon Declaration: Education 2030: Towards Inclusive and Equitable Quality Education and Lifelong Learning for All*. Paris, UNESCO.
- \_\_\_\_\_. 2017. *Unpacking Sustainable Development Goal 4: Education 2030*. Paris, UNESCO.
- United Nations. 2015. *Transforming our World: The 2030 Agenda for Sustainable Development*. New York, United Nations. <https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf> (Accessed 09 May 2018.)