

# Condensing a Curriculum for Accelerated Education: An A to Z Guide

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# Acknowledgments

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# **Table of Contents**

ACKNOWLEDGMENTS	3
TABLE OF CONTENTS	4
KEY TERMS	6
INTRODUCTION	8
HOW TO USE THIS GUIDE	9
WHY DEVELOP AN ACCELERATED EDUCATION CURRICULUM?	9
SECTION 1: PREPARING FOR AE CURRICULUM DEVELOPMENT	11
OVERVIEW	12
STEP 1: FORMALLY ENGAGE SYSTEM-LEVEL DECISION-MAKERS AND REVIEW RELEVANT POLICY	13
STEP 2: ENSURE SUFFICIENT FINANCIAL SUPPORT	15
STEP 3: FORM A CURRICULUM TASK TEAM	16
SECTION 2: FUNDAMENTALS OF AE CURRICULUM DEVELOPMENT	17
OVERVIEW	18
CHARACTERISTICS OF AN EXEMPLARY AE CURRICULUM	21
AE CURRICULUM DESIGN PRINCIPLES	22
KEY ELEMENTS OF THE AE CURRICULUM GUIDE	24
SUPPORTING AE TEACHERS AND LEARNERS THROUGH CURRICULUM DESIGN	27

SECTION 3: DEVELOPING THE AE CURRICULUM GUIDE	29
OVERVIEW	30
STEP 1: DETERMINE THE SCOPE OF THE AE CURRICULUM AND RATE OF ACCELERATION	34
How to Determine the Scope and Rate of Acceleration	34
STEP 2: DETERMINE CONTENT STANDARDS AND DEVELOP AE LEVEL DESCRIPTORS	38
How to Determine Content Standards and Develop Level Descriptors	38
Integrating Thinking Skills into Content Standards and Level Descriptors	40
Developing Literacy Content Standards and Level Descriptors	42
Developing Numeracy Content Standards and Level Descriptors	45
Developing Content Standards and Level Descriptors for SEL and other Subject Areas	48
STEP 3: ESTABLISH PRIORITY OUTCOMES	49
How to Establish Priority Outcomes	49
Sample AE Priority Outcomes for Literacy, Numeracy, and Subject-Area Integration	52
STEP 4: DEVELOP SCHEMES OF WORK	54
Instructional Sequencing and Pacing	54
How to Develop Schemes of Work	56
STEP 5: COMPLETE THE CURRICULUM MAP	63
STEP 6: DEVELOP AE TEACHING AND LEARNING ACTIVITIES AND MATERIALS	66
How to Develop AE Teaching and Learning Activities and Materials	66
REFERENCES	70



**Table 1:** Key terms and definitions in this guide

Accelerated education (AE) curriculum	An accelerated education (AE) curriculum is a prioritised and condensed program of study that identifies and maps out the most important knowledge and skills that learners need so that they can achieve proficiency in core primary school subjects in a shortened time frame.
Accelerated education programme (AEP)	An accelerated education programme (AEP) is a flexible, age-appropriate programme, run in an accelerated time frame. An AEP aims to provide access to education for disadvantaged, over-age, and/or out-of-school children and youth, which may include those who missed out on or had their education interrupted by poverty, marginalisation, conflict, and crisis.  The goal of AEPs is to provide learners with equivalent, certified competencies for basic education using effective teaching and learning approaches that match their level of cognitive maturity.
Content standards	<b>Content standards</b> describe key competencies encompassed in a subject area. AE content standards are not level specific. They are applicable to all levels of instruction.
Curriculum guide	A curriculum guide is a structured document that outlines the vision and policy, goals and objectives, learning experiences, and instructional resources that make up an AEP. The curriculum guide articulates what learners should know and be able to do at different stages of the AEP, and it helps teachers know how to support AE learners in achieving these goals. It is a tool that assists with planning and implementing a high-quality AEP.
Curriculum map	An <b>AE curriculum map</b> is a programme-level instructional plan. It serves as the foundation of an outcome-based AE curriculum. It provides a programme-level overview of the AE curriculum and includes all learning outcomes. It provides an 'instructional road map' for each level of the AEP that helps keep instruction focused on learners' attainment of high-leverage learning outcomes. As such, it articulates content standards, level descriptors, priority outcomes, and lesson objectives.
Lesson objectives	Lesson objectives describe what the learners will know and be able to do as the result of a lesson and support the attainment of priority outcomes. AE lesson objectives should clearly align to priority outcomes, as well as to knowledge and skills, identified for the scheme of work during the planning process described above.

Lesson plans are a detailed plan of the teaching and learning activities the will take place in a single lesson. Lesson plans clearly state what learners should know and be able to do by the end of the lesson and how they we learn that. It also incloudes all the information a teacher needs to be able to teach that lesson, such as background information that learners needs to know, step-by-step instructions for each activity, opportunities for formative assessment, as well as a list of supporting teaching and learning materials, such as text books or readers, workbooks, problem sets, reading passages, alphabet cards, and number lines.	ill e ng
Level descriptors are broad learning goals that describe what AE learner should know and be able to do by the end of each AE level. AE level descriptors benchmark progress towards content standards and help ensure AE learners are on track to acquire key competencies equivalent those in the formal education system by the end of the AEP.  Level descriptors  AE level descriptors are not inclusive of all knowledge and skills found in the national curriculum. They identify and describe only essential knowledge and skills learners can use across multiple subject areas and multiple contexts. AE level descriptors should include both subject-speciproficiencies and thinking skills.	to
Priority outcomes are measurable, complex learning goals that described essential knowledge and skills learners need to acquire to meet proficie as described by AE level descriptors. Priority outcomes are narrower than level descriptors in that they can be assessed through one or two assessment tasks. They are broader than lesson objectives in that they the multiple lessons to teach and learn.	ncy
Rate of acceleration  The rate of acceleration describes the ratio of the formal school time frame to the AEP time frame. For example, an AEP in which learners acquire the equivalent of a grades 1 through 6 in three years has an acceleration rate of 2:1	
Schemes of work divide the instruction for a term into discrete instructional units that help AE teachers organise their teaching around priority outcomes. Schemes of work may be thought of as instructional units. They are based on priority outcomes and help AE teachers and AE learners understand and track the incremental progress that is being mathroughout a term by including guidelines for formative assessments in literacy and numeracy.	
The <b>scope</b> of the AE curriculum designates which of the levels, grades, a subject areas from the national curriculum (and maybe additional releva content) will be included in the AE curriculum.	

## Introduction

The Accelerated Education Working Group<sup>1</sup> (AEWG) is an inter-agency working group made up of members supporting and/or funding accelerated education programmes (AEP). The AEWG aims to improve the quality of AEPs through developing guidance and tools to ensure that accelerated education is a relevant response to meet the needs of over-age, out-of-school children and youth and to support a more harmonised approach to accelerated education.

To date, significant investment and efforts by the AEWG have resulted in a conceptual framework for what constitutes good practice in accelerated education (AE). The development of the Accelerated Education: 10 Principles for Effective Practice and accompanying Guide to the Accelerated Education Principles have set a foundation for improving programme quality, design, implementation, and assessment of results.<sup>2</sup>

Key to any AEP is the curriculum. Whilst the AEWG has developed several tools and guidance to support AEP design, implementation and evaluation there was nothing specific on how to develop an AE curriculum. We hope that this guidance fills this important gap.

# An accelerated education programme (AEP) is a flexible, age-appropriate programme, run

is a flexible, age-appropriate programme, run in an accelerated time frame. An AEP aims to provide access to education for disadvantaged, over-age, and/or out-of-school children and youth, which may include those who missed out on or had their education interrupted by poverty, marginalisation, conflict, and crisis.

The goal of AEPs is to provide learners with equivalent, certified competencies for basic education using effective teaching and learning approaches that match their level of cognitive maturity (Accelerated Education Working Group, 2017).

## How to Use This Guide

The purpose of this guide, Condensing a Curriculum for Accelerated Education: An A to Z Guide, is to help Ministries of Education (MoE),<sup>3</sup> development partners, and implementing organisations develop a comprehensive AE curriculum—a curriculum that prioritises and condenses primary level4 knowledge and skills—to guide and support teaching and learning in AEPs.

This guide presumes some familiarity with the basics of curriculum design and development. It is not a training guide. It is a reference and resource guide that outlines the ways in which standard curriculum design and development practices can be applied to developing a certified curriculum for AEPs that best meets the needs of AE learners and teachers, supports national policies and priorities, and aligns with other guidance on AEPs developed by the AEWG. See Table 2 for an overview of the sections of the guide.



**Tip!** For more information on the curriculum development process, see: UNESCO-International Bureau of Education. (2017a). Developing and Implementing Curriculum Frameworks, Training Tools for Curriculum Development: Thematic Module No. 1 <a href="https://neqmap.bangkok.unesco.org/wp-content/uploads/2019/06/Developing-and-Implementing-Curriculum-Frameworks-1.pdf">https://neqmap.bangkok.unesco.org/wp-content/uploads/2019/06/Developing-and-Implementing-Curriculum-Frameworks-1.pdf</a>

- 1 The AEWG is currently led by UNHCR with representation from UNICEF, UNESCO, USAID, ECHO, Norwegian Refugee Council, Plan International, International Rescue Committee, Save the Children, Education Development Center, and War Child Holland.
- 2 All AEWG tools and guidance are available all on the INEE website.
- 3 When we use the acronym, MoE, we are referring to the Ministry of Education or the relevant education authority in a given context. The AEWG recognises that the name of such an education authority may differ between contexts.
- 4 This guide is directed towards stakeholders condensing the primary school curriculum. Much of the steps and tips in this guide can be useful for those condensing the secondary curriculum, as some AEPs also include the junior secondary level.

**Table 2:** Sections of this guide

SECTION	PURPOSE	WHO IS INVOLVED?
1. Preparing for AE Curriculum Development	Outlines the resources, people, and organisations needed for AE curriculum development.	<ul> <li>MoEs and associated governmental agencies</li> <li>Development organisations</li> <li>Implementing partners</li> </ul>
2. Fundamentals of AE Curriculum Development	Describes the components of an AE curriculum and the way in which curriculum design principles are adapted to meet the needs of AE learners and teachers.	<ul> <li>MoEs and associated governmental organisations</li> <li>Curriculum task team members</li> <li>May be used to develop training guides and/or workshops for curriculum writers</li> </ul>
3. Developing the AE Curriculum Guide	Describes the processes by which the AE curriculum is condensed from the national curriculum. Contains detailed guidance on creating a prioritised, outcomebased curriculum map that aligns assessment with instruction. Includes information about formative assessment. Contains considerations for developing learning activities and supporting instructional materials that meet the unique needs of AE learners and teachers.	<ul> <li>Curriculum task team members</li> <li>May be used to develop training guides and/or workshops for curriculum writers</li> <li>Some parts are appropriate for developing training for AE teachers</li> </ul>

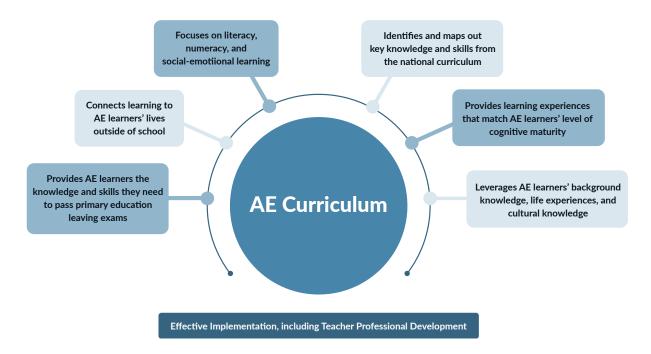
# Why Develop an Accelerated Education Curriculum?

According to the AEWG's AE Principle 2, a key characteristic of an effective AEP is that 'curriculum, materials and pedagogy are genuinely accelerated, AE-suitable and use the relevant language of instruction'. <sup>5</sup>

Ideally, AEPs can accelerate the learning process by concentrating on the most important knowledge and skills that AE learners need by using a prioritised and condensed curriculum developed to meet the unique needs of AE learners, as well as having smaller classes that allows for more time on learning tasks.

An AE curriculum encompasses more than literacy and numeracy skills. Figure 1 shows the characteristics of an AE curriculum. An AE curriculum also includes skills that are foundational and provide the scaffolding to learning across subject areas, such as social-emotional learning (SEL), self-regulation, metacognition, and life skills. In addition to learning outcomes and an instructional sequence, an effective AE curriculum includes learning activities, along with supporting teaching and learning materials that are responsive and relevant to the AE learner.

Figure 1. Characteristics of an effective AE curriculum



It is important to note that the success of the AE curriculum is dependent not only on its quality and content, but also on effective planning, implementation, evaluation, and revision of the curriculum. Effective implementation requires effective teacher professional development, which requires adequate funding from government or donors. Robust monitoring and evaluation includes assessment and reporting of learners' knowledge, understanding and achievement. Neither teacher professional development nor monitoring and evaluation are addressed in detail in this guidance, but they can be found in additional AEWG guidance.<sup>6</sup>



**Tip!** The AEWG differentiates between 'accelerated education' and 'accelerated learning.' Accelerated learning refers to:

...approaches to teaching and learning, informed by research in the cognitive and neurosciences, that provide more engaged, proficient and faster development of learned knowledge and basic skills. Although accelerated learning is a desirable goal for Accelerated Education Programmes, in reality most AEP teachers in humanitarian and development contexts use standard teaching-learning methods due to limited specific accelerated learning training and experience. (Accelerated Education Working Group, 2017)

Even with standard teaching methods, an AE curriculum crafted to meet the unique needs of AE learners can improve their understanding, retention and application of key knowledge and skills.

# **Section 1: Preparing for AE Curriculum Development**

# **Purpose**

This section outlines the resources, people, and organisations needed for AE curriculum development.

## Who should use this section?



MoEs and government officials



**Development organisations** 



Implementing partners

# **Contents**

- Step 1: Formally Engage System-Level Decision-Makers and Review Relevant Policy
- Step 2: Ensure Sufficient Financial Support
- Step 3: Form a Curriculum Task Team



#### **Overview**

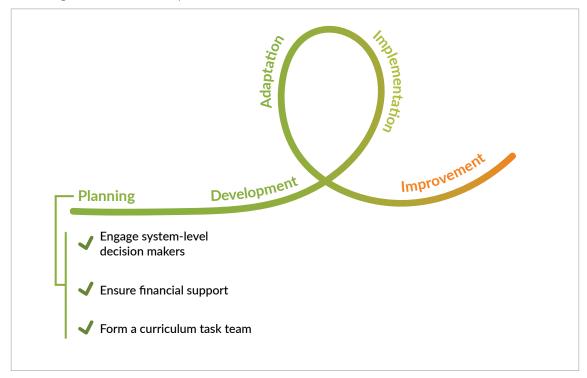
Before a curriculum can be designed and written, sufficient financial and human resources need to be secured and mobilised. Representation by the MoE is important during the preparation stage, whether or not they lead and/or carry out the work of AE curriculum development. A curriculum task team, with representation from relevant stakeholder groups, needs to be formed.

Three essential steps must take place to prepare for AE curriculum development:

- Formally engage system-level decision-makers and review relevant policy
- 2. Ensure sufficient financial support
- Form a curriculum task team<sup>7</sup>

Figure 2 shows how planning fits into the full curriculum development cycle.

Figure 2. Planning for curriculum development





**Tip!** Some components of the preparation process may be aspirational or beyond the control of development partners and implementing organisations. For example, it may be difficult to obtain multi-year funding for curriculum development including piloting, review and revision, and there may be obstacles to involving some key stakeholders. But whether each step of the preparation process can be fully realised or not, it is still valuable that it be discussed and considered.

# **Step 1:** Formally Engage System-Level Decision-Makers and Review Relevant Policy

The first step of the preparation process is to engage and (as appropriate) enter into formal agreements with system-level decision-makers. These may include the following:

- National policymakers
- MoE and other associated governmental agencies
- National curriculum development centre
- Ministry of Finance
- Development organisations
- Implementing partners
- Teachers unions

It is essential to engage system-level decision-makers in the preparation process, regardless of who is initiating or leading the curriculum development process.

This is often done with a formal agreement, such as a memorandum of understanding (MOU), between the relevant government, funder, and implementer counterparts.

AE curriculum development may be initiated by an MoE and associated governmental agency, such as the curriculum development centre, or it may be initiated by a development organisation, implementing partner, or combination of organisations. Whichever organisation initiates the AE curriculum development process, system-level decisions about the AE curriculum need to be guided by national policy and sanctioned by the MoE or other appropriate governmental agency. Thus system-level decision-makers must be involved from the start.<sup>8</sup>



Photo: © UNHCR/S. Rich

<sup>8</sup> Not all countries or contexts have policies for non-formal, alternative, or accelerated education, but in some contexts AE provision may be guided by other education policies or AE policies may be under development. The intention is that AEPs are aligned with the national education system and are seen as a legitimate education option.

The reason for this involvement is because the AE curriculum needs to be equivalent to the formal school curriculum and certified. While an MoE may not carry out the work of developing and writing an AE curriculum, the MoE needs to certify the curriculum so that AE learners can enter or re-enter the formal education system at an appropriate level or be eligible for further training or livelihoods. For example, if an AEP aims to provide learners with the equivalency of a primary education, the MoE needs to certify the equivalency and allow AE learners to take the formal primary leaving exams or other primary leaving certification upon their completion of the programme.

In addition to formally engaging system-level decision-makers, it is essential to review the MoE policy on accelerated education or, if none exists, non-formal or alternative education. If the policy includes information about curriculum certification, the policy should guide system-level decisions, such as what topics and subject areas the AE curriculum needs to address, the language of instruction, and the process for final curriculum approval.



**Tip!** Engaging system-level decision makers from the start of the curriculum development process is important because there may be unspoken goals and values, competing priorities, legislative and policy barriers, and funding and resource constraints that need to be identified and addressed. For example, are there tensions related to language of instruction? Are some learners able to sit exams while others are not? Are there competing priorities around content of the curriculum, such as inclusion of religious education?



Photo: © UNHCR

# **Step 2: Ensure Sufficient Financial Support**

The second step of the preparation process is to ensure financial support that will cover the full curriculum development process for all levels of the AEP. Financial support may be obtained from a number of sources:

- Governmental agencies
- Development organisations
- Implementing partners
- Donors

The entire cycle of curriculum development should be considered when planning the AE curriculum development budget. Curriculum development is an iterative process that requires, at a minimum, a cycle of planning, development, implementation, evaluation, and improvement. Initial evaluation of the AE curriculum can be achieved by field testing a pilot curriculum, which allows time to gather information about how the curriculum is being used and to solicit feedback from teachers, learners, and MoE supervisors. The information gathered from the pilot can then inform curriculum revisions and improvements.

Ideally, financial support should be secured that allows for the development of a full AE curriculum—that is, a curriculum that covers all levels (a full cycle) of the AEP, rather than only some levels. For example, if the curriculum condenses primary grades 1 through 6 into three AE levels, financing should be secured to develop the curriculum for all three AE levels.

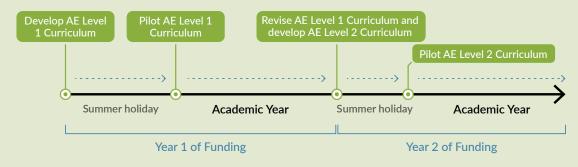
Initial AE curriculum development may take anywhere from several months to several years, depending on the length and scope of the AEP, the rate of acceleration, and whether the curriculum is being developed from scratch or adapted from an existing programme.



**Tip!** Funding the curriculum development cycle for a full AEP curriculum can be incredibly challenging. Many AEPs themselves are often funded in only single-year funding cycles. One solution can be staggering curriculum development with the programme implementation.

For example, as shown in Figure 3, if a donor-funded curriculum development initiative does not allow time for field testing, it can be folded into an on-going process that staggers both curriculum development and implementation. Level 1 curriculum can be developed, and then field tested during the first year of programme implementation. The feedback and evaluation of the Level 1 curriculum can then inform modifications to the Level 1 curriculum, as well as improve development of Level 2 and so forth.

Figure 3. Example of staggered curriculum development timeline



# **Step 3: Form a Curriculum Task Team**

The third step in the preparation process is to form a curriculum task team. The curriculum task team comprises representatives from governmental, semi-autonomous (e.g. curriculum development centres), and non-governmental organisations involved in AE curriculum development and implementation, as well as key outside consultants. These may include the following:

- MoE officials
- National curriculum development centres
- Sub-national officials
- Teachers
- Representative from the department of teacher professional development or teacher training institute
- Curriculum managers
- Curriculum writers and lead curriculum developers
- Subject matter experts
- Special education specialist or representative
- Gender specialist
- (If relevant) MoE officials from learners' country of origin

It is crucial that a knowledgeable and respected chairperson, usually from the national curriculum development centre, head this team. Curriculum task team members should represent expertise from different areas, such as curriculum development, accelerated education, adolescent development, effective pedagogy, literacy, numeracy, SEL, special education, and indigenous languages.

The curriculum task team serves many functions, including the following:

- Develops the overall curriculum development process/timeline
- Serves as the reviewers and experts during the development phase of the process
- Produces and/or approves a unifying curriculum design
- Develops a document that shows the alignment between the AE curriculum and the national curriculum
- Provides ongoing support and feedback to curriculum developers and writers



**Tip!** It is essential that all members of the task team can access the language being used on the task team and in the curriculum. This may mean that all task team members are proficient in the language themselves or that appropriate interpretation and translation are guaranteed.

It is also important to ensure inclusion and representation of different groups (e.g. women, religious and ethnic minorities, and displaced persons) on the task team—especially those from the communities for whom the AEP is being developed. This will help to ensure that the curriculum is relevant to them and is inclusive of their experiences and specific needs.

# **Section 2: Fundamentals of AE Curriculum Development**

# **Purpose**

This section describes the components of an AE curriculum and the way in which curriculum design principles are adapted to meet the needs of AE learners and teachers.

# Who should use this section?



MoEs and government officials



AE curriculum task team



**AE curriculum writers** 

### **Contents**

- Characteristics of an Exemplary AE Curriculum
- AE Curriculum Design Principles
- Key Elements of the AE Curriculum Guide
- Supporting AE Teachers and Learners through Curriculum Design



#### Overview

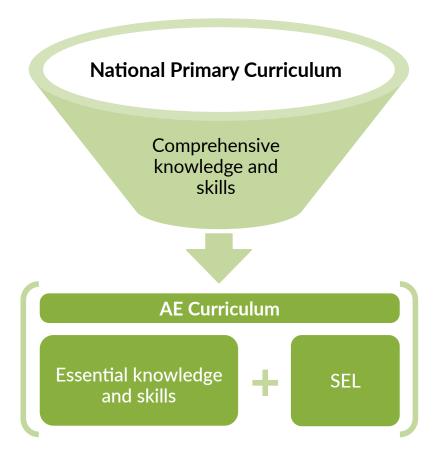
An **accelerated education (AE)** curriculum is a prioritised and condensed program of study that identifies and maps out the most important knowledge and skills that learners need so that they can achieve proficiency in core primary school subjects<sup>9</sup> in a shortened time frame.

As shown in Figure 4, to create an AE curriculum, the national primary curriculum is prioritised and condensed to focus on essential knowledge and skills, especially in literacy and numeracy, as well as thinking skills and problem-solving. SEL is also an important part of an AE curriculum.

An AE curriculum may also include essential knowledge and skills from other subject areas—such as social studies, science, health, art, sport, and music—or it may eliminate some of these subject areas altogether.

The scope of competencies required by primary school leaving exams should be a major factor in determining which subject areas beyond literacy, numeracy, and SEL to include in an AE curriculum.

Figure 4. Relationship between the national curriculum and the AE curriculum



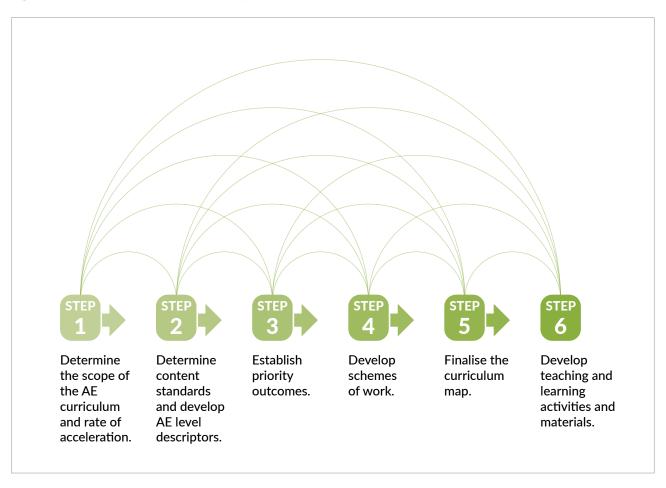
<sup>9</sup> AEPs often cover the skills and knowledge equivalent to primary education. However, some cover less than that, and some cover more, including junior secondary schooling. The steps in this guide are specific to condensing the primary grades, but much of the guidance can be useful for condensing the junior secondary curriculum as well.

There are four time points during the AE curriculum development process when the national curriculum is prioritised and/or condensed:

- 1. When developing the AE scope: The scope of an AE curriculum condenses the national curriculum by including only subject areas that are essential for AE learners.
- 2. When developing the AE content standards and level descriptors: These are the prioritised knowledge and skills within the selected subject areas, as well as the definition for overall proficiency for each level of the AEP.
- **3.** When developing AE priority outcomes: Priority outcomes further define essential knowledge and skills within each subject area and express them in terms of measurable outcomes.
- **4.** When developing AE schemes of work: AE schemes of work condense the timeline for instruction by closely aligning priority outcomes, formative assessment, and lesson objectives.

These time points are further illustrated in Figure 5.

Figure 5. The five-step process for developing an AE curriculum map

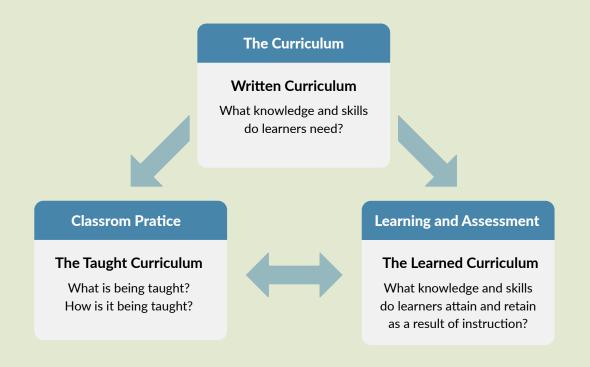




**Tip!** The success of an AE curriculum depends on more than a well-written curriculum guide. To be successful, the curriculum needs to be effectively taught and adequately learned.

While this may seem evident, studies have shown that there is often only a moderate relationship between the written curriculum (the explicitly stated learning goals, objectives, and priorities), the taught curriculum (the activities and practices that occur in the classroom), and the learned curriculum (the skills and knowledge that learners acquire).

Figure 6. The written, taught, and learned curriculum



A strong alignment between the written and taught curriculum is crucial for learners to acquire the hoped for knowledge and skills (the learned curriculum), as illustrated in Figure 6.

Source: Glatthorn, A., Boschee, F., Whitehead, B., & Boschee, B. (2018); Glathorn, Carr, & Harris (2001); Shaaban (2013)

## Characteristics of an Exemplary AE Curriculum

The AE curriculum is not simply a compressed version of the national curriculum taught in an accelerated time frame. It is a prioritised curriculum that is (1) age appropriate and relevant to the lives of learners and (2) crafted specifically to meet the unique needs of AE learners and teachers.

An AE curriculum needs to strike a balance between being comprehensive enough that teachers have the information and tools they need to teach effectively and being concise enough that it is practical and user friendly. The AE curriculum also needs to provide learners with the knowledge and skills that will enable them to re-integrate successfully to formal school or to follow alternative livelihood or vocational pathways.



**Tip!** For an example of a full AE curriculum, see: Liberia, Ministry of Education, Government of Liberia, with support from USAID (2011) Updated with support from USAID Advancing Youth (2017). Core Education Skills for Liberian Youth Technical Guide to the Alternative Basic Education Curriculum (ABE). EDC

An overly complex and dense curriculum will overwhelm teachers and learners. Table 3 provides a list of Do's and Do Not's when developing an AE curriculum.

Table 3: Do's and Do Not's of developing an AE Curriculum

Do	Do Not
Ensure the AE curriculum is user friendly in structure and use of language.	Do not use educational jargon that may be unfamiliar to AE teachers.
Prioritise essential knowledge and skills aligned to the national curriculum.	Do not attempt to compress all content from the national curriculum and teach it more quickly.
Create a curriculum guide that can be used to guide day-to-day instruction and is flexible enough that teachers can adapt its resources to meet the needs of their learners.	Do not create an overly rigid guide that neglects to include time for revision and reinforcement of key concepts, as needed.
Include a progressive learning sequence that is developmentally appropriate to AE learners.	Do not attempt to mirror the exact learning sequence in the national curriculum.
Include time for formative assessments that allow teachers and learners to assess learning on an ongoing basis.	Do not schedule all assessments for the end of a unit, term, or AE level.
Create a curriculum that is relevant to the lives of AE learners, appropriate to their age, culturally responsive, and inclusive.	Do not use materials and resources created for young children or those created for learners whose context and culture are
Include positive representations of girls,  learners from different ethnic communities, and learners with disabilities.	markedly different from those represented in the AEP.

# **AE Curriculum Design Principles**

The basic design principles that guide the development of an AE curriculum are the same as those that guide the design of a standard curriculum. **An AE curriculum should be coherent, outcome-based, comprehensible to teachers, age appropriate for learners, inclusive, relevant, and supportive**. Explanation of these criteria are provided in Table 4.

 Table 4: Application of basic curriculum design principles to AE curriculum development

DESIGN PRINCIPLE	FUNCTION IN AN AE CURRICULUM
Coherent	<ul> <li>The AE curriculum is coherent within and across subject areas and levels. It is also based upon and aligned with essential competencies in the national curriculum.</li> <li>Coherence can be achieved vertically and horizontally:</li> <li>A vertically coherent AE curriculum is logically sequenced so that each learning experience builds upon the last.</li> <li>A horizontally coherent AE curriculum ensures learning outcomes, assessment, and learning experiences are aligned with one another.</li> <li>An AE curriculum that is aligned with the national curriculum ensures that AE learners achieve competencies equivalent to learners in comparable grades in the formal education system.</li> </ul>
Outcome based	An outcome-based AE curriculum is guided by clear learning outcomes that address both subject area content and higher-order thinking skills. Teaching and learning activities and materials that are relevant and age-appropriate support learners' attainment of those outcomes.  There are four levels of AE learning outcomes. They are developed in the following order:  1. Content standards describe the key competencies encompassed in a subject area.  2. Level descriptors are broad learning goals that describe what AE learners should know and be able to do by the end of each AE level.  3. Priority outcomes are measurable, complex learning goals that describe the essential knowledge and skills learners need to acquire to meet proficiency as described by AE level descriptors.  4. Lesson objectives describe what the learners will know and be able to do as the result of a lesson. They also support the attainment of priority outcomes.
	All AE learning outcomes address high-leverage knowledge and skills, including thinking skills, that can be used across multiple subject areas and in multiple contexts.

# Comprehensible and age appropriate

A comprehensible AE curriculum can be understood by AE teachers and AE learners. All AE learning outcomes, lesson plans, and supporting materials are presented in ways that AE teachers can comprehend and use effectively.

The content and level of cognitive demand in lessons is developmentally appropriate to the age and cognitive maturity of AE learners. There is an emphasis on strategies that help learners 'learn to learn', monitor their own understanding, and develop the social-emotional skills they need to succeed in school, work, and the community.



Tip! One way to ensure comprehension is to use the local language as the language of instruction. AEPs may also consider, where possible and in line with MoE policy and practice, using the local language or 'Mother Tongue' as the initial language of instruction. Instruction in the local language helps marginalised learners immediately access learning and removes some of the barriers they face in acquiring a basic education. AEPs may want to consider a model of instruction that allows AE learners receive instruction in some subject areas, such as numeracy or SEL, in the local language while they are still learning the language of formal school. Under this model, explicit instruction designed to support the acquisition the language of formal school could take place as part of literacy or as a standalone subject area.

#### **Inclusive**

Learning outcomes, pedagogy, and materials are targeted to and appropriate for over-age learners.

Teaching and learning activities and materials demonstrate representation of and are relevant to all learners, including girls, learners from language- and ethnic-minority communities, internally displaced persons, refugees, learners with disabilities, and other marginalised groups.



Tip! In areas where there is language, ethnic and religious diversity, it is important that culturally, socially and linguistically relevant curricula are used. In multi-lingual settings, community-informed decisions will need to be made on the most appropriate main language of instruction. Teachers and other education personnel should receive continuous support to ensure learning, pedagogy and materials are differentiated and support different learners needs.

#### Relevant

Instructional practises and learning materials are:

- Appropriate and engaging for over-age, formerly out-of-school children and youth
- ► Culturally responsive and asset based
- ➤ Sensitive to the needs of learners from/in conflict-affected contexts



**Tip!** A culturally responsive and asset-based curriculum can build upon and strengthen the array of knowledge, skills, strengths and experiences that AE learners bring with them to the classroom.

#### Supportive

SEL is an integral part of the curriculum. Learning experiences address AE learners' physical, social, and emotional well-being by including structures and strategies that help them build self-awareness and self-management, social awareness and social skills, and decision-making skills.

In the context of an AEP, curriculum design principles need to be applied in a way that ensures the AE curriculum does the following:

- Aligns with the national curriculum and meets MoE requirements for certification
- Focuses on key knowledge and skills in literacy, numeracy, critical thinking, and problem-solving
- Is easy for teachers to follow and offers them the tools and strategies to effectively accelerate learning
- Explicitly addresses instructional pedagogy and the ways in which over-age, marginalised, formerly out-of-school learners are engaged their learning
- Includes opportunities for AE learners to build the SEL competencies they need for success in school, work, and the community

## **Key Elements of the AE Curriculum Guide**

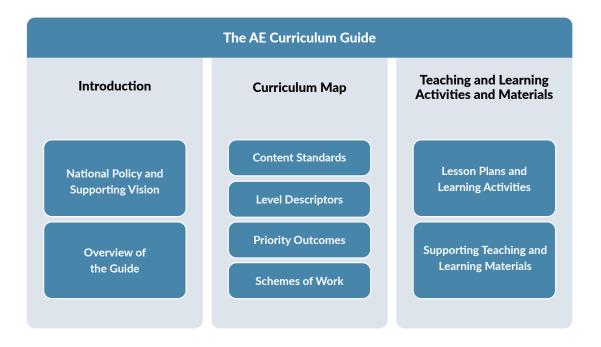
An AE curriculum guide needs to be seen as a valuable and valid resource by MoEs, teachers, learners, and the community. To do this, it needs to do the following:

- Clearly align with the national curriculum and the general aims of the national education system
- Describe what AE learners will know and be able to do
- Give teachers the tools they need to teach and assess learning
- Be easy for AE teachers to use and understand since the success of any curriculum is dependent upon its effective implementation

An AE curriculum guide is a structured document that outlines the vision and policy, goals and objectives, learning experiences and instructional resources that make up an AEP. The curriculum guide articulates what learners should know and be able to do at different stages of the AEP, and it helps teachers know how to support AE learners in achieving these goals. It is a tool that assists with planning and implementing a high-quality AEP.

The AE curriculum guide is organised into three main sections, each of which contains several elements, as shown in Figure 7. All aspects of the AE curriculum guide should incorporate the AE curriculum principles described above.

Figure 7. Three sections of the AE curriculum guide



Each of the three main sections of the curriculum guide serves an important purpose.

- Introduction: The introduction clearly aligns the AE curriculum to the national vision for AE
  learners and contains important information for AE teachers about the structure of the guide. It
  may also include general teaching tips.
- Curriculum Map: A curriculum map is the instructional plan that serves as a foundation for the
  curriculum. It aligns to the national curriculum, prioritises subject areas and essential knowledge
  and skills within those subject areas, describes observable and measurable learning outcomes,
  and provides an instructional road map.
- **Teaching and Learning Activities and Materials:** These activities and materials give AE teachers the tools they need to successfully meet the learning needs of AE learners.

Table 5 (next page) provides a general outline of each element of the AE curriculum guide.

**Table 5:** Outline of the AE curriculum guide

SECT	ION		WHAT INFORMATION DOES IT INCLUDE?
	National policy and supporting vision		➤ The rationale and need for the AEP:  » The learners who the AEP will serve  » The MoE's goals for the AEP
INTRODUCTION			» The overall vision for AE learners' futures
INTROD	Overview Overview		<ul> <li>▶ An explanation of the structure of the guide and how to use it</li> <li>▶ The length of each AEP term and/or level</li> </ul>
			► The AEP's philosophy of teaching and learning
			► Teaching tips and strategies to engage AE learners (e.g. Think, Pair, Share; group discussions; cooperative group work)
	Content standards		► Key competencies encompassed in literacy, numeracy, SEL, and other subject areas in the AE curriculum that are applicable to all levels of instruction
ИАР	Level descriptors		► Broad end-of-year learning goals that describe proficiency at each level of the AEP for each content standard
CURRICULUM MAP	emes of work	Priority Outcomes	➤ Measurable, high-leverage knowledge and skills that are focussed on literacy, numeracy, critical-thinking skills, problem-solving, and/or SEL and that are used to plan the general schedule for formative assessment and teaching over the course of a term/semester
	Schemes	Lesson objectives	➤ Specific, measurable learning goals that describe the learning outcome of each lesson and clearly align with the attainment of priority outcomes, which are organised into weekly lesson progressions that guide daily instruction and support learners' attainment of priority outcomes
erials	Lesson plans and learning activities		► Plans and activities that are accessible to all learners, regardless of background, language, gender, or disability
es and mate			<ul><li>▶ Comprehensible learning activities</li><li>▶ Simple interactive teaching strategies</li></ul>
gactivitie	Leaching and Learning Materials  Supporting Teaching and Learning Materials		► Activities and materials that are created or chosen specifically for AE learners
learning			► Fiction and non-fiction reading passages
ing and			<ul><li>Writing prompts</li><li>Mathematics word problems</li></ul>
Teach			<ul> <li>Activities to develop social-emotional skills either integrated within subject content or as standalone content</li> </ul>

To support learners' acquisition of key knowledge and skills in an accelerated time frame, it is especially important to consider how to apply relevant curriculum design principles to each section and element of the curriculum guide in a way that bests support effective teaching and accelerated learning.

## Supporting AE Teachers and Learners through Curriculum Design

While teacher professional development, including workshops and ongoing coaching, are crucial to effective teaching and ultimately learning, the curriculum guide itself can act as a support to teachers. Curriculum materials that provide clear learning goals, include learning activities that model effective instructional strategies, and provide examples of learners' ways of thinking can provide teachers with embedded professional development support.

In the context in which AEPs are frequently implemented, which often lack trained or certified teachers, it is especially important to design a curriculum that supports teachers' understanding and skills of both what is being taught and how to teach it.

To support effective teaching, the AE curriculum guide needs to be written in a way that:

- Builds teachers' understanding of the subject areas they are teaching and does not just script
  what they are to do
- Builds teachers' teaching skills to be able to deliver high-quality instruction and meet the unique needs of individual learners
- Clearly aligns teaching and learning activities and materials with learning objectives
- Is of high-quality, simple, and straight-forward enough to be comprehensible to teachers with a range of literacy and numeracy skills



Photo: © UNHCR

The way a curriculum is designed can also support outcomes for AE learners. In addition to teaching literacy and numeracy, an AE curriculum needs to:

- Build social-emotional skills. It is important that the AE curriculum give AE learners opportunities
  to apply social-emotional skills that they learn through SEL activities and classroom practices.
  These skills, which include self-regulation, stress management, positive communication skills, and
  responsible decision-making, are crucial to AE learners' success in the AEP, formal schooling, and
  their lives outside of education.
- Build critical thinking and problem-solving skills. Learning activities need to focus on
  more than the acquisition of basic skills; they need to offer opportunities for AE learners to
  develop critical-thinking and problem-solving skills using content that connects to their lives,
  interests, and cultures.
- Provide opportunities for self-regulated learning. Opportunities for learners to assess their own learning and identify their own strengths and needs through formative assessment need to be built into lesson plans. Formative assessment that is focused on giving learners regular and immediate feedback has been shown to increase learner engagement and achievement, particularly when it includes opportunities for self-assessment and peer assessment. Once learners can monitor their own progress, they are able to set goals, ask for help, and better identify the skills they need to practise and study.



**Tip!** AE learners have needs that can present obstacles to learning if they are not addressed. These needs can be met through classroom practices and learning activities that support SEL.

- ► AE learners need to learn non-academic skills that help them 'learn to learn.' AE learners require instruction not only in basic literacy and numeracy skills, but also in SEL skills needed for academic success, such as understanding school norms and expectations, self-regulation, metacognition, study skills and positive peer interactions.
- ► AE learners need to learn strategies to manage stress. AE learners have had their education interrupted by, poverty, marginalisation, conflict, and crisis. These traumas continue to impact them and can affect their attendance, their mental health, and their ability to learn.
- ► AE learners need to learn to persevere through academic frustration and competing priorities. The initial excitement an AE learner feels may turn to frustration if he or she does not achieve immediate academic success or feels overwhelmed by the demands of the AEP on top of work and family obligations. Without strategies to cope with these feelings, AE learners may disengage from learning and/or drop out of the AEP altogether.

# Section 3: Developing the AE Curriculum Guide

# **Purpose**

This section describes the processes by which the AE curriculum is condensed from the national curriculum. It contains detailed guidance on creating a prioritised, outcome-based curriculum map that aligns assessment with instruction. It includes information about formative assessment.

## Who should use this section?







**AE curriculum writers** 



**AE** teachers

#### **Contents**







Step 4: Develop Schemes of Work

Step 5: Complete the Curriculum Map

Step 6: Develop AE Teaching and Learning Activities and Materials



#### Overview

Recall that the AE curriculum map includes three sections: (1) Introduction; (2) Curriculum Map; and (3) Teaching and Learning Activities and Materials. This section focuses on developing Sections 2 and 3 of the curriculum guide: the Curriculum Map and the Teaching and Learning Activities and Materials, as shown in Figure 8. (Section 1 of the curriculum guide, the Introduction, and provides an overview of the guide, the national policy, and the vision, so it is not described here.

Figure 8. Three sections of the AE curriculum guide

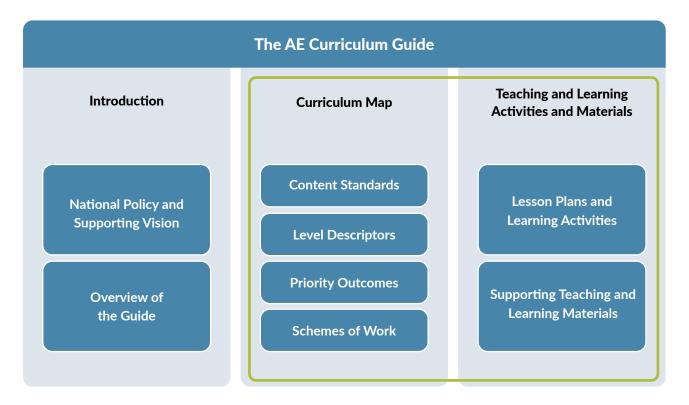


Figure 9 (next page) shows an example of a blank curriculum map for a 12-week term for a single level and a single subject area. A full curriculum map for the whole AEP would contain several of these completed templates—one for each AE level, term, and subject area. Teaching and learning materials for each week and each lesson, as well as assessment activities, are developed from this curriculum map.

An **AE curriculum map**<sup>10</sup> is a programme-level instructional plan. It serves as the foundation of an outcome-based AE curriculum. It provides a programme-level overview of the AE curriculum and includes all learning outcomes. It provides an 'instructional road map' for each level of the AEP that helps keep instruction focused on learners' attainment of high-leverage learning outcomes. As such, it articulates content standards, level descriptors, priority outcomes, and lesson objectives.

Figure 9. Example of a blank curriculum map

CONTENT STANDARDS	;		
Subject Area: Level Term		Level descriptor(s):	
Priority Outcomes for weeks 1-3			
Week	Lesson object	ives	Sample formative assessment tasks
1			
2			
3			
Priority Outcomes for we	eks 4-6		
Week	Lesson object	ives	Sample formative assessment tasks
4			
5			
6			
7	Strategies to r	reinforcement of weeks 1-6, based on learners' relieve test anxiety mative assessment	needs
Priority Outcomes for we	eks 8 - 10		
Week	Lesson object	ives	Sample formative assessment tasks
8			
9			
10			
11 & 12	Strategies to r	reinforcement of weeks 1-10, based on learners relieve test anxiety ear assessments	' need

A well-crafted AE curriculum map supports four vital aspects of curricular coherence:

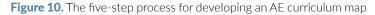
- 1. Coherence with the national curriculum
- 2. Coherence with the needs of AE teachers, learners, and their community
- 3. Vertical coherence, or logical sequencing so that each learning experience builds on the last
- 4. Horizontal coherence, or ensuring alignment between learning outcomes, assessment, and activities

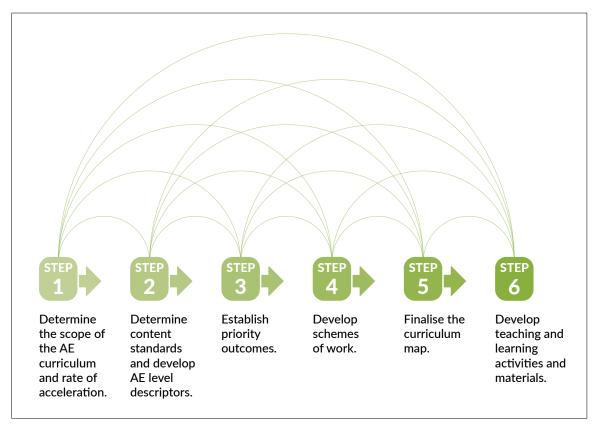
Table 6 (next page) describes each type of coherence and why it is important.

**Table 6:** Types of coherence and why each is important

#### **TYPE OF COHERENCE** WHY IS IT IMPORTANT? WHAT IS IT? Coherence with the national curriculum There is a clear alignment between AE learners achieve learning the key knowledge and skills competencies at least taught in the AE curriculum and the equivalent to those required by **Tip!** The instructional sequence knowledge and skills in the national the formal school system during of the AEP and the instructional the course of the AEP. sequence of the national curriculum primary curriculum. do not have to match to achieve overall coherence with one another. Coherence with the needs of AE teachers, learners, and their community Looking to the needs of The AE curriculum reflects the teachers, learners, and the experiences and meets the needs of community help to make Tip! To ensure coherence with the its teachers, learners, and community the curriculum relevant, needs of AE teachers, learners, by including context-specific content, comprehensive and ageand their community, input from appropriate language of instruction, appropriate, and inclusiverepresentatives of these stakeholder relevant and inclusive activities and three very important principles groups is solicited, and it is used to examples, etc. of AE curriculum design. make decisions about how the scope of the AE curriculum can include knowledge, skills, and practices responsive to the local context. Vertical coherence Instruction is purposefully structured Vertical coherence ensures AE and sequenced to build knowledge learners acquire key knowledge and skills in an accelerated time and skills, including thinking skills, through logical learning progressions. frame; successfully progress through each level of the AEP; and are prepared for their next level of instruction, whether in the AEP or formal school. Horizontal coherence Within subject areas, learning Horizontal coherence helps learners more deeply acquire outcomes, assessments, and instruction are closely aligned and skills and knowledge by clearly support learners' acquisition of practicing them in multiple essential literacy, numeracy, criticalsubjects/contexts, rather than Tip! Some examples include: literacy thinking and problem-solving skills. in a single, specific subject/ instruction includes decoding, Connections are made between skills context. It allows more time for reading comprehension, and writing within a subject area. practicing key competencies in each week, SEL is integrated into literacy and numeracy. It also all subject areas; social studies is Between subject areas, knowledge helps learners practice making integrated with literacy and/or and skills are integrated, and learners connections between what they science with numeracy; literacy apply literacy and numeracy skills they are learning in the AEP and their and numeracy are integrated into are learning to other subject areas. lives. all subject areas.

**Developing the AE curriculum map is a five-step process,** as shown in Figure 10. In Step 1, the scope of the curriculum and the rate of acceleration are determined. In Steps 2 through 4, content standards, level descriptors, priority outcomes, and schemes of work are developed. In Step 5, the curriculum map is finalized. After completion of the curriculum map, teaching and learning activities and materials are developed in Step 6.





Although these steps should be approached sequentially, they are not strictly sequential. The steps are interdependent, and decisions made in any one of them may affect both previous and subsequent steps. For example, the scope of the curriculum may need to be revisited and revised based on decisions made when establishing priority outcomes. Similarly, when schemes of work are being developed, it may become clear that there are redundancies or gaps in the curriculum and, as a result, priority outcomes need to be revisited or revised.

Developing a curriculum map is not a simple or quick process. The length of the process to develop a curriculum map will vary and depends on multiple factors. These factors include, for example, the number of people involved, scheduling, and whether an AE curriculum is being adapted from an existing curriculum or is being wholly developed.

Financial support also plays an important role in how long the development of a curriculum map may take. If sufficient financial support is not available to ensure a reasonable timeline for each step, it may be prudent to consider a phased curriculum development process (e.g. developing AE level one first and piloting it, then developing AE level two and piloting it, and so forth). Developing a curriculum map that covers the entire AEP cycle will likely take months, not days or weeks.



**Tip!** While determining the rate of acceleration is technically Step 1 of the AE curriculum development process, it is possible that it may be discussed and decided upon during the engagement with key stakeholders and identification of funding. While it is important that the rate of acceleration be based on the amount of content to be covered and how quickly a learner can gain that content, it is also important to recognize that there might be political and financial factors that influence this decision as well.

# **Step 1: Determine the Scope of the AE Curriculum and Rate** of Acceleration

The first step in the development of the curriculum map is to identify the scope of the curriculum and the rate of acceleration.

The AE curriculum must include literacy and numeracy, as well as other subject-area content, such as social studies and science, that learners need to pass primaryleaving exams. The AE curriculum should also include SEL. Beyond that, it may include context-specific content, such as life-skills and disaster-risk reduction

relevant to AE learners' lives.

The **scope** of the AE curriculum designates which of the levels, grades, and subject areas from the national curriculum (and maybe additional relevant content) will be included in the AE curriculum.

In deciding the rate of acceleration, the need to move through the curriculum more quickly needs to be balanced with the realities of how long it takes learners to acquire certain skills. This depends on many factors, including the learners' ages and cognitive maturity, background experiences such as educational experiences, the number of instructional hours, and how much content needs to be covered (the AE scope). Even though the curriculum is condensed, there still needs to be sufficient time for AE learners to acquire literacy,

The rate of acceleration describes the ratio of the formal school time frame to the AEP time frame. For example, an AEP in which learners acquire the equivalent of a grades 1 through 6 in three years has an acceleration rate of 2:1.

numeracy, and other essential knowledge and skills, rather than going through the material too fast.

# How to Determine the Scope and Rate of Acceleration

Before the AE curriculum map can be developed, two foundational questions must be answered:

- Which of the levels, grades, and subjects from the national curriculum (and other relevant content) will be taught, and when, in the AEP? (Refers to scope)
- What is a reasonable time frame in which to teach this? (Refers to the rate of acceleration)

The answers to these questions can be considered in relation to four domains:

- 1. AE levels and rate of acceleration for each level
- Academic subject areas to be covered
- Social-emotional competencies to be taught
- Other context-specific content to be included

For each of these domains, certain things must be considered or included (see Figure 11, next page). For example, literacy, numeracy, and other examinable subjects must be included, and which MoE grades the AE levels will correspond to must be identified.

Figure 11: Four domains for developing scope and rate of acceleration

#### AE Levels and Rate of Acceleration for Each Level

#### **IDENTIFY:**

- Ae levels
- MoE grade levels to which each AE level corresponds
- How many AE levels will be developed at present

#### Academic Subject Areas

#### **INCLUDE:**

- Literacy
- Numeracy
- Subjects areas required for AE curriculum certification
- Subject areas and topics that appear on the primaryleaving exam

# Social-Emotional Competencies

#### **INCLUDE:**

 Specific social-emotional competencies needes by AE learners served by this AEP, including skills that support AE learners' success in school and work

# **Context-Specific Subject Areas**

#### **INCLUDE:**

Subject areas relevant to the local context and AE learners, such as:

- Health education
- Disaster-risk reduction
- Rights of women and girls
- Life skills
- Vocational or employment skills

To determine scope and rate of acceleration, it is necessary to gather useful background information, input from key stakeholders, and materials and resources that guide decision-making in programme design and implementation. The MoE and other associated governmental agencies, the curriculum task team, implementing partners, and community members are all involved in the process of gathering information and making decisions, but their roles will vary according to the local context. For example, the MoE and other associated governmental agencies may determine the scope and rate of acceleration based on policy or national goals, or they may approve a scope and rate of acceleration proposed by the curriculum task team and implementing partners. Input from the community served by the AEP should also be solicited to understand the profile, needs, and preferences of AE learners, so that the curriculum can include topics and subjects important to them and relevant to learners' cultures and lives. The best way to gather the input from the community and from whom is a local decision.

Table 7 shows suggested actions and guiding questions for making decisions about AE scope and rate of acceleration. To make decisions about AE levels, rate of acceleration, and content to be taught (e.g. academic, social-emotional, and context-specific subject area competencies), it is important to analyse the financial and human resources available for curriculum development, review relevant policies and national goals, gather relevant documents and materials, obtain community input, and understand the social and emotional needs of the learners.

 Table 7: Actions and guiding questions to inform AE scope and rate of acceleration

ACTIONS	GUIDING QUESTIONS
	What is the age range of target over-age out-of-school children and youth that the AEP will reach?
Know your AE	What are other demographic characteristics of the target group(s) in relation to gender, religion/ethnicity, disability status, displacement status?
learners.	What other responsibilities do target learners have, e.g., the need to work, take care of children?
	What are the goals of target learners after completing the AEP?
	What are target learners prior educational/learning experiences and levels?
Analyse the financial and human resources available for initial curriculum development.	How many levels of AE curriculum do our current resources allow us to develop initially?
Review the relevant	What do national policies and goals say about standards for the certification of an AE curriculum?
guiding national policies and goals.	Is there a policy about language of instruction in AEPs?
•	Is there a policy about rate of acceleration in AEPs?
	To which MoE grade levels will the AE literacy and numeracy correspond?
Gather resources, such as the national primary curriculum	In multi-linguistic contexts, how will the AE curriculum ensure learners acquire the language of the formal school system (e.g. if instruction begins in the mother tongue)?
and requirements of primary-leaving	What subject and topics are tested on the national primary leaving exam?
exams, to establish the minimum academic	Beyond literacy and numeracy, which subject areas and topics areas found in the national curriculum should be considered for the AE curriculum?
requirements of the AE curriculum.	How are certification requirements, instructional time, and rate of acceleration considered when making decisions about how to teach content beyond literacy and numeracy (i.e. integration vs. separate instructional time)?
	How will we gather input from community members?
Gather community	What can community members tell us about their curricular priorities?
input.	What context-specific subject areas, such as second and third languages or religious education, are important to the community?
	How will we understand learners' SEL needs in this context?
Identify the social, emotional, and safety	What are the specific social-emotional competencies that learners in this AEP need?
and health information needs of the learners.	Do learners need specific information to keep them healthy and safe (e.g. information on gender-based violence, mine safety, infectious diseases, sexual reproductive health, natural disasters)?

The actions to generate the information needed to make decisions around scope and rate of acceleration do not need to be accomplished in a set order. Some parts of the information and resource gathering process may be completed in parallel with others, and discussions about these should take place regularly, decisions about the scope and rate of acceleration need to be made in tandem.

Use the information, input, and resources gathered to determine the scope and rate of acceleration of the AE curriculum. Ensure that decisions are recorded that address each of the domains related to AE scope

**Tip!** If financial resources prevent the development of the full AE curriculum, be sure to specify here which parts of the AE curriculum will be developed first, and which later.

as

shown—AE levels and rate of acceleration, academic subject areas, social-emotional competencies, and context-specific content to be included in the AE curriculum.

Example scope and rates of acceleration from two different AEPs are shown in Figure 12.

Figure 12: Examples of AE scope and rate of acceleration

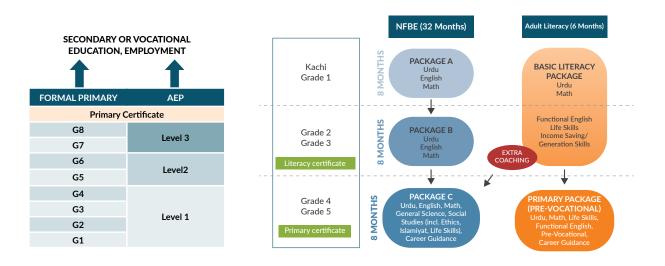




Photo: © UNHCR/ Bassam Diab

# **Step 2:** Determine Content Standards and Develop AE Level Descriptors

The second step in the development of the curriculum map is to determine content standards and AE level descriptors. Broadly, content standards and level descriptors describe the prioritised knowledge and skills in selected subject areas and define the proficiency for each AE level. Priority outcomes and lesson objectives will later be developed from content standards and level descriptors. Figure 13 shows the relationship between content standards, level descriptors, priority outcomes, and lesson objectives.

Figure 13: Relationship between content standards, level descriptors, priority outcomes, and lesson objectives



**AE** content standards describe key competencies encompassed in a subject area. AE content standards are not level specific. They are applicable to all levels of instruction.

**AE level descriptors** are broad learning goals that describe what AE learners should know and be able to do by the end of each AE level. AE level descriptors benchmark progress towards content standards and help ensure AE learners are on track to acquire key competencies equivalent to those in the formal education system by the end of the AEP.

AE level descriptors are not inclusive of all knowledge and skills found in the national curriculum. They identify and describe only essential knowledge and skills learners can use across multiple subject areas and in multiple contexts. AE level descriptors should include both subject-specific proficiencies and thinking skills.

The wording and content of content standards and level descriptors will vary and should be determined by the MoE or associated governmental agencies and/or the curriculum task team. Content standards and level descriptors for AE may be adopted or adapted from the national primary curriculum, or they may be created specifically for the AEP. Figure 14 shows an example of an AE literacy content standard and level descriptor that supports it.

Figure 14: Example AE literacy content standard

#### **CONTENT STANDARDS: 11**

Use appropriate strategies and skills to read, comprehend, evaluate, and respond to a variety of texts

#### **LEVEL DESCRIPTORS:**

By the end of AE Level 1, learners can:

• Identify, retell, and learn from important information in texts they read and those that are read-aloud to them.

<sup>11</sup> Examples of content standards, level descriptors, priority outcomes, lesson objectives, and teaching and learning activities used throughout this document are for illustration only. They are not meant to be inclusive of all possible objectives, nor are they meant to imply that they are the 'right' objectives or activities. Decisions about wording and content of all objectives and activities should be the decision of the curriculum task team and should be based on and aligned with the national curriculum.

#### How to Determine Content Standards and Develop Level Descriptors

To develop content standards and level descriptors, the MoE, associated governmental agencies, and curriculum task team members should **review**, **analyse**, **and discuss the resources related to each subject area in the AE curriculum scope**. These resources may include the following:

- National primary school curriculum guides for each subject area and grade level included in the AE curriculum scope
- Other curricula related to AEP, such as existing AE, alternative basic education, and adult education, SEL, or life skills curricula.
- General information about what is tested on primary leaving exams (if applicable)
- International guidance and other resources related to key competencies for literacy, numeracy, and SEL, especially for adolescents<sup>12</sup>

A gap analysis of existing curricula may be part of this process to identify missing competencies or specific curriculum materials.

Well-crafted AE content standards and level descriptors provide the first opportunity to condense the national curriculum by prioritizing essential high-leverage knowledge and skills within subject areas. To do this, every content standard and level descriptor should meet at least two of the following three criteria: endurance, leverage, and academic significance. Questions to consider regarding these criteria are shown in Figure 15.

Figure 15: Three criteria for good AE content standards and level descriptors

#### **ENDURANCE**

Will the knowledge and skills described in the content standard and supporting level descriptors help learners to more effectively function in daily life and as a member of the local, national, and global communities?

#### **LEVERAGE**

Can the knowledge and skills described in the content standard and supporting level descriptors be used across multiple subject areas and in multiple contexts?

#### **ACADEMIC SIGNIFICANCE**

Are the knowledge and skills described in the content standard and supporting level descriptors needed for success on the primary-leaving exam and/or in secondary school?

<sup>12</sup> There is not a single, global set of competencies for literacy, numeracy, or SEL. However, a review of the literature and of the competencies identified by a variety of countries reveals certain commonalities. MoEs and related governmental agencies should determine the set of competencies upon which the AE content standards are based.

#### Content standards may be chosen from the national curriculum, or they may be developed as needed.

Content standards are generally organised by content strand, theme, or topic, such as history, geography, economics, and civics under social studies, and number sense and operations, algebra, geometry, measurement, statistics, and probability under mathematics. However, content varies by country, and AEPs should organise their content standards in line with the national curriculum.

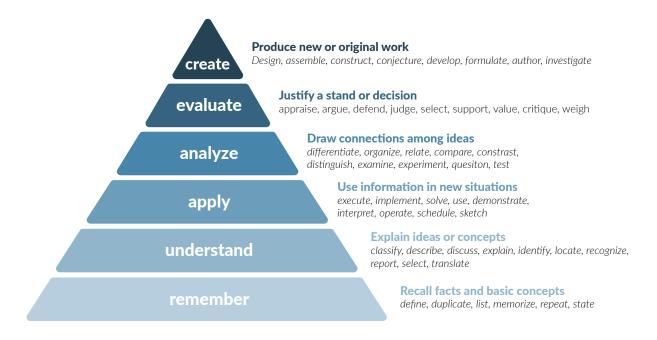
Level descriptors in the AEP may include knowledge and skills that are not addressed in the corresponding grade level in the national curriculum, or they are addressed at different levels. For example, writing, reading comprehension, and mathematical problem-solving may appear at earlier levels of the AEP than they do at corresponding levels of the national curriculum.

To show that the AE curriculum aligns with the national curriculum, a document should be produced that clearly cross-references AE standards and level descriptors to the national curriculum. All content standards and level descriptors should be written in clear, simple language that will be comprehensible to AE teachers.

#### Integrating Thinking Skills into Content Standards and Level Descriptors

AE content standards and AE level descriptors should be written to explicitly build both subject area content knowledge and thinking skills. The six levels of Bloom's Taxonomy shows the progression of thinking skills from simpler to more complex (see Figure 16).

Figure 16: Bloom's Taxonomy - adapted from Armstrong, P. (2010)



To move learners beyond memorisation and rote recall, AE content standards should include higher-order thinking skills, and all AE level descriptors should address all levels of Bloom's Taxonomy, so learners in all levels can build higher-order thinking skills, as shown in Figures 17 and 18.

Within each AEP level, subject area, strand or theme, and even within lessons, there is progression from simpler to more difficult cognitive processes. In other words, in earlier stages of new content, learners should be expected to recall facts and basic concepts or explain ideas, whereas at later stages of the new content, they should be able to use their knowledge and skills to evaluate, justify a decision, or produce an original work.

Level of Difficulty of Thinking Skills

As learners progress through AEP levels, they apply skills across all levels of Bloom's Taxonomy to increasingly complex texts or problems or with a greater level of independence. In other words, in early AE levels, they will progress from easier thinking skills (remember/understand) to higher-level thinking skills (evaluate and create) with easy texts such as sentences or paragraphs. In later AE levels, they will progressively move from lower to higher-order thinking skills with harder texts, such as short essays or books. In mathematics, for example, they will progress through different levels of thinking skills starting with numbers within 100, moving to numbers within 10,000, and later to numbers within 1,000,000. In the end, all AE levels cover all levels of Bloom's Taxonomy, with the difficulty of the text increasing by level.

Figure 17: Example of level descriptors for literacy

**Literacy Strand: Reading** Content Standard: Use appropriate strategies and skills to read, comprehend, evaluate, and respond to a variety of texts.

#### By the end of Level 1, AE learners can:

- 1. Identify, retell and learn from important information in simple texts they read independently or with teacher support.
- 2. Determine the purpose, understand, summarize, and respond to texts that are read aloud to them.

By the end of Level 2, **AE learners can:** 

- 1. Identify, retell and learn from important information in they read independently.
- 2. Determine the purpose. understand, summarize, and respond to information in texts they read independently.

By the end of Level 3, AE learners can:

- 1. Identify, retell and learn from important information multiple related texts.
- 2. Determine the purpose, understand, summarize, and respond to multiple related texts.

**Level of Difficulty of Texts** 

Figure 18: Example of level descriptors for numeracy

**Numeracy Strand:** Numbers and Operations Content Standard: Represent and solve problems using addition and subtraction.

# Level of Difficulty of Thinking Skills

#### By the end of Level 1, AE learners can:

- 1. Represent addition and subtraction facts with 2-digit numbers.
- 2. Solve and create, addition and subtraction problems within 100 using objects, pictures, and real-life examples, as well as numbers and appropriate mathematical symbols.

#### By the end of Level 2, **AE learners can:**

- 1. Represent addition and subtraction facts with 4-digit numbers.
- 2. Solve and create, addition and subtraction problems and one- and two-step word problems within 10,000 using real-life examples, numbers and appropriate mathematical symbols.

#### By the end of Level 3, **AE learners can:**

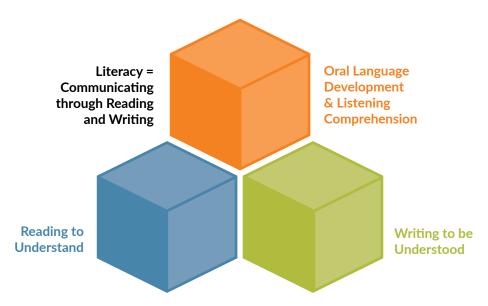
- 1. Represent addition and subtraction facts with 6-digit numbers.
- 2. Solve and create, addition and subtraction problems and one- and two-step word problems within 1,000,000 real-life examples, numbers and appropriate mathematical symbols.

**Level of Difficulty of Problems** 

#### **Developing Literacy Content Standards and Level Descriptors**

Literacy is a complex process that has been defined in many ways. However, at its most fundamental level, it can be understood as the ability to communicate through reading and writing. Literacy in AEPs encompasses the knowledge and skills learners need to read, understand, analyse, evaluate, and create a variety of written materials for the purpose of communication. <sup>13</sup> It is important the AE literacy content standards and level descriptors support the idea of literacy as communication through reading and writing, beginning in AE Level 1. Figure 19 illustrates the concept of communication through reading and writing.





Because AE learners have the cognitive maturity to understand texts that are too difficult for them to read independently, listening comprehension and oral response are also important parts of the AE literacy curriculum. AE learners need to learn strategies to understand a range of texts, including texts that are appropriate for their age and level of cognitive maturity, but that may be too difficult for them to read independently. They can do this through the incorporation of oral language development and listening comprehension.

While AE learners need to quickly attain foundational reading and writing skills, it is important that these not be taught in isolation from reading and listening comprehension at the earlier levels, because oral language development is strongly correlated with literacy. Similarly, learners should begin writing, not just copying, in AE Level 1, as there is a strong research base showing that learners who have the opportunity to write (even with errors) increase their reading comprehension.<sup>14</sup>

#### SAMPLE AE LITERACY CONTENT STANDARDS AND LEVEL DESCRIPTORS

Table 8 provides sample AE literacy content standards, which can be used as a reference to develop content standards that include the knowledge and skills needed by AE learners. Remember, content standards and level descriptors should follow, whenever possible, the organisational structure and wording of the national curriculum.

**Table 8:** Sample AE literacy content standards

ORAL LANGUAGE AND LISTENING COMPREHENSION	READING	WRITING
Listen to understand	Use knowledge of the cueing system of the written language to read familiar and unfamiliar words	Use knowledge of the cueing system of the written language and language conventions to write in a way that others can decode and understand
Speak to communicate with different audiences for different purposes	Use a range of strategies to read, comprehend, evaluate, and respond to a variety of texts	Create and/or gather information and ideas and organize them to write for a variety of purposes and audiences
Attain the oral language and listening skills needed to effectively function in daily life and as a member of the local, national, and global communities	Use the structure, organisation, features, forms, and stylistic elements of texts to construct meaning	Draft, revise, and edit original writing, using knowledge of the structure, organisation, features, forms, and stylistic elements of texts, as well as feedback from self, peers, and teachers
	Attain the reading knowledge and skills needed to effectively function in daily life and as a member of the local, national, and global communities	Attain the writing knowledge and skills needed to effectively function in daily life and as a member of the local, national, and global communities
VOCABULARY AND GRAMMAR		

Table 9 provides sample AE literacy level descriptors with increasing levels of cognitive difficulty within levels, as well as increasing difficulty of texts across levels. Level descriptors should clearly align to and support content standards and show a progression of knowledge, skills, and cognitive complexity.

 Table 9: Sample AE literacy level descriptors

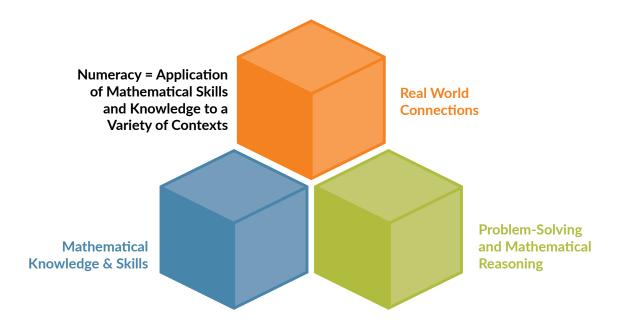
	AE LEVEL 1	AE LEVEL 2	AE LEVEL 3
Oral Language and Listening Comprehension	Understand and respond to familiar words and phrases in simple questions or explanations	Understand and respond to conversations, instructions and narratives on familiar topics	Understand and respond to conversations, explanations, instructions and short narratives of a somewhat complex nature but related to familiar tasks and situations
Reading	Decode and recognize everyday words or word groups in short, simple texts	Decode and recognize familiar simple words, by breaking words into syllables, applying pronunciation rules	Decode and recognize most familiar and some unfamiliar words in short to medium-length text by drawing on content knowledge and oral vocabulary, breaking words into parts, applying pronunciation rules, and adjusting reading pace
Writing	Perform a few simple edits of handwriting, spelling, punctuation and capitalization, based on feedback from others and using a template or guide	Make simple edits of grammar (simple present and future tenses, subject/verb agreement), beginning-sentence capitalization, spelling and punctuation (end periods, some commas)	Make several simple edits of grammar (such as simple tense agreement), spelling, and punctuation (such as periods, capital letters, and some commas), sentence structure (such as compound and some complex sentences), language usage, and text structure using tools such as spelling word lists and simple editing checklists

#### **Developing Numeracy Content Standards and Level Descriptors**

Numeracy can be thought of as mathematical literacy. The focus of numeracy is the application of mathematical skills and knowledge to school, work, and daily life. This has two implications for the development of AE numeracy content standards and level descriptors. First, AE numeracy content standards and level descriptors should emphasize mathematical knowledge and skills that are most critical to learners' daily lives and to their ability to successfully transition to formal school or other alternative transition pathways. As well, AE numeracy content standards and level descriptors should address problem-solving and the application of mathematical knowledge and skills to a variety of contexts, along with foundational mathematical skills.

It is important the AE numeracy content standards and level descriptors within each strand support the idea of numeracy as the understanding of mathematical concepts and the application of these concepts to problem-solving and daily life (see Figure 20). Rote memorization of procedures, terms, and formulas is not sufficient. Problem-solving strategies, opportunities for mathematical reasoning, and real-life applications should be included in every strand, beginning in AE Level 1.

Figure 20: Numeracy as the application of mathematical skills and knowledge to a variety of contexts



The strands of mathematical knowledge and skills are organized differently in different countries, but all strands include numbers (including number sense, properties, and operations); measurement; geometry; data, statistics, and probability; and algebra (including patterns, open number sentences, and equivalencies).

Just as in literacy, AE learners may need support to access written word problems that are appropriate to their age and level of cognitive maturity but too difficult for them to read independently.

#### SAMPLE AE NUMERACY CONTENT STANDARDS AND LEVEL DESCRIPTORS

Table 10 provides sample AE numeracy content standards that can be used as a reference.

**Table 10:** Same AE numeracy content standards

NUMBER, OPERATIONS, AND ALGEBRAIC THINKING	GEOMETRY AND MEASUREMENT	DATA, STATISTICS, AND PROBABILITY
Understand and represent numbers, including whole numbers, integers, fractions, and decimals	Define, describe, classify, compare, and represent two-dimensional shapes and/or three-dimensional objects using knowledge of their defining attributes	Gather, read, and draw conclusions from data
Demonstrate an understanding of the number system and place value	Demonstrate an understanding of the combination, transformation, movement, and relative position of one- and two-dimensional geometric figures	Organise, represent, and summarise data using a suitable data display, such as a table or appropriate graph
Use mathematical operations, their corresponding symbols, and their relationships to one another to compute	Identify measurable attributes and measure them, using appropriate measurement tools and units	Make predictions and inferences from data
Develop and apply number sense to estimate and to evaluate the reasonableness of an estimate or answer	Use measurement to describe and compare real-world objects and liquids	Understand the basic concepts of probability and apply them to assess the likelihood that an event or outcome will happen
Demonstrate an understanding of number relationships as expressed in functions, ratios, and per cents	Demonstrate an understanding of the relationships between units of measure within a given measurement system	
Recognise, describe, and extend geometric and numeric patterns	Use appropriate tools and strategies to tell time and measure elapsed time	
PROBLEM-SOLVING, MATHEMATIC AND APPLICATIONS TO REAL LIFE	CAL REASONING,	

Table 11 provides sample AE numeracy level descriptors with increasing levels of cognitive difficulty within levels, as well as increasing difficulty of texts across levels. Level descriptors should clearly align to and support content standards and show a progression of knowledge, skills, and cognitive complexity.

 Table 11: Sample AE numeracy level descriptors with increasing level of cognitive difficulty

	AE LEVEL 1	AE LEVEL 2	AE LEVEL 3
Number operations and algebraic thinking	Read (identify and recognize numbers), write, and interpret very simple types of mathematical information such as identify and recognize whole numbers up to 3 digits, common monetary values, and basic common fractions (1/2, 1/4)  Recall and use a few simple math procedures such as basic counting, sorting, ordering, grouping, measuring, simple addition and subtraction, and multiplication	Read, write and interpret some common types of mathematical information such as whole numbers, monetary values and prices, common fractions (3/4, 1/10), decimals (.25,.50, .75, .10) and percentages (25%, 75%, 10%)  Recall and use mathematical procedures such as addition and subtraction, grouping, comparing two numbers, basic estimating	Read, write, and interpret a variety of common mathematical information such as: monetary values, benchmark fractions (1/8, 1/3, 1/5, etc.), decimals, and percentages (15%, 30%, etc.)  Recall and use a good store of mathematical procedures such as estimation, rounding, multiplication and division, adding and subtracting common fractional amounts
Geometry and measurement	Read, write, and interpret very simple types of mathematical information of geometric shapes and commonly used standard units of measurement	Read, write and interpret some common types of mathematical information such as commonly used standard units of measurement, common geometric shapes, and the concept of 'area'	Read, write, and interpret a variety of common mathematical information such as standard units of measurement, geometric shapes including shapes containing a combination of common shapes
Data, statistics and probability	Demonstrate very simple ways to interpret and represent data (picture graphs)	Demonstrate simple ways to represent and interpret data, and arrange data (tables, bar graphs, line graphs, pie graphs)	Demonstrate ways to interpret and represent data (tables and graphs with scaling, basic statistical concepts such as range, mode, mean, and median

## Developing Content Standards and Level Descriptors for SEL and other Subject Areas

In addition to literacy and numeracy, an AE curriculum should include SEL and any other subject area that is taught on the primary leaving examination (or equivalent) or that is deemed appropriate by the curriculum task team. Those may include social studies, science, religion, language, and others.

Content standards and level descriptors should be developed for every subject area that will be included in the AE curriculum. They should be included whether the subject area will be taught as a stand-alone subject, wholly integrated into literacy or numeracy, or taught through a combination of free-standing lessons and subject matter integration. Including content standards and level descriptors for every subject area ensures that key competencies are addressed, proficiency levels are clear, appropriate priority outcomes and supporting teaching and learning activities and materials are developed, and subject area learning can be assessed.

Content standards for all subject areas should include thinking skills and meet at least two of the three criteria: endurance, leverage, and academic significance. Level descriptors in all subject area should show a progression of thinking skills, as described by Bloom's Taxonomy, as well as a progression of content knowledge.



**Tip!** Social-emotional learning may not appear in the national primary curriculum, and if it does, it may need to be significantly modified to meet the needs of AE learners. SEL content standards developed for the AE curriculum should align with relevant national policies and priorities, if they exist. They should also address important social/emotional issues identified by the community, and help AE learners and teachers feel safe, connected, and supported.

Importantly, AE content standards and level descriptors should correspond to the age and developmental stage of children and youth, and not their academic level. Therefore, SEL level descriptors for AE learners may be more complex and address more complicated emotional and social issues than those for younger children.

SEL can take place in several ways in the AEP. Some social-emotional competencies should be taught explicitly, through freestanding SEL skills instruction. This may include, for example, recognizing and managing emotions, learning and applying stress management strategies, setting goals, and mindfulness. Some SEL—for example, describing positive classroom behaviour and identifying emotions of a character—can be integrated into subject-area instruction. Lastly, some SEL can be addressed through classroom practises, such as promoting safe, healthy, and protective environments and developing positive relationships and social interactions.



Tip! Several resources are available on social-emotional learning, including:

- ► The Collaborative for Academic, Social, and Emotional Learning (CASEL): https://casel.org/
- ► Harvard University's Ecological Approaches to Social Emotional Learning (EASEL) Laboratory: <a href="https://easel.gse.harvard.edu/">https://easel.gse.harvard.edu/</a>
- ► Harvard's EASEL Lab Explore SEL website on frameworks for SEL: http://exploresel.gse.harvard.edu/
- ► INEE's Measurement Library for learning and holistic development in crisis contexts: <a href="https://inee.org/measurement-library">https://inee.org/measurement-library</a>
- ► UNESCO's Mahatma Gandhi Institute of Education for Peace and Sustainable Development (MGIEP array of SEL resources: https://mgiep.unesco.org/
- ► The Wallace Foundation low-cost, low-burden SEL strategies: https://www.wallacefoundation.org/

#### **Step 3: Establish Priority Outcomes**

The third step in the development of a curriculum map is to establish priority outcomes.

Priority outcomes guide assessment and the development of teaching and learning activities and materials. Like level descriptors, priority outcomes address knowledge and skills that learners can use across multiple subject areas and set up learners for success at the next level of instruction. In addition, they provide measurable learning targets that benchmark progress throughout the academic year. AE priority outcomes may address one subject area or integrate key knowledge and skills from multiple subject areas. They should include both subject-specific proficiencies and thinking skills.

AE priority outcomes are measurable, complex learning goals that describe the essential knowledge and skills learners need to acquire to meet proficiency as described by AE level descriptors. Priority outcomes are narrower than level descriptors in that they can be assessed through one or two assessment tasks. They are broader than lesson objectives in that they take multiple lessons to teach and learn.

Like content standards and level descriptors, the wording and content of priority outcomes may vary and should be determined by the MoE, associated government agencies, and/or the task team. Priority outcomes may be adopted or adapted from the national primary curriculum, or they may be created specifically for the AEP. Figure 21 shows an example of an AE Level 1 literacy priority outcome.

Figure 21: Example AE priority outcome

#### **AE LEVEL 1 LITERACY**

#### **PRIORITY OUTCOME:**

Learners will be able to:

 Use sound/symbol relationships and visual memory to identify and read simple words. <sup>16</sup>

#### **How to Establish Priority Outcomes**

Well-crafted AE priority outcomes ensure that assessment and instruction align and that both focus on essential knowledge and skills. To do this, every priority outcome must do the following:

- Describe measurable learning outcomes that directly align with level descriptors
- State what learners will know and be able to do
- Be measurable with one or two assessment tasks
- Describe complex knowledge and skills that cannot be mastered in one or two lessons

Priority outcomes provide an opportunity to connect the broad goals of content standards and level descriptors with instruction and assessment. Applying the same general criteria to all three assures consistency among them. Therefore, just as with content standards and level descriptors, priority outcomes should meet at least two of the three criteria: endurance, leverage, and academic significance.

<sup>16</sup> Written languages have different structures. Objectives (including priority outcomes and lesson objectives) related to foundational reading skills, such as decoding words, should be specific to the demands of the language of instruction. All examples in this document are based on reading and writing in English.

Curriculum task team members, curriculum developers, and curriculum writers should come to a common understanding of the meaning of each of the criteria. Review the three criteria in Figure 22.

Then, the following questions should be considered:

Which subject-area knowledge and skills that meet the criteria should be taught through stand-alone lessons?

Which subject-area knowledge and skills that meet the criteria lend themselves to integration into literacy or numeracy?

Figure 22: Three criteria for curriculum development

#### **ENDURANCE**

Knowledge and skills learners help learners function more effectively in their daily life in their communities

#### **LEVERAGE**

Knowledge and skills can be used across multiple subject areas

#### **ACADEMIC SIGNIFICANCE**

Knowledge and skills are needed for success on the primary leaving exam or in secondary school



**Tip!** Content standards and level descriptors need to be developed for each subject area before developing priority outcomes, and they are specific to that subject area. In other words, there will be content standards and level descriptors in literacy, numeracy, and any other subject area within the AEP scope, including SEL and life skills.

**Priority outcomes, however, can integrate subject areas.** For example, literacy and social studies are often integrated in priority outcomes, and numeracy and science are often integrated. Religion may also be integrated into literacy and social studies, and SEL can often be integrated into any subject area. While integrating subject areas is not necessary and may not be appropriate in some AEPs, it can help to condense the curriculum, to ensure horizontal alignment, and to improve learning outcomes by allowing learners to apply knowledge and skills in different contexts and in relation to different material.

After considering which content must be taught in stand-alone lessons and which can be integrated, the priority outcomes are established. There are three ways to establish priority outcomes:

- Priority outcomes can be selected from existing curricula. The criteria for priority outcomes can be applied to existing outcomes in the national primary curriculum, existing AE curricula, or other curricula being used for AE curriculum development.
- 2. Priority outcomes can be developed by synthesizing or adapting outcomes in existing curricula. There may be instances in which priority outcomes that meet the criteria can be developed by synthesizing learning outcomes in existing curricula.
- 3. Priority outcomes can be created by the curriculum task team to support AE content standards and level descriptors that do not appear in existing curricula or to support integration of subject-area content into literacy or numeracy. There may be instances in which priority outcomes do not appear in existing curricula and must be created in accordance with the criteria.

Whether priority outcomes are selected, adapted, or created is dependent on a number of factors and is a decision best made by curriculum task team members to fit the local context. It is very possible that an AE curriculum will require the application of all three methods throughout the course of curriculum development.



**Tip!** Priority outcomes should be written in clear, simple language so that AE teachers can communicate and explain them to learners at the beginning of each unit of study. Understanding the priority outcomes will help both teachers and learners make connections between individual lessons, and those connections will improve both teaching and learning.



**Tip!** Both priority outcomes and learning objectives describe what learners will know and be able to do, but they have different purposes. Learning objectives describe what learners will know and be able to do at the end of a lesson. Priority outcomes describe the high-leverage transferable knowledge and skills that learners should attain as the result of a unit or series of related lessons. They guide learning sequences—because over the course of several lessons learners are building towards priority outcomes—and formative assessment.

It is possible to confuse priority outcomes with lesson objectives when trying to accelerate a curriculum. It is important that acceleration in the AE curriculum does not come at the expense of learners' understanding of concepts, and this can happen when priority outcomes are used as learning objectives.

For example, 'Add and subtract whole numbers within 10' is a priority outcome. It can be assessed with one or two assessment tasks. However, it cannot be effectively taught and learned in one or two lessons. If learners learn only to memorise and recite addition and subtraction facts, it will be difficult for them to retain, transfer, and apply their learning.

To really understand how to add and subtract numbers within 10, learners need a series of lessons that allow them to come to an understanding of the relationship between numbers within 10, the relationship between addition and subtraction, and the application of addition and subtraction strategies to problem-solving.

While it may seem counter-intuitive that more lessons can sometimes accelerate learning, a learning sequence that focuses on moving learners from lower to higher levels of cognitive demand can, in fact, help them understand concepts more quickly.

A sample learning sequence is shown below. In this sequence, the lesson objectives from five lessons support learners' understanding of adding and subtracting within 10.

#### AE LEVEL 1. TERM 1

Priority outcome: Add and subtract whole numbers within 10.

#### FIVE-LESSON LEARNING SEQUENCE (LESSON OBJECTIVES): By the end of AE Level 1, learners can:

- $1. \ \ Solve given addition problems within 10 and create addition problems within 10 using pictures and numbers.$
- 2. Solve given subtraction problems within 10 and create subtraction problems within 10 using pictures and numbers.
- 3. Compose and decompose 10 using objects and numbers. (Use 10 objects to find and record all addition and subtraction problems within 10).
- 4. Add and subtract numbers within 10 using a number line and 'counting on' or 'counting back'.
- 5. Create and solve word problems related to real life that use addition or subtraction within 10.

A focus on building deeper understanding through building conceptual understanding supports the knowledge retention of AE learners over a longer period of time, resulting in their ability to attain and retain essential competencies in an accelerated time frame.

# Sample AE Priority Outcomes for Literacy, Numeracy, and Subject-Area Integration

Figures 23 through 25 provide example AE priority outcomes for literacy, numeracy, and subjectarea integration.

Figure 23: Example AE priority outcomes for literacy

#### **SUBJECT AREA: LITERACY**

**Content standard:** Use appropriate strategies and skills to read, comprehend, evaluate, and respond to a variety of texts

**Level descriptor:** By the end of AE Level 1, learners can identify, retell, and learn from important information in texts they read and those that are read aloud to them

#### **PRIORITY OUTCOMES**

- Use sound/symbol relationships and visual memory to identify and read simple words
- Use understanding of the concepts of print and the conventions of the written language to identify, read, and understand words and short simple sentences
- Retell, in their own words, a story that is read to them, including the setting, characters, sequence of events, and lesson or theme
- Demonstrate understanding of words, sounds, rhymes, and syllables in spoken and written language

Figure 24: Example AE priority outcomes for numeracy

#### **SUBJECT AREA: NUMERACY**

**Content standard:** Demonstrate an understanding of the number system and place value. Use mathematical operations, their corresponding symbols, and their relationships to one another to compute

**Level descriptor:** By the end of AE Level 2, learners can solve a variety of problems that require them to add and subtract whole numbers within 1,000

#### **PRIORITY OUTCOMES**

- Use understanding of place value to identify the value of each digit in a number, write numbers in expanded form, and compare the values of numbers using numbers with up to 3 digits
- Add whole numbers within 100
- Subtract whole numbers within 100
- Solve one- and two-step word problems using addition and/or subtraction of whole numbers within 100
- Add and subtract whole numbers within 1,000
- Solve one- and two-step word problems using addition and/or subtraction of whole numbers within 1,000



**Tip!** Adding and subtracting whole numbers within 1000 applies the same mathematical concepts and procedures as adding and subtracting whole numbers through 100. Therefore, they are combined into one priority outcome in this example.

#### SUBJECT AREAS: LITERACY, SOCIAL STUDIES, AND SEL

#### **Content standards:**

- Literacy: Create and/or gather information and ideas and organize them to write for a variety of purposes and audiences
- Social studies: Understand the roles of rules, laws, and the government in daily life
- SEL: Contribute to the well-being of others in the AEP and in the larger community

#### **Level descriptor:** By the end of AE Level 2, learners can to the following:

- Literacy: Write sentences and paragraphs to convey facts, suggestions, and opinions.
- Social studies: Describe the roles of children and youth in society, including how to participate in the classroom and the community and in civic life
- SEL: Identify goals and action steps for success in the classroom, at work, and in the community

#### **PRIORITY OUTCOMES**

- Use sentences and illustrations to create lists of rules to guide successful participation and achievement of oneself and one's classmates
- Use sentences and illustrations to create lists of rules to guide successful participation of children and youth in the community and/or civic life
- Identify a problem in the community and use sentences and illustrations to describe how children and youth can contribute to its solution



Photo: © UNHCR/Vincent Tremeau

#### **Step 4: Develop Schemes of Work**

The fourth step of developing the curriculum map is to develop schemes of work. Schemes of work may also be thought of as instructional units or modules. Developing schemes of work involves the following:

- Breaking up AE terms into smaller, manageable units
- Identifying the priority outcomes that will be addressed in each scheme of work
- Developing lesson objectives, learning sequences, and possible assessment tasks for each scheme of work

AE schemes of work divide the instruction for a term into discrete instructional units that help AE teachers organise their teaching around priority outcomes. Schemes of work may be thought of as instructional units. They are based on priority outcomes and help AE teachers and AE learners understand and track the incremental progress that is being made throughout a term by including guidelines for formative assessments in literacy and numeracy.

Planning schemes of work from priority outcomes before planning daily instruction keeps the focus of the curriculum

on learning and not just activities. While sequenced lesson objectives are included in the final scheme of work, their development is the last step in the process. All schemes of work for literacy or numeracy should integrate SEL, and they may integrate content from other subject areas where possible and practical.

#### **Instructional Sequencing and Pacing**

Schemes of work need to consider both instructional sequencing and instructional pacing. 'Instructional sequencing' refers to the order in which material is taught and when. 'Instructional pacing' refers to the speed at which the curriculum progresses through the content. Both the sequence and pace of instruction influence learning.

**There are four types of instructional sequencing.** The four types of instructional sequencing are described below:

- 1. Hierarchical sequencing is when learners acquire basic concepts in a content area before more difficult concepts in the same content area.
- 2. Simple-to-complex sequencing is when learners progress from lower to higher levels of cognitive demand, as described in Bloom's taxonomy.
- 3. Integration within subject areas refers to when the multiple skills within a subject area are used across activities in that subject area.
- 4. Integration across subject areas is when learners apply the knowledge and skills they learn in one subject area to other subject areas.

Table 12 (next page) identifies the purpose and gives examples of the four types of instructional sequencing, as well as how they help to ensure vertical and horizontal coherence.

**Table 12:** Four types of instructional sequencing, purpose, and examples

	TYPE OF SEQUENCING	PURPOSE	EXAMPLES
	Hierarchical	Builds prerequisite skills	<b>Literacy:</b> Learners learn necessary sound/ symbol relationships before they are asked to read new words.
ICE			<b>Numeracy:</b> Learners learn to count before they learn to add.
VERTICAL COHERENCE	Simple to complex	Builds critical-thinking and problem-solving skills	<b>Literacy:</b> Learners recall basic facts about a text they have read before they are asked to evaluate the reliability of information they have read.
VERTICA			<b>Numeracy:</b> Learners are asked to solve a word problem before they are asked to create their own word problem.
	Integrated within subject areas	Helps learners connect high- leverage knowledge and skills within subject areas	<b>Literacy:</b> Each scheme of work in literacy includes a balance of foundational reading skills, comprehension, writing, and oral language skills.
RENCE			Numeracy: Every scheme of work in numeracy that focuses on numbers, operations, and/or algebraic thinking includes opportunities for problem-solving. Instruction addresses the meaning of operations and the ways in which they are related.
HORIZONTAL COHERENCE	Integrated across subject areas	Helps learners apply high- leverage knowledge and skills across subject areas	<b>Literacy:</b> Learners practice reading comprehension, writing, and speaking skills in SEL lessons.
HORIZON			<b>Numeracy:</b> Learners apply concepts in in probability and statistics to social studies lessons.

These ways of sequencing the curriculum are not mutually exclusive. Schemes of work, and more broadly the curriculum, will incorporate several sequencing types at once.

For example, in literacy lessons, learners will progress from sound/symbol relationships to reading new words (hierarchical), as well as progress from recalling basic information they have read to evaluating what they read (simple-to-complex). At the same time, these reading skills will be integrated with comprehension, writing, and oral language skills within literacy lessons (within subject areas), as well as be applied in numeracy, social studies, and science lessons (across subject areas).

A well-sequenced scheme of work that is of a manageable length makes it easier to ensure vertical and horizontal coherence within and among terms and levels. Looking at units of study, instead of entire terms or single lessons, can help curriculum writers and reviewers identify areas of curricular redundancy and repetition and find curricular gaps. Schemes of work also offer AE teachers a structure that supports instructional coherence in the classroom.

Another major consideration in developing schemes of work is pacing, or how slowly or quickly to move through the content of the unit. Pacing that is responsive to learners' needs, by challenging them without

overwhelming them, is a key factor in learner engagement and achievement. Schemes of work, particularly at the higher levels of the AEP, may be developed to allow teachers some flexibility, so they can tailor the pace of their daily instruction to their learners' needs.

Pacing to support AE learner success requires formative assessment. With appropriate support, including coaching and professional development, AE teachers can use information from formative assessments to move more quickly through daily lessons that are related to the knowledge and skills their learners understand, and they can spend more time helping their learners practise new knowledge and skills.

#### WHAT IS FORMATIVE ASSESSMENT?

The main purpose of formative assessment is to inform and improve teaching and learning. Used as intended, formative assessment can motivate learners, accelerate their learning, and help them become more self-directed and self-regulated.

#### Formative assessment takes place throughout a term.

It can take a wide variety of forms, from classroom discussions to short quizzes to learner-created study questions to writing prompts. Formative assessment allows learners and teachers to identify learning strengths and address learning gaps before evaluative summative exams.

Some formative assessments, such as quizzes or written responses, may be graded, but the main purposes of formative assessments should be to give learners opportunities to receive actionable feedback, engage in self-reflection, and improve their learning.



Tip! For more information on formative assessment, see: Trunball, E. & Lash, A. (2013) Understanding Formative Assessment: Insights from Learning Theory and Measurement Theory.

WestEd <a href="https://www.wested.org/online\_pubs/resource1307.pdf">https://www.wested.org/online\_pubs/resource1307.pdf</a>

#### **How to Develop Schemes of Work**

#### Developing schemes of work involves two sub-steps:

- 1. Dividing the term/semester into manageable units and planning out the schemes of work (each unit) based on priority outcomes
- 2. Developing lesson objectives and learning sequences for each week of each scheme of work

#### PLANNING SCHEMES OF WORK

It is important to plan out the schemes of work and how they will fit together in a coherent way before beginning to develop them. The first step is to divide the term into multiple units, each approximately three to four weeks long. Once the entire term has been divided up into units, develop a scheme of work for each instructional unit.

Schemes of work do not need to cover the same number of weeks—some may be shorter and some longer—but each scheme of work should cover the number of weeks that is manageable for AE teachers. Decisions about the length of schemes of work should be made by the curriculum task team. Figure 26 shows one example of how a 12-week term can be divided up into schemes of work.

Figure 26: Relationship between terms, schemes of work, and weeks

	ENGLISH LITERACY, AE LEVEL 1, TERM 1										
Scher	me of wo	ork #1	Review/ assess	Scheme of work #2		Review/ assess	Scheme of work #3		Revise/ assess		
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12

**Each scheme of work should be planned, starting with the priority outcomes.** In Step 3, priority outcomes were defined as measurable, complex learning goals that learners need to achieve to meet proficiency as it is described in the level descriptors.

For Step 4, specific priority outcomes must be selected for each scheme of work. Schemes of work may not address all priority outcomes, and schemes

of work throughout a term may repeat the same priority outcomes.

Once the priority outcomes underpinning each scheme of work has been determined, the specific knowledge and skills that will be taught and assessed and the opportunities for integration of other subject-areas will be identified. Both the taught and assessed knowledge and skills can be listed at this point in the planning process. The lists will then be used to develop lesson objectives and guide the development of formative assessment activities.

Figure 27 is an example completed planning template. It shows the priority outcomes and the knowledge and skills to be taught and assessed, in one example scheme of work for English literacy AE Level 1, Term 1.



**Tip!** Because of the nature of learning foundational literacy and numeracy knowledge and skills, the same priority outcomes may appear throughout a term, from one scheme of work to another, with learners expected to demonstrate proficiency through increasingly complex tasks. This is particularly true in beginning literacy instruction.



Photo: © UNHCR

#### SUBJECT AREA: ENGLISH LITERACY LEVEL: 1 TERM: 1

Scheme of work #1: Introduction to Reading and Writing (Weeks 1–3)

#### **PRIORITY OUTCOMES:**

- Use sound/symbol relationships and visual memory to identify and read simple words
- · Write words that others can read and understand
- Retell, in their own words, a story that is read to them, including the setting, characters, sequence of events, and lesson or theme
- Develop awareness of words, sounds, rhymes, and syllables in spoken and written language
- Use understanding of the concepts of print and the conventions of the written language to identify, read, and understand words and short simple sentences

#### SEL:

• Learn, practise, and apply positive and productive behaviours in the classroom

#### Knowledge and skills to be taught:

- Recite alphabet
- Match alphabet letter names with their written form
- Text direction in words, sentences, and on pages of text
- How to write own name
- Classroom rules and procedures
- Read, write, and sound out the letters 'Mm', 'Aa', 'Tt', 'Ss', 'Cc'
- Blend sounds from the 5 letters to read simple words
- Match uppercase letters with lowercase letters
- Individual sounds in spoken words (blending and segmenting)
- New vocabulary (English)
- Story elements: Characters, setting, and important events

#### Knowledge and skills to be assessed:

- Text direction
- Read, write, and sound 5 letters
- Letter formation
- Write own name
- Characters and events in story (read aloud)
- Recite alphabet (with support)
- Knowledge and use of classroom rules

#### **DEVELOPING LESSON OBJECTIVES AND LEARNING SEQUENCES**

Once the whole scheme of work has been planned out—priority objectives and key knowledge and skills listed—lesson objectives can be developed and arranged into learning sequences for all the lessons in each week of each scheme of work.

An AE lesson objective describes both the knowledge and skills learners should attain as a result of a lesson and its level of cognitive demand. Lesson objectives should describe learner behaviour—things that learners should be able to do after the lesson is complete. Words such as 'understand' and 'know' should be avoided, because these are much harder for the AE teacher to determine that the learner has achieved the

AE lesson objectives describe what the learners will know and be able to do as the result of a lesson and support the attainment of priority outcomes. AE lesson objectives should clearly align to priority outcomes, as well as the knowledge and skills, identified for the scheme of work during the planning process described above.

objective. The actions used in lesson objectives should link to a level of Bloom's taxonomy. Table 13 shows some verbs that can be used.

Table 13: Action verbs for lesson objectives based on the levels of Bloom's Taxonomy

ACTION VERBS FOR EACH LEVEL OF BLOOM'S TAXONOMY					
Remember	Understand	Apply	Analyse	Evaluate	Create
Сору	Describe	Apply	Analyse	Compare	Assemble
Match	Discuss	Classify	Compare	Debate	Create
Name	Estimate	Compute	Contrast	Determine	Construct
Recall	Give an example	Change	Distinguish	Estimate	Design
Recite	Explain	Demonstrate	Debate	Evaluate	Develop
Recognise	Identify	Dramatize	Develop questions	Predict	Organise
Tell	Label	Illustrate	about	Justify	Plan
Underline	Restate	Use	Experiment	Interpret	Propose

To develop an AE lesson objective, follow these steps:

- 1. Decide on the knowledge and skills that the lesson will address, selecting from the knowledge and skills listed in the planning template for this scheme of work.
- 2. Identify the level of cognitive demand the lesson will address, using Bloom's Taxonomy.
- 3. Use an action verb to describe what learners will be able to do after completing the lesson.
- Identify additional details needed to clarify the purpose of lesson and/or expected learning.
- 5. Synthesize the information into a clear lesson objective that describes what learners will know and be able to do.
- 6. Remember to ensure the lesson objective is written in language that AE teachers can understand and that it is detailed enough to guide teaching. Avoid educational jargon.

Figures 28 and 29 show examples of the process of developing lesson objectives for Level 1 literacy and Level 1 numeracy.



**Tip!** For a more complete list of verbs see UNESCO *The ABCDs of Writing Instructional Objectives*, page 2: <a href="https://unevoc.unesco.org/e-forum/ActionVerbsforObjectives.pdf">https://unevoc.unesco.org/e-forum/ActionVerbsforObjectives.pdf</a>

Figure 28: Process for developing lesson objectives for Level 1 literacy

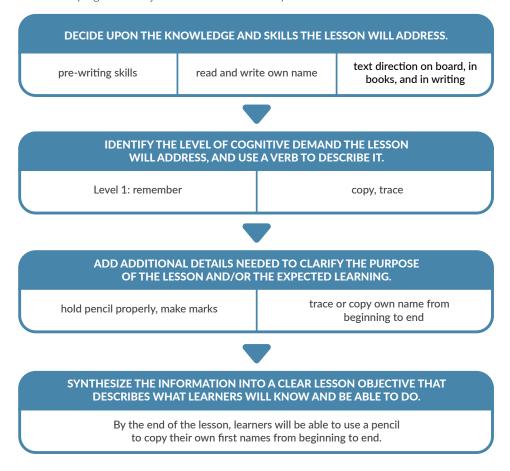
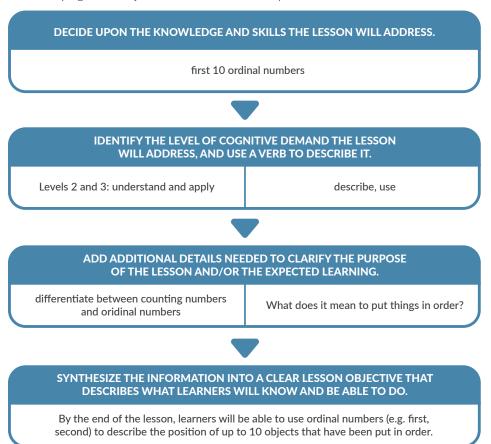
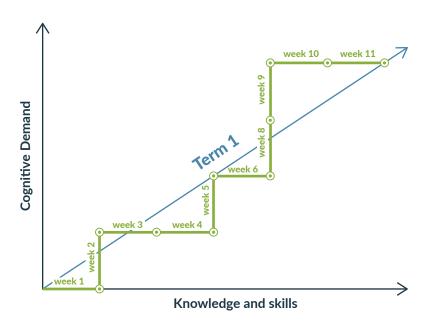


Figure 29: Process for developing lesson objectives for Level 1 numeracy



While they are written, lesson objectives need to be arranged into learning sequences (sometimes known as learning progressions). Learning sequences are the order in which lesson objectives are achieved. They can be thought of in relation to a week of lessons, a scheme of work, or a whole term. As shown in Figure 30, for shorter periods of time, such as over the course of each week, learning sequences either help learners build new knowledge and skills or help learners complete tasks with increasing levels of cognitive demand. For longer periods of time, such as over the course of a scheme of work or a term, learning sequences both build essential knowledge and skills and help learners progress through the levels of cognitive demand.

Figure 30: Learning sequences over time



Two examples of learning sequences are provided in Figures 31 and 32. In the first example, five-lesson learning sequence focuses on learning new knowledge and skills over time. In the second example, a five-lesson learning sequence focuses on applying the same learned knowledge and skills to increasing levels of cognitive demand.

Figure 31: Example learning sequence for Level 1 numeracy

#### **AE LEVEL 1 NUMERACY**

**Priority outcome:** Identify the measurable attributes for given objects (i.e. height, length, weight, and capacity) and measure them using non-standard units.

#### **LEARNERS CAN DO THE FOLLOWING:**

- 1. Identify height (how tall) as an attribute they can measure, and measure height in non-standard units
- 2. Identify length (how long) as an attribute they can measure, and measure length in non-standard units
- 3. Identify weight (how heavy) as an attribute they can measure, and measure weight in non-standard units
- 4. Identify capacity (how much it can hold) as an attribute they can measure, and measure capacity in non-standard units
- 5. Identify all attributes that we can measure on a given object: height, length, weight, and/or capacity

Figure 32: Example learning sequence for Level 2 literacy

#### **AE LEVEL 2 LITERACY**

**Priority outcomes:** 

**Literacy:** Make inferences from texts

**SEL:** Demonstrate an understanding of other's feeling and emotions

#### LEARNERS CAN DO THE FOLLOWING:

- 1. Identify meanings of pronouns and use them appropriately in sentences describing oneself, men, women, boys, girls, and groups of people
- 2. Revise and practise forms of 'to be'
- 3. Replace nouns with pronouns in given sentences
- 4. Use pronouns and correct forms of 'to be' to describe feelings that classmates act out during a classroom game
- 5. Create sentences about feelings using pronouns and the correct from of 'to be
- 6. Read, understand, and infer (guess) others' feelings from sentences that use different forms of 'to be'



**Tip!** Learning sequences in literacy should include objectives that address the range of literacy skills: oral language development and listening, foundational reading skills, and comprehension. Learning sequences in math should reflect a balance of learning objectives that address conceptual knowledge, computational fluency, and problem-solving.

#### **Step 5: Complete the Curriculum Map**

Once content standards, level descriptors, priority outcomes, lesson objectives, and learning sequences have been created and finalised, a complete AE curriculum map can be produced. The curriculum map comprises Section 2 of the curriculum guide.

The curriculum map details each week of each term for each level of the whole AEP cycle. It should include at least the following:

- The subject area
- Content standards for that subject area
- The AEP level descriptor and term
- Priority outcomes for each scheme of work (instructional unit)
- Lesson objectives for each lesson of every week

Time for revision and reteaching should also be built in. Ideally, the curriculum map should also include sample formative assessment tasks, which may be included in lesson plans and learning activities. Formative assessment tasks can take a variety of forms. What is most important is that they align with priority outcomes and lesson objectives. Decisions about where and how to include formative assessment in the AE curriculum should be made by the curriculum task team in consultation with the MoE and associated governmental agencies.

While AE lesson objectives are quite detailed as to what learners will know and be able to do at the end of each lesson, they are not lesson plans or learning activities. To support AE teachers through curriculum design, it is suggested that teaching and learning activities, including at least some fully scripted lessons, appear in a separate section of the curriculum guide. Scripted lessons provide AE teachers with high-quality model lessons offering sufficient detail to guide them in effective implementation of the curriculum.

Finally, the curriculum map should be written so that AE teachers can easily understand it, as it is their instructional road map.

Figures 33 and 34 show two example sections of the AE curriculum map for literacy and numeracy classes in AE Level 1, Term 1, Week 4. The full curriculum map would include each week, of each scheme of work, for each term, in all levels of the AEP.

Figure 33: Sample completed curriculum map for AE Level 1 English literacy, Term 1, Week 4

SUBJECT AREA: ENGLISH LITERACY	CONTENT DESCRIPTORS:  Use appropriate strategies and skills to read, comprehend, evaluate, and respond to a variety of texts
LEVEL: 1 TERM: 1	<b>LEVEL DESCRIPTOR:</b> By the end of AE Level 1, learners can identify, retell, and learn from important information in texts they read and those that are read aloud to them.

#### **PRIORITY OUTCOMES**

#### LITERACY:

Use sound/symbol relationships and visual memory to identify and read simple words

Write words that others can read and understand

Use understanding of the concepts of print and the conventions of the written language to identify, read, and understand words and short simple sentences

Retell, in their own words, a story that is read to them, including the setting, characters, sequence of events, and lesson or theme.

Develop awareness of words, sounds, rhymes, and syllables in spoken and written language

#### SEL:

Learn, practise, and apply positive and productive behaviours in the classroom

Learn, pr	Learn, practise, and apply positive and productive behaviours in the classroom					
Week	Lesson objectives	Sample formative assessment tasks				
4	<b>LESSON 1</b> Read, write, and sound out 8 letters of the alphabet: 'Mm', 'Aa', 'Tt', 'Ss', 'Cc', 'Bb', 'Rr', 'Nn'	Assess beginning sound and corresponding letter in words:				
	<ul> <li>With the teacher, blend sounds from the 8 letters to read simple words.</li> </ul>	Have learners complete during lesson 2:				
	Match uppercase letters with lowercase letters.	<ul> <li>Learners draw and label pictures of objects that begin with the</li> </ul>				
	Form words with alphabet cards and read them.	sound of each learned letter (e.g. a drawing of a ball and the				
	LESSON 2 Identify letters from their sounds:	letter 'b')				
	<ul> <li>Give examples of words that begin with each of the 8 learned letters.</li> </ul>	Use this task to identify learners who need reteaching.				
	<b>LESSON 3</b> Build vocabulary by learning and dramatizing the meanings of words (in English).	Have learners self-assess understanding of characters, setting, and sequence of events in a story:				
	LESSON 4  Describe the four key traits of a sentence (begins with an uppercase letter, ends with a full stop, contains individual words, and expresses a complete thought).	Have learners complete during lesson 5:  • Pairs of learners retell the story to one another.				
	Use them to identify the beginning and end of a written sentence and how many words it contains.	Use this task to have learners identify what they understand and what they need to practise more.				
	LESSON 5 Identify and discuss the characters, setting, and sequence of important events from a story (read aloud).					

Figure 34: Sample completed curriculum map for AE Level 1 numeracy, Term 1, Week 4

# SUBJECT AREA: Numeracy • Demonstrate an understanding of the number system and place value. • Use mathematical operations, their corresponding symbols, and their relationships to one another to compute LEVEL 1, TERM 1 LEVEL DESCRIPTORS - NUMBERS, OPERATIONS, AND ALGEBRAIC THINKING: • By the end of AE Level 1, learners can add and subtract whole numbers within 100. • By the end of AE Level 1, learners can demonstrate an understanding of the relationship between addition and subtraction.

#### **PRIORITY OUTCOMES**

#### **NUMERACY:**

- Add and subtract numbers within 10
- Illustrate the relationship between addition and subtraction, using numbers within 10

#### SEL:

• Learn, practise, and apply positive and productive behaviours in the classroom

	• Learn, practise, and apply positive and productive behaviours in the classroom					
Week	Lesson objectives	Sample formative assessment task				
	LESSON 1 Solve given addition problems within 10 and create addition problems within 10 using objects, pictures and numbers.  LESSON 2 Solve given subtraction problems within 10 and create subtraction problems within 10 using objects, pictures and numbers.  LESSON 3 Compose and decompose 10 using objects and numbers. (Use 10 objects to find and record all addition and subtraction problems within 10/)  LESSON 4 Add and subtract numbers within 10 using a number line and 'counting on' or 'counting back'.  LESSON 5 Create and solve word problems related real life that use addition or subtraction within 10.	Assess adding and subtracting within 10.  Give learners a quiz at the end of lesson 5.  • Learners copy and solve a list of addition and subtraction problems within 10.				

#### **Step 6: Develop AE Teaching and Learning Activities and Materials**

After the AE curriculum map (Section 2 of the curriculum guide) is developed, the third major section of the curriculum guide provides teaching and learning activities and materials, which help teachers to connect the objectives and goals in the curriculum to their actual classroom practices.

Teaching and learning activities and materials include lesson plans (or sample lesson plans), and they may also include supporting teaching and learning materials. Teaching and learning activities and materials must be designed to do the following:

- Directly align with lesson objectives
- Support the attainment of priority outcomes
- Support the unique needs of AE learners
- Support effective implementation by AE teachers

How to Develop AE Teaching and Learning Activities and Materials

The final step in developing the curriculum guide is to develop teaching and learning activities and materials (or examples that teachers can borrow from). Lesson plans and supporting materials can be developed and identified after the full curriculum map has been laid out—priority outcomes have been selected, lesson objectives have been developed, and formative assessment opportunities have been identified for all we

assessment opportunities have been identified for all weeks of all terms of all levels of the AEP.

All lesson plans should include the following:

- The lesson objective
- List of materials needed for instruction (e.g. chalkboard, chalk, slates, pebbles, reading passage)
- Learning activities
- Supporting teaching and learning materials (e.g. texts, mathematics problems)
- Time required to implement the lesson
- Formative assessment opportunities
- Explanatory notes for teachers (e.g. vocabulary, important concepts)

AE lesson plans are a detailed plan of the teaching and learning activities that will take place in a single lesson. Lesson plans clearly state what learners should know and be able to do by the end of the lesson and how they will learn it. It also includes all the information a teacher needs to be able to teach that lesson, such as background information that learners need to know, step-by-step instructions for each activity, opportunities for formative assessment, as well as a list of supporting teaching and learning materials, such as textbooks or readers, workbooks, problem sets, reading passages, alphabet cards, and number lines.



**Tip!** Well-crafted AE lesson plans, activities, and materials offer an opportunity to closely align the written curriculum (the curriculum guide), the taught curriculum (activities and experiences for teaching and learning), and the learned curriculum (the knowledge and skills learners gain). Strong alignment between these three aspects of curriculum is crucial to positive learner outcomes.

#### In addition, lesson plans should:

- ▶ Directly support lesson objectives, lesson activities, and learner attainment of priority outcomes
- Support the integration of subject-area content (e.g., social studies, science, or SEL) into literacy and numeracy, as appropriate
- Support the acquisition of the range of literacy skills, including oral language and listening, reading, reading comprehension, and writing
- Support the acquisition of the range of numeracy skills, including conceptual understanding, computational fluency, and problem-solving
- Use texts that include a range of text features. (e.g. titles, headings, illustrations)
- Use materials and resources that allow learners to practice skills (e.g. word problems, reading passages, writing prompts) and include multiple ways in which learners can demonstrate understanding

#### SUPPORTING AE TEACHERS THROUGH LESSON PLAN DESIGN

It is important to determine how to write lesson plans so that they help AE teachers teach the lesson successfully, as well as increase their own knowledge and skills. All lesson plans and supporting materials should be developed to be used in low-resource contexts by AE teachers who may lack professional training and who may be building their own literacy and numeracy skills as they teach. To best support AE teachers, both the content and the structure of the lesson plans and supporting materials must be easy for AE teachers to understand and to use.



Photo: © UNHCR/Achilleas Zavallis

Table 14 shows four key considerations when developing lesson plans that meet the needs of AE teachers.

**Table 14:** Considerations for developing lesson plans to support AE teachers

CONSIDERATION	WHY IS IT IMPORTANT TO CONSIDER THIS?	WHAT QUESTIONS CAN WE ASK OURSELVES TO THINK ABOUT THIS?
Lesson plan structure and layout	Provides a clear and consistent format for lesson plans, which makes it easier for AE teachers to find the information they need quickly	How can we structure lesson plans so they include all of the information AE teachers need while still being easy to read and follow?  Should we have one lesson plan template that can be used for all lessons, or should we create different templates for different types of lessons?  How can we ensure the lesson plan structure does not discourage the use of hands-on activities, cooperative learning, and other learner-centred activities?
Language/ readability	Ensures the lesson plans are written at a level accessible to teachers with a range of literacy skills	What supporting text features (e.g. graphics, bold type, size of typeface) should be included to help support AE teachers' understanding of lesson plans?  What grammar structures (e.g. sentence construction and length, verb tenses) should we take into account when designing lesson plans?
Activity instructions	Ensures that teachers know how to carry out the lesson and the activities, especially interactive teaching strategies	How can we integrate interactive teaching strategies into lesson plans so that they are easy for AE teachers to use and understand?  How can we present and explain the use of interactive teaching strategies in a way that makes sense to AE teachers and does not overwhelm them?
Teachers' pre- requisite knowledge and skills	Ensures that teachers understand the concepts and the 'big ideas' underlying the teaching activities, which enables them to teach more effectively	What concepts do teachers need to know and understand to teach each lesson effectively?  How can the lesson plans support teachers' understanding of key concepts and build their skills and knowledge?

### SUPPORTING AE LEARNERS THROUGH TEACHING AND LEARNING ACTIVITIES AND MATERIALS

#### Lesson plans should also be written in a way that promotes the achievement of learning outcomes.

AE learners have a wide range of experiences and needs. Because AE learners are over-age, they bring a wealth of life experiences which can be built upon in the classroom. In addition, AE classrooms are often multi-age, and are sometimes multi-level. AE lesson plans should be written in a way that builds on learners' previous experiences; accounts for the wide range of knowledge, skills, and cognitive maturity; and allow learners to play a role in their own learning.

Table 15 shows four key considerations for supporting AE learners through teaching and learning activities and materials.

 Table 15: Considerations for developing teaching and learning activities and materials to support AE learners

CONSIDERATION	WHY IS IT IMPORTANT TO CONSIDER THIS?	WHAT QUESTIONS CAN WE ASK OURSELVES TO THINK ABOUT THIS?
Providing instruction that is appropriate to students' level	Ensures learners are challenged but not become overwhelmed	How can lesson plans incorporate a variety of instructional strategies, such as modelling, guided practice, classroom discussion, cooperative learning, and hands-on activities?  How can lesson plans include differentiated activities for learners who have more basic and more advanced levels of knowledge and skill?
Linking new learning to prior learning and background knowledge	Accelerates learning and helps learners understand and remember what they learned	How can lesson plans include the opportunity for learners to connect the day's lesson with previous learning?  How can lesson plans connect learning with learners' experiences, cultures, and existing background knowledge?
Engaging learners in the learning process and providing opportunities for peer support	Helps accelerate understanding and helps learners remember what they learn	<ul> <li>▶ How can lesson plans include activities that:</li> <li>▶ Engage AE learners</li> <li>▶ Are age-appropriate</li> <li>▶ Include hands-on learning activities,</li> <li>▶ Help increase learners' self-confidence</li> <li>▶ Allow AE learners to work with peers</li> </ul>
Providing a balance of explicit instruction, teacherguided practice, and independent practice	Explicit instruction provides learners with a model of learning behaviours and outcomes.  Guided practice allows learners to practice new knowledge and skills with support.  Independent practice allows learners to practice and reinforce new skills on their own.	How can lesson plans ensure explicit instruction is focused on the lesson objective, including the level of cognitive demand?  How can lessons be designed so AE learners can get feedback from teachers?  How can lessons be designed so AE teachers can get feedback from learners (e.g. providing opportunities for leaners to ask teachers for help if they are confused)?

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