

# The Learning Passport: Research and Recommendations Report

**Making progress possible:  
Improving the quality of education for  
vulnerable children everywhere**

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This work represents the personal views of the authors and does not necessarily reflect the position of the United Nations Children's Fund

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# Contents

<b>CONTRIBUTORS .....</b>	<b>1</b>
<b>1 EXECUTIVE SUMMARY .....</b>	<b>4</b>
<b>2 INTRODUCTION .....</b>	<b>18</b>
2.1 BACKGROUND .....	18
2.2 RESEARCH PHASE OUTPUTS .....	18
2.3 THE REPORT APPROACH .....	18
2.4 PROJECT PRINCIPLES (UNICEF).....	19
2.5 DOCUMENT OVERVIEW .....	19
<b>3 EDUCATION IN EMERGENCIES: CONTEXT.....</b>	<b>22</b>
3.1 INTRODUCTION .....	22
3.2 EDUCATION IN EMERGENCIES: LEARNER BACKGROUNDS AND NEEDS .....	23
3.3 EDUCATION IN EMERGENCIES: FROM CURRICULUM TO CLASSROOM AND BEYOND .....	39
<b>4 MENTAL HEALTH, PSYCHOSOCIAL SUPPORT, AND SOCIAL AND EMOTIONAL LEARNING 56</b>	
4.1. INTRODUCTION .....	56
4.2. SEL WITHIN THE WIDER MHPSS PROGRAMME AREA .....	56
4.3. CONCEPTUALISING MENTAL HEALTH .....	57
4.4. EDUCATION, PLAY, AND PLAY-BASED PEDAGOGIES TO PROMOTE CHILD WELLBEING AND RESILIENCE.....	63
4.5. MHPSS-SEL WITHIN A PUBLIC MENTAL HEALTH–WELLBEING PROMOTION FOCUS	69
4.6. CULTURE AND MHPSS-SEL .....	72
4.7. THE MHPSS-SEL TRIANGLE IN EIE CONTEXTS.....	77
4.8. THE FIELD OF SEL: BENEFITS ALONGSIDE DILEMMAS, INTERNATIONAL BARRIERS, AND DESIGN PARAMETERS FOR EIE .....	79
4.9. SELF-REGULATION AS THE UNDERLYING MECHANISM FOR SEL SKILL DEVELOPMENT .....	83
4.10. SELF-REGULATION SKILLS: DIFFERENTIATION AND INTEGRATION APPROPRIATE FOR A GIVEN SITUATION .....	87
4.11. CONCLUSION.....	89
<b>5 LITERATURE REVIEW: CURRICULUM .....</b>	<b>91</b>
5.1 INTRODUCTION .....	91
5.2 PRINCIPLES OF HIGH-QUALITY CURRICULUM FRAMEWORKS .....	91
5.3 CURRICULUM FRAMEWORKS FOR EDUCATION IN EMERGENCIES: LITERACY.....	95
5.4 CURRICULUM FRAMEWORKS FOR EDUCATION IN EMERGENCIES: MATHEMATICS .....	106
5.5 CURRICULUM FRAMEWORKS FOR EDUCATION IN EMERGENCIES: SCIENCE .....	113
5.6 CURRICULUM MAPPING, ‘TOUCHPOINTS’, AND TRANSITION.....	124
<b>6 LITERATURE REVIEW: ASSESSMENT AND ACCREDITATION .....</b>	<b>132</b>
6.1 PRINCIPLES OF QUALITY ASSESSMENT AND ACCREDITATION .....	132
6.2 ASSESSMENT AND ACCREDITATION FOR EDUCATION IN EMERGENCIES .....	137
<b>7 LITERATURE REVIEW: RESOURCES (TEACHING AND LEARNING MATERIALS) .....</b>	<b>143</b>
7.1 INTRODUCTION .....	143
7.2 CURRICULUM ALIGNMENT .....	143
7.3 DESIGN AND DEVELOPMENT .....	145
7.4 SUPPLY AND DISTRIBUTION .....	146
7.5 USING MATERIALS .....	147
7.6 DISTRIBUTION AND STORAGE .....	148
7.7 NON-PRINT RESOURCES.....	149
7.8 CASE STUDIES .....	151
<b>8 THE LEARNING PASSPORT: DIGITAL SUPPORT .....</b>	<b>153</b>

8.1 SCOPE .....	153
8.2 APPROACH .....	153
8.3 KEY GENERAL CONSIDERATIONS FOR DIGITALLY SUPPORTING THE LEARNING PASSPORT .....	154
8.4 PROCESS CONSIDERATION: DESIGNING DIGITAL SUPPORT FOR THE LEARNING PASSPORT .....	158
8.5 PLATFORM RECOMMENDATIONS.....	161
<b>9 RECOMMENDATIONS FOR THE LEARNING PASSPORT.....</b>	<b>170</b>
9.1 OVERVIEW .....	170
9.2 GUIDING RECOMMENDATIONS .....	170
9.3 SPECIFIC RECOMMENDATIONS.....	174
<b>APPENDIX 1.....</b>	<b>185</b>
METHODOLOGY .....	185
<b>APPENDIX 2.....</b>	<b>187</b>
UNICEF'S TECHNOLOGY FOR DEVELOPMENT (T4D) DESIGN CRITERIA .....	187
UNICEF'S 5 KEY PROGRAMME RECOMMENDATIONS ON ICT FOR EDUCATION.....	187
<b>APPENDIX 3.....</b>	<b>188</b>
GLOSSARY OF ACRONYMS AND TERMS USED IN SECTION 4 .....	188
<b>APPENDIX 4.....</b>	<b>191</b>
CONTRIBUTOR BIOGRAPHIES.....	191
<b>BIBLIOGRAPHY .....</b>	<b>201</b>
<b>BIBLIOGRAPHY, SECTION 4: MENTAL HEALTH, PSYCHOSOCIAL SUPPORT, AND SOCIAL AND EMOTIONAL LEARNING.....</b>	<b>232</b>

# 1 Executive summary

## Orientation

The Learning Passport is a collaboration between UNICEF, the University of Cambridge and Microsoft that aims to tackle an intractable problem: the quality of education in contexts where learners have been displaced. As UNICEF point out in their advocacy brief ‘Education Uprooted’ (2017), the ongoing global crisis of displacement is also a crisis of education. Education is interrupted, often for long periods. The education children do receive is often ill-suited to their needs; the useful accreditation of learning is frequently absent. The result is children who are denied access to the advantages that education provides, including its role as a buffer against the stress of upheaval (UNICEF, 2017, p.13).

The Learning Passport is a response to the international crisis in education quality and learning outcomes. The project’s specific aim is to improve the quality of education for children who – for whatever reason – are unable to access national education systems satisfactorily, either temporarily or permanently. The goal is to make possible stable and effective learning pathways for these children despite the instabilities they experience. This includes helping them to enter or return smoothly into national systems.

The project’s hypothesis is that quality can be improved by making available, as a global public good, an *education model* for basic education for children whose education has been disrupted. This education model is the Learning Passport. Practically speaking, the education model centres around a lightweight Curriculum Framework (Cambridge Assessment, 2020) for three core subjects (mathematics, science, literacy) as well as a major Social and Emotional Learning (SEL) aspect: SEL elements integrated throughout each of the core subjects, and a separate SEL curricular component (Boyd-MacMillan & DeMarinis, 2020). An approach to providing quality-assured teaching and learning materials is the second major element; the third covers assessment and assessment tracking, including providing children with a portable record of their learning. These components are aimed at primary-level education and establishing essential competencies at the primary stage. The developers’ and researchers’ working assumption has been that users will be aged around 5–15 years old.

In addition, there are three operative principles underpinning the research of the Learning Passport. First, all elements of the Learning Passport would be contextualised – a collaboration between international and local stakeholders. Second, a goal of the Learning Passport would be to help children smoothly transition back into national education systems.<sup>1</sup> Third, and related, the Learning Passport is conceived of as a resource of which national governments should determine the use and usefulness, recognising that national ownership and leadership are key to the success of any education response, and echoing the stress placed on this by the Global Compact for Safe, Orderly and Regular Migration and the Global Compact on Refugees.<sup>2</sup>

## The purpose of the Research and Recommendations Report

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<sup>1</sup> Noting in line with United Nations High Commissioner for Refugees (UNHCR) that the possibility of transitioning will always be context dependent (UNHCR, 2012, p. 8).

<sup>2</sup> For example: ‘Support will be put in place upon the request of the host country, or country of origin where relevant, in line with country ownership and leadership and respecting national policies and priorities’ (United Nations, 2018, p. 9).

The purpose of the Report, with reference to the proposed education model, is first to anchor the project in the available evidence for quality education, as well as the evidence for quality in Education in Emergencies (EiE). Secondly, it is to make recommendations for how the Learning Passport should be taken forward or rethought, based where possible on the evidence.

### What the Report contains

The research within the Report consists primarily of a series of literature reviews looking at different dimensions of the Learning Passport:

- ↳ Section 3, the first section of the Report itself, titled ‘Education in Emergencies: Context’, offers an overview of research conducted into defining and characterising the current global state of displacement from an education viewpoint. It also outlines educational interventions and solutions in contexts of displacement and in EiE contexts more generally, and identifies where the implementation of the Learning Passport can learn from both more and less effective projects, instruments and policies.
- ↳ Section 4 presents how the SEL areas of the Learning Passport have been approached, and how they are framed in relation to Mental Health and Psychosocial Support (MHPSS).
- ↳ Sections 5, 6, and 7 of the Report move beyond the landscape of EiE with respect to the Learning Passport, and into literature reviews of the different interlinked areas of the Learning Passport: Curriculum, Assessment, and Resources or Teaching and Learning Materials (TLMs).
- ↳ Section 8 covers potential digital support to the Learning Passport.
- ↳ The final core section of the Report (Section 9) summarises the findings from the above literature reviews, and draws from them the key recommendations for taking the Learning Passport forward.

### Recommendations

Recommendations for the Learning Passport fall into two categories. ‘Guiding Recommendations’ cover the Learning Passport as a whole, and point towards essential components of a successful approach. These recommendations qualify and guide the subsequent more specific recommendations, and indicate the areas where a high degree of consistency and constancy in the evidence has been found. As will be seen, there is some overlap between these broader recommendations.

‘Specific Recommendations’ cover the specific areas of the Learning Passport – Curriculum, Assessment, Resources, SEL, and Digital support – picking out how these should be taken forward.

The provisional recommendations of this Report are captured for executive summary purposes in the following table. A fuller narrative version can be found in the final section of the Report (Section 9, ‘Recommendations for the Learning Passport’).

## Guiding Recommendations

### *Localisation of the Learning Passport*

- 1a** That any implementation of the Learning Passport is preceded by a formal evaluation stage. This to include not only an evaluation of the feasibility of implementing the Learning Passport, but a quality review of any existing education provision.
- 1b** That input from local stakeholders is required for development of all localised components, and forms part of the planning pathway for implementation.
- 1c** That, as part of the Learning Passport, guidance is provided for localisation/contextualisation of the Learning Passport.

### *Coherence and the Learning Passport*

- 2a** That implementation of the Learning Passport should first look at whether it can be delivered with all components, to test coherence, and that if implementation is not viable in this ‘unitary’ way, a different model should be developed to, if possible, test individual components and tools.
- 2b** That there are example ‘deployment approaches’ provided, showing how coherence can be flexibly established in different displacement contexts.

### *Learner needs*

- 3a** That across all dimensions of development, education interruption is foregrounded. Where, for example, specific curriculum paths, pedagogies, and remedial approaches can help counter the effects of interruption, they must be included.
- 3b** That across all dimensions of development of the Learning Passport *accessibility* is prioritised, with specific areas of focus being gender, special educational needs, and cultural accessibility.

### *Supporting teachers*

- 4a** That efforts to support, train, and engage educators to deliver the Learning Passport first formally review local teacher capacity, including skills.
- 4b** That for piloting purposes, a (pilot-specific) teacher training programme and continuing professional development (CPD) programme is created to support the Learning Passport, or adapted from an existing programme.
- 4c** That where the Learning Passport is digitally supported, any teacher training distinguishes between general training in the Learning Passport and training in ‘how to use the technology’.

### *Language*

- 5a** That for the purposes of establishing foundational literacy, where possible students using the Learning Passport are taught in the same language that they use at home (mother tongue).
- 5b** That, in multilingual contexts, the implementation evaluation phase includes an assessment of how different languages are used, in order to identify medium/s of instruction and connected issues. An ‘assessing the language environment’ tool is therefore recommended (there may be suitable existing tools).

### *Engaging with local stakeholders*

- 6a** That an ‘assessing the stakeholder landscape’ tool is developed as part of the education model, and that this assessment takes into account the affiliations and motivations of local stakeholders.
- 6b** That community-based, civil society, and non-governmental organisations (NGOs) are engaged from the viewpoint of localising the Learning Passport.

## Specific Recommendations

### *Curriculum recommendations: Overall*

- 1a** That curriculum frameworks for the Learning Passport are developed which are context-agnostic; in other words, developed at a *high level* to ensure they are as adaptable and flexible as possible.
- 1b** That these frameworks should adhere to the principles of good development and design identified in the Research and Recommendations Report, and include existing Inter-agency Network for Education in Emergencies (INEE) guidance.
- 1c** That these frameworks are used in each implementation to provide structure for a contextualised curriculum and other components.
- 1d** That guidance on contextualising the frameworks covers a wide range of potential EiE scenarios.
- 1e** That ‘curriculum mapping’ is used to identify touchpoints between curricula; and that in collaboration with a software partner, a discrete digital curriculum mapping tool is developed for the Learning Passport to facilitate this.
- 1f** That curriculum mapping conducted as part of implementations of the Learning Passport facilitates integration into national systems by allowing the easy identification of individual pathways for children between curricula.
- 1g** That flexibility in sequencing and pacing is therefore included so that students can move more rapidly over material they are familiar with, and focus on areas that are unfamiliar.
- 1h** That the literacy curriculum, and content of the curriculum and resources addressing language proficiency, are recognised as areas that will need greater support and are intrinsically more complex.
- 1i** That MHPSS programming and considerations are integrated into components of the Learning Passport and incorporate:

- SEL programming as a core component of all teaching
- An adversity-informed approach, focusing on mental health, wellbeing, and both promotion and prevention
- A specially designed Community Readiness Assessment Model (CRA model) of initial assessment for all implementations of the Learning Passport
- Special attention to the mental health and wellbeing of EiE teachers and their multiple functions
- Integration of MHPSS-SEL programming into larger family, group, and community constellations

**1j**

That the Learning Passport's curriculum framework developers consider:

- Including overall curriculum aims
- Organising the framework in terms of subjects
- Including an indication of progression within a subject
- Presenting the framework such that it indicates the order in which concepts need to be learned
- Avoiding overcrowding the framework so that concepts can be understood in depth
- Including, as an integrating function, SEL content, process, and presentation throughout

## **Curriculum recommendations: Subject-specific**

### *Literacy*

- 2a** That the difficulties of developing a literacy curriculum framework are further explored, and the specific challenge of literacy is appreciated.
- 2b** That, subject to feasibility, a context-agnostic, language-agnostic literacy curriculum framework is developed.
- 2c** That a literacy framework, if developed, supports learning in mathematics and science, and the SEL programme, and additionally that developers consider:
- Organising the structure in terms of skills (e.g. speaking, listening, reading, and writing)
  - Allowing for encounters with a wide variety of texts, and talking and listening experiences
  - Allowing for the potentially varied and/or ‘non-linear’ nature of literacy development
  - Outlining the purpose of the literacy framework and providing a rationale
  - Including oral aspects of literacy
  - Indicating the sequence of learning

### *Mathematics and science*

- 2d** That for the mathematics and science curriculum frameworks, developers consider:
- Organising the framework in terms of content, concepts, principles, fundamental operations, core knowledge, and associated progressions
  - Including threshold concepts
  - De-contextualising content, concepts, principles, fundamental operations, core knowledge, and associated progressions

- Focusing on concepts, principles, fundamental operations, core knowledge, and associated progressions rather than context and differentiation
- Providing guidance which emphasises the potential usefulness of, and respect for, indigenous knowledge when contextualising the curriculum framework

### ***Mathematics***

- 2e** That for the mathematics curriculum framework, developers consider:
- Including so-called ‘big ideas’
  - Including the majority of fractions and decimals near the end of the primary phase
  - Including number and geometry/shape and space
  - Focusing on count, place values, multiplicative thinking, partitioning, and proportional reasoning
  - Developing a framework which allows for problem-solving to be included in many areas of teaching and learning
  - Making provision for literacy and language which supports learning in maths
- 2f** That for the science curriculum framework, developers consider:
- Including principles and so-called ‘big ideas’ of science to help learners understand the scientific aspects of the world and make informed decisions about science
  - Making provision for literacy and language which supports learning in science
  - Ensuring that the scientific terminology used in the science curriculum framework is carefully chosen and key definitions provided
  - The importance of not assuming availability of space and equipment for practical activities, but nevertheless the importance of integrating practical activities where possible

### ***Social and Emotional Learning (SEL)***

**2g**

That for the ‘SEL programme design’ for EiE contexts, developers consider:

- That within an MHPSS overarching framework, an integrated ‘IC-ADAPT’ (Integrative Complexity–Adaptation and Development After Persecution and Trauma) framework for EiE contexts is used to establish criteria for identifying priority SEL programme areas and outcomes in educational contexts
- That education-based MHPSS services to improve mental health and wellbeing of learners, using adapted child wellbeing (CWB) domains, to support and enhance education outcomes should consider enabling provision across all four levels of the MHPSS triangle.
- That all implementations should consider beginning with the internationally tested Community Readiness Assessment (CRA) model
- That a special version of the Cultural Formulation Interview (CFI) should be considered for inclusion during initial assessments
- That the initial assessment process for the Learning Passport as a whole (e.g. using the CRA that includes the CFI) is itself recognised as an intervention for promoting mental health and psychosocial wellbeing
- That not only adverse event, trauma, and depression reduction techniques, but also lower functioning and attachment rebuilding and restoration strategies, with focus on wellbeing and resilience promotion, are incorporated into the SEL programming
- That an ‘IC-ADAPT’ framework should be considered as a fundamental organising base for SEL programming and delivery
- That incorporating play, play-based pedagogies and other evidence-based learner-centred pedagogies in multiple modalities will increase programme effectiveness and benefits for learners and youth

#### *Assessment and accreditation recommendations*

**3a**

That implementations of the Learning Passport first evaluate what forms of assessment are suitable for any given context.

**3b**

That the Learning Passport contains protocols by which the purpose and value of assessment is explained to test takers, those who administer tests, and those who use the results (we recommend that these protocols are developed in subsequent phases).

**3c**

That accreditation is approached with caution, and that the following Specific Recommendations are followed:

- That stakeholders should first seek to work with existing and politically non-divisive regional and supranational accreditation bodies to establish recognition and accreditation of the Learning Passport
  - That a new high-stakes Learning Passport certification is not a promising route for EiE contexts, and more flexible accreditation alternatives to formal examinations should be investigated
  - That accreditation should prioritise alignment and equivalency with qualifications that will allow displaced students to continue their education within national education systems, or find employment
- 3d** That an expert Tracking Working Group is established to separately examine the creation and tracking of learning records that might ‘move with’ children across country borders (portability).
- 3e** That teacher or educator involvement and capacity are understood as essential for assessment, and in light of this:
- That teachers (or equivalent) use assessment to convey learning progress to learners
  - That teachers develop students’ understanding of learning goals, criteria, and self-assessment
  - That teachers promote students’ self-assessment skills
  - That teachers participate in CPD, provided through the Learning Passport, about formative assessment

#### *Resources (teaching and learning materials – TLMs) recommendations*

- 4a** That all TLMs must fully reflect the localised Learning Passport curriculum, and the assessment approach of the Learning Passport, and include sufficient guidance for their use in displacement scenarios.
- 4b** That any *existing* TLMs are first evaluated for their appropriateness, and reused/adapted if possible (we recommend that this process of evaluation is formalised through the development of a TLM quality assurance ‘scorecard’). In general, close liaison with government and education partners is essential before decisions are made about materials production.
- 4c** That, as an aspect of contextual appropriateness, stakeholder involvement in the development of TLMs is key.

- 4d** That Learning Passport TLMs need to be culturally *and* displacement sensitive, while also paying attention to the need for inclusive representation.
- 4e** That TLMs used by the Learning Passport should promote self-learning.
- 4f** That TLMs accommodate the wide range of ages they may be used for.
- 4g** That choice of media and materials should also reflect durability, usage, storage, and dissemination needs regarding the specific context. In general, specialist advice should be taken on all aspects of printing, publishing, and distribution.
- 4h** That in the development of digital TLMs, the following specific principles are adhered to:
- That all digital TLMs should be designed to complement facilitators rather than replace them, and all facilitators trained in their use
  - That all digital learning materials contain appropriate scaffolding
  - That all digital learning materials need to be designed according to specific pedagogic principles

## Digital support recommendations

*Area 1: To investigate how a platform could act as a global searchable repository for validated EiE curriculum and instructional materials, including the project's own*

- 5a** That the Learning Passport project focuses on developing a central bank of Open Educational Resources (OER).
- 5b** That these OERs should be cleared for reuse in platforms as a global public good.
- 5c** That this OER bank is the subject of a feasibility study.
- 5d** That curation and adaptation for any context should be done hand in hand with local expertise.
- 5e** That the potential for centralised digital support for capacity building amongst teachers and facilitators is pursued.
- 5f** That any digital solution includes on-going, documented, and accountable monitoring to prevent and stop harm (bullying, grooming, recruitment, incitement).

*Area 2: To investigate how a platform could act as a repository for children's assessment data, and a means for updating and tracking it in the field*

- 5g** That a digital platform will be best suited as a secondary repository for data derived from written or paper-based assessment material, rather than used to collect data directly.
- 5h** That the Learning Passport digital platform should allow for the recording of assessment data against all relevant local curriculum assessment objectives.

- 5i** That the functionality of storing assessment data and other identity data is adaptable within the Learning Passport.
- 5j** That design and development of digital support uses a Human Centred Design process.

***Area 3: Potentially deliver assessments/accreditation, as part of an online and offline digitally based assessment/accreditation option***

- 5k** That the desirability of implementing digital assessments is considered.
- 5l** That flexibility is retained regarding the number and function of platforms to be used in the stages of contextualised development.
- 5m** That in line with UNICEF's Technology for Development (T4D) principles, existing embedded solutions and platforms are considered for reuse/adaptation/enhancement as part of any solution.

## **Summary of recommended evaluations, working groups, and tools**

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### ***Evaluations***

- 1a. (Guiding Recommendations). Formal evaluation stage for any proposed Learning Passport intervention, including a formal review of education quality.
- 3a. (Specific Recommendations). Evaluation of what forms of assessment are suitable for the given context.
- 4b. (Specific Recommendations). Evaluation of existing TLMs through the development of a TLM quality assurance ‘scorecard’.
- 5c. (Specific Recommendations). Feasibility study for proposed OER bank.

### ***Working groups***

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- 3d. (Specific Recommendations). An expert Tracking Working Group to examine the creation and tracking of learning records that might ‘move with’ children (portability).

### ***Tools***

- 1e. (Specific Recommendations). A digital ‘curriculum mapping’ tool.
- 4b. (Guiding Recommendations). For piloting, a teacher training programme and CPD programme (this may be an adaptation of an existing programme).
- 5b. (Guiding Recommendations). An ‘assessing the language environment’ tool.
- 6a. (Guiding Recommendations). An ‘assessing the stakeholder landscape’ tool.

## 2 Introduction

### 2.1 Background

The Learning Passport is a collaboration between UNICEF, the University of Cambridge, and Microsoft. Drawing on education expertise from across the University and beyond, the Cambridge project team has developed its research and recommendations in dialogue with the project's External Reference Group as established by UNICEF, contributing to the research phase of the collaboration.

### 2.2 Research phase outputs

In agreement with UNICEF the current phase of the Learning Passport project has several outputs. For clarity these are as follows:

- ↳ A Research and Recommendations Report, focusing on educational quality and its challenges vis-à-vis EiE, and providing a set of research-led recommendations around developing an education model for 'children on the move'.
- ↳ A draft curriculum framework and SEL programme design, including cohesive elements across all of the curricular components (mathematics, science, literacy) and an SEL curricular component (begun in tandem with research and for ongoing refining).
- ↳ Initial commentary on how the Learning Passport might be piloted.
- ↳ Working with a software partner to conceptualise a digital platform to support the Learning Passport.

### 2.3 The Report approach

While methodology is covered in Appendix 1 at the end of this Report, distinct from this is the general approach the Cambridge team has taken, and which it is important to outline.

First, the Cambridge team has tailored its methodology and research activities to the project timeframe for submission of the Report. This has included a dedicated research phase of approximately eight months in 2019, preceded by and building upon the creation of two initial literature reviews in 2017 and 2018.

Second, and to complement desk research, the Cambridge team has sought to directly inform its understanding of EiE, as well as specific project questions, by undertaking a number of field missions with UNICEF (Bangladesh, Sudan, Myanmar). The outputs and findings of these missions have been incorporated into the methodology and used to direct the desk research, the findings of which comprise the literature reviews in the Report.

Third, it is generally recognised that the literature around education and 'children on the move' is still emerging and that the evidence base is patchy. Cambridge's approach has been not to let this impede the making of recommendations, but rather to a) flag the issue, and b) recognise that the Learning Passport is trying to innovate, rather than repeat. Piloting, and the associated monitoring and evaluation work, will therefore be fundamental in due course and once components of the Learning Passport are complete.

As such, the Learning Passport project is also envisaged as a means of further research and evidence gathering.

Fourth, and to give additional weight to the output concerning digital (that is, concept-stage work around a digital platform to support the Learning Passport), the Cambridge team has undertaken a broader investigation into digital and EiE to ensure this work is on a firm footing. The research here has been more practical in nature.

## 2.4 Project principles (UNICEF)

UNICEF has developed a set of project principles for the Learning Passport, which are:

- ↳ Do no harm.
- ↳ Alignment with relevant frameworks and standards including Inter-agency Network for Education in Emergencies (INEE) Minimum Standards, Sustainable Development Goal (SDG) 4, the Global Compact for Safe, Orderly and Regular Migration, the Global Compact on Refugees, and the Comprehensive Refugee Response Framework.
- ↳ A global solution, but informed by national contexts and realities.
- ↳ Centrality of research and evidence; analysis should precede action.
- ↳ Strengthening existing national efforts.
- ↳ Equity and inclusion.
- ↳ Coherence with education partners and stakeholders.
- ↳ Designed in collaboration with education partners, stakeholders and users.
- ↳ Integrity, validity and flexibility.
- ↳ Ethical research approach.
- ↳ Best fit over best practice (don't let perfection be the enemy of the good).

## 2.5 Document overview

This final section of this introduction gives an explanatory overview of the Report, beginning with some wider research considerations and then describing what is covered in each section.

### 2.5.1 Wider research considerations

A major consideration for this Report has been the unusual nature of EiE as a field of research. A wide variety of different sources are examined in the review, reflecting the range of organisations and stakeholders involved in EiE, the relative youth and interdisciplinarity of the academic field of EiE, and the paucity of in-depth reporting on the practice, methodology and efficacy of specific EiE interventions.

As a general rule, detailed accounts and systematic analyses of curricula and their effects, failures, and successes in EiE contexts are sparse, and conclusions often have to be drawn from fragmented or anecdotal evidence. This is certainly partly explained by the fact that crises can be quick to develop, and frequently lack the data collection infrastructure necessary for rigorous monitoring and evaluation. However, it is still necessary to note the scarcity of comparable data, and the recognition by contributors to

the field of the need to develop an evidence base in relation to the theoretical work already going on (Barakat et al., 2013, p. 127; Burde et al., 2017, pp. 636–637, 645–646).

In spite of the relative absence of evidence, however, there has been a great deal of effort put into establishing the criteria and scope for what might constitute successful EiE, spearheaded by the minimum standards created by the INEE, founded in 2000. Activity in this arena continues to grow, and with more substantial records of what does and does not work beginning to inform new projects. How these sources and the literature surrounding EiE have been searched and included in this report is outlined in the methodology appendix (Appendix 1).

## 2.5.2 Report sections

The report that follows is structured into a series of sections. Section 3, the first section of the Report itself, titled ‘Education in Emergencies: Context’, offers an overview of research conducted into defining and characterising the current global state of displacement from an education viewpoint. The emphasis in this section is on identifying the challenges that the Learning Passport aims to tackle, and providing a fuller understanding of the particular dynamics and features of EiE. This includes research that both describes the characteristics of displaced learners in general, and the different challenges they face depending on context. This section also outlines educational interventions and solutions in contexts of displacement, and identifies where the implementation of the Learning Passport can learn from both more and less effective projects, instruments, and policies.

Section 4 explains how the SEL areas of the Learning Passport have been approached, and how they are framed in relation to MHPSS. This is supported by a literature review informing the discussion of these approaches.

Sections 5, 6, and 7 of the Report move beyond the landscape of EiE with respect to the Learning Passport, and into literature reviews of the different interlinked areas of the Learning Passport: Curriculum, Assessment, and Resources (TLMs). These are the key aspects of the Learning Passport itself as a coherent education model. Within each literature review, we first identify as great a consensus as possible within the general (non-EiE) academic literature regarding the optimal development and design of each of these Learning Passport components. Principles derived here are then refined and developed according to existing EiE evidence.

Section 8 covers potential digital support to the Learning Passport. It is important to emphasise that the Learning Passport is not conceived of as necessarily digitally reliant from an on-the-ground deployment perspective; but when and where digital support might make a difference to quality it is vital we define how.

The final core section of the Report (Section 9) summarises the findings from the above literature reviews, and draws from them the key recommendations for taking the Learning Passport forward. Some of these recommendations are drawn directly from pertinent and robust findings in the literature reviews, but – not unexpectedly given the nature of the field – the majority have emerged from a synthesising of multiple findings of differing relevance.

The recommendations are of two kinds. The first is the distillation of particularly important findings and evidence from the literature reviews, which point towards an essential need which the Learning Passport must meet in order to be successful. The

second recommends the approach we think is most likely to achieve success, extracted from multiple sources where the evidence does not plainly direct us towards a position. Importantly, both kinds of recommendation are limited in scope to defining and guiding the next steps of the Learning Passport project *in particular*.

## 3 Education in Emergencies: Context

### 3.1 Introduction

This section describes the challenges faced both by displaced learners and the education actors seeking to address them. While the section as a whole considers the characteristics of EiE provision and key areas of challenge, it first anchors the discussion in an examination of the diverse needs, aims and aspirations of the learners themselves. Prior to that, however, we highlight several more general contextual issues, which are pertinent to the planning and implementation of EiE in whatever context.

The first and most obvious point, which nevertheless cannot be overemphasised, is the need to recognise the multiple levels of heterogeneity involved in EiE. These include learners' diverse personal, family, and community histories and identities within and across population groups, as well as the varied geographical, socio-economic, and political contexts they have left, and those in which they find themselves (Ghaffar-Kucher, 2018).

Further differences relate to the temporality and status of educational disruption – from relatively short periods after a natural disaster to long-term escapees from years of civil strife. Since there is a strong and dynamic relationship between the socio-cultural and political environment and EiE learners' individual and collective needs, experiences, and aspirations, these multi-faceted contextual factors have major implications for the necessary diversity of provision of educational and other services, and learners' equitable access to and experience of them.

There is therefore a tension between this globalised agenda, epitomised by the Millennium Development Goals (MDGs) and SDGs, and the general top-down approach to development, managed through global guidelines and standardised quantifiable indicators, and the often very context-specific bottom-up approach that can take account of contextual specificities. Further, these processes of development can overlook local and community understandings and responses to crisis (Weinstein et al., 2007) and inadvertently position displaced learners as helpless beneficiaries of aid interventions – though see Dryden Peterson et al.'s (2017) accounts of Somali refugees' successful educational trajectories and Miletzki's (2019) account of the survival strategies and resourcefulness of Burundian refugees in Tanzania, which both counter the deficit discourse. In addition, the voices of displaced learners are often lost in the planning of interventions, even as many guidelines call for development initiatives to take account of the local context and pay heed to local voices (UNESCO, 2010).<sup>3</sup>

The vast majority of the estimated 79 million forcibly displaced people – according to 2018 figures from the United Nations High Commissioner for Refugees (UNHCR) – come from the Global South. Around half are under the age of 18, and well over half are internally displaced persons (IDPs), and of the estimated 30 million refugees and asylum seekers, around 80 per cent live in neighbouring countries. Therefore, the vast majority are hosted in the developing regions, which often may be the least prepared to provide

<sup>3</sup> Examples of approaches for mediating this problem exist, and the education-based MHPSS service provision to improve the mental health and wellbeing of learners and education outcomes introduced in Section 4 includes processes for accessing and responding to local voices from the planning stage and forward. For example, a recently developed method for engaging with a community around MHPSS-SEL service provision is the Community Readiness Assessment (CRA) model (Wells et al., 2019) which provides a snapshot of readiness for informing program implementation.

protection and services (UNHCR, 2019a), including education. The location of the majority of the world's forcibly displaced population means that attention should be paid to the evidence in educational literature on mainstream education in those countries, which can help inform development of the Learning Passport, alongside the EiE-specific research evidence.

## **3.2 Education in Emergencies: Learner backgrounds and needs**

### **3.2.1. Introduction**

Displacement contexts present a distinctive set of challenges to learners that manifest in complex ways and in different combinations. This sub-section contextualises EiE learner backgrounds and needs, recognising first and foremost that displaced children are not a discrete category, but experience diverse realities (Boyden & Zharkevich, 2018). It begins by anchoring the discussion in an examination of the aims of learners themselves, recognising that individual objectives and aspirations are hugely shaped by the opportunity structures available (or perceived to be available) to young people. Next it explores how the socio-economic characteristics of learners are shaped by their interactions across different socio-political spaces and points in time. This is followed by an examination of learners' access to services to meet basic needs, namely physiological and safety needs, and psychosocial needs. The next sub-section discusses the issue of language in the displacement context, with reference to its implications for identity and belonging. Disability and gender are examined in subsequent sub-sections, with a focus on the importance of an intersectional approach to these issues when considering their impact on access to education and learning in emergency contexts. Sub-section 3.2.8 concludes by noting how legislation and recognition shape learner environments. Short case studies showing where interventions have been implemented to meet the exigencies of children's education in particular emergency contexts are interspersed throughout the text.

### **3.2.2. Objectives, motivations, and aspirations of displaced learners**

As access to education in displacement grows in priority, the lives of displaced children and youth are increasingly shaped by the kind of 'emergency' education they receive, and the policies that guide it. Today, the field is driven by the objective of providing a sense of normality through routine, knowledge acquisition and skills acquisition, with the intention of providing children with improved life chances (Winthrop, 2011; Burde et al., 2017). EiE is commonly approached through the need for rapid restoration of conventional learning, with a secondary emphasis on the importance of psychosocial support (PSS) (Winthrop, 2011). Children in crisis situations consistently describe education as a priority: a review of 16 studies covering 17 different emergencies, ranging from conflict to protracted crises and disasters, found that of 8,749 children, 99 per cent saw education as a priority (Save the Children, 2015a).

However, it is important to note that emergencies may challenge conventional notions of education or learning. Children who are forcibly displaced by conflict face distinctive experiences that may shift the purpose and relevance of education (Bellino, 2018). Winthrop (2011) argues that the experiences of displaced children may mean that a more nuanced understanding of the purpose of education is required – one which takes into

account the specific outlook (objectives, motivations, aspirations) of displaced children. For example, in a study which examined children's views on learning in Afghanistan, in Ethiopia with Eritrean refugees, and among Liberian refugee students in Sierra Leone, Winthrop (2011) finds that children valued diverse forms of learning. While curriculum skills such as literacy were significant aspects of learning, students detailed the importance of other forms of learning for their self-making and aspirations. Refugee children included among their objectives a desire to fulfil social expectations, to be able to contribute positively to society, to earn money, and to be able to care for their families. These objectives are tied to the five pillars (life systems) of the Adaptation and Development After Persecution and Trauma (ADAPT) model that resonates strongly with the lived experiences of refugees in a range of settings and has promise for promoting wellbeing and resilience, reducing distress, bringing coherence to the sense of chaos, and increasing the adaptive capacities of refugees with varying levels of distress (Tay & Silove, 2017).

The learner objectives of displaced students may also change in contexts where children are exposed to distinctive insecurities, such as poverty and uncertainty. Given a global context where only 1 per cent of refugees pursue higher education, and where restricted employment rights continue to prevent displaced persons from accessing formal work, the purpose of education and the objectives and aspirations of learners are thus shifted and often disrupted. Displaced children and youth may experience a sense of 'waithood' (Dhillon et al., 2009, p. 12) and be forced to constantly re-imagine their futures as they navigate the long-term uncertainties created by displacement and compounded by national policies on migration (Chase, 2017). The literature finds that political and economic restrictions on permanent rights, employment rights, and further educational opportunities impact the aspirations and objectives of displaced learners (Chase, 2017; Bellino, 2018). Studies have also shown that informal learning objectives such as social interaction are undermined by the social tensions and discrimination that displaced children often face (Dryden-Peterson et al., 2017). These uncertainties intersect with the multiple other hardships experienced by displaced persons.

Reviews of the literature have found that displaced learners may also use their projected educational trajectories to seek to overcome uncertainty (Dryden-Peterson, 2017). Studies have shown that children can use their educational opportunities to challenge the limitations of their spaces and mobility. In a study in a Palestinian refugee camp, Marshall (2015) found that boys and girls used spaces in the camps differently. Female participants sought to challenge the cultural norms by which they were constrained, limited in mobility, and limited in social participation; they did this by focusing on their learning as a way of encouraging their parents and societies to invest in their education. Bellino (2018) also shows how the objectives of learning for refugee participants in Kenya were shaped by the need to use education as a pathway out of the camp, in pursuit of academic and economic opportunities elsewhere. Refugees perceived the ability to be educated as an affirmation of their self-worth in society. Thus, both studies found that educational opportunities allow children to challenge their limited spaces and trajectories.

Studies in this review persistently showed that the provision of opportunities can enhance the aspirations of displaced persons. For example, Bellino (2018) notes that displaced young people perceived citizenship as the key to escaping discrimination and poverty, and that they used their educational opportunities to pursue scholarships and further opportunities. Similarly, Dryden-Peterson et al. (2017), in their study with youth in Kenya, noted that refugees were able to connect with others and reduce their sense of

isolation by using mobile phones. Mobiles were also valuable tools for accessing knowledge contexts that were unavailable in camps. The use of mobile phones among refugee youth in Kenya reflects findings from other studies about the ubiquity in use of mobile phones by refugees: refugees use their phones to communicate with other refugees and often family members, to access information and to learn about services that are relevant to their daily lives (Thomas & Lim, 2010; Leung, 2010; Leung et al., 2009).

The gap between the purposes of education as conventionally conceived, and the distinctive needs of displaced children, point us towards the challenges displaced learners face in terms of learning environment, and their effect on the children themselves. These challenges manifest in different ways and in different combinations. The following sub-section highlights how different histories and experiences of displacement shape the socio-economic characteristics of learners, with concomitant implications for their learning and access to education.

### **3.2.3. Socio-economic characteristics of learners**

The lives of displaced families prior to, during, and following displacement are often navigated through hardships and insecurities. Some displaced children may experience trauma as a result of exposure to violence or conflict either in or while fleeing their home country, while many more must endure gruelling daily stressors in the context of displacement (Miller & Rasmussen, 2017). Daily stressors in displacement contexts include poverty, insecure livelihoods, food insecurity, lack of social capital, limited access to basic services, and informality of tenure (te Lintelo & Soye, 2018). These conditions impact the development and capabilities of displaced children in multiple and intersecting ways. As discussed below, socio-economic factors directly and indirectly impact displaced children's access to education and learning. Environmental stressors such as irregular or lack of employment may lead to social issues, including intrafamilial violence and intergroup tensions between displaced populations and host communities. These issues affect displaced children's learning and access to education in turn.

National policies often restrict refugees', migrants', and asylum seekers' access to formal employment, causing many families to fall into poverty and struggle to survive. Ulrichs et al. (2017) note that in Jordan, 99 per cent of Syrians work informally in highly vulnerable conditions. In countries where refugees are restricted from formal employment, families may be forced to remove their children from schooling in order to provide for the family (Dhingra, 2015; Al Akash & Boswall, 2016; Bellamy et al., 2017). A longitudinal welfare study of Syrian refugee children in Jordan's host communities by UNICEF Jordan (2017) found that children were major contributors to household income. As noted in sub-section 3.2.7 of this review, decisions about which members of the family should leave school to pursue work are usually highly gendered (Erden, 2019). In 2017, the UN estimated that 536,000 Syrian children were not attending formal education in Turkey, Lebanon, and Jordan (UNICEF, 2017b). Four million refugee children are out of school around the world today (Save the Children, 2018).

In Jordan, Syrian adolescents are shouldering the emotional burden of insecure livelihoods, with one female Syrian teenager noting that, 'I feel like all of a sudden I had to grow up – now I think like an adult, share their problems, worry about my parents, rent, financial situations, food, everything. In Syria, those weren't issues' (UNICEF & IMC, 2014, p. 24). Poverty affects children's health and development (Stevenson & Worthman, 2014), impacting their learning capabilities in turn. Poverty-related health

issues such as undernutrition can impact children's learning by influencing cognitive processes (Gómez-Pinilla, 2008), while early stress may have adverse effects on brain function, learning, and memory (Samuelson et al., 2010; Yasik et al., 2007). Brain and nervous system development in human infants during the first 1,000 days (conception to two years of age) is critical. Compromised development during this time (such as from undernutrition or poverty) can have lifelong effects on physical growth and cognitive function (Lloyd-Fox et al., 2017). Hirani (2014) emphasises the need for integrated health, mental health, and education programmes to meet the needs of internally displaced children residing in the disaster relief camps of Pakistan. These are children who are highly vulnerable to detrimental effects on their health, wellbeing, growth, development, coping, and learning, due to lack of needed services in relief camps that can sufficiently address their healthcare needs, rights, and all aspects of development.

Studies often note that the educational and economic backgrounds of parents may influence the likelihood of children attending school. In Somalia, a survey found that 70 per cent of mothers reported they had no previous education (Moyi, 2012). This study argues that the socio-economic status of mothers may have a direct impact on the likelihood of girls' continuing education (the gendered dimensions of access to learning and education in displacement contexts are further explored in sub-section 3.2.7).

Children's learning progress is also strongly affected by their social or relational wellbeing in displacement. The stresses of displacement, particularly economic insecurities, impact social wellbeing within the family in multifarious and insidious ways. Wells et al. (2016) note that lack of employment rights affects health outcomes and produces psychosocial outcomes that themselves become stressors. The constant precariousness of insecure livelihoods 'has a powerful governing effect on people, rendering them extremely vulnerable' (Horst & Grabska, 2015, p. 10); widespread unemployment is linked to an increase in mental health problems and suicide among Syrian men in Jordan and Lebanon (MercyCorps, 2015; Wells et al., 2016). Relatedly, reports of domestic abuse in the region, linked to depression and stress, are also on the rise (Achilli, 2015; te Lintelo et al., 2018). Studies show that parents' mental health problems during displacement can greatly hinder their children's abilities to achieve positive mental health and to integrate (Correa-Velez et al., 2010).

More than half of the world's 21 million refugees and 40 million IDPs are estimated to live in urban areas (IRC, 2016). For example, at least 85 per cent of Syrian refugees have settled in and around urban centres in Syria's neighbouring states (Achilli, 2015). Research shows that many urban refugee children face bullying, discrimination, and isolation from their hosts as a result of political tensions around refugee rights and national policies of segregation. Post-migration experiences of discrimination and neighbourhood disorder further exacerbate the risk of continued reduction in functioning and wellbeing, trauma and development of post-traumatic stress disorder (PTSD) (Perreira & Ornelas, 2013). In Jordan and Lebanon, for example, refugee population influxes place enormous strains on urban infrastructure, the housing market, public services, and employment opportunities (te Lintelo et al., 2018). These issues lead to intergroup tensions between refugees and hosts (Carrion, 2015; MercyCorps, 2015; Human Rights Watch, 2016; te Lintelo et al., 2018). In Lebanon, a curfew law prohibits Syrian refugees from being on the street at night, encouraging social isolation and further alienating refugees from their host communities (Chatty, 2017).

Studies note that humanitarian programming can also exacerbate social tensions between refugees and their hosts by providing support to refugees alone (MercyCorps,

2015; te Lintel et al., 2018). Although there is now almost universal recognition among international organisations that host communities are negatively affected by displacement, Shteiwi et al. (2014) find that specific item and service provision campaigns by organisations such as UNHCR are targeted overwhelmingly at refugees. Tensions in relation to aid provision affect refugee children's relational wellbeing: a female Syrian teenager in Jordan reported that Jordanians 'think we live off organizations and get everything for free – rent, food, cash assistance, thinking Syrians are on vacation and they don't understand how much we suffered' (UNICEF & IMC, 2014, p. 28).

In Jordan, social tensions are manifested in bullying between Jordanian and Syrian children; Syrian adolescents reported being blamed by their peers for the country's economic and social problems (UNICEF & IMC, 2014). Furthermore, double-shift schooling strategies in Jordan and Lebanon, whereby host children attend in the morning and, where possible, Syrian refugees attend in the afternoon (Deane, 2016), compound alienation and bullying. Numerous studies report that bullying occurs between school shifts (UNICEF & IMC, 2014; Guay, 2015; Stave & Hillesund, 2015; UNICEF, 2017b). Exposure to discrimination can leave parents and children weary of school, and hinder or completely disrupt children's learning, increasing school dropout rates and negatively impacting children's mental health (Dryden-Peterson, 2016). Exposure to discrimination, without PSS and opportunities for communities to exchange positively, can also reduce children's aspirations by establishing a negative perception of the future (UNICEF & IMC, 2014).

### **3.2.4. Access to services to meet basic needs**

Several studies have shown that the inadequate fulfilment of basic needs is a major challenge for displaced students. Two types of basic needs are recognised as fundamental to children's learning in displacement contexts, namely their physiological and safety needs (food, sanitation, shelter, etc.) (Al-Hroub, 2014; Hek, 2005; Karanja, 2010; Wells et al., 2016). Displaced children's access to services to meet physiological needs such as food and shelter is a critical determinant of the quality of their learning (Mason & Orcutt, 2018), while the concept of 'safety' recurs in the literature as a central feature of wellbeing, particularly for refugees (Williamson & Robinson, 2006; Ager & Strang, 2008; Rasmussen & Annan, 2010). Psychosocial wellbeing is also an essential need in terms of being able to manage daily stressors and to develop positive coping skills. In a report based on interviews with 28 teachers and facilitators from refugee and host communities in Bangladesh, Lebanon and Uganda, Save the Children (Mason & Orcutt, 2018) found

#### **Navigating insecure routes to school: WhatsApp groups**

In parts of Lebanon and Syria, child refugees and IDPs may be forced to cross insecure areas in order to reach school. In these cases, Alfarah and Bosco Paniagua (2016) find that parents use WhatsApp and SMS texting to communicate with their children and stay informed about their safety; teachers also use WhatsApp to inform parents about relevant incidents or security matters. Limitations to access or affordability of mobile phones are overcome through the pooling of resources within the community. Alfarah and Bosco Paniagua (2016) note that in refugee camps in Lebanon, a single device is sometimes shared among several tents. A group of parents may use one phone to keep in touch with their children, who may share another phone and travel in a group to get to their school or educational facility.

that the psychosocial wellbeing of refugee children is a significant issue thwarting their learning.

Whether these various types of basic needs are fulfilled or not in these settings has direct and indirect impacts on children's access to and quality of education. In conflict or disaster areas, conflict and insecurity can hamper children's access to education in direct and indirect ways. For example, schools may be attacked or destroyed (Mooney & French, 2005; UNICEF, 2015), while in other cases they may be used as shelter or for some other emergency purpose, as school infrastructure is often located in central areas. The route to school itself may be too insecure (Mooney & French, 2005; Alfarah & Bosco Paniagua, 2016; INEE, 2016, 2018; NRC, 2018). Where students do have access to schools, classrooms often become overcrowded, physical accessibility may be limited, and the lack of proper sanitation may result in drop out – particularly among girls (NRC, 2018; UNESCO, 2019a). Gender-based concerns for women and girls' safety are clear in a prevalence rate meta-study in complex emergencies (Stark & Ager, 2011). Innovative ways and the use of technology to reduce gender-based violence are important considerations in programme planning (Lilleston et al., 2018).

Challenges to access to education also exist in non-conflict contexts, usually as a result of physiological needs being unmet. In a quantitative study of internally displaced children in Turkish primary schools, Akar (2010) found that a number of physiological challenges, including malnutrition, poor hygiene, and unstable shelter, impacted children's schooling. These challenges, as Al-Hroub (2014) argues, can affect the motivation of refugee students and contribute to an increase in dropout rates as a result. Another example can be found in Karanja's (2010) study of the educational experiences of Sudanese refugee children in Nairobi, Kenya. This study shows that the provision of basic needs is not always guaranteed, and that lack of provision affects students' school attendance. Some students also reported experiencing anxiety due to the shortage of food and shelter, and school fees, which negatively influenced their ability to concentrate at school (Karanja, 2010).

As noted in sub-section 3.2.3, child refugees and displaced children are at significant risk of psychosocial problems because of adverse events, violence, forced migration, family separation, inability to access education services, and resettlement in unfamiliar environments (Fazel et al., 2005; Murray, 2019; UNESCO 2019b). Access to PSS in safe environments is found to promote resilience and school performance among refugee students (Murray, 2019; Oppedal et al., 2018). In displacement contexts, formal PSS programmes exist alongside other, more informal types of support. Informal institutions such as civil society groups and religious organisations are usually deeply connected to cultural and social norms, and are important wellbeing supports, particularly in times of crisis (Williamson & Robinson, 2006; Sumner & Mallett, 2011).

Religious organisations can act as pivotal forms of support for both spiritual wellbeing and local integration in contexts of displacement (Williamson & Robinson, 2006; Eghdamian, 2016; Fiddian-Qasmiyah, 2016). Although religion is often avoided by humanitarian organisations (Eghdamian, 2016; Eyber, 2016; Quosh, 2013), working with local faith groups can be fruitful, since 'their embeddedness in the community allows them to form meaningful relationships and networks grounded in trust and shared norms' (El Nakib & Ager, 2015, p. 11). Fiddian-Qasmiyah (2016) notes that when refugee women from Syria arrive in Jordan they often approach Muslim faith leaders for support, information and comfort, and mosques have often become a new safe space for

Syrian refugee women and girls to gather, learn and discuss their situations. Notably, many refugee men from Syria are found to avoid mosques, since they view faith leaders and mosques as being part of a political system which they do not trust. A Save the Children (2015b) study asserts that faith plays an important role in the lives of Syrian children in Iraq and Lebanon, with boys, in particular, often citing the mosque as a place to go for support. Though faith may be important in the lives of many persons, and often is tied to local religious institutions, it can be difficult for secular international non-governmental organisations (INGOs)/non-governmental organisations (NGOs) to know how to manage interactions with them. Quosh (2013) discusses this situation in the development of a UNHCR-sponsored MHPSS programme for urban refugees in pre-war Syria.

An emerging literature also finds that in contexts of displacement, technology, in particular mobile phones, plays a vital role in facilitating social support for displaced persons, though with these benefits also come potential risks for displaced children to be targeted through online bullying, grooming, and recruiting tactics. Leung (2010) indicates that the mobile phone is the most popular and familiar digital technology used by refugees. Research by AbuJarour and Krasnova (2018), Borkert et al. (2018), Dryden-Peterson et al. (2017), and Dahya and Dryden-Peterson (2017) make similar statements about the ubiquity and use of mobile phones. As noted in sub-section 3.2.2, refugees use mobile phones to support their daily lives; to sustain local and global relationships with friends and family; to maintain emotional wellbeing; to create new relationships and facilitate integration into host nations and to access employment opportunities, legal advice, medical help, and shelter. Thomas and Lim (2010) found that mobile phone use enhances wellbeing among migrants because it facilitates intimacy and communication with family and friends from their home and diasporic countries. Likewise, Leung (2010) and Leung et al. (2009) found that the availability, affordability, and access to mobile phones were essential for the emotional wellbeing of refugees. AbuJarour and Krasnova (2018) also acknowledge the capacity of digital technologies to maintain relationships with family and friends, and to foster refugee wellbeing.

These forms of informal support intersect with formal interventions in most contexts under consideration here. Formal MHPSS programmes are implemented by NGOs with the aim of protecting or promoting psychosocial wellbeing, and/or preventing or treating mental disorders in emergency settings (IASC, 2007). Often, SEL programmes present a specific line of programming in education settings under the PSS umbrella, and aim to build the social and emotional skills necessary for academic and life success. However, numerous challenges exist to the successful implementation and delivery of PSS and SEL.

Soye and Tauson (2018) identify key challenges for NGOs implementing PSS and SEL for Syrian refugee children in the Middle East, on the basis of interviews with practitioners working in the field, including lack of clear definitions of PSS in practice, 'top-down' understandings of psychosocial wellbeing, and a dearth of research into the effects of daily stressors on mental health. Other issues include limited and short-term funding cycles which threaten the long-term viability of programmes (Watters, 2007; Richardson, 2014; Soye & Tauson, 2018), inadequate wellbeing support or training for practitioners and teachers (Soye & Tauson, 2018), and failure to coordinate between PSS and other sectors of the humanitarian response (Abramowitz & Kleinman, 2008; Soye & Tauson, 2018). Compared to humanitarian programming in camps, cross-sectoral coordination can be particularly complex in urban areas (Sanyal, 2012; Al-Shdayfat, 2017).

Despite the importance of parental and community participation in PSS programming for children (Richardson, 2014; Wells et al., 2016; Soye & Tauson, 2018), the prevalence of stigma around mental health issues and towards the term ‘psychosocial’ in the Middle East means that parents may be reluctant to allow their children to engage in programming or to become involved themselves in SEL (Richardson, 2014; Soye & Tauson, 2018). Providing PSS to children in classroom contexts through the SEL channel may help to reduce this stigma. However, Soye and Tauson (2018) add that the provision of SEL in mainstream schooling in displacement contexts is often dependent on host governments’ perceptions of PSS and whether they consider education an appropriate medium for this type of support – or indeed whether such support is necessary at all. Other studies note that in efforts to meet the Inter-Agency Standing Committee’s (IASC, 2007) recommendation that PSS programmes be ‘culturally appropriate’, programmes often risk homogenising refugee groups and ignore their changing needs in the context of displacement. Summerfield (1995, p. 355) asserts that ‘war-affected peoples are often in fluid or evolving situations: with time, their perceptions and priorities may change, so their relationship with an NGO needs to be able to accommodate this’.

### **3.2.5. Language, identity, and belonging**

In many contexts of displacement, children’s learning progress is challenged by the need to adapt to a new context – a process not infrequently involving cultural tensions – and to learn one or more new languages (McFarlane et al., 2010). Specific examples reveal the extent of the academic and social challenges associated with language differences.

Firstly, empirical studies have substantiated that displaced children’s literacy level in the language of instruction (LOI) is crucial for their academic learning in the receiving countries (Aydin & Kaya, 2017; Brown et al., 2006; Save the Children, 2018). For example, in a qualitative study of Sudanese refugee adolescents in an English-medium school, Brown et al. (2006) found that participants’ limited literacy in English was a major barrier that prevented them from achieving academic success. In studies of Syrian children in Turkish schools the delivery of lessons in Turkish is cited as a challenge, because many refugee students are unable to understand the language and follow classes, and as a result, their academic performance suffers (Aydin & Kaya, 2017; Capstick & Delaney, 2016; Çelik & Içduygu, 2018). Moreover, as language is usually intertwined with learning, non-host children are also more likely to be viewed as intellectually deficient and therefore taught in a less challenging way (Bal, 2014; Thorstensson, 2013).

Language differences between home and school undermine the capacity of parents in displaced families to monitor their children’s schooling. Dryden-Peterson (2016) notes that some resettled refugee children arrive with families who have low literacy and educational attainment, and thus are not able to receive the same level of support at home as other children (though this is not a universal feature of refugee families). Lack of parental involvement in children’s educational experiences, which can be exacerbated by language barriers, can further disadvantage children’s learning and adaption processes, as has been demonstrated in displaced and diaspora communities in non-emergency settings (McBrien, 2011), and is anticipated to produce similar effects in emergency settings.

In addition to the challenges to their academic learning, the language barrier may also contribute to a feeling of marginalisation and rejection among displaced children, which sometimes results in their disengagement from school (Çelik & Içduygu, 2018). Many

displaced children struggle to form friendships due to language barriers (McFarlane et al., 2010). In an ethnographic study of Syrian children who had settled in the United Kingdom, Madziva and Thondhlana (2017) found that these children's limited proficiency in English hindered them from developing friendships with their new classmates and led to their isolation in the class. It is only when their English proficiency improved that these children became more capable of making new friends and integrating into the new school. McFarlane et al. (2010) note that while learning a new language may place further stress on displaced children, it can also create opportunities to re-build self-esteem and restore a sense of attachment and belonging (Jenaplan-Schule, 2011).

While displaced children experience considerable challenges due to their lack of host language proficiency, institutional support to overcome these language barriers is often lacking. For example, in a study into the educational barriers faced by Syrian refugee children in Turkey, Aydin and Kaya (2017) revealed that there is no supplementary language training for refugee students; this leads to them taking longer to overcome language barriers, and thus the gap between them and their peers widens. Institutional issues related to language support can persist even in contexts that are relatively monolingual, particularly in decisions over which language should be selected as the medium of instruction (MOI) in displaced children's schooling.

Dilemmas regarding the including or excluding dynamics of LOI mirror other issues surrounding access to learning. Refugees' home languages may be chosen as the MOI, especially when the refugee-receiving countries are less willing to include them in the mainstream society and to instruct them in the host country languages. Typical examples can be seen in the Temporary Education Centres (TECs) in Turkey (Çelik & Içduygu, 2018) and the refugee schools in Thailand (Oh & Van Der Stouwe, 2008). It should be noted that such policies may not necessarily be resisted by displaced populations themselves. For example, TECs have been found to be well received by Syrian refugee parents, as they believe that they will return to Syria in the future and hope that their children can be educated in Arabic (Ozer, et al., 2017). As noted by Dryden-Peterson (2016), the forms of access children pursue also reflect the kind of educational objectives that parents seek for their children.

### Maintaining cultural connections: Afghan refugee schools

In Pakistan, the government policy and a desire for return to Afghanistan shape the education options for the refugee children. Because Pakistan's education system significantly differs from that of Afghanistan, many refugee students study the Afghan curriculum. The International Rescue Committee (IRC) responded to pleas for support from Afghan refugee schools that no longer had the funds to provide programmes at an adequate standard. The IRC-supported schools now provide primary education for both refugee boys and girls, and secondary education (grades 7–12) for refugee girls. In addition, home schools were formed in more remote and/or conservative areas where there were not enough students to establish a school or girls were not allowed to leave their neighbourhoods. These home schools followed the same curriculum as refugee schools. The IRC-supported schools use the curriculum of Afghanistan's Ministry of Education to promote learning in the children's first language (Qahir & Kirk, 2007).

Some parents in displaced families may have a strong desire for their children to be educated in their home languages in order to maintain a connection with their heritage

cultures. While refugee children's host country languages influence their identity formation in the new learning environment, their home languages are closely related to the maintenance of their distinctive ethnic identities (Hatoss & Sheely, 2009; Sporton & Valentine, 2007). As revealed by Hatoss and Sheely's (2009) mixed-method study, Sudanese-Australian refugee youth regarded their home language as an important asset to keep them 'valuable' (Hatoss & Sheely, 2009, p. 140) and give them confidence in the distinctiveness of their identities. Moreover, these refugee children were also found to use their home languages in the domain of family and local community, suggesting that their home languages were the prerequisite for them to socialise with people from their home country. Better understanding of the connection between language and cultural identity for children and adults who need to manage two or more languages in daily routines has informed the approach to and importance of cultural information in mental health diagnostic and treatment processes (American Psychiatric Association, 2013).

Burde et al. (2017) show that informal spaces that are used to teach refugees' home language or religious schools may be important to address safety, gender and cultural norms, and the psychosocial needs of children. In spite of these benefits, there is a risk that children who receive learning in informal spaces stay disconnected from mainstream education and society. Specifically, as Çelik and Içduygu (2018) point out, these children are likely to be educated in a separate educational system in which their learning materials, teachers, and assessments are different from those of their counterparts in mainstream schools. Nonetheless, as host country governments usually do not have sufficient funds to support the development of a separate educational system, these children are less likely to receive quality education. For example, Ozer et al. (2017) found that the Turkish courses provided by TECs were very basic and could not equip refugee children with the literacy needed to succeed in the host society.

Admittedly, such isolation from mainstream society might not be problematic if children eventually return to their home countries. However, the future for refugees usually remains very uncertain. While prior attention has often focused on children returning home, and their identities as citizens of their countries of origin, returning home is often no longer an option for the majority of displaced people today as the nature of contemporary conflict and displacement is prolonged (Dryden-Peterson, 2017). This increasingly prevalent problem is reflected in the Global Compact on Refugees (United Nations, 2018), where there is a clear statement that local integration must be part of the social and political repertoire of responses to displacement crises (pp. 19–20), and the Global Compact for Safe, Orderly and Regular Migration's emphasis on 'inclusion' (United Nations, 2019, p. 25). The question remains whether the long-recognised educational value of mother-tongue-based and multilingual education, particularly for early years learners (Ball, 2010), can be preserved within approaches that prioritise integration into host country systems.

### **3.2.6. Disability and special educational needs**

The challenge of access to education for children in contexts of displacement intersects with and is exacerbated by disability. Globally, one in 10 children have a disability (IASC, 2019, p.2), and UNHCR estimates that 10 million (out of 65 million) forcibly displaced persons in 2016 have a disability (Bešić et al., 2018). In Jordan and Lebanon alone, 30 per cent of refugees are estimated to have a disability (Bešić et al., 2018). Yet beyond these basic numbers, little is known about the educational experiences and educational attainment for children with disabilities affected by displacement. While

research in the field of medicine and mental health has begun to highlight the needs of children with disabilities in emergency settings (Cardozo et al., 2004; Mollica et al., 2004; Murthy & Lakshminarayana, 2006; Betancourt & Williams, 2008), there remains a huge gap in understanding these children's learning experiences and educational needs. Current studies highlight the basic challenges affecting the learning outcomes of children with disabilities in conflict-affected settings, including inaccessible facilities, lack of teacher training, socio-economic factors, and violence. However, these challenges are often approached through educational initiatives that view people with disabilities as a homogenous group, disregarding the specificities of type of disability. In reality, research evidence shows that the type of disability also impacts different opportunities and outcomes.

For example, a study by Trani et al. (2012) analyses the results of a nationwide survey conducted in Afghanistan in 2007 to portray the complex factors that limit access and learning for children with disabilities based on disability type. The survey shows that the proportion of children without disabilities accessing school is almost twice as high as the proportion of children with disabilities. Notably, the study finds that children with mobility problems are the most likely to attend school and continue primary and secondary school in Afghanistan. Children who suffer from seizures, children with sensory difficulties, and children with learning difficulties or emotional problems are least likely to access schools and most likely to drop out.

Similarly, a survey in Iraq shows that children with mobility impairments are most likely to be in school, while children with mental health difficulties were less likely to attend, and children with both functional and health difficulties were least likely to attend (Alborz et al., 2013). Researchers suggest that children with physical disabilities may be most likely to attend school as they are viewed as least difficult to manage and are therefore more accepted (Bešić et al., 2018). In addition, cognitive disabilities are more difficult to identify, and teachers may lack the training and support needed to respond to the needs of children with cognitive difficulties (Trani et al., 2011).

Studies find that girls are most likely to drop out around the time of puberty due to a combination of socio-cultural factors such as forced marriage, overprotection, fear of harassment, and the low value placed on education by their families. These issues intersect with the challenges faced by disabled female students. Research by Trani et al. (2011) thus finds that in Afghanistan, the literacy rates for girls with disabilities was 43 per cent compared to 76 per cent for boys with disabilities. Notably, the study also finds that after the age of 14, there was little difference between boys' and girls' literacy rates.

School structures are less likely to integrate children with disabilities due to infrastructural barriers such as inaccessible buildings and classrooms. For example, a report by Human Rights Watch (2016) finds that public schools in Jordan lack necessary facilities for children with movement-related disabilities. In four out of five cases, Syrian parents of children with multiple disabilities reported that they could not enrol their children, or did not attempt to because they assumed they would be rejected. Children with disabilities living in rural areas are less likely to attend schools due to distance and costs of transportation, as they may need their caregivers to accompany them on the school journey. In Afghanistan, children with disabilities from rural areas were 1.7 times less likely to attend school than in urban areas (Trani et al., 2012). Additionally, studies note that children with disabilities are more likely to be separated from their caregivers during conflict, as parents and caregivers may need to make difficult choices should they be forced to flee (Rohwerder, 2013; Bakhshi et al., 2018).

Despite the prevalence of disability in emergency settings, and its intersectionality with other factors such as gender and poverty in limiting children's access to learning, displaced children with disabilities continue to remain invisible in the education discourses of receiving countries as well as those of many humanitarian programmes. Studies show that access and learning for children with disabilities is limited by negative perceptions, as these children may 'face a lack of expectations not only by their parents, teachers and wider community, but also by the agencies tasked with reconstructing and developing the education sector' (Trani et al., 2011, p. 1,201). International law has yet to translate into planning due to issues of stigma and negative attitudes, often leaving children with disabilities invisible in education programmes in emergency settings. It is argued that less pressure is placed on nations to demonstrate achievements for providing quality education to children with disabilities due to current cost–benefit approaches regarding funding and planning (Trani et al., 2011; Miles, 2013). Negative attitudes and stigma may also permeate into communities and schools, leaving children vulnerable to harassment and further exclusion (Bešić et al., 2018).

These socio-political forms of exclusion have implications for the psychosocial wellbeing of children with disabilities. In a study in Darfur, Sudan, Bakhshi et al. (2018) found that children with disabilities were at higher risk of poorer psychological wellbeing, particularly those children with behavioural and mood disorders, as well as associated disabilities. In addition to the poor wellbeing that children with disabilities may experience, a particularly important but overlooked issue is the trauma inflicted by disabilities suffered during conflict. Participants in a study in Sri Lanka noted that acquiring a disability during conflict led to a sense of further marginalisation and trauma, as people became victims not only of conflict but also of the lack of support available for people with disabilities (Samararatne & Soldatic, 2015). This is why – as is investigated further in Section 4 – it is so important that wherever and whenever possible the range of children reached by SEL programmes includes those with explicit mental health needs.

### **Supporting mothers of children with disabilities: Caritas initiative in Nepal**

In refugee camps in Nepal, an initiative by the international NGO Caritas brought together 55 Bhutanese mothers of children with disabilities for a one-month training on family planning and care-giving skills. Mothers continued to support each other after the completion of the training: Mirza (2011) notes that the women 'organised their own support groups to address needs beyond the scope of the original training, such as development of a communal savings and credit programme'.

While research and interventions addressing the direct needs of learners with disabilities appear absent, studies also illustrate the emergence of local and community-based initiatives and their role in helping individuals with disabilities fight marginalisation in contexts of conflict. Notably, these initiatives reveal that people with disabilities in conflict-affected settings continue to lack access to even basic services, such as medical and food programmes. For example, in camps in Thailand, a self-help group was created by women with disabilities to help families with disabilities access improved facilities, to learn about their basic legal rights and protections, and to access financial support made available to them (Samararatne & Soldatic, 2015).

### **3.2.7. Gender**

Conflict can disrupt the education of boys and girls due to the destruction of security, infrastructure, and economic stability. However, studies show that factors which impede children's learning are often deeply rooted in socio-economic and cultural norms that existed pre-conflict, which are further exacerbated by conflict and displacement. In conflict-affected settings, gender interacts with geographic, economic, and socio-cultural factors to shape young people's lives in complex and intersecting ways.

Research has shown that displacement-related insecurities and the lack of economic opportunities available to displaced families can have negative implications for gender roles, disrupting children's learning. For example, many studies have found that child marriage increases when displaced families are unable to meet their basic economic needs, are unable to envisage stable futures, and are also concerned over the security of their daughters due to the harassment and bullying that refugee children face (Crivello et al., 2013; Marshall, 2015; Arab & Sagbakken, 2019). In Jordan and Lebanon, the concerns of many Syrian refugee families for the safety of their daughters has led to an increase in marriages of young adolescent girls (UNICEF & IMC, 2014; Stave & Hillesund, 2015; Al Akash & Boswall, 2016; Hassan et al., 2016). Additionally, conflict affects family structures and the responsibilities that children may take on (INEE, 2016; Frisoli et al., 2019). The degree and perceived disruption of established family roles as well as patterns of attachment are important areas of focus in trauma-informed mental health services for refugee and other displaced populations (Silove, 2013). In Somaliland, mothers became income generators due to the absence of men who were killed or had fled, and therefore relied on girls to work at home (Burde et al., 2017). Similarly, while the Syrian refugee crisis has created a shift in gender roles with the entrance of women into the labour market, girls have become the ones who must assume responsibility for household duties (DeJong et al., 2017). The involvement of girls in domestic responsibilities can lead to school absenteeism (Dryden-Peterson et al., 2017).

Research shows that boys are often given the responsibility of providing for their families and have to pursue economic opportunities at the expense of the continuity of their education (Marshall, 2015; INEE, 2019, pp. 11–12). In Turkey, where Syrian refugee families make insufficient income to cover their daily expenses, the patriarchal structure of both Syrian and local Turkish communities jeopardises schooling for boys, given the belief that the breadwinners should be male members of the family (Erden, 2019). In a study with Somali refugees in Kenya, participants who successfully completed secondary education heavily relied on parents who supported a change in gender norms, a network of supportive peers and teachers, and technology resources that helped provide skills and support through more flexible systems (Dryden-Peterson et al., 2017). Here, age also appears as a significant factor affecting learner characteristics, as both boys and girls who enter adolescence are more likely to experience pressures related to gender norms (Crivello et al., 2013). Girls are more likely to be in school before puberty due to socio-cultural norms attached to age, and the threats of sexual harassment and violence within conflict-affected settings (Landis et al., 2018; Burde et al., 2017).

The geographic location of schools has gendered impacts on children's access to learning. For example, girls living in rural areas are less likely to attend education (Burde & Linden, 2013; Burde et al., 2017). Furthermore, Burde et al. (2017) show that girls from poorer families living in rural areas are mostly excluded from education, a finding supported by research by Landis et al. (2018) across 14 sites in South Kivu, Democratic Republic of Congo. The study by Burde and Linden (2013) finds that for every extra mile

of distance to school in Afghanistan, girls were 19 per cent less likely to attend school. The study also analyses the impact of an initiative that placed schools in villages in Afghanistan. The initiative was found to increase girls' enrolment rates by 52 per cent, nearly eliminating gender disparity in these villages.

Evidence has shown that distance to school hinders learning attainment due to security issues, cost of transportation, and the number of hours girls spend outside of the home. Due to the breakdown of security systems in conflict-affected settings and the heightened risks of abduction and harassment, parents become more concerned about girls' journeys to and from school (Burde et al., 2017). Recent forms of attacks have targeted girls' education, such as the Taliban in Pakistan or Boko Haram's abductions in Nigeria. Furthermore, research has shown that harassment and sexual violence around school spaces or on the way to schools may deter girls from being able to attend school (Burde et al., 2017; Landis et al., 2018; DeJong et al., 2017).

### **Increasing access to girls' education in remote areas: Community or 'village-based' schools**

In 2013, the Afghanistan Ministry of Education initiated a 'village-based' schools scheme to target vulnerable and remote populations in Afghanistan. Community schools make use of multi-purpose facilities, or existing buildings that have other primary purposes. They also seek to employ teachers who already live locally, to better integrate education systems with community life. They tend, too, to have a more flexible approach to grades with children of different ages being taught together, depending on the demographic spread in the village, and boys and girls may even be taught in the same class. As mentioned above, a study by Burde and Linden (2013) found that the initiative increased girls' enrolment by 52 percent. However, the study also notes that, 'compared to traditional government schools, the major challenge for village based schools is quality. They serve a smaller number of students, and are taught by locally educated individuals usually with less than 12 years of education. Their remote locations make monitoring difficult' (Burde & Linden, 2013, p. 30).

The socio-cultural norms of the host society may influence parents' decisions to send their children to school or not. For example, a study found that some Syrian refugee families in Lebanon did not allow their daughters to attend school, as they considered Lebanese society more liberal than their own, and were concerned about the influences their daughters would be exposed to at school (DeJong et al., 2017). Furthermore, various socio-cultural factors both within and around schools comprise gendered pathways or barriers to children's access to learning. For example, studies have shown that the presence of female teachers may increase girls' likelihood of attending school. However, conflicts also impact the availability of female teachers. A study shows that a large percentage of female teachers fled the conflict in Somalia, leaving only 15 per cent of the original total in the country (Moyi, 2012). Importantly, a review of literature by Burde et al. (2017) shows that if parents are formally introduced to a male teacher, the teacher's gender may no longer reduce girls' likelihood of attending primary education. The many culture-based and gender-based concerns raised in these studies would be important to map in preparatory work done for establishing MHPSS-SEL components in future programming (Wells et al., 2019).

Numerous studies also show that school facilities may leave girls vulnerable to gender-based violence. For example, many schools within conflict-affected settings lack separate

sanitation facilities, leaving girls more vulnerable to harassment and sexual violence (Moyi, 2012; Burde et al., 2017). Additionally, as conflict may disrupt the education of children for years, schools may integrate children of different ages. Studies have noted that parents may be hesitant to allow their girls to attend classrooms where older boys may be present (Burde et al., 2017).

As noted elsewhere in this section, where formal education is inaccessible, access to education may be provided through informal and non-formal programmes. These settings create gendered benefits and limitations for displaced children. An example of a study in Somalia found that Qur'anic schools have been the main providers for early education due to their flexibility in hours and structures (Moyi, 2012). The study also notes that because these schools are owned by communities that donated land, built schools, and maintained them, schools continued to function during conflict. Unfortunately, these schools also lacked sufficient facilities such as desks, latrines, and trained teachers, though the study notes that these schools were more widely accepted due to their flexibility in meeting children's needs.

### 3.2.8. Legislation and recognition

Where displaced learners remain within their origin country's border as IDPs, their national government remains responsible for education provision. Once people have crossed a border, they may become refugees. Under the 1951 Refugee Convention, signatories are obliged to extend primary education to refugees, and the same principle is reflected in the UN Convention on the Rights of the Child (United Nations 1989); all children residing in a territory should be treated equally (Hart & Kvittingen, 2016). Many countries with large refugee populations are not signatories to the Refugee Convention (Buckner et al., 2017); however, non-signatories to the Convention may have signed other human rights treaties that are relevant to the protection of refugees, such as Lebanon. Notably, countries may have signed the Convention but fail to implement it at the domestic level.

Political unwillingness to allow asylum seekers to remain in host countries, or reluctance to introduce rights-based policies for refugees, can often be explained by a lack of state capacity to support both host and refugee populations. This is particularly true in developing countries, where Grabska and Mehta (Eds.) (2008, p. 4) note that 'rights-based approaches may place significant strains on the institutions of receiving areas'. In cases where countries have a history of hosting large refugee populations, governments may be reluctant to admit new populations or to encourage their integration. Jordan, for example, has a long history of hosting Palestinian refugees and there are currently more than 2 million Palestinians in the country (UNWRA, 2019). The influx of Palestinian, and more recently, Iraqi refugee populations, has placed enormous pressures on the country's urban infrastructure and services. This has led to a reluctance to treat the new population of Syrian refugees as anything more than temporary guests (Lenner & Schmelter, 2016). Such political indecision has enormous implications for the lives of refugees, particularly for their wellbeing and integration (Watters, 2010).

In this legislative and political context, where refugees are often deprived of legal rights and status, host governments can act as impediments to delivering safe and quality education. Guidelines such as the Global Compact for Safe, Orderly and Regular Migration, which provides education to people crossing borders, are only useful if national authorities take the responsibility to implement them (United Nations, 2019). In Turkey, Syrian refugees can face delays of six months or more to obtain the

identification card that is required for children to enrol in public schools (Human Rights Watch, 2016). Education is not only made more accessible via the lowering of legislative and political barriers; it can itself become a means of enhanced mobility and admission. The Global Compact on Refugees (United Nations, 2018) places the forms of admission and migration facilitated by education within the context of ‘complementary pathways’: scholarships and student visas are named (p. 19), but an improved wider educational environment will similarly support this goal. A crucial component of this is the recognition of certificates and diplomas by host governments. Host governments may not recognise particular education certificates, thus placing restrictions on refugees’ access to continued education (UNICEF, 2015; Zeus, 2010). Furthermore, refugee children often lack birth certificates, which affects their access to education; these may have been left in the country of origin (COO), or, for children born in the displacement context, families may have been unable to obtain one from the government because of their family books being unavailable (UNICEF Jordan, 2017).

An important point related to recognition pertains to the collection, analysis, management and storage of data and information about EiE generally. While internationally recognised definitions of refugee and IDP populations attempt to establish a legal position for displaced persons, data are not always collected according to the legal definitions, and IDPs may become refugees if they cross a border (Sarzin, 2017). Governments tend to capture displacement data through censuses in developed countries (Eurostat, 2018a), while United Nations (UN) agencies and NGOs that collect data on refugees and/or IDPs in developing countries include the UNHCR, the International Organisation for Migration (IOM) through its Displacement Tracking Matrix (DTM IOM, 2019) and the Internal Displacement Monitoring Centre (IDMC, 2019). IDMC has tracked internal displacement due to conflict since 1998, adding displacement due to disaster in 2009 (Ellison & Smith, 2013). Meanwhile, the Joint IDP Profiling Service (JIPS) is an inter-agency service working with governments and humanitarian and development actors to produce displacement-related data (Sarzin, 2017; Eurostat, 2018b). UNICEF presents data from UN Department of Economic and Social Affairs (UN DESA) and the UNHCR related to migration, including forced migration specific to children (IDMC, 2019).

Nonetheless, there is a lack of comprehensive displacement data due to different terminologies, concepts, and methodologies of data collection and presentation (Sarzin, 2017; Eurostat, 2018a; IDMC, 2019). While data in camps are standardised and regularly collected, most displaced individuals live outside formal settlements or in urban areas where they are difficult to reach (UNESCO, 2019a; te Linteloo & Soye, 2018). Many refugees do not register with UNHCR: for example, according to government estimates in Lebanon, as of 2017 around half a million Syrians in the country were not UNHCR-registered (Government of Lebanon and United Nations, 2017). To support governments and agencies in collecting standardised data, profiling methodologies for displaced populations in urban areas have been developed, in addition to general guidelines to determine vulnerability of different groups (Jacobsen & Nichols, 2011).

Urban profiling methodologies include urban context analysis (International Rescue Committee), city and neighbourhood profiles (UN-Habitat), displacement profiling (JIPS), and city-wide assessment (World Vision) (Campbell, 2018). ‘Area-based approaches’ are now an important form of response to urban crises, which work by defining an urban area, rather than a sector or target group, as the main entry point for humanitarian and development intervention (IRC, 2015). te Linteloo and Soye (2018) note that while area-based approaches offer a potentially equitable approach by covering

vulnerable groups that live in close proximity, in reality many displaced groups may be dispersed across broad urban areas, living in various forms of rented, hosted, and shared accommodation. These structural issues relating to data and information-gathering impact our ability to fully understand and characterise the particular conditions of displaced learners.

Compounding these issues, the low priority frequently given to education in response to emergencies can impede effective responses. Donors often do not consider education as priority assistance during the emergency phase of displacement (Anderson, 2009; Crea, 2016), while there are many competing priorities to be considered by service providers as well. There is a significant lack of funding available for education (Culbertson & Constant, 2015; UNESCO, 2019a); where funding is available, it often has short or inconsistent spending timeframes (Anderson, 2009; Crawford et al., 2015; Watters, 2007). However, there is mention in the literature of a focus by international organisations on bridging the gap between humanitarian aid and development aid in education (Mendenhall, 2009).

### **3.3. Education in Emergencies: From curriculum to classroom and beyond**

#### **3.3.1. Introduction**

The Learning Passport seeks to make a specific intervention into the environment described in the previous part of this section (3.2), with its distinctive set of challenges both for learners and for the delivery of quality displacement-appropriate education. In particular, the Learning Passport is focused on understanding how curriculum frameworks, resources, and assessment and accreditation can be brought together to help deliver such an education. Evidence for, and research into, the importance of this particular triad of educational ‘components’ is outlined in more detail in the following sub-sections. Specifically, the literature reviewed explores the issues and challenges related to: infrastructure and facilities; curricula, associated pedagogies and learning materials; assessment and accreditation; teachers and their training and professional development needs; teacher and student; and in contexts of displacement or emergencies, in order to identify what has and has not worked effectively in delivering different kinds of output in these contexts. We also draw on some of the relevant general literature on the educational challenges in less well-resourced countries, since many are common to educational provision for forcibly displaced populations.

Before offering any in-depth discussion of the specifics of educational provision in EiE, there are several key general points to be made. First is the importance of the socio-political environment in which education takes place. As Weinstein et al. (2007, p. 44) concluded, following their research into education in four post-conflict societies (Croatia, Kosovo, Bosnia and Herzegovina, and Rwanda): ‘curriculum development is a complex process that occurs within a confluence of social and political dynamics’. Therefore, for curricular change to be successful in conflict-affected contexts, development actors need to recognise that education systems are historically produced and deeply embedded in dynamic and complex socio-political contexts (Tawil & Harley (Eds.), 2004; Davies, 2011; Lopes Cardozo & Hoeks, 2015). This means that the ambitious aims for schools of building tolerant, inclusive societies and enabling healing from conflict will fail if the socio-political environment, which includes governments and communities, is not

supportive (Tawil & Harley (Eds.), 2004; Weinstein et al., 2007; Lopes Cardozo & Hoeks, 2015). Smith and Vaux (2003) also highlight the need to pay attention to educational governance, while Smith (2010) points out that greater awareness of the multi-faceted and complex nature of bringing about educational reform and/or implementing interventions has led to development actors in conflict-affected contexts to include political economy analyses prior to making interventions (Smith, 2010).

Second, and related to this, is the fact that education itself in both the formal and informal curriculum is an inherently political process (Bush & Saltarelli, 2000; Ghaffar-Kucher, 2018), concerned with power (Foucault, 1977; Apple, 1982) and identity (Tawil & Harley (Eds.), 2004; Weinstein et al., 2007). Thus, planning and implementing an education programme, in whatever circumstances, is never merely a neutral technical process about choice and implementation of curricula (Smith & Vaux, 2003; Ghaffar-Kucher, 2018) since curricular decisions have implications for what knowledge is included and valued, and whether learners are trained to be passive consumers of ‘facts’ in transmission-style pedagogies and summative assessments, or critical thinkers. The choice of language (or languages) of instruction, as is illustrated elsewhere in this report, is a case in point.

The provision of EiE is generally considered to be a benign good, or at the very least a neutral intervention (Bush & Saltarelli, 2000; Smith & Vaux, 2003). Evidence of this has been provided by various stakeholders (parents, teachers, children, donor agencies), in a number of conflict-affected situations, who relate how schools have sheltered learners from external abuse and harm, providing knowledge and skills that may be used to gain employment, and can provide a feeling of normality and sense of purpose for children (Winthrop, 2011; Mendenhall et al. 2015; Mason & Orcutt, 2018).

However, it is less often acknowledged how education can exacerbate tensions and help fuel conflict (Bush & Saltarelli, 2000; Smith & Vaux, 2003; Burde et al., 2017), though education’s relationship with conflict is complex and contextually specific (Bush & Saltarelli, 2000; Smith & Vaux, 2003; Davies, 2011; Burde et al., 2017). Since state education is about state-building and creating desirable citizens, it is also often a homogenising force; hence, more often than not, formal education systems reproduce social hierarchies and inequalities, through promoting dominant cultures and languages, while marginalising and/or denigrating others, and through competitive and highly selective examination systems (Bush & Saltarelli, 2000; Davies, 2004; Benson & Kosonen (Eds.), 2013). This is as important to bear in mind for refugee education, where the trend is increasingly to integrate refugees into existing formal education systems (Ghaffar-Kucher, 2018), as for IDPs, especially when educational marginalisation or discrimination may have been a root cause of their displacement in the first place.

Regarding education, and formal education in particular, Bush & Saltarelli (2000, p. v) point to the ways in which educational systems ‘can be manipulated to drive a wedge between people’ by politicising identities in ways that allow cultural differences to become the basis of conflict. Using Kosovo as an example, they explain how:

‘...to counteract Albanian attempts to affirm their minority national identity, the Serbian government adopted a policy of assimilation, eliminating teaching programmes in the Albanian language and introducing a unified curriculum and standardized textbooks across the country, measures that many blame for the ensuing strife.’ (p. 5)

More obviously, schools can also be sites of physical and emotional violence (Harber, 2004; Leach & Mitchell, 2006), ranging from unregulated corporal punishment to bullying ‘teasing’ and exclusion by either fellow learners or teaching staff. At the same time, as Smith and Vaux (2003) emphasise, there is need to look beyond the visible impacts of education in conflict, and analyse policies and practices at all levels in terms of their potential to aggravate or ameliorate conflict; these include the formal and informal actions of the classroom setting.

### **3.3.2. School infrastructure and access to resources**

For many, a classroom, or at least a secure dedicated space for learning, is a prerequisite for formal education to take place. In conflict or disaster areas, schools may be attacked or destroyed (Mooney & French, 2005; Vanner et al., 2019), or become a recruiting ground for militant activity (Human Rights Watch, 2015), or even military camps or arms depots (Vanner et al., 2019). In other cases, they may be used as shelter or for some other emergency purpose, as school infrastructure is often located in central areas (Ferris & Winthrop, 2010). Where students do have access to schools, whether inside or outside camps, classrooms often become overcrowded and physical accessibility may be limited (NRC, 2018; UNESCO, 2019a). The absence of a safe perimeter is a particular security concern for staff and students both in conflict and non-conflict contexts, particularly in urban areas. Inevitably, infrastructure and facilities vary greatly between and within country contexts, especially for IDPs, and with notable differences between rural and urban locations, where rural schools’ infrastructure is almost always of inferior quality.

Sound school infrastructure is often taken to be a prerequisite for educational quality, and an incentive to attract children to go to school – irrespective of the reality of the quality of teaching or learning. Although not specifically directed at EiE, the six-country evaluation of UNICEF’s child-friendly school (CFS) programme (UNICEF, 2009) has relevant lessons for the child-friendly spaces approach, which has been adapted for refugee EiE situations. Considering the programmes in Nigeria, South Africa, Thailand, Philippines, Guyana, and Nicaragua, the evaluation report cautioned that ‘although having well-built, safe schools that provide comfortable learning environments is important, this alone is not sufficient to make a school child-friendly’, noting that ‘school architecture and architectural features do not predict school climate’ (*ibid.*, p. 126). What is more, despite the huge initial investment (infrastructure and resources constituted two thirds of project budgets) schools in poor-income areas struggled to maintain the buildings. Studies on teacher motivation in Sub-Saharan Africa and South Asia have shown that poor school infrastructure and lack of access to basic facilities – characteristic of many refugee camps too – are often cited as reasons for the difficulty in recruiting and retaining qualified teachers, especially in rural areas (Bennell & Akyeampong, 2007; Adedeji & Olaniyan, 2011). Since poor facilities are detrimental to teacher morale, they also impact negatively on student learning (*ibid.*), while the physical environment of child-friendly spaces has also been pointed out, in a study in Uganda, to exert a psychosocial impact on ‘children’s perception of safety’ (Frisoli et al., 2019, p. 5).

Lack of power and internet connectivity often characterise educational facilities in conflict-affected contexts (Lehne et al., 2016), though where they function, they facilitate important social interactions, connecting displaced persons with family and friends in other locations (Dryden-Peterson et al., 2017; Fisher & Yafi, 2018). Yet many regions hosting displaced persons in Africa and parts of Asia remain ‘underconnected’; as a recent UN report warned, ‘there is a yawning gap between the underconnected and the

hyper-digitalized countries', which has the potential to 'widen further and exacerbate existing inequalities' (UNCTAD, 2019, p. 3).

The absence of a reliable power source and internet connectivity impacts on student learning in various ways. There may be insufficient light for children to see the chalk board on overcast days, or to do homework at night, which is a necessary supplement if educational provision is only a limited number of hours a day. Even where theoretically there is power, connectivity can be intermittent. One of the major obstacles for mobile-phone teacher education support initiatives in rural Mexico, Nigeria, Senegal and Pakistan was that in all countries, a lack of a reliable signal had a detrimental effect on the projects' effectiveness (Fengchun et al., 2017).

### **3.3.3. The curriculum**

#### **3.3.3.1. What is included in the curriculum?**

The word 'curriculum' is often used interchangeably with 'syllabus', namely the 'what' in terms of content that is covered in educational institutions. Sabella and Crossouard (2018, p. 717), in their analysis of primary schooling in Jordan, make the point that 'curriculum' should be conceptualised as not just the 'specification of knowledge to be learned', but also as a container for 'messages about *how* that knowledge should be learned' (italics added). Curricula should be seen as integral and indivisible from other aspects of the school ecosystem, such as teacher ability, the physical infrastructure of classes, and students' educational experiences. Since the curriculum (in the broadest sense of the term) has such a significant impact on the access to, equity within, and quality of EiE contexts, understanding the implications of curricular decisions made in these fields is essential.

#### **3.3.3.2. What kind of curriculum?**

In her background paper for the 2019 'Global Education Monitoring Report', Ghaffar-Kucher (2018, p. 18) comments that those involved in schooling for displaced children rarely address the political nature of state schooling, but 'instead focus on what curriculum to use, and even here there is tension'. The two choices that are generally considered are whether refugees should study the curriculum of their COO or that of the country of first arrival (COFA), though in reality there are often other options (Chelpidien Hamer, 2011).

When it is anticipated that the amount of time that refugees would remain in countries of first asylum will be small, there are clear pedagogic and psychosocial advantages to continue to follow the curriculum of the COO. As Bensalah (2000) notes, this so-called 'education for repatriation' would make the eventual re-entry process much simpler and less stressful. However, even if there are good pedagogical reasons for following this approach, the same publication notes that this course of action may be impossible for physical or logistical reasons, citing the example of Somalia where the war there 'almost totally destroyed the nation's textbooks and curricula' (p. 9).

The present EiE context is a protracted 'global refugee crisis' (Esses et al., 2017, p. 78), and not one where refugees can readily expect to return back to their COO or be resettled in a third country. UNHCR (2014) estimates that a refugee spends, on average, 17 years in exile. IDPs, 'the invisible majority', on average face even longer – an estimated 23 years on average (Crawford et al. 2015), though they rarely get as much international attention (Ferris & Winthrop, 2010; Ghaffar-Kucher, 2018). From a

curricular perspective, it is likely to be more efficacious for refugees to follow the COFA curriculum, since doing so would maximise refugees' opportunities to transition to formal education with the host country and increase their ability to assimilate and access the available social and economic opportunities. Indeed, UNHCR (2012, p. 8) advocates a strategy where refugees are integrated into national systems 'where possible and appropriate and as guided by on-going consultation with refugees', a policy reaffirmed in their 2017–2021 strategic work (UNHCR, 2017b). Most recently, the Global Compact on Refugees reiterated this in its call to 'expand and enhance the quality and inclusiveness of national education systems to facilitate access by refugee and host community children' to education (United Nations, 2018, p. 13), as did the Global Compact for Safe, Orderly and Regular Migration through the commitment to '[p]rovide inclusive and equitable quality education to migrant children and youth' (United Nations, 2019, p. 24). Despite the fact that integration in the COFA is now the preferred route to education for refugees, parallel schooling is still the norm (Ghaffar-Kucher, 2018). One of the key reasons for the desire to move away from separate schooling for displaced learners is perpetuation of the 'other', in particular the discrimination refugees often face by the host population, including sometimes, the teachers (Ferris & Winthrop, 2010).

### **3.3.3.3. Challenges to integration into national systems**

Where national integration is politically possible, how straightforward this is will depend on a range of linguistic, cultural, and pedagogic factors, as well as the political will of the host country. Regarding this last point, it has been suggested that governments of COFAs sometimes make access deliberately difficult to discourage refugees from staying (Ferris & Winthrop, 2010; Ghaffar-Kucher, 2018). While Bulbul (2008) reports on the relative straightforwardness of Iraqi refugees integrating into the Jordanian system, Dryden-Peterson (2010) paints a different picture with Congolese refugees in Uganda. Indeed, in particular contexts, students may view host country curricula as being 'highly politicised and discriminatory' (Dryden-Peterson, 2015, p. 12). INEE (2010b) states that it is important that whatever curricula and examinations are followed, they should be recognised by both home and host governments. A potential third way through these options is what Bensalah (Ed., 2002, p. 22) describes as a curriculum which 'faces both ways', citing the example of a hybrid curriculum for Afghan refugees in Pakistan within which the Afghan curriculum was supplemented by materials for learning Urdu so that students could access labour markets and higher education.

Accelerated learning programmes can also help ease the reintegration of displaced learners into the school system when they have missed out on years of schooling. UNICEF (2006) reports on a range of different curricula in place in Nepal and developed in response to the conflict between Maoist insurgents and government forces, which resulted in huge levels of displacement. An example of one of these programmes is the Flexible Schooling Programme (FSP) which condenses the formal primary curriculum of five years into three, and where a truncated version of the government curriculum and textbook is used (Dubai Cares, 2015, p. 42). Other varieties of this form of accelerated programme are widespread and represent a successful form of intervention where there is discrepancy in learning between different populations, and can help to alleviate pressure on national schooling systems while accommodating displaced learners (Jalbout, 2015).

In Turkey, similar steps were taken to accomplish a transition between different curricula. The policy up until 2016 was for Syrian refugees to attend either a Turkish public school or a TEC. TECs, which were set up in the refugee camps, were attended by

around three quarters of Syrian refugee students (Aras & Yasun, 2016; Sanduvac, 2016). They offer primary and secondary education in Arabic as the MOI, and a curriculum designed by the Ministry of Education of the Syrian interim government that was modified by the Turkish Ministry of National Education. However, as Sanduvac (2016) pointed out, in his comparative research into the Turkish public schools and the TEC-adapted Syrian curriculum, the Syrian curriculum did not take into account Syrian children's forced displacement, so did not include any life skills, citizenship education, or Disaster Risk Reduction (DRR) content, such as self-protection, mine risk education or a psychosocial programme. The Turkish government has since announced that all TECs will be closed and students transferred into the state school system, and any remaining TECs will be transformed into integrated public schools by 2020 (Hauber-Özer, 2019). However, transition into the state system from TECs is low (Aras & Yasun, 2016); latest figures indicate only 60 per cent of Syrian children are attending, with only 20 per cent enrolled in upper secondary schooling. In addition to the economic constraints on access, linguistic barriers are a major obstacle to learning, though the Turkish government is developing curricula for Syrian students to learn Turkish as a second language, as well as designing related teacher training (Hauber-Özer, 2019).

However, the likelihood that Syrian refugee children's curricular needs will be met within the Turkish state system is low, given the Turkish state's history of intolerance towards minority representation, and assimilationist education policies. The continued suppression of Kurdish language and culture from the curriculum is a case in point, which has arguably contributed to Turkey's own internal conflict (Oyvat & Tekgürç, 2019).

Literature evaluating how COFA curricula are used to provide education for displaced learners thus points towards two preliminary conclusions. The first is the establishment of political will and practical capability; local administrative support for using COFA curricula cannot be relied upon in all instances, and as is detailed throughout this report, the specific needs of displaced learners may not be met by the unaltered use of national curricula. The second is that the integration of displaced learners into COFA curricula requires transitional support. What form these support mechanisms should take is a key consideration of the following sub-sections, and of the Report as a whole.

#### **3.3.3.4. Curricular coherence, clarity, and alignment**

It is a key feature of many EiE contexts that, as described by Dryden-Peterson (2015), given the mobility of individuals within EiE contexts, students (and teachers) may encounter multiple and conflicting curricula and/or modes of assessment within a defined geographical area, complicating and compounding other challenges associated with EiE. Further, in many EiE contexts, there is a desire on the part of humanitarian responses and affected communities to introduce education quickly, meaning that it often takes place in an ad hoc manner. Sanduvac (2016), for example, describes the huge pressures and 'urgent necessity' in setting up programmes for Syrian refugees in Turkey. There may also be the temptation to 'mix and match' curricula for some of the reasons stated above. The result of this can be a lack of coherence and clarity for students, teachers, and principals alike. As Weinstein et al. (2007) caution, citing Tawil and Harley (2004): 'education policy reform is likely to be most sustainable when it is initiated by a sovereign national education authority in a context of relative stability'.

Sanduvac (2016, p. 13) makes a similar point about the lack of alignment in pedagogical approach in the Syrian interim government's curriculum used in TECs in Turkey, noting

that ‘although the changes in the science books promoted inquiry and critical thinking, the approach was not maintained consistently throughout the science textbooks and was not integrated in other textbooks, including history and social studies’.

As discussed earlier in this section, and in line with the need to ensure that the viability of ‘local integration’ (United Nations, 2018, pp. 19–20) and ‘inclusion’ (United Nations, 2019, p. 25) is maintained, the necessity of mobility between different learning pathways and progressions will have to be balanced with the possible lack of coherence or curricular alignment described here. Responses that do not adequately assess how to transition displaced students into national or local curricula, and identify what specific threats to coherence might arise in this process, risk failure.

### 3.3.3.5. Curriculum subjects and pedagogies

Whatever curriculum is adopted, a common challenge appears to be ensuring that it retains sufficient breadth and scope (both in terms of subject selection and pedagogical approach) to cater for the range of academic, linguistic, and psychosocial knowledge and skills which learners in EiE contexts need to acquire. UNICEF (2015) shows how, in the destination countries of Syrian refugees, this change has resulted in a focus on subjects like Arabic and mathematics at the expense of activities such as sports and art. Slippages, such as this, into overly instrumental approaches to education have been shown to ignore the complex needs of people in EiE contexts, for whom a wider or deeper curriculum could provide therapeutic benefits (Capstick et al., 2018). Moreover, Gambetta and Hertog (2009) have shown the risk of emphasising certain disciplines and career trajectories over others in contexts of deprivation, frustrated expectations, and/or oppression.

For example, curricula which include opportunities for peace education, or peace-building, and which seek to integrate art, sport, music, and other non-academic components routinely yield positive outcomes in terms of students’ mental health, examples of which can be seen in the research of Ager et al. (2011) in northern Uganda, and Berger et al. (2007) with Israeli students. INEE (2010b, p. 64) advocates an enriched curriculum which includes ‘safety messages, psychosocial support and education on human rights, conflict resolution, peacebuilding and humanitarian law’. These emphases are echoed in more recent INEE (2016, 2018) reports focusing on PSS and SEL. Baxter and Bethke (2009) discuss different examples of ‘alternative education’ curricula, such as the International Rescue Committee’s (IRC) Healing Classrooms initiative, implemented in more than 20 countries, the aim of which is to ‘develop a safe space in the classroom and to use a rights-based experiential approach to support a psychosocial healing programme’ (p. 100). However, given the human and economic resource constraints commonly found in EiE contexts, there is a considerable challenge in identifying the best way to most effectively implement these kinds of curricular approaches in practice.

More innovative approaches to curriculum development that are in line with the problem-solving and critical thinking methodologies espoused by those looking to transform the curriculum include participatory curriculum development and drawing on indigenous knowledge. Moon and Sunderland (2008) report on ActionAid’s Reflect ESOL (English for Speakers of Other Languages) programme, which demonstrates that there are many pedagogic advantages to a co-constructed curriculum, most notably in terms of student agency. However, it is a challenging methodology to implement successfully, particularly in formal education in EiE contexts where teachers are unlikely to be either highly skilled or experienced or to have opportunities for professional

development. This said, it is important to secure the involvement of teachers and learners in shaping curricula and materials. In a separate study in Jordan, Qablan et al. (2010) show how disregarding teachers' voices in redesigning materials and the curriculum negatively affected learning outcomes.

One approach to curriculum development in conflict-affected contexts that has received little attention is the potential contribution of indigenous knowledge. Marking five years of the Africa Region's Knowledge and Learning Group, a World Bank (2004) report points out how indigenous knowledge could be integrated more into 'modern' methods of conflict resolution, and into educational planning more generally, rather than education authorities relying more on Western models and outside impetus. They added that:

‘donor organizations have often assumed that participation processes were to be used to induct marginalized groups of people into the presently dominant Western-type economic and cultural systems ... The possibility that existing indigenous African institutions – often distinguished as “customary” or “informal” – could be a base for internally initiated development has been only rarely explored.’ (p. 73)

Weinstein et al. (2007) allude to a related concern in emphasising the need to pay more attention to community processes, and learn more about ‘within-community reconciliation among formerly warring groups’ (p. 47).

### **3.3.3.6. Use of EdTech in EiE**

The digital divide in terms of the penetration of power and internet connectivity between the Global North and vast swathes of the Global South, and between rural and urban areas has major implications for the potential use of EdTech, in both EiE and many non-EiE contexts, not only for the inability for the technologies to function, but also because teachers themselves are unlikely to have much experience or training in using them for educational purposes. UNHCR's (2016) global survey of internet and mobile connectivity availability and use among refugees (both adults and children) confirmed the findings of other research with refugee communities regarding the importance of mobile phones – WhatsApp and Google (Fischer & Yafi, 2018) as well as social media – to refugee wellbeing in enabling them to keep in contact with family and friends. Dryden-Peterson et al.'s (2017) mixed-methods study of Somali refugees from Dadaab Camp who had completed secondary education there or elsewhere in Kenya or in other countries showed how they had used social media (such as Facebook and email) to create peer support networks and study groups to assist their learning, but importantly although the networks were facilitated by technology, they were initiated through face-to-face contact.

Yet there are cautionary tales from e-learning: ‘despite the increasing ubiquity in access to mobile technologies, their optimal use and integration to support learning, teaching, and professional development at scale and sustainably, rely on a host of complex dependencies’ (Isaacs et al., 2019), while a World Bank Working Paper on ICT in Africa (Souter et al., 2014, p. 17) specifies that ‘ICT integration in education requires national budget support as well as nationally driven partnerships with the private sector. Total reliance on donor-funded projects that are necessarily driven by differing donor agendas will lead to standalone projects that are not sustainable.’ One such example, recounted in

a UNICEF (2012) report, is the successful mobile MoMath initiative, which has successfully engaged rural youth in South Africa and improved their performance in maths. Crucially, it had the well-coordinated support of essential actors, including national and regional education authorities, as well as the cooperation of network and mobile phone providers, and a built-in monitoring and evaluation framework. It is due to be expanded and adapted to other African contexts. Further discussion of this evidence base can be found in Section 8 of this Report.

### **3.3.4. Assessment, certification, and accreditation<sup>4</sup>**

#### **3.3.4.1. Assessment practices and learner needs**

Among the various tensions in the area of assessment is the need for displaced students (as with all students) both to receive formative assessment, as feedback to improve learning, and summative and cumulative assessments, which allow them to demonstrate what they have learned (Mendenhall et al., 2015; Bengtsson & Dyer, 2017). Bengtsson and Dyer (2017) point out that formal national assessments leading to certification are ‘summative or cumulative’ but lack the formative element to capture the ongoing learning needs of displaced learners. Unfortunately, there is limited guidance on how to conduct formative assessment for learners in crisis and displacement contexts, making it difficult to capture learner progress and assess their ongoing needs (Dryden-Peterson, 2011).

National assessments, however, are often difficult for displaced learners to access. Reasons for this range from being formally excluded by the government (Kirk, 2009), to not having documentation, and the inaccessibility and/or cost of reaching the exam site (Kirk, 2009; Chelpi-den Hamer, 2011; Bengtsson & Dyer, 2017). Furthermore, assessment may not actually allow for displaced learners to display their knowledge when exams are conducted in a language in which they are not proficient, which in turn may be full of unfamiliar cultural references (Benson & Kosonen, 2013; Bengtsson & Dyer, 2017).

As noted throughout this report, there is need for curriculum alignment between what is taught in schools and what is tested. However, as Sabella and Crossouard (2018) highlight, in their case study of primary education in Jordan, just implementing a new curriculum does not translate into improved performance in assessment. It is common to find a time lag between curriculum implementation and success – a lag which in an EiE context can be deeply problematic, given the intense pressure on donors to show performance, impact, and value for money. Indeed, the pressure for assessment systems to follow international norms, such as global standardised tests, can result in a narrowing of what is assessed (and, therefore, also what is taught).

#### **3.3.4.2. Accreditation**

Certification, accreditation, validation, and recognition are also important issues to consider with regard to displaced learners. Magali Chelpi-den Hamer (2011) concisely distinguishes between certification and accreditation: the former indicates proof of learning (for instance the provision of a formal certificate that recognises a student’s attainment) whereas the latter refers to the process of certification when it occurs within

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<sup>4</sup> Assessment and accreditation are issues that affect both students and teachers who are refugees and IDPs. We consider teachers in sub-section 3.3.6, while the focus in this sub-section is on students.

an official programme recognised by a Ministry of Education. Further, validation is the process by which the authenticity of the accreditation is ascertained and takes place at different moments: for instance, upon entry into a new school at a different level (e.g. going from primary to secondary school) or entry into a new school in a new jurisdiction (e.g. when a displaced student is seeking entry to an institution in the place of asylum). Recognition is the acceptance by an outside party of a certificate's worth and validation. It is the desired result of the validation process (Kirk, 2009). Ghaffar-Kucher (2018) notes that the need for credentials (and recognition) is likely to affect older children and adults, but will still have a knock-on effect on young children, since if they enable family members to gain employment, younger children are less likely to have to be sent out to earn money. Accreditation is examined in more detail in Section 6.

#### **3.3.4.3. Cross-border coordination**

When coordination works well between host country and COO, assessment by the COO is possible within the territory of the host country. For example, in the past the Republic of the Congo has allowed the Democratic Republic of the Congo (DRC) to conduct assessments and certify displaced DRC primary school students at the end of their enrolment. This meant recognition of the refugees' learning and progress through the school system when they returned to DRC. However, this type of cross-border assessment is not common. Kirk (2009) stresses that early coordination among stakeholders is crucial for this to happen.

While the cross-border assessment approach is uncommon, a region-wide assessment scheme may be helpful for refugee students who study in their host country, and wish to return to their home country or progress elsewhere regionally. The West African Examinations Council (WAEC) determines the examinations required in English-speaking West African countries (Ghana, Nigeria, Sierra Leone, Liberia, and the Gambia), conducts the examinations and awards certificates. For example, the WAEC examination was taken by Liberian and Sierra Leonean refugees in the Gambia. WAEC officials travelled across the border to the camps in Gambia and brought back the completed papers to Liberia, where they were graded (Kirk, 2009). Similarly, efforts within the European Union towards a qualifications passport for adults to collate previous certification and learning offer another model (UNHCR & UNESCO, 2018).

#### **3.3.4.4. Words of caution**

Assessments and examinations at all levels in all countries are prone to corruption: 'Wherever there are exams, there is cheating. Wherever credentials are valued, there is fraud' (Noah & Eckstein, 2001, p. 6). However, since refugees and IDPs in particular are often located in contexts of extreme poverty within low-income countries, where even the teachers may be very poor, exam malpractice is more likely, and refugees and IDPs are more vulnerable to abuse: teachers may extort money from families, and girls may be coerced into transactional sex – sometimes under pressure from their own family – in order to obtain grades (Stromquist et al., 2013).

### **3.3.5. Language in curriculum**

The language-in-education policy and practices of any country are critical both to learners' educational experiences and their learning outcomes as well as to their sense of identity and belonging (Benson & Kosonen (Eds.), 2013), and adaptation in their adopted country. This is true in any multilingual context (most countries) but is

particularly true of emergency contexts, where displaced learners are struggling to negotiate new identities, and may need to rapidly gain communicative competence in a new language in order to survive. While choice of MOI is a political decision in any context, it is a particularly contentious and sensitive issue in contexts where ethno-linguistic tensions are likely to be contributing to the conflict situation (Davies, 2009; Pinnock & Vijayakumar, 2009).

There is now considerable literature on language-in-education policy and practice and its relationship with learning across the world, which is of relevance here. Quantitative and qualitative studies across a range of low and middle-income countries have produced a strong body of evidence that indicates that learning in a language that is not used at home is often linked to learner absenteeism, dropout, poor performance and school exclusion (Pinnock & Vijayakumar, 2009). In contrast, Carole Benson (2004), in her review of mother-tongue education (MTE) for the 2005 'Global Monitoring Report', gave various examples of studies in low-income countries that showed how MTE is associated with more participatory teaching, more confident learners and greater parental/guardian involvement in their child's schooling (see also Alidou et al., 2006). Smits et al. (2008) analysed household survey data of 26 developing countries and found that mother-tongue-based multilingual education is important for educational attendance of children who speak local languages at home, and that this effect is especially important for those concentrated in rural areas.

The fact that other languages not used in the home are more easily learned with exposure is another argument against separate schooling of refugee populations, when they need to learn the language of the host country. In certain EiE contexts, the LOI is less problematic, particularly with regard to Arabic-speaking Iraqi and Syrian refugees going to Lebanon or Jordan, though the difference between the Arabic used in children's home lives and the formal Arabic used for education can be a significant barrier for many children (Pinnock & Vijayakumar, 2009).

In other contexts of displacement, however, it can be extremely confusing, and a source of marginalisation. Dryden-Peterson (2015) talks about interviewing one student who:

‘followed a Tanzanian curriculum in English and Swahili during primary school; began secondary school following a Burundian curriculum officially in French and Kirundi, but with teachers using mostly English and Kiswahili; and completed secondary school following a Congolese curriculum in French.’ (p. 5)

In an EiE context, language is often a highly vexed and politicised issue, an issue which Dryden-Peterson (2015) notes is especially complicated in that LOI policies of both host countries and the UNHCR have changed over time. As noted above, the issue of linguistic equity is a particularly important one in terms of assessment. Although there is scarce evidence available for the effects of particular approaches to language usage in assessment for emergency contexts, there is ample evidence worldwide of the effect of the MOI and attainment. Empirical studies have substantiated that refugee children's literacy level in the LOI is crucial for their academic learning in the receiving countries (Aydin & Kaya, 2017; Brown et al., 2006). For example, in a qualitative study of Sudanese refugee adolescents in an English-medium school, Brown et al. (2006) found that participants' limited literacy in English was a major barrier that prevented them from achieving academic success. Specifically, without sufficient proficiency in

grammar, spelling, vocabulary, and, in particular, subject-specific language, these teenagers found it hard to comprehend the content of the course.

Minority Rights Group (2009) argues that academic success can be harder to attain for linguistic minority children when they take high-stakes exams, as it becomes a test not only of the subject content, but also of the language, since language and subject content are inseparable. Even for maths – viewed as the least literacy-dependent subject – there is evidence that lack of proficiency in the MOI hampers. Literacy is also important in children's home language too, as research in various contexts has shown that mother-tongue literacy can be a resource that helps improve literacy in the MOI (Benson & Kosonen (Eds.), 2013). A case in point is Bigelow and King's (2015) comparative case study of two Somali adolescents' learning experiences in an English-medium educational system. This study reveals that the child with lower literacy in Somali had more difficulties in understanding the content of school subjects, compared to her counterpart who had higher home language literacy. This is because the former might not comprehend subject-specific vocabulary even in Somali, whereas the latter could utilise his home language to access the lessons. In short, languages, both the LOI and refugee children's home languages, are important for them to adapt to the schooling in the new environment.

Kuchah (2016) notes how difficult this can be in multilingual settings, specifically Cameroon, where 258 languages are spoken and where French and English are the MOI. Classrooms typically have students from multiple first language backgrounds, who must sit six summative assessments every year, in addition to high-stakes exams at the end of each educational cycle. This difficulty can be compounded when the teachers too lack proficiency in the MOI, as is the case with many in Nigeria, for example (Humphreys with Crawfurd, 2015).

UN Special Rapporteur (2017) argues that it is imperative that when a minority language is used as the MOI in public school education, final exams must also be in that language. If this is not the case, the already-marginalised are likely to become even more marginalised. Mullis et al. (2007) provide further evidence of this when analysing Progress in International Reading Literacy Study (PIRLS) data from 35 countries, finding that 'students who reported never speaking the language of the PIRLS test at home had lower average reading achievement than those speaking it more frequently' (Pinnock & Vijayakumar, 2009, p. 18). Erling et al. (2017, p. 11) write about two different models in Ghana and India, both of which are multilingual societies. Ghana uses an 'early exit transitional bilingual educational model' where students in lower primary use a government-supported Ghanaian language before shifting to English at upper primary. India, however, recommends that 'the state language be used as the [means of instruction] in government schools, with another modern Indian language and English being taught as curricular subjects'. The authors argue that while attempts to ensure a role for local languages in education is desirable, the act of doing this is 'fraught with difficulties' (*ibid.* p. 15). Moreover, official language-in-education policy and actual practices differ greatly, with teacher beliefs regarding language and learning as well as their own language repertoire playing a key role in what languages are actually used in the classroom (Benson, 2004). In contexts where displaced learners have some say in the MOI, then it is important to engage with the preferences of parents/carers as they have a major say in whether children attend or persist in school. Although many appreciate MTE, they also often want their children to learn the prestige language of access to jobs (Trudell, 2007). Of course, refugees are more likely to pick up a language not used at

home with exposure, which is a strong argument in favour of integrated schooling for refugees when in a new country, rather than segregated schooling.

While transformative curriculum agendas often promote bi- or multi-lingualism in education policy and practice (Alidou et al., 2006; Benson & Kosonen (Eds.), 2013), a more recent development has been to champion translanguaging. This would mean teachers learning how to support fluid language practice. Otheguy et al. (2015, p. 283) define translanguaging as: ‘the deployment of a speaker’s full linguistic repertoire without regard for watchful adherence to the socially and politically defined boundaries of named (and usually national and state) languages’. In other words, teachers and schools must recognise that language use is fluid and that greater learning opportunities are afforded in allowing students to code-switch among languages, drawing upon their full linguistic repertoire. As Ghaffar-Kucher (2018) elaborates:

‘translanguaging is a promising practice for three reasons: it does not matter how many languages are spoken in the classroom; teachers need not have the knowledge of all the languages spoken in their classrooms; and most importantly, all students benefit. However, in order to support these practices requires rethinking curriculum, instruction, and teacher professional development.’  
(p. 24)

### **3.3.6. Teachers, teaching, and teacher education**

The interaction between teachers and learners is arguably the most important factor influencing educational quality and crucial to curriculum implementation (Dembélé & Miaro II, 2003). Indeed, research in many contexts of displacement shows that a teacher is often the only resource available to students (Buckland, 2004; Kirk & Winthrop, 2007; Mendenhall et al., 2018b; Richardson et al., 2018). In a similar vein, as the Education for All Dakar Framework for Action cautions: ‘No education reform is likely to succeed without the active participation and ownership of teachers’ (UNESCO, 2000, p. 20), though their views are often excluded in debates about curriculum reform or training/support needs, including in EiE settings (Kirk & Winthrop, 2007). The frequent exclusion of teachers’ views in these critical areas, especially in EiE settings, reflects a neglect of a critically important stakeholder group, not only for programme planning and curriculum reform, but also by implication from a public health perspective, the mental health and wellbeing of the children they serve (Mendenhall et al., 2018a).

#### **3.3.6.1. Teachers and teacher recruitment**

Teachers in EiE are as diverse a population as the learners they teach, with their own personal educational histories, professional needs and capabilities (Mendenhall et al., 2018a). Syrian refugee settings, for example, have relatively high numbers of university-qualified, experienced teachers (Deane, 2016), whereas in contexts of forced displacement in Sub-Saharan Africa and Southern Asia, teachers may have themselves had very little formal schooling, limited (if any) relevant professional development, and could therefore be struggling with low literacy, content knowledge, and pedagogical know-how (Moon (Ed.), 2013), in addition to the specific experience and knowledge and conditions they may need to cope with education in situations of forced displacement (Dundar et al., 2014; Mendenhall et al., 2018b).

However, the insufficient supply of teachers is a challenge in many refugee-hosting countries, especially the dearth of female teachers in rural areas, and in particular national contexts, where there is only a small pool of formally educated women to draw from (Kirk, 2004; Jenner, 2015). Almost 70 million extra teachers are likely to be needed worldwide by 2030 if all children are to complete a cycle of primary and secondary schooling (UIS, 2016). This is particularly pertinent to teacher supply for displaced learners since the regions with the greatest teacher shortages (Sub-Saharan Africa and Southern Asia) are also home to many of the world's forcibly displaced populations (Mulkeen et al., 2017), putting increased pressure on already stretched systems (Mendenhall et al., 2018b). The difficulty in recruiting qualified teachers in emergency contexts inevitably affects the quality of teaching and learning (Culbertson & Constant, 2015; Karam et al., 2017b; Shepler, 2011; West & Ring, 2015). As is shown in West and Ring's (2015) study into the teaching force in refugee camps in Algeria and Ethiopia, low financial incentives, poor working conditions – including short-term contracts and irregular pay – and a lack of social recognition prevent the hiring of high-quality teachers of refugees. These factors also have an impact on teacher attrition (Richardson et al., 2018; Ring & West, 2015; Vogel & Stock, 2017). Moreover, teachers of camp refugees have overcrowded classrooms and excessive workloads, which can also push them out of the profession (Nicolai, 2003; UNICEF, 2015).

One of the central issues of teacher recruitment is who should be recruited to teach refugees and displaced students (Richardson et al., 2018). In an extensive review of the literature on teachers working in refugee settings, Ring and West (2015) suggested that teachers of refugees should be both national teachers (teachers in host countries who teach refugees) and teachers who are refugees themselves. While both groups are currently teaching refugee students, they have vastly different backgrounds in terms of their certification, incentives, and professional training (Ring & West, 2015), and the selection among them is especially important as it can have an impact on quality, access, and inclusion.

Some argue that teachers should be primarily selected from the local refugee community. In a study of adult Somalis reflecting on their school experiences in and around the Dadaab refugee camps in Kenya, for example, most of the 21 interview participants expressed the importance of refugee teachers in their pathways to educational success (Dryden-Peterson et al., 2017). Being part of the same community as their students, these refugee teachers always have a better understanding of the needs of the students. For example, several students mentioned that their refugee teachers would provide extra explanations of the lessons when they failed to understand the Kenyan national teachers. They also recalled closer relationships with their refugee teachers, who shared the same cultural and linguistic background with them, as compared to the national teachers from outside the camp. Similar findings are also shown in Kirk and Winthrop's (2008) study on the role of community-based teachers in Afghanistan. While these teachers had limited teaching experience and might not be formally qualified, they had particular strengths in promoting children's 'tarbia' (moral and ethical character) and wellbeing. Moreover, they understood context-specific educational content, and were able to relate the textbook lessons to the students' everyday life and employ culturally appropriate strategies in their teaching.

The argument for national teachers, however, is their familiarity with the LOI, curriculum, and examination employed in the school. The current preference for the integration of refugee students within national systems (UNHCR, 2012) means that refugee students' success in school and their integration in host communities may then

additionally depend on their acquisition of the national language and curricula (Dryden-Peterson et al., 2017). For example, in Dryden-Peterson's study of Somali refugees, while students in Dadaab camps in Kenya experienced closer relationships with their refugee teachers, they also recognised the importance of trained national teachers, especially after Dadaab shifted to follow the Kenyan curriculum, and the students were required to learn the host language and sit for the national exams.

### **3.3.6.2. Teacher certification and employment in national schools**

Given the growing importance of integrating refugees into host country education systems, more refugee teachers need to be integrated into national schools. Mendenhall et al. (2018a) succinctly summarise the barriers to this: refugee teachers may be denied the legal right to work, they may not be proficient in the MOI, and they may not be proficient in the curriculum. Karam et al. (2017a) found that while most Syrian teachers are certified in their home country, they are limited in their ability to teach the Lebanese curriculum in English. In addition, refugee teachers' qualifications may not be recognised in the country of asylum, or proof of certification may have been lost when they fled from conflict. Even when re-training and certification is possible in the host country, it may be too costly in terms of money and time (Mendenhall et al. 2018a). Chad, however, upgraded refugee teacher qualifications so that refugees could be fully certified by the education authorities and employed in the public school system. The Chad and Sudanese governments then signed a joint agreement along with various UN bodies to ensure that certification and equivalency will be recognised when Sudanese teachers return home (*ibid.*)

### **3.3.6.3. Teaching and learning**

In many contexts, including where forcibly displaced children learn (see Mendenhall et al., 2015), schooling involves teacher-led classes, involving the delivery of 'facts' for learners to digest and a preponderance of rote-learning and memorisation. The persistence of such transmission-style pedagogies, in the Global South in particular, has received a lot of critical attention (see Tabulawa, 1997; Lewin & Stuart 2003; Schweisfurth, 2013). It has variously been attributed to the lack of attention paid to the socio-cultural context of learning, the lack of relevant training and support and training for teachers, insufficient teaching materials, vastly overcrowded classrooms, and issues of teacher professional identity (*ibid.*). Other key factors include the MOI, in which often many teachers and learners are not proficient, and its crucial tie-in with high-stakes examinations, in which factual recall predominates.

When planning educational interventions for conflict-affected populations, especially within national education systems, it is important to grasp these pedagogical norms and the immensity of the challenge in bringing about change, especially since the specific pedagogical demands of teachers required for inclusive multi-cultural learning and post-conflict reconciliation, such as critical thinking skills, problem-solving, conflict resolution or encouraging open discussion, are very different from the rote-learning demanded in many classrooms (Sayed et al., 2018).

### **3.3.6.4. Teacher education and professional development**

Many teachers in EiE may not have undergone any formal professional training at all, though research has shown that students do not necessarily learn better from more qualified teachers due in part to the ineffectiveness of many teacher education systems (Schwille & Dembélé with Schubert, 2007; Dundar et al., 2014; Mulkeen et al., 2017).

Though situations vary, common issues with initial teacher education echo those of schools: under-resourcing, overcrowded lecture halls, ill-prepared and supported teacher educators, an MOI that many students struggle with, outdated and/or irrelevant curricula that have been transplanted uncritically from ‘Western’ contexts and which do not prepare teachers for the realities of school teaching, and a lack of properly supervised and mentored practical experience (Akyeampong, 2002; Moon (Ed.), 2013; Schwille and Dembélé with Schubert, 2007). These difficulties are exacerbated in crisis-affected situations by the additional challenges of supporting teachers to deal with students suffering the anxieties and the trauma of displacement and conflict, and enabling them to practise positive discipline (Crisp et al., 2001; Ring & West, 2015). Yet many of the teachers of refugees do not receive formal training to guide them in their work, and many of them are not adequately equipped to address the overwhelming demands in a refugee classroom (Kirk & Winthrop, 2007; O’Neal et al., 2018).

When teachers are not equipped to respond to the needs of displaced children, their limited capacity can impede the provision of high-quality education (Aydin & Kaya 2017). A growing body of research has shown that teachers in public schools into which displaced learners are being integrated can be unprepared to cope with issues of cultural differences, lack of resources, and students’ psychological needs. This is as true for many of the more qualified teachers in more resource-rich countries such as Turkey, Malaysia and the UK (see Akar, 2010; Aydin & Kaya, 2017; Madziva & Thondhlana, 2017; O’Neal et al., 2018), as it is for the less qualified teachers of more resource-constrained contexts of Kenya (see Mendenhall et al., 2015). It is especially true when appropriate pre-service and in-service training are not available (Akar, 2010; Aydin & Kaya, 2017; Madziva & Thondhlana, 2017; Mendenhall et al., 2018a; O’Neal et al., 2018). This is particularly pressing given the specific motivational needs of displaced learners discussed elsewhere in this section, as teachers often are viewed as central to helping displaced children understand as well as navigate the purpose of learning, to help them conceptualise what the future may be, and to help prepare them for it (Winthrop, 2011; Dryden-Peterson et al., 2017).

### **Stress management for teachers of refugees in Malaysia**

O’Neal et al. (2018) developed a stress-management training intervention to improve teacher wellbeing and self-efficacy with refugees in Malaysia. This intervention programme began with recruiting refugee teachers who were more experienced and educated; and then trained them as peer trainers. After that, these peer trainers went back to their own schools and delivered the training to their peer trainees. As shown in their follow-up evaluation, this peer-refugee-teacher-delivered intervention has significant effects on teacher confidence, knowledge and self-care for both trainers and trainees. The study also suggests that this peer-training model may facilitate a more sustainable, culturally relevant, and empowering process in which peer teachers continuously train other teachers, and thus provide constant support for emotionally vulnerable post-conflict refugee teachers.

Teachers who are displaced themselves may also be suffering from anxiety, stress and trauma, a situation for which they too will need support, since this will prevent them from teaching effectively (Penson et al., 2012; van Ommering, 2017). Research shows that even in high-income countries, where resources and infrastructures are in place, teachers’ stress can have a contagious effect in the classroom and those who are more

stressed are less likely to form close relationships with students, use effective classroom management techniques, or deliver clear instructions, all of which can negatively impact student achievement. In contrast, providing teachers with social and emotional teaching strategies can prevent a decline in teaching effectiveness (Sparks, 2017). Finally, for teachers to be agents of change in transformative education in post-conflict situations, teacher education needs to include professional development that equips them to manage critical discussions with students about the conflict, which will also necessarily entail reflecting on their own identities, histories and prejudices (Weldon, 2010; Herath, 2015).

In the Western Cape, South Africa, the ‘Face the Past’ programme has been undertaken annually since 2003 by cohorts of trainee teachers. It aims to tackle the legacy of Apartheid, by involving teachers reflecting on personal and group identities, to break down stereotypes of the ‘other’ and build trust, as well as provide skills for the classroom, since the ultimate aim is to enable teachers to assist students’ cognitive and social development. Initial 4–5-day workshops are followed by periodic follow-up workshops during the year. Research and initial evaluations have shown positive results (Weldon, 2010). Research in various post-conflict contexts has shown how hard it is for teachers to engage actively in critical peace-building education as they are often afraid to provoke further conflict, especially when challenging community views where they live, work and/or come from (Tawil & Harley (Eds.), 2004; Weinstein et al., 2007; Lopes Cardozo & Hoeks, 2015).

## **4 Mental Health, Psychosocial Support, and Social and Emotional Learning<sup>5</sup>**

### **4.1. Introduction**

Having explored key components of the EiE context that are important to consider when developing educational programmes, the next question is around creating optimal conditions for academic attainment in the EiE context. This section explores how an SEL programme might be designed to promote the interacting mental health, wellbeing, and social and emotional competencies (SECs) and skills necessary for successful academic engagement among learners on the move.

International investment in SEL programmes is increasing as the role that these competencies and skills play in academic achievement, relationships, civic participation and employment opportunities is supported by empirical findings (Corcoran et al., 2018; Durlak et al., 2011). In EiE contexts, the research reviewed here indicates that SEL programming is most helpfully located within a wider MHPSS programme area with a public mental health-wellbeing promotion focus for formal and informal educational settings. The following section reviews the wider MHPSS literature, including:

- ↳ The model of mental health that shapes SEL design and delivery.
- ↳ Child mental ill-health and wellbeing and resilience.
- ↳ Education, play, and play- and learner-centred pedagogies as pathways to mental health and wellbeing.

A public mental health promotion focus requires the involvement of local voices in MHPSS-SEL programming. Along with consultations with host countries about any existing MHPSS-SEL programming, the Community Readiness Assessment Model (CRA) and Cultural Formulation Interview (CFI) are considered as initial steps for the Learning Passport as a whole, to access local voices, as well as to initiate the intervention process. An ecosocial, multidimensional model (ADAPT – Adaptation and Development After Persecution and Trauma) created with and for refugee, migrant, and displaced populations is then reviewed, including evidence that it offers a helpful framework for the multiple interacting levels of these populations' experiences. The MHPSS-SEL triangle is considered and followed by a brief overview of SEL as a field. The discussion then focuses on the underlying mechanism of all SEL competencies and skills, self-regulation through the developmental progression of differentiation and integration, and concludes with a suggestive, preliminary SEL framework for EiE contexts.

### **4.2. SEL within the wider MHPSS programme area**

To begin, a very brief orienting paragraph for readers new to SEL. The earliest decades of research and practice designated as 'SEL' (c.1994) occurred primarily in the United States (Frydenberg et al., 2017). Accordingly, the most widely used definition of SEL is provided by the Chicago-based Collaborative for Academic, Social and Emotional Learning

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<sup>5</sup> Please note that references specific to this section can be found in the section 'Bibliography, Section 4: Mental Health, Psychosocial Support, and Social and Emotional Learning'. A glossary of abbreviations and terms used in the section can be found in Appendix 3.

(CASEL): the processes by which children and adults acquire and apply core competencies to recognise and manage emotions, set and achieve positive goals, appreciate the perspectives of others, establish and maintain supportive relationships, make responsible decisions, and handle personal and interpersonal situations constructively (USAID, 2019; INEE, 2018; UNESCO, 2019; Osher et al., 2016; Elias et al., 1997; Weissberg et al., 2015; Aspen Institute, 2019). From this definition, CASEL identifies five competency areas: recognising and managing emotions and setting and achieving positive goals, appreciating the perspectives of others, establishing and maintaining supportive relationships, making responsible decisions, and handling personal and interpersonal situations constructively. Recently, the Harvard-based EASEL Lab Taxonomy Project (ELTP) has analysed over 35 SEL programmes and identified five categories of SEL domains or skills: cognitive regulation, emotional skills, identity, personality-based perspectives, and social skills (Jones et al., 2019; ECCN & Salzburg Global Seminar, 2019; Jones, 2019). It is important to note that CASEL and ELTP provide frameworks for analysing programme areas and domains, rather than SEL programmes per se. The CASEL and ELTP frameworks will be discussed later in this section.

SEL programmes are designed to address children's needs to enable academic engagement, strong relationships, future civic engagement and improved employment opportunities through individual and group support in different formal and informal educational contexts and cultures. However, effective SEL programming requires cultural adaptation and attention to contextual needs. For EiE contexts, recent international reports have explored the links among MHPSS-SEL at both theoretical and applied levels for EiE contexts (INEE, 2016, 2018; UNICEF, 2018; UNESCO, 2019). These reports identify school contexts as playing a vital role in mental health promotion and wellbeing, not only for learners but for the wider community. 'MHPSS should be integrated and provided through the social service, protection, health *and* education sectors (UNICEF, 2018, p. 15, emphasis added). MHPSS may be thought of mainly as the domain of social services, protection services, and the health sectors, but there is increasing recognition that educational sectors have an important role to play in public mental health promotion as part of the learning process (academic, relational, civic, and for future employment). In EiE contexts, the learning context may often be the best location for organising a variety of other MHPSS activities as it can offer an entryway that is not associated with the often-noted stigma of mental health clinics (UNESCO, 2019).

Frisoli et al. (2019) locate SEL for EiE contexts within a larger MHPSS framework. Children in these contexts experience 'ordinary' adversities that affect wellbeing but for the majority do not cause marked mental ill-health, such as queuing for necessities, living in temporary shelters, and engaging in unfamiliar routines. Some have experienced a multitude of adverse and traumatic events at home, on the journey, and in their new living context. However, the experience of less or more severe adversities and even trauma does not predetermine a negative outcome. As discussed in the next sections, one determining factor seems to be the mental health paradigm within which PSS and SEL in educational environments takes place.

### 4.3. Conceptualising mental health

The delivery of MHPSS and SEL in EiE contexts is shaped by the operating paradigm for mental health. A mental health paradigm determines in large part what is included

and excluded in assessment, diagnostic processes, treatment, psychosocial interventions and rehabilitation planning, and whose voices are included in the process (Lewis-Fernández et al., 2016). Moreover, how mental health is conceptualised shapes how children are supported in formal and informal educational settings.

### **4.3.1 Two domains: Mental health and wellbeing**

The paradigm of mental health using only one continuum and featuring mental health and mental illness at opposite ends has been replaced by a paradigm that frames mental health as two distinct yet interacting ‘domains’ (i.e., areas of experience, depicted as two separate continua), mental ill-health and subjective wellbeing (DeMarinis & Boyd-MacMillan, 2019; Patalay & Fitzsimons, 2016). Increasing evidence shows relatively weak correlations between mental ill-health and subjective wellbeing alongside findings that many experience high-functioning wellbeing in the presence of symptoms of mental ill-health (Patalay & Fitzsimons, 2016; Kalra et al., 2012). Mental disorder/illness and mental health/wellbeing are distinct although related domains to the extent that absence of either mental health or mental disorder does not imply the presence of the other. Campion et al. (2012) find that prevention of mental disorder is closely related to and can occur as a result of the promotion of mental health and associated resilience (p. 80). This finding supports a two-domain view of mental health where mental ill-health and subjective wellbeing are distinct constructs that are only moderately associated (Kinderman et al., 2015; Patalay & Fitzsimons, 2016).

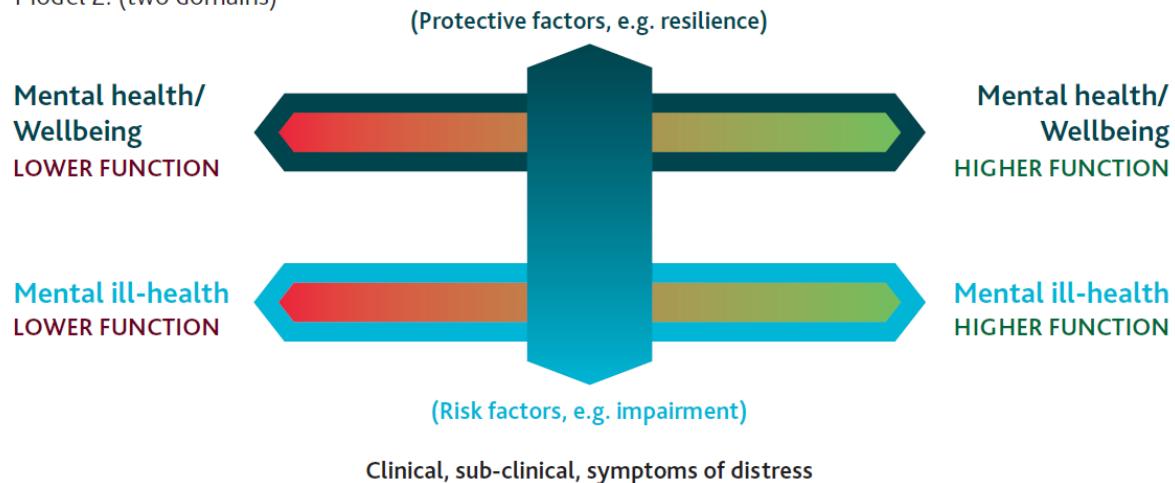
The two-domain model as depicted in Figure 1 permits a more complete understanding of mental health and focuses on numerous interacting factors that can affect actual daily function, which is the area of concern for both PSS and SEL. The model is not static but fluid, and reflects the growing evidence of interaction between the two domains (Patalay & Fitzsimons, 2016; DeMarinis and Boyd-MacMillan, 2019; Kalra et al., 2012). A two-domain model, of special importance for EiE contexts, does not underestimate the important contributions to understanding risk factors for negative mental health consequences of war-related violence and loss while addressing the important critique that Betancourt and Khan (2008) raise: that the focus on trauma alone has resulted in inadequate attention to factors associated with resilient mental health outcomes. A two-domain model avoids this mistake, and when used to shape SEL programming ensures adequate attention is paid to wellbeing and resilience.

**Figure 1: Mental health models (Source: Adapted from DeMarinis & Boyd-MacMillan, 2019)**

Model 1: (one domain)



Model 2: (two domains)



### 4.3.2 Child mental ill-health

The mental ill-health dimension is concerned with a person's 'level of function' in order to target areas for improvement. This targeting can then guide MHPSS-SEL activities in formal and informal educational settings in order to address deficit functions while also promoting wellbeing. Murray et al. (2012) note that the burden of mental ill-health, its treatment, and associated costs across all sectors of society, are increasing internationally. Many first experience symptoms of mental ill-health before the age of 14. Early treatment substantially lowers the risk of mental ill-health conditions that can reduce academic attainment, negatively impact relationships, and lower employment opportunities (NHS England & Department of Health, 2015). Relatively less is known about the stability and continuity of wellbeing through the life course, including the childhood predictors of subjective wellbeing (Patalay & Fitzsimons, 2016). However, wellbeing is a key outcome for SEL programming and enhances functioning in all areas of life, including educational attainment and relationships. The next sections review the SEL outcomes of wellbeing and resilience.

### 4.3.3 Child wellbeing (CWB)

The World Health Organisation (WHO) and the United Nations Children's Fund (UNICEF), along with other international researchers and leading health and youth agencies, call for a unified multidimensional definition of CWB (Forgeard et al., 2011; Statham & Chase, 2010; UNICEF, 2007). Many international experts in the field argue

that this unified definition needs to recognise CWB multidimensionality (e.g. Diener, 2009; Forgeard et al., 2011; Michaelson et al., 2009; Pollard & Lee, 2003) and dynamism (e.g. Dodge et al., 2012; Statham & Chase, 2010). A unified multidimensional definition of CWB incorporates a strengths-based, developmental ecological approach to SEL (Pollard & Lee, 2003), and includes indicators with objective and subjective dimensions of wellbeing at each developmental stage (Pollard & Lee, 2003; Statham & Chase, 2010; Wassell & Dodge, 2015). In this way, the promotion of CWB as an important outcome in SEL programme design and delivery can encompass a child's development, important life events, and life transitions (Statham & Chase, 2010).

#### 4.3.4 Considering the dimensions of CWB

Currently, there is no consensus on the dimensions that contribute to CWB. For example, many researchers identify the following range of core CWB dimensions:

- ↳ Physical/health, emotional/psychological (Casanueva et al., 2012).
- ↳ Cognitive/educational (Casanueva et al., 2012).
- ↳ Social/relationships (Morrow, 2001), family (Carroll, 2002).
- ↳ Material/economic (Sixsmith et al., 2007).
- ↳ Contribution to society/community, school/education (Konu et al., 2002; Sixsmith et al., 2007).
- ↳ Behaviours/risks (Casanueva et al., 2012).
- ↳ Safety (Dunn & Layard, 2009).

In contrast, only a few researchers include the following core dimensions that also have a significant impact on CWB, especially for displaced learners:

- ↳ Environment and pets (Nic Gabhainn & Sixsmith, 2006; Sixsmith et al., 2007).
- ↳ Strengths (Dunn & Layard, 2009).
- ↳ Freedom (Dunn & Layard, 2009; Sixsmith et al., 2007).

A unified multidimensional approach to CWB for SEL programming would systematically review empirically validated dimensions for inclusion in the SEL programme design (Wassell & Dodge, 2015). The dimensions that are included will determine and shape the MHPSS-SEL delivered in any educational setting. The longitudinal Fragile Families dataset (Fava et al., 2017) provides empirical support for the multidimensional construct of CWB, but even this dataset is missing two key dimensions. The included dimensions are:

- ↳ **Material wellbeing:** The domain of material wellbeing may best be described as a measure of financial income, goods, resources, and the ability to provide for basic needs.
- ↳ **Relational wellbeing:** The relationship domain represents the types of relationships (e.g. biological parents: married or cohabitating), quality of relationships, and levels of affection expressed towards the child from important people in their lives (e.g. parents and grandparents) and who lived with the child (i.e., mother, father, grandparents).
- ↳ **Health and behavioural wellbeing:** Within this domain of health and behavioural wellbeing the mother's physical health and health behaviours during the prenatal period (e.g. smoking while pregnant, prenatal healthcare) and after birth were taken into account, as well as items about the child's physical health (e.g. birth weight,

asthma, lead poisoning), injuries (e.g. visits to the emergency room), access to healthcare, and subjective measures of the mother's perception of her child's health. In addition, more behavioural health aspects about the child as more independent and interpersonal interactions would be developmentally relevant in early childhood (e.g. child feeling sad, lonely, ashamed, and getting into fights with other children).

- ↳ **Environmental enrichment:** The environmental enrichment domain focuses attention on aspects pertaining to whether or not a caregiver read or told stories to the child, the number of books, toys, puzzles, and instruments that were in the home, and whether or not the child got to go on outings, or had hobbies.

Two further dimensions are missing, despite strong evidence bases. The first is particularly important in EiE contexts, spiritual wellbeing (Quosh, 2013; UNICEF, 2018; Betancourt & Khan, 2008; Silove, 2013). The second very important dimension in EiE contexts is wellbeing associated with a safe physical environment, the foundational level of the MHPSS pyramid (UNICEF, 2018; Frisoli et al., 2019).

For the delivery of MHPSS-SEL in formal and informal educational settings with learners on the move, the above wellbeing dimensions would need to be adjusted and adapted to match the experiences of children in EiE contexts as identified through focus groups and interviews before implementation and delivery. Existing research provides theoretical and empirical information that can inform the transition of these wellbeing dimensions to EiE contexts. As noted, wellbeing is an important outcome for SEL programming, supporting academic attainment, secure relationships, civic engagement and improved employment opportunities.

#### 4.3.5 Resilience

Resilience is a complex concept and continues to be both defined and approached in research in different ways. Generally, it is accepted that resilience is inherently related to the resources that an individual can draw on to overcome adversity (e.g. Richardson, 2002). These protective or promotive factors come in a wide variety of forms that combine to *make* a person resilient. Three interacting levels are involved.

- ↳ **Level 1 – Individual factors:** Focus is on psychological and neurobiological factors that can play a role in maintaining and recovering wellbeing after traumatic events or setbacks. This level of resilience typically involves investigations of personality and coping styles that mediate the relationship between adversity and wellbeing (Masten, 2007), but it can extend to include investigations of physical and cognitive abilities as well as neurocognitive structures and neural responses to stressors (Feder et al., 2009; Reinelt et al., 2015).
- ↳ **Level 2 – Social factors:** Focus is on the social relationships one has and whether an individual can call on and expect support in times of crisis. Research has demonstrated that such relationships can be an important determinant of whether an individual can cope with major stressors such as loss of different kinds, changes in family structures, or chronic ill-health. Social support is widely construed to contain both affective (emotions and feelings) and instrumental components. This level of support is primarily in the form of either emotional support (e.g. listening and providing empathy) or instrumental support (e.g. tangible assistance aimed at solving a problem) (Adams et al., 1996).
- ↳ **Level 3 – Community factors:** Focus here goes beyond individual capacities and takes into account economic, institutional, ecological, and infrastructure capacities

when evaluating which communities are most likely to be resilient in the face of tragedies either natural or human (Cutter et al., 2008; Norris et al., 2008; Murphy, 2007). For instance, it might be necessary to know not only whether a given area has emergency services, but also how well integrated the services are in terms of communication and coordination.

#### 4.3.6 Resilience as a process

The process approach to studying resilience looks more at *how* individuals cope with hardship and, in particular, is often associated with assessing patterns of wellbeing over time to determine who is resilient in periods of stress (Luthar et al., 2000; Windle, 2011; Becker & Ferry, 2016). It has been suggested that there are three general patterns that reflect resilience: 1) functioning well under adverse conditions; 2) a relatively quick recovery to normal functioning after facing adverse conditions; and 3) developing in the face of adversity (Bonanno, 2004, 2005; Masten et al., 1990).

#### 4.3.7 Resilience and wellbeing

Resilience and wellbeing are fundamentally related, and in some instances, resilience is even measured using wellbeing instruments (Davydov et al., 2010; Windle, 2011). Meta-analyses have demonstrated that there are robust relationships between measures of resilience and measures of wellbeing (Hu et al., 2015; Lee et al., 2013). Yet there is evidence that self-report measures of resilience are not simply redundant with indices of wellbeing (Burns & Anstey, 2010; Martínez-Martí & Ruch, 2017).<sup>6</sup>

#### 4.3.8 Approaching resilience, mental health, and wellbeing in EiE contexts

The complex circumstances of EiE settings and the scarcity of research on children in these settings make it difficult to recommend the best approach for important SEL outcomes such as resilience, mental health, and wellbeing in these contexts. The lack of agreement on definitions of resilience, wellbeing, and mental health adds to the difficulty, as does the multi-faceted nature of adversity and trauma. These challenges led Betancourt and Khan (2008) to advocate that these concepts and their applications in EiE contexts be approached as *dynamic processes rather than only as personal stable (unchanging) traits*. Both a multi-level approach (that acknowledges the influence of individual, familial, community and wider social factors) and a process approach (that acknowledges change over time and the factors that contribute to change) are needed. They argue for an understanding of resilience from the perspective of social ecology (Bronfenbrenner, 1979). In this perspective, an individual's social network includes, and extends beyond, the immediate family to peer, school and community settings, and to

<sup>6</sup> At the same time, the relationship between resilience and wellbeing is not straightforward. Some researchers have argued that higher levels of wellbeing serve as an antecedent of resilience (e.g. Kuntz et al., 2016). There has been extensive work showing that positive emotions facilitate resilience (e.g. Fredrickson et al., 2003; Ong et al., 2006; Ong et al., 2010; Tugade & Fredrickson, 2004). Research suggests that positive emotions can promote greater resilience because they promote flexible thinking (Isen et al., 1987) and facilitate both adaptive coping (Folkman & Moskowitz, 2000) and the maintenance of social relationships (Keltner & Bonanno, 1997). Others have suggested that the relationship between wellbeing and resilience can also work in the opposite direction. For example, several researchers have used resilience to directly predict a number of wellbeing outcomes including depression (Loh et al., 2014), job satisfaction (Luthans et al., 2007), and subjective wellbeing (Cohn et al., 2009; Liu et al., 2014). Still others have argued that resilience and related constructs can serve as moderators between stressors and wellbeing outcomes (e.g. Flinchbaugh et al., 2015; Min et al., 2015).

cultural and also political belief systems (Betancourt & Khan, 2008; Boothby et al., 2006; Earls & Carlson, 2001).

Children and families in EiE contexts frequently encounter the loss of security, unpredictability and a lack of structure in daily life (Stichick, 2001; Machel, 2001). Restoration of a damaged social ecology is fundamental to improving prevention and rehabilitative interventions for children in EiE contexts (Betancourt & Khan, 2008). An effective way to restore the social ecology is through SEL programming in educational contexts that includes play and play-based (learner-centred) pedagogies. As discussed below, play and play-based (learner-centred) pedagogies promote child wellbeing and resilience, important outcomes for SEL programming that support academic attainment, stable relationships, and longer-term goals such as improved employment opportunities and civic participation.

## **4.4. Education, play, and play-based pedagogies to promote child wellbeing and resilience**

### **4.4.1 Education as a central pathway to improved mental health and wellbeing**

Amid disruption and experienced chaos, the opportunity for education can be a means of restoring a sense of order and a degree of normality in the lives of children, families, teachers, and whole communities in EiE settings (IASC, 2007; Betancourt et al., 2013). In the theory and research review of EiE during armed conflict by Burde and colleagues (2017), the impossibility of making general statements about education in these contexts is apparent due to the limited number, as well as limitations, of the studies available. However, their overview provides a very useful framework for sorting through and organising current findings.

- ↳ Regarding access to education: diminished or inequitable access to education drives conflict; conflict reduces boys' and girls' access to education differently; and decreased distance to primary school increases enrolment and attendance significantly for boys and even more so for girls.
- ↳ Regarding learning: education content likely contributes to or mitigates conflict, although the mechanisms through which it does so remain underspecified; and peace education programmes show promise in changing attitudes and behaviours towards members of those perceived as the 'other', at least in the short term.

Providing children living in emergency and post-emergency situations with structured, meaningful, and creative activities in a school setting or in informal learning spaces improves their emotional, social and behavioural wellbeing (Burde et al., 2017, p. 620). Educational programmes including SEL with a strong knowledge base and attention to the child's and community's empowerment, through a culturally and gender-informed perspective, are key to providing a sense of stability and the development of daily routines that aid mental health and wellbeing in EiE contexts (IASC, 2007).

### **4.4.2 Loss of education as a source of stress**

The loss of access to education has been shown to be one of the greatest sources of proximal stress in EiE settings for both adults and children, as a good education is perceived to be a means to the future, a way out of poverty and towards a more

prosperous life (INEE, 2016; Burde et al., 2017). From a mental health-wellbeing perspective, access to education can be understood as a means for reducing mental ill-health and for increasing wellbeing. An example is provided by Betancourt and colleagues' (2013) randomised controlled trial that tested the effectiveness of a 10-session cognitive behavioural therapy (CBT)-based group mental health intervention, Youth Readiness Intervention (YRI) for multisymptomatic war-affected youth (aged 15–24 years) in Sierra Leone. The YRI showed significant postintervention effects on emotion regulation, prosocial attitudes/behaviours, social support, and reduced functional impairment, and significant follow-up effects on school enrolment, school attendance, and classroom behaviour. The YRI produced acute improvements in mental health and functioning as well as longer-term effects on school engagement and behaviour, suggesting potential to prepare war-affected youth for educational and other opportunities. This type of research with younger children is lacking, but in general, interventions are even more effective at younger ages, and operate preventatively as well as restoratively.

#### **4.4.3 Play and play-based (learner-centred) pedagogies**

Play is learning. Vygotsky noted, play ‘contains all developmental tendencies in a condensed form and is itself a major source of development’ (1978, p. 102). The instinctual drive to play is very strong in children, and they will do so when they have no real toys, when parents do not actively encourage the behaviour, and even in the middle of a war zone. In the eyes of a young child, running, pretending, and building are fun. Researchers and educators understand that these playful activities benefit the development of the whole child across social, cognitive, physical, and emotional domains. Indeed, play is such an instrumental component to healthy child development that the UN Convention on the Rights of the Child (United Nations, 1989, Article 31) recognised play as a fundamental right of every child. The following boxed text explores the benefits of play to support academic, social and emotional learning.

### **The continuum of absolute play versus work play**

Play can be understood on a continuum from more absolute play to play that incorporates other motives and attitudes that are less playful, such as work. Unlike play, work is typically not viewed as enjoyable in the same way and is extrinsically motivated (i.e. goal-oriented). As researcher Joan Goodman (1994) suggested, hybrid forms of work and play are not a detriment to learning; rather, they can provide optimal contexts for learning. For example, a child may be engaged in a difficult, goal-directed activity in an educational task, but be actively engaged and intrinsically motivated. At this mid-point between play and work, the child's motivation, coupled with guidance from an adult, can create robust opportunities for playful learning.

### **Adults as play facilitators**

Recent research supports the idea that adults can facilitate children's learning while maintaining a playful approach in interactions known as 'guided play' (Fisher et al., 2011; Hirsh-Pasek et al., 2008). Guided play can be less or more directed. Fisher et al. (2011) provide an overview of the range of play, from adults enriching the child's environment by providing objects or experiences that promote aspects of an academic curriculum to adults more directly scaffolding play by joining in the fun as a co-player, asking thoughtful questions, commenting on children's discoveries, encouraging further exploration, and pointing out new facets to the activity. Although playful learning can be somewhat structured and adult-facilitated, it must also be learner-centred (Nicolopoulou et al., 2006). Play should stem from the child's own desire and be adapted to the child's cultural world.

## Necessity of play

Over the past few decades, researchers in the fields of education and child psychology have amassed significant evidence for the necessity of play in children's lives. While having fun, children can develop critical cognitive, emotional, social, and physical skills. Play even contributes to proper brain development (National Research Council & Institute of Medicine, 2000). The informal understanding children gain in play through experimentation, observation, and comparison lays the foundation for higher-order thinking and later learning of formal Science, Technology, Engineering, and Maths (STEM) concepts (Fisher et al., 2011; Tepperman, 2007). Pretend play in the early years is related to later literacy outcomes including reading comprehension and the ability to communicate clearly through speech and writing (for a review, see Nicolopoulou et al., 2006, and Tepperman, 2007). Therefore, while play is an important end in itself, it is also a means to other ends. Executive function, the cognitive abilities behind conscious self-control of thought, action, and emotion (part of the self-regulation process underlying all SEL skills), develops rapidly in childhood, concurrent with maturation of prefrontal brain regions (for a review, see Carlson et al., 2013), and continues to strengthen into the mid-20s. Early executive function abilities have been implicated in school readiness (Blair & Razza, 2007) as well as the development of memory, attention, intelligence, morality, and emotion regulation (for a review, see Zelazo et al., 2008). Moreover, measures of executive function at age four have been shown to predict a host of long-term outcomes including physical health, substance dependence, personal finances, and criminality (Moffitt et al., 2011). Bailey and Jones (2019) note that executive function plays a fundamental role in SEL. The skills children learn through play in the early years set the stage for future learning and success from the kindergarten classroom to the workplace.

## Play and learning

There is a natural link between playing and developing the disposition to learn. Having control over the course of one's own learning, as in free play, promotes desire, motivation, and mastery (Hurwitz, 2003). Children also learn how to search for knowledge, how to explore, how to test ideas and their own hypotheses, and how to engage in discovery. What is more, all this is done in a safe, anxiety- and risk-free environment, where children are free to test the limits of their knowledge and abilities with relatively few repercussions (Hirsh-Pasek & Golinkoff, 2003). Playing can build confidence through the ability to solve a problem, and strengthen the important SEL outcome of resilience by and through encountering challenges, and through failing and trying again (Hurwitz, 2003).

### **Play with peers**

Through play with peers, children learn how their own desires may differ from those of another child, how to advocate for their own ideas, how to deal with frustration, how to work in a group, and how to respond in socially appropriate ways (Berk et al., 2006; Hirsh-Pasek et al., 2008; Pellis & Pellis, 2009). These are skills promoted through SEL programming. The diverse skills that children gain through social play with peers help them feel competent in social situations (e.g. Hirsh-Pasek et al., 2008; Singer & Singer, 2005), while also contributing to cognitive and emotional growth. Pretend play may encourage the flexible thinking required for children to overcome impulses and successfully control behaviour. After a year of acting classes, children and adolescents showed increased empathy, and adolescents showed increased theory of mind (Goldstein & Bloom, 2011). Influencing areas of creativity, language, social skills, socialisation, social understanding, coping and emotion regulation, and promotion of executive function, pretend play can be argued to be a powerful tool for all (academic, social, emotional) learning in childhood (cf., Lillard et al., 2013).

### **Physical play**

Physical play, also known as ‘locomotor’ play or exercise play, involves physical activity in a playful context such as kicking, running, jumping, chasing, and climbing (Pellegrini, 2009). Generally, scholars believe that physical play follows an inverted-U shaped trajectory, gradually increasing from infancy through the school years and then declining during adolescence (Power, 2000). Unfortunately, despite the potential physical and cognitive benefits bestowed by physical activity, physical play is one of the least researched forms of play (Pellegrini, 2009). What is known is that physical play can provide benefits in the cognitive and academic domains. Physical activity can contribute to the development and expression of self. Several intervention studies have shown that moderate to vigorous levels of physical activity can improve executive function in school-age children (for a review, see Diamond & Lee, 2011; as noted executive function plays a fundamental role in SEL). Organised activities like sports may be even more effective, because they require sustained attention and disciplined action. If physical play can impact executive function in young children, it may in turn affect academic outcomes (Blair & Razza, 2007). Taking breaks for physical play also has immediate impacts on learning, which may be due to children’s increased attention to academic tasks after physical activity (Pellegrini, 2009).

### **Play through EdTech and edutainment**

Technology-based computer/media games can be a powerful tool to promote playful learning beyond the point in early childhood when interest in traditional forms of play lessens. Games can also guide children towards advanced knowledge and skills through the graduated levels of complexity built into their programs. The presentation of materials in multiple modalities (i.e., visual, tactile, auditory) can serve the needs of children with a wide range of learning styles (Mayo, 2009). Technology-based learning requires on-going monitoring to prevent and immediately address potential harm (e.g. bullying, grooming, recruitment, incitement).

## **Play in school**

The inclusion of age- and context-appropriate play and play (learner-centred) pedagogies in school settings, as well as in therapeutic interventions, is not uncommon. Schools are in a unique position to offer mental health support adapted to the needs and varying situations of children. One way to reach a wide number of children for different kinds of SEL and mental healthcare interventions is through classroom-based programmes. Beauregard's (2014) review of scientific publications focusing on classroom-based creative expression found 19 articles referring to eight different programmes with refugee and non-refugee children. Examining these for effects on children's mental health, the research generally indicates benefits, but findings are mixed. Some studies reported significant improvement in hope, coping and resiliency, prosocial behaviours, self-esteem, impairment, emotional and behavioural problems (especially aggressive behaviours), construction of meaning and PTSD scores. Other studies also reported no significant change in prosocial behaviours, self-esteem, emotional and behavioural problems, coping and resiliency of adolescent boys and PTSD (without a targeted intervention).

## **Play and the physical environment**

Play elements in programme designs and interventions involve outdoor as well as indoor components, most likely in the vicinity of the learning space. Attention to the physical environment, both natural and constructed, and consequences for multi-dimensional mental health and wellbeing concerns, has been and remains a central dimension in medical anthropology since the original model of Kleinman (1980) proposing that individuals and groups can have vastly different notions of wellbeing, health and illness. The importance of paying attention to the physical environment is a central safety and environmental concern discussed in key EiE guideline documents (IASC, 2007; INEE, 2018; UNESCO, 2019).

For children, teachers, families and the extended community, the school interior spaces and its outside environs are collectively essential safe spaces and healing spaces. Another important consideration is the value of 'owning' and using the spaces for learning and playing processes, such as drama therapy, creative arts, and play spaces in order to support the mind–body function through SEL and other school curriculum activities (Rousseau et al., 2007, 2005). Enabling children in EiE contexts to have a say in how their indoor and outdoor play spaces are planned is empowering, and encourages ownership and care of the space. These types of activities promote wellbeing and mental health.

Given the overall benefits of play outlined briefly above, and its learner-centred orientation, it is vitally important to include play elements in SEL programmes and play-informed interventions for strength-based initiatives with displaced and otherwise vulnerable learners. Rigorous attention should be given to play's multiple modalities and functions. This will strengthen the design and effectiveness of MHPSS programmes and community initiatives with multi-layered benefits for children and youth (Right to Play, 2018). Further reflection on the importance of play for learning is found in Section 7.7, which elaborates on SPICE. The acronym SPICE is used in research focusing on the importance of play in the learning process. SPICE represents the social, physical,

intellectual, creative/cultural, and emotional areas of development (Manwaring & Taylor, 2007; Harvell & Prowle, 2018).

## 4.5. MHPSS-SEL within a public mental health–wellbeing promotion focus

SEL can be viewed through both public health and educational lenses, as a means of both primary prevention (e.g. Elias & Weissberg, 2000) and academic support (Romano et al., 2010). This is implicit in the presentation of MHPSS-SEL in reports published by INEE (2016), UNESCO (2019), and the background paper to the UNESCO 2019 report (Frisoli et al., 2019). This approach can be supported and extended through a focus on public mental health-wellbeing promotion. According to the WHO:

‘Public health refers to all organized measures (whether public or private) to prevent disease, promote health, and prolong life among the population as a whole. Its activities aim to provide conditions in which people can be healthy and focus on entire populations, not on individual patients or diseases. Thus, public health is concerned with the total system and not only the eradication of a particular disease.’ (2016a, 2016b)

### 4.5.1 Protective factors

An approach to public health that includes public mental health with a health promotion focus recognises protective factors for mental health and wellbeing as well as broader determinants, including the lifelong impact of mental ill-health and other risk factors. Good mental health, as the World Health Organisation has noted (WHO, 2004), is the basis of all health. Positive mental health results in health, psychosocial, and economic benefits, which are not due simply to the absence of mental disorder. Moreover, promotion of mental wellbeing can both prevent mental disorders as well as assist in the recovery from mental disorder:

‘Prevention is important for the sustainable reduction of the burden of mental disorder since once it has arisen, treatment can only reduce a relatively small proportion of such burden. The challenge is to incorporate such interventions into non-clinical and clinical practice as well as engaging with a range of other service providers including public health.’ (Campion et al., 2012, p. 68)

UNICEF (2018) argues that prevention of mental disorder and promotion of mental health should be a central part of the work of MHPSS and the wider programme area of SEL. DeMarinis (2018) argues that this orientation has not played a central role, due to various factors, including but not exclusive to training focused primarily on diagnosing and managing mental disorder; insufficient resources; the lack of coordinating strategies between Ministries, institutions, agencies, and sectors; and the lack of operative models that can assist with the coordination of the prevention and promotion foci.

## **4.5.2 Strategies, planning, and priorities**

Public mental health therefore needs to incorporate various strategies, ranging from the promotion of mental wellbeing to primary prevention and other forms of prevention and intervention. Planned strategies need to focus on individual, societal, and environmental aspects. Targeted interventions in relation to individuals will also need to focus on and assess the levels of function in the whole population. Kalra et al. (2012) propose a nested approach with the individual at the centre, surrounded by family, carers, and significant others, and educational and other local networks, surrounded by society at large, as the most suitable way to approach this. Adequate interventions are required for those at risk of developing psychiatric disorders, as well as for those who may have already developed illness. As Betancourt and Williams (2008, p. 324) note, **programmes to enhance protective factors should not supplant targeted clinical programmes intended to help severely traumatised children exhibiting persistent mental health symptoms and functional impairment.**

Mental health and wellbeing promotion need to be prioritised in general and to support health and wellbeing for academic attainment in particular. Simply put, a public mental health-wellbeing orientation focuses on both challenges (e.g. psychosocial impairment, distress) *and* strengths (e.g. wellbeing, resilience) no matter when or where one enters the MHPSS-SEL process. This can be visualised in Figure 2.

Mental health, wellbeing, daily functioning, family cohesion and community members' interaction in general, and not least in EiE contexts, appear to benefit from the provision of PSS interventions (including SEL in formal and informal educational settings), yet evidence regarding their implementation among displaced populations remains limited (Nickerson et al., 2011; Tol et al., 2011). When considering the implementation of care services that foster local agency, an ecological approach may promote culturally appropriate care (Ager et al., 2005). This kind of approach fits well with the Bronfenbrenner (1979) model that has become a standard reference in MHPSS documents (UNESCO, 2019). It can be argued that though humanitarian organisations routinely conduct psychosocial needs assessments (Wells et al., 2016), an ecological assessment goes further, in terms of examining the context and culture for accessing services to address identified needs (Wells et al., 2018). The next sections explore evidence-based methods for engaging all stakeholders in MHPSS-SEL programming.

**Figure 2: Public mental health promotion in EiE settings (Source: Adapted from DeMarinis, 2018)**

## Public Mental Health Promotion in EiE contexts



### 4.5.3 Engaging all stakeholders: Community Readiness Assessment (CRA) Model

The promotion of culturally and contextually appropriate mental health and wellbeing programme interventions, including SEL programming with appropriate interventions, requires an understanding of the social, cultural, and biological factors that shape individual and collective meaning making (Kirmayer, 2006). The CRA model (Wells et al., 2019) represents a tested model and applied method for comprehensively engaging with a community for programme development and implementation, here applied to a MHPSS-SEL service provision.

#### 4.5.3.1 Accessing community views

The CRA model provides a snapshot of how people in the community relate to issues surrounding important concepts, and their concerns about which information is needed for effective programme planning. For example, what are people's beliefs about mental health, wellbeing, education? How do people access help? Who can support change? Getting access to this information through the CRA model creates community engagement. This engagement then enables communities to be involved in and actually shape the interventions (across the MHPSS-SEL spectrum) to fit with community values. The CRA model adapts concepts to communities, further identifying the need for community leadership, engagement, and consensus regarding problem recognition as well as needed resources (Edwards et al., 2000).

#### 4.5.3.2 Rapid assessment through key informants and cultural brokers

The CRA model provides a rapid method for assessing a community's attitudes and capacity to address common social issues to promote change (Thurman et al., 2007). Employing the knowledge of local 'key informants', the CRA model enables identification of community implementation barriers, taking into account local culture,

resources, and existing social structures (*ibid.*). Key informants are community members holding key positions who are knowledgeable about an issue, for example, schoolteachers, health professionals, or religious leaders (*ibid.*). The identification of cultural brokers, trusted by the community and holding key positions for knowledge access, is essential in the process of gaining initial trust and finding ways to access *all* the voices of the community (Kirmayer et al. (Eds.), 2014). Past experiences faced by displaced persons can make it difficult to establish a sense of trust necessary for educational, psychosocially supportive, and therapeutic relationships (Henley & Robinson, 2011), and by extension to become involved in a process to engage with new educational resources, especially SEL, with which displaced communities may be unfamiliar. Cultural brokers can provide access to parents who have psychological problems and concerns, as such access necessitates an understanding of their cultural idioms of distress and of hope (Kleinman, 1980). Such psychological problems can prevent parents or carers from seeking professional help for themselves and from recognising some difficulties in their children as being a manifestation of psychological problems (Thalheimer & Cook, 2002). As a result, mental health, psychosocial, and educational services can experience difficulties in reaching these children. It is therefore important to consider offering and coordinating these services across sectors, including the school environment and surrounding activities (Barrett et al., 2000; Marshall et al., 2005; Tingvold et al., 2012; Tol et al., 2013; Walker et al., 2011).

#### **4.5.3.3 Community empowerment**

The CRA model can be thought of as a type of empowering ‘action research method’ (Creswell & Creswell, 2018) that is embedded in a process of engaging local cultural brokers, with representation from all stakeholder groups, to determine and strengthen participation in the services, and the services themselves, that will affect their communities. The CRA model assumes that:

- ✉ Communities differ in their readiness to address issues.
- ✉ There are multiple stages of readiness that communities move through as they conceive of, realise, maintain, and enhance intervention programmes.
- ✉ Interventions must be appropriate to the community readiness stage in order to be effective and sustainable (Barrett et al., 2000; Marshall et al., 2005; Tingvold et al., 2012; Tol et al., 2013).

Assessment of community readiness may also help identify available and missing resources that need to be addressed (Thurman et al., 2007). For example, people may have knowledge about the value of certain kinds of mental health care, PSS, or SEL opportunities, but no ability to pay for or otherwise access it. Or, such care, support, or opportunities may have been unavailable in their settings and therefore never considered. The next sections explore further the relationship between culture and MHPSS-SEL programming.

### **4.6. Culture and MHPSS-SEL**

Cultural knowledge and its practical expressions in programme planning are recurrent themes in MHPSS-SEL programming research. Cultural knowledge enables better understanding of the dimensions of a person’s pain and hope (Kirmayer, 2008; Lewis-Fernández et al., 2016). This knowledge can shape the delivery of MHPSS-SEL programmes in formal or informal educational and clinical settings with greater

effectiveness for wellbeing promotion. The fifth iteration of the ‘Diagnostic and Statistical Manual of Mental Disorders (DSM-5)’ (American Psychiatric Association, 2013) offers this definition and approach:

‘Culture refers to systems of knowledge, concepts, rules, and practices that are learned and transmitted across generations. Culture includes language, religion and spirituality, family structures, life-cycle stages, ceremonial rituals, and customs, as well as moral and legal systems. Cultures are open, dynamic systems that undergo continuous change over time; in the contemporary world, most individuals and groups are exposed to multiple cultures, which they use to fashion their own identities and make sense of experience. These features of culture make it crucial not to overgeneralize cultural information or stereotype groups in terms of fixed cultural traits.’ (p. 749)

#### 4.6.1 The Cultural Formulation Interview (CFI)

The DSM-5 (American Psychiatric Association, 2013) recommends an internationally tested instrument, *The Cultural Formulation Interview* (CFI), as an information tool for use with ALL clients/patients with mental ill-health and/or lowered psychosocial functioning (impairment or distress). The CFI includes supplemental versions for use with refugee, IDP and asylum-seeker populations; a supplementary module for School-Age Children and Adolescents; and an Informant Version that allows parents, caregivers and significant others to provide information about the learner’s situation. A special version of the CFI could be used with different stakeholder groups in the Community Readiness Assessment (CRA) model application to more thoroughly plan for incorporating age, host culture, gender, and disability sensitivities into SEL programming. Using the person’s own words, the CFI provides a means of mapping their concerns, experiences, and resources in relation to:

- ↳ Understanding of the problem(s).
- ↳ Personal, social, and general life circumstances.
- ↳ Accessible and empowering meaning-making resources (at all levels and of all types) and suggestions for including or connecting these resources to the therapeutic process or other intervention (such as MHPSS-SEL in educational settings).

This information can be used to understand the culturally formed individual, group, and community to more thoroughly plan that SEL content and delivery is age, host culture, gender, and disability sensitive. The adaptation of the CFI for SEL use with an entire class group would allow for the class to be understood as a working unit with a clear mapping of concerns, experiences and resources that can be updated to follow the process of not only individual learners but also the class as a community.

Watters (2001) argues that including cultural information within empowering paradigms helps to address the common critique of Western psychiatry, and other healthcare areas, as seeing migrants/IDPs and other vulnerable groups as ‘victims’. The MHPSS-SEL paradigm that is selected and operative in EiE contexts, as in other contexts, will shape the interactions among programme choices, organisational praxis, healthcare and education systems’ interactions, and possibilities for interactions within the wider community of actors and resources (DeMarinis et al., 2011; Kleinman, 1980; Kleinman et al., 1978). DeMarinis et al. (2011), Kleinman (1980), and Kleinman et al. (1978) argue

that effective mental health and PSS requires attention to cultural meaning-making processes and the social-structural factors under which these processes emerge. Metzl and Hansen (2014) argue that ‘structural competency’ is a necessary component of provider training, intervention development, and implementation. In EiE contexts, the mental health and PSS provider (through formal or informal SEL programming) is often a teacher or other non-specialist adult. This will impact learners, teachers, families, and the wider EiE contexts, and needs to be implemented with appropriate training and continuing professional development with regular supervision.

#### **4.6.2 Varying levels of adversity and trauma in displaced populations**

The integration of past, present, and anticipated future experiences is a human characteristic intrinsic to all theories of human development and learning. The view that responses of the human psyche to immediate stresses are not heavily influenced by past experiences, particularly of a highly adverse or threatening nature, appears to counteract all notions of development and adaptation (Tay & Silove, 2017). More recent adversity and trauma-informed approaches have emerged as alternative or parallel ways of viewing mental ill-health or behavioural difficulties. These approaches acknowledge the impact of biological stress responses on physical functioning, cognitive processes and their impact on emotional regulation, working out of strength-based approaches (for example see, SAMHSA, 2014).

MHPSS-SEL responses to the effects of adversities and trauma exposure, and resulting sequelae for children in EiE contexts, need to be extended to include families and teachers, who themselves may also have experienced similar adversity or trauma exposure (Penson et al., 2012; van Ommering, 2017). Therefore, MHPSS-SEL programme planning needs to pay special attention to addressing the needs of teachers in terms of coping strategies and stress reduction methods (INEE TiCC Collaborative, 2019a, 2019b; Mendenhall, et al., 2018a, 2018b). In situations where teachers are brought in from international contexts, vicarious trauma may be experienced. In this sense, ‘SAMHSA’s Concept of Trauma and Guidance for a Trauma-Informed Approach’ (SAMHSA, 2014) for a trauma-informed approach for programme planning of interventions, grounded in cultural and contextual knowledge, is in accordance with the ADAPT model’s growth orientation and focus on helping people make meaning in and of their situation (the ADAPT model is reviewed very briefly below).

#### **4.6.3 Not a disorder: post-traumatic reactions and post-traumatic growth**

A growing body of research endorses the view that it is inappropriate to label post-traumatic reactions as a disorder (Bhushan & Kumar, 2009). Joseph and Williams (2005) state that post-traumatic reactions are ‘normal reactions experienced by people in response to stressful and traumatic situations, indicative of the need for cognitive-emotional processing, rather than an abnormal state of mind’ (p. 426). Considering the extreme nature of many experiences of displacement, some researchers even designate their behaviour as ‘normal responses to abnormal situations’ (Mollica et al., 1987). Despite the negative ramifications of traumatic experiences, research is moving away from the earlier pattern of excessive focus on the pathological nature of traumatic reactions. Research suggests that in addition to experiencing negative symptoms of post-

traumatic stress (PTS), many persons report positive changes thereafter. These positive psychological changes, which are experienced as a result of the struggle with highly challenging life circumstances, is termed post-traumatic growth (PTG) (Tedeschi & Calhoun, 1995). It is a qualitative transformation in functioning that involves a movement beyond a pre-trauma level of adaptation but does not necessarily yield less emotional distress.

For most trauma survivors, post-traumatic growth and distress coexist, and the growth emerges from the struggle with coping, not from the trauma itself (Tedeschi & Calhoun, 2004). The study by Hussain and Bhushan (2011) with Tibetan refugees is in line with this dual existence paradigm. Their findings concerning the mediating effect of cognitive-emotional regulation strategies between the traumatic experiences and PTS as well as PTG fit with the two-continuum mental health paradigm reviewed above.

#### **4.6.4 Avoiding under- or over-diagnosing and neglecting wellbeing**

This complex picture of reduced functioning, adversity, and trauma undergirds two core postulates of the ADAPT (Adaptation and Development After Persecution and Torture) model created with and for displaced people. Although the title of the model suggests relevance mainly to severely affected sub-groups, as an ecosocial model its relevance and value spans all four levels of the MHPSS-SEL programming spectrum (see Figure 3), and along both dimensions of mental ill-health AND wellbeing at the micro (individual), meso (family and group) and macro (society) levels (see Figure 1). For emphasis, the model is appropriate for all displaced and/or vulnerable learners. The ecosocial model identifies five life systems: safety and security; roles and identities; justice; bonds and networks; existential meaning. These five pillars (life systems) characterise all societies, whether stable or disrupted, according to two postulates:

- ↳ The five identified psychosocial pillars overlap and interact.
- ↳ The greater the undermining of several pillars, the more likely that foreground experiences (cumulative lower functioning, trauma and stress) will lead to adverse mental health outcomes.

Further, the range of mental reactions (normative and pathological) is extended beyond the conventional categories of depression and PTSD; the complex interaction of different types of lower functioning, trauma, and stress against the background of varying degrees of disruption of the psychosocial pillars (life systems), produces a variegated and overlapping constellation of symptoms (for example, explosive anger, prolonged grief, complex-PTSD and separation anxiety) commonly observed among refugees and other displaced populations all along the life cycle. From these observations emerge new diagnostic categories or understandings of impairment and lowered functioning.

Together, the five ADAPT pillars (life systems) are designed to represent universal experiences of displaced children and young people, offering an intuitive and meaningful overview not only to professionals of all kinds, but to the displaced, refugee, and migrant people themselves (Silove & Steel, 2006; Silove, 2000). The provision of this meaningful overview to displaced learners, families, and communities is itself an initial wellbeing- and resilience-promoting intervention, thereby promoting two important SEL outcomes. In understanding adversity and trauma in displaced populations, Tay and Silove (2017) cohere with Miller and Rasmussen (2017), who propose an expanded model concerning the determinants of mental distress. Miller and Rasmussen (2017) note that current stressors can be even greater risk factors for PTSD among people exposed to traumas,

even more than the direct effect of past traumas (see also De Schryver et al., 2015, and Jayawickreme et al., 2017).

#### 4.6.5 Evidence base

The ADAPT model draws heavily on existing observations (clinical, theoretical, and scientific) alongside many studies that have tested discrete aspects of the framework. Research has provided support for the importance of all five constituent pillars (life systems) of the ADAPT model. The impact of life-threatening events (Pillar 1) (Tay et al., 2016c), traumatic loss (Pillar 2) (Tay et al., 2015a; Tay et al., 2016b) and the sense of injustice (Pillar 3) (Tay et al., 2017b) have each been linked to common mental disorders, specifically PTSD, complicated grief and explosive anger, respectively (Tay et al., 2016a; Tay et al., 2017a). Nevertheless, although there is a degree of specificity in these relationships, patterns of overlap are common, given that the ADAPT pillar areas (life systems) often are undermined simultaneously and there is a high level of comorbidity involving common mental disorders and related psychological reactions amongst displaced persons.

Recent research has been conducted that explicitly tests all pillars (life systems) of the framework simultaneously. An operationalised index of ADAPT components was included in the comprehensive ‘Refugee-Mental Health Assessment Package’ developed and validated among West Papuan refugees, along with other components including trauma events, ongoing stressors and a range of mental disorders (Tay et al., 2015d). In the statistical analyses, the whole ADAPT index was shown to play a key role in revealing the pathways leading to several pathological outcomes including PTSD (Tay et al., 2015a), complicated grief (*ibid.*) and adult separation anxiety (Tay et al., 2016a). The quantity of trauma and adversity on its own did not lead to PTSD. Only when the ADAPT index as a whole measure was included, did the model produce a good fit and show the direct effect of ongoing adversity as well as the moderating effect of the ADAPT model on adverse events and trauma exposure. Several ongoing studies are examining the ADAPT measure in a further sample of West Papuans residing near the border of Papua New Guinea, and among displaced refugees from Myanmar in Malaysia.

The orientation to adversity and trauma in the ADAPT model is informed by research on the long-term effects of experiencing early life adversity and trauma on brain function and future mental health risk. As noted earlier, childhood adversity has been found to be associated with changes in brain structure and connectivity in non-clinical adolescent and adult groups. These physical changes to the brain have been shown to correlate with mental health-related traits that were likely to sensitise the individual to future life stress (Cristóbal-Narváez et al., 2016; McCarthy-Jones et al., 2017; INEE, 2016).

The ADAPT model has been used to develop an explicitly experiential psychosocial intervention (Integrated ADAPT Therapy, IAT) that focuses more directly on the meaning of the continuum of changes experienced by displaced populations, organised according to the constituent five pillars (life systems) (Tay & Silove, 2017). In its early proof of concept and piloting phase, IAT contextualised the universal pillars within the culture and specific environments of a range of displaced population groups. Preliminary observations suggest that IAT, incorporating CBT and other techniques, resonates strongly with the lived experiences of displaced persons in a range of settings and has promise in reducing distress, bringing coherence to the sense of chaos and increasing the adaptive capacities of displaced persons with varying levels of distress (Tay & Silove,

2017). The next sections examine the relationship between SEL programming and the MHPSS triangle.

## 4.7. The MHPSS-SEL triangle in EiE contexts

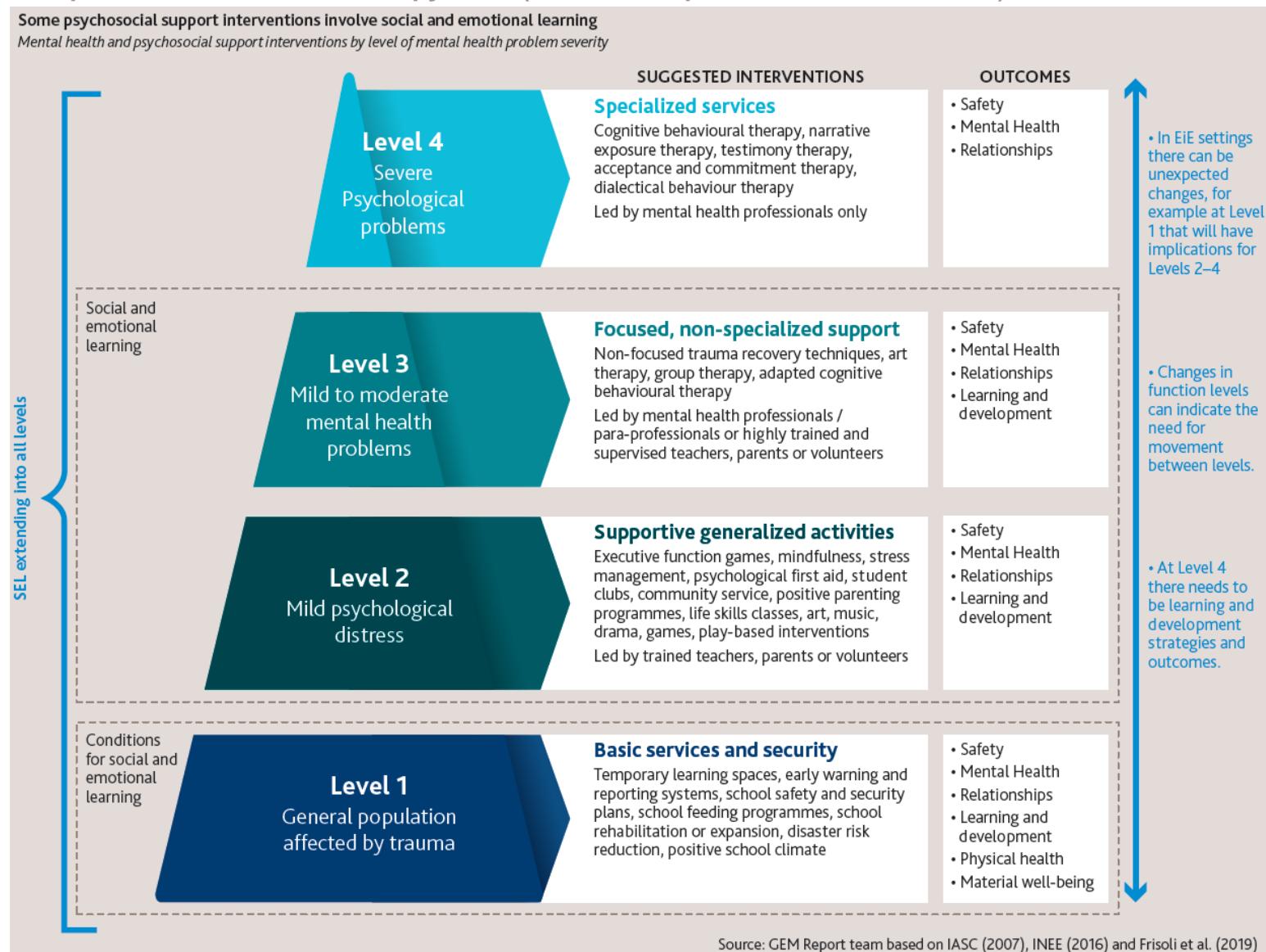
One important need for SEL in EiE contexts involves incorporating a range of SEL activities both within and outside of a curriculum structure across the different levels of the MHPSS triangle. INEE (2016), INEE (2018), Frisoli et al. (2019), and UNESCO (2019) discuss the important need for SEL programmes and activities for all levels of service. All sectors have a role to play in meeting children and family MHPSS-SEL needs and in facilitating referrals up and down the layers of the MHPSS triangle. However, SEL is often placed at Levels 2 and 3 only. Instead of SEL being confined to Levels 2 and 3 (Community and Family Support; and Focused, Non-specialised Services, respectively; UNESCO, 2019), this review indicates a need to extend the reach of SEL programming in educational contexts to the entire triangle, that is, also to Level 1 Basic Services and Security, and to Level 4 Specialised Services: see Figure 3.<sup>7</sup>

- ↳ **Level 1 – Basic Services and Security:** Concerns for actual security, and even safety, often need to be supplemented by the community and family members as well as by coordinated efforts of the children themselves. Concerns for safety and the ability to trust in ‘safe spaces’ are prominent themes for children as well as adults in EiE settings, as the ADAPT model indicates. It therefore seems important to include Level 1 in SEL programming, to the extent possible.
- ↳ **Level 4 – Specialised Services:** Many children, teens and adults will have multiple adverse events, trauma sequelae, and psychopathology, diagnosed or otherwise, depending on the MH resources available. In many contexts, specialised services simply do not exist, and children will not be diagnosed or otherwise supported. Given the scarcity of specialised services, it is all the more important that wherever possible, all children are included in the Learning Passport in general and in the SEL components in particular. Inclusion for such targeted populations can make an essential difference to their daily level of function AND the possible inhibition of further deteriorating conditions. It therefore seems important to include Level 4 in SEL programming, to the extent possible.

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<sup>7</sup> This proposal for widening the range of SEL is based on discussions with members of the World Psychiatry Association working with refugees and asylum seekers in transcultural mental health contexts in both low and middle-high income countries.

**Figure 3: The place of SEL in the MHPSS pyramid (Source: Adapted from UNESCO, 2019)**



#### **4.7.1 Multi-sector and multi-agency collaboration and coordination**

An inclusive SEL reach (across all four levels of the MHPSS-SEL triangle) would require close consultation and collaboration among health, mental health, and education sectors. School interest in social and emotional development has been in evidence for over 100 years (Osher et al., 2016) and recent international guidelines have focused on educational settings as non-threatening contexts for addressing mental health and psychosocial needs, highlighting the potential value of SEL contributions (INEE, 2018; USAID, 2019; GEM, 2019; Frisoli et al., 2019). UNESCO Policy Paper 38 (2019) notes that mental health services may be underutilised due to systemic and cultural barriers, and recommends schools as a hub for connecting mental health professionals, communities, families, teachers, and learners. As discussed throughout this report, systemic and cultural barriers can lead to underutilisation of educational services as well. Prioritising multi-agency work (MAW) at the national, regional, and local levels to build collaborative partnerships among the health, mental health, and education sectors will enable all MHPSS-SEL activities to have a dual health promotion and risk reduction function. These partnerships will also support direct and indirect links to academic achievement along with wellbeing in educational and other settings. Having located SEL within the programme area of MHPSS with a wellbeing-resilience focus, the next sections explore the field of SEL specifically.

### **4.8. The field of SEL: Benefits alongside dilemmas, international barriers, and design parameters for EiE**

As noted at the start to this section, the CASEL definition is used widely in the field of SEL: the processes by which children and adults acquire and apply core competencies to recognise and manage emotions, set and achieve positive goals, appreciate the perspectives of others, establish and maintain supportive relationships, make responsible decisions, and handle personal and interpersonal situations constructively (USAID, 2019; INEE, 2018; UNESCO, 2019; Osher et al., 2016; Elias et al., 1997; Weissberg et al., 2015; Aspen Institute, 2019). The early decades of SEL research and practice occurred primarily in the United States (Frydenberg et al., 2017). Now internationally, the CASEL definition is used to shape a general education approach, movement and policy (Torrente et al., 2016). For example, the IRC, RTI International, Norwegian Refugee Council (NRC), Save the Children, Creative Associates International, War Child Holland, and Finn Church Aid, currently implement PSS and SEL programmes that follow a specific scope and sequence, with guided lesson plans and activity sheets that are designed to build students' five SEL competencies or SECs (self-regulation, self-management, social awareness, relationship skills, and responsible decision-making) as identified by the CASEL framework (Frisoli et al., 2019; Payton et al., 2000). At the time of writing, the outcomes from these projects are unknown. This example demonstrates several tensions currently at work within this dynamic and still developing field, including the use of Western definitions of SEL in non-Western contexts, discussed briefly below.

#### **4.8.1 Benefits from SEL in EiE contexts**

The promotion of learner emotional health and wellbeing through SEL programmes has been found to have a positive impact on child development and learning, representing a

promising avenue of response for EiE contexts (INEE, 2016). Meta-analyses report social, behavioural, and academic benefits (Corcoran et al., 2018; Durlak et al., 2011). Research also suggests that early SECs are linked to later academic achievement, whereas social and emotional problems or challenges are linked to academic difficulties (Blair & Diamond, 2008; Konold & Pianta, 2005; National Research Council & Institute of Medicine, 2000; Raver, 2002; Romano et al., 2010). In EiE contexts, SEL skills build wellbeing and resilience among children and youth affected by crisis, making the difference between their having supportive relationships or being socially isolated, between managing stress or turning to negative coping mechanisms, and between success in school or dropping out (Diaz Varela et al., 2013). As communities emerge from conflict, natural disasters, or other violence, prioritising SEL in formal or informal educational settings builds stronger, more socially cohesive groups that can pave the way for ending the cycle of violence fuelled by social polarisations (the opposite of social cohesion). ‘Learning spaces are natural channels for delivering SEL programming, especially in crisis contexts. This is already happening around the world, even if the efforts are not called SEL’ (INEE, 2016, p. 14), supported by substantial international investment in SEL programming (Humphrey, 2013).

#### **4.8.2 Dilemmas within the field of SEL**

At the same time, the field of SEL is beset by several dilemmas (USAID, 2019; UNICEF, 2018; Jones et al., 2016; Wigelsworth et al., 2016; Whitehurst, 2016; Gelbach, 2015; Nagaoka et al., 2014; Heckman & Kautz, 2012; Frydenberg et al., 2017). One dilemma focuses on what the field should be called, e.g. twenty-first century skills, life skills, soft skills, non-cognitive skills, academic mindsets, or other. Another dilemma focuses on what is included in the field (i.e., inclusion–exclusion boundaries). And still another on what the targeted domains should be called, providing an example of the ‘jingle-jangle fallacy’ (Block, 2000) with varying terms of reference for SEL ‘skills’, including ‘domains’, ‘habits’, ‘attitudes’, ‘virtues’, ‘competencies’, ‘capacities’, ‘feelings’, ‘strengths’, ‘progressions’. Similarly, a range of terms can be used for a specific skill or domain, such as self-control, which is termed variously as self-regulation, executive control, and willpower, among others. Crucially, there is no agreement on the essential ingredients for change (e.g. targeted versus universal programmes; inclusion of teachers and families or focus on learners alone) or on how individual programmes should be evaluated and monitored. The term SEL itself is used to refer to both processes and outcomes, as well as policies and educational approaches. One proposed rubric is to use SEL to refer to process and practice, and SEC to refer to the factors and outcomes derived from this process and practice (Frydenberg et al., 2017). In SEL and SEC research, this distinction is not always clear, but it is argued as critical to enable practitioners to know precisely where their efforts are to be directed (e.g. on the process of SEL) and what they are promoting (e.g. SEC) when operationalising the SEL process (*ibid.*).

#### **4.8.3 The dilemma of SEL programme variabilities**

Variabilities among SEL programmes testify to the flexibility and relevance of SEL to a wide range of contexts and situations. The spectrum of variabilities creates challenges for comparisons and adaptations across programmes and contexts. These variabilities include:

- ↳ Contexts of delivery, including culture (e.g. attitudes towards and goals for education, gender inclusion, disabilities, and social and emotional norms).
- ↳ Educational infrastructure (e.g. educational system priorities, buildings and learning spaces, equipment, travel to and from schools).
- ↳ Teaching resources (e.g. pedagogies, training, continuing professional support).
- ↳ Possibilities for family and wider community involvement (which can involve a mix of cultural-socio-economic factors) (UNESCO, 2019; Frisoli et al., 2019; USAID, 2019; INEE, 2016; INEE, 2018; Wigelsworth et al., 2016).

The result is individual programme studies and meta-reviews evidencing clear SEL benefits (McEvoy, 2019; Baker-Henningham & Walker, 2018; Durlak et al., 2011; Taylor et al., 2017; Corcoran et al., 2018) alongside other findings of failure to achieve or replicate targeted change (Frisoli et al., 2019; INEE, 2018; Wigelsworth et al., 2016; Social and Character Development Research Consortium, 2010). These contrasting findings occur both within the country of programme origin and during international transfer. Terminological (as well as methodological) variabilities can undermine efforts to gain clearer understandings of the key factors contributing to either outcome (Jones et al., 2016; Wigelsworth et al., 2016). Again, the measurement and assessment variations evidence the need for a methodology fitting to programme, context, and study goals, but also create challenges for comparisons across programmes and contexts. Example variations in SEL studies include:

- ↳ Population sample and size (Durlak et al., 2011; Schonfeld et al., 2015).
- ↳ SEL programme design (e.g. how the fidelity–adaptation tension is navigated, delivery intensity, targeted domains for change).
- ↳ Implementation protocols.
- ↳ Study design.
- ↳ Continued developer involvement in effectiveness evaluation, after pre-piloting, piloting, and efficacy studies (these latter should involve developers) (Eisner, 2009).
- ↳ Measurement instruments and administration methods.
- ↳ Depth and breadth of reporting.

These variations make it difficult to compare outcomes from delivering the same programme in different contexts, let alone across programmes in one or more countries (McKown, 2019; Wigelsworth et al., 2016; Berman & McLaughlin, 1976; Castro et al., 2004; Hansen et al., 2013). SEL assessment is sometimes seen as something distinct and separable from academic learning unless the benefits and clear goals for SEL delivery and assessment are communicated to all stakeholders (McKown, 2019). These issues, while understandable to an extent, challenge SEL delivery in high-income countries and are magnified in EiE contexts (UNESCO, 2019; Frisoli et al., 2019; Soye & Tauson, 2018).

The importance of targeted interventions is highlighted in the systematic review by Jordans and colleagues (2016) of 24 mental health and psychosocial interventions for children affected by armed conflicts in low- and middle-income countries. It offers valuable guidance easily adapted for designing and assessing SEL programmes and related interventions in school-based settings in EiE contexts:

- ↳ Gap between published research and the focus of MHPSS programmes: While most of the SEL programming and interventions being implemented in humanitarian settings are geared towards strengthening community support (e.g. activating social

networks, creating supportive child-friendly spaces), most research attention still goes to focused interventions, especially CBT.

- ↳ Importance of identifying specific activities tied to specific outcomes: Outlining how SEL programming and interventions may affect different subgroups of children is essential in complex and dynamic environments with ongoing adversity threatening mental health and wellbeing.
- ↳ Match outcome measures to outcome goals: SEL programming and interventions can have very different goals (ranging from promotion, to prevention, to treatment) and need to select carefully the outcome measures that best match the intervention goals.
- ↳ One size does not fit all: Tailor SEL programming and interventions to specific socio-cultural contexts and conflict settings.
- ↳ Planning, conceptual grounding, and sustainability: There is a need for better targeting and improved conceptual development of SEL programming and interventions for more effective and sustainable results.

#### 4.8.4 International barriers

According to the ECCN and Salzburg Global Seminar (2019), at the global level, ‘the three most frequently cited barriers [to SEL programme success] relate to teacher preparation, curriculum design, and perceived challenges around measurement and assessment. There are also significant constituencies who for different reasons do not consider SEL opportunities to be important and relevant in education’ (p. 2).

Overcoming these challenges effectively in EiE contexts may seem impossible when compared to other contexts with the infrastructure, political will, and capacity to invest multi-levelled resources in planning, training, testing, and monitoring (e.g. such as is occurring currently in the RefugeesWellSchool research project: Norwegian Centre for Violence and Traumatic Stress Studies, 2018). Moreover, diverse cultural perspectives on what comprises SEL and SEC mean that what are not considered to be SEL factors in some Western and individualistic contexts are thereby missed during the development and evaluation of SEL processes and outcomes in non-Western and communal contexts (Frydenberg et al., 2017; Torrente et al., 2016). This indicates that SEL programme designs and evaluations in EiE contexts cannot simply adopt Western SEL definitions for non-Western contexts and expect cultural and contextual coherence. Instead, perhaps a strategy that could be used to guide SEL programme designs would begin by identifying the fundamental human processes underlying all SEL skills and to culturally and contextually incorporate these processes into a specific community’s ecosystem.

Mapping efforts are underway to bring order, clarity, and comprehensibility to the SEL field in general and to EiE contexts specifically. The INEE PSS-SEL Background Paper (2016) aims to clarify the range of terminologies and approaches relating to PSS and SEL in education in crisis-affected contexts, uniting PSS and SEL within a wider mental health framework graphically portrayed in the MHPSS-SEL triangle with four levels introduced above (Diaz Varela et al., 2013, adapted from IASC, 2007; INEE, 2016). The INEE PSS Guidance Note (McNatt et al., 2018) emphasises the need to support the psychosocial wellbeing of all children and youth, particularly those in the face of crisis, and suggests strategies for incorporating PSS into educational responses. The Harvard ELTP is creating a ‘Rosetta Stone’ type of resource to facilitate connections, comparisons, and communication across programmes and perspectives in the midst of SEL terminological and conceptual differences (Jones et al., 2019; ECCN & Salzburg

Global Seminar, 2019; Jones, 2019). A nascent collaborative partnership led by INEE and the Harvard EASEL Lab intends to create a core SEL framework for EiE contexts from 20 existing programmes, which will include cultural adaptation, implementation, and evaluation guidance. Other teaching collaboratives aim to map best practices for those in teaching roles (e.g. INEE Teachers in Crisis Contexts Collaborative; Promising Practices in Education UNHCR, Save the Children, Pearson Collaborative).

#### **4.8.5 EiE contextual parameters for SEL programme designing and planning**

While the above mapping processes are contributing significantly to understanding and knowledge, in crisis contexts where urgency and time pressures are high, SEL programmes may be imported and deployed with minimal assessment and contextual or cultural adaptation (Silove et al., 2017a; Tay et al., 2015c). Skills may be taught without regard to the specific needs of the learners in a specific context. Important SEL factors in one culture and context may be dismissed or unrecognised in another context and culture. A key question for SEL programmes in EiE contexts is how to plan around the tensions of urgency, scalability, and the specific needs of displaced learners with local contextual and cultural requirements.

#### **4.8.6 The fidelity–adaptation tension**

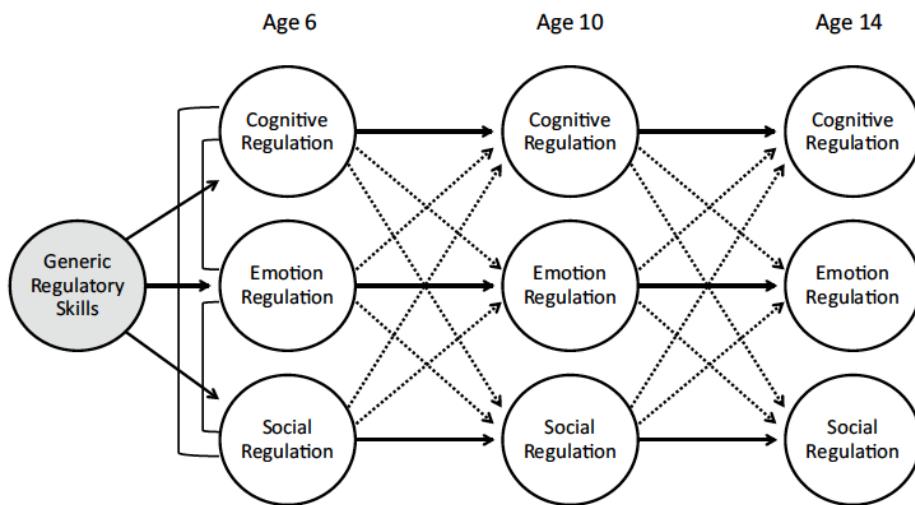
The number of adaptations to an existing programme can reach the threshold of effectively creating a new programme (Berman & McLaughlin, 1976; Castro et al., 2004; Hansen et al., 2013; Wigelsworth et al., 2016). At that point, the programme evaluation process (trial stages) must begin afresh, changing how programme evaluation results can be related to previous evaluations to inform conclusions about and claims for programme effectiveness. Resisting either sufficient adaptations in the name of fidelity to the original programme, or sufficient fidelity in the name of adaptation, each risks dereliction of duty and violation of the international ethic of ‘do no harm’ to the learner and wider learning community (Frisoli et al., 2019). Navigating the fidelity-adaptation tension could be helped by the fact that SEL programming sits within the MHPSS programme area and can utilise initial assessment models and tools designed to access the needs and goals, resources and challenges of EiE learners, families, and communities in specific contexts. Having identified these contextual design parameters for SEL programming, the next section explores the design parameters that can guide SEL programme content.

### **4.9. Self-regulation as the underlying mechanism for SEL skill development**

In a meta-analysis of two major strands of self-regulation research literature, executive function and effortful control, Bailey and Jones (2019) identify self-regulation as the key underlying mechanism for academic, emotional, and social success across the lifespan. They argue that social and emotional skills and skillsets rely on fundamental regulatory skills that develop over time through the development of a ‘regulatory gestalt’ (integrated, multi-dimensional, holistic). In this process, regulatory domains (cognitive, emotion, social) are integrated to support increasingly more complex behaviour. This developmental process involves a developmental progression beginning with generic,

basic self-regulation skills that differentiate into more tailored, specialised skills and then integrate into skills that are more complex and sophisticated. Figure 4 represents this process schematically, highlighting the interplay of cognitive, emotion, and social regulatory skills.

**Figure 4: Regulatory influence within and across domains: ‘Skills in one regulatory domain influence the development of more sophisticated skills in that domain and also influence other domains’ (Source: Bailey & Jones, 2019, p. 19)**



An SEL programme for EiE contexts will need to target self-regulation in ways that acknowledge the interplay between cognitive, emotion, and social regulation. Which SEL skills should be prioritised? To begin to respond to that question, the next section considers the competency areas or domains that SEL programmes target.

#### 4.9.1 SEL competency areas or ‘domains’

As noted, the CASEL definition for SEL is the most widely used internationally. From the CASEL definition emerge five SEL competency areas: self-regulation, self-management, social awareness, relationship skills, and responsible decision-making (Elias et al., 1997). The earlier mentioned ELTP has identified six broad SEL ‘domains’: cognitive regulation, social skills, perspectives, emotional skills, values, and identity), each with ‘sub-domains’ (Jones et al., 2019). It is important to note that CASEL and ELTP have developed and provide frameworks for analysing SEL programme areas/domains that are NOT themselves SEL programmes. According to the ELTP analysis, SEL programmes vary widely as to how they prioritise the domains targeted for change. Some target all six domains more or less equally, while others target one or two dominant domains.

The ELTP domains and CASEL competencies overlap but do not refer to phenomena at the same level of analysis. The CASEL competencies were formulated to inform and guide an evaluative framework that aims to identify, evaluate, and rate ‘well-designed’, ‘evidence-based’ SEL programmes with potential for wide dissemination (Weissberg et al., 1989; Payton et al., 2000; CASEL, 2013). The ELTP domains emerged as a descriptive rather than an evaluative tool after reviewing over 35 SEL programmes. Applied to the CASEL framework (not a programme), the ELTP analysis shows that the CASEL competencies fall into the ELTP domains of cognitive regulation, emotional

skills, social skills, and values, in roughly equal percentages (20, 23, 28, and 20 per cent, respectively), but fall into the two domains of trait-based perspectives and identity to a much lesser degree (3 and 8 per cent, respectively) (Jones, 2019). Figure 5 presents the CASEL competencies and ELTP domains.

**Figure 5: CASEL core competencies and ELTP domains. (Source: Adapted from Weissberg et al. (Eds.), 2015, and Jones et al., 2019)**

CASEL core competencies <b>Collaborative for Academic, Social, and Emotional Learning</b>	ELTP core domains <b>EASEL Lab Taxonomy Project</b>
self-regulation (e.g. recognition of interplay among emotions, thoughts, behaviours; self-assessment; confidence; optimism)	cognitive regulation (e.g. attention control, working memory)
self-management (e.g. emotions, thoughts, behaviours, including stress management, impulse control, self-motivation)	social skills (e.g. understanding social cues, conflict resolution)
social awareness (e.g. perspective-taking, empathy, social-ethical norms, social resources)	perspectives (i.e., trait based)
relationship skills (e.g. listening, cooperative, and conflict negotiation skills; capacity to resist peer pressure)	emotional skills (e.g. emotion knowledge, expression)
responsible decision-making (e.g. consequential thinking, social norms, ethics; wellbeing of self and others)	values (e.g. ethical, performance)
	identity (e.g. self-knowledge, purpose)

#### **4.9.2 Self-regulation as the common denominator underlying CASEL competencies and ELTP domains**

Given these overlaps and differences between the most widely used set of SEL core competencies and the first analytical tool created to organise the diverse SEL programming field into a comprehensive framework, what is the most appropriate design for displaced learners? Is there a common denominator that can serve as the foundation for SEL programming with displaced and other vulnerable learners? Based on the analysis of Bailey and Jones (2019), self-regulation is the common denominator beneath the overlaps and differences between the widely used CASEL competencies and the comprehensive analytical tool of ELTP domains. As explored above, self-regulation emerges through a developmental progression of cognitive, emotional, and social self-

regulation into a ‘regulatory gestalt’, that is, an integrated, multi-dimensional, holistic system (Bailey & Jones, 2019). This insight seems to offer a way through the international challenge noted above regarding the variation in SEL competencies across cultures and contexts (Frydenberg et al., 2017; Torrente et al., 2016). Due to cultural differences, factors not considered to be part of SEL in some Western and individualistic contexts are omitted or missed during the development and evaluation of SEL processes and outcomes in non-Western and communal contexts. Given the cultural and contextual differences regarding what is and is not an SEL factor, it seems important that an SEL programme design for EiE contexts uses a framework that begins with the fundamental human developmental progression of self-regulation through differentiation and integration that underlies all SEL skills.

Self-regulation through differentiation and integration is the human process that underlies all SEL skills regardless of the culturally or contextually defined and shaped SEL skill. A self-regulation SEL framework can support a programme design that targets the SEL factors that are culturally and contextually recognised and appropriate for specific EiE educational settings. Identifying these factors will require an evidence-based model that captures the interaction between individual and social expressions of differentiation and integration, i.e. beginning with basic, generic self-regulation skills that differentiate into specialised skills and then integrate into more complex skills, along with an ecosocial model of functioning directly relevant to learners on the move, such as the ADAPT model discussed above.

### **4.9.3 Individual and social expressions of differentiation and integration: Integrative complexity**

Over 40 years of research into the general cognitive processing model, ‘integrative complexity’ (IC), has explored how people engage cognitively with varying environmental demands and features a cross-culturally validated empirical measurement frame (Baker-Brown et al., 1992).<sup>8</sup> The term ‘cognitive’ is used in a broad sense, to include affective (emotions and feelings) and social as well as cognitive processing. Cognitive processing involves an interplay among how we think, feel, and interact with other people (individuals, groups, communities, and societies). IC has two inter-related unique features distinctive from other cognitive processing models (Suedfeld, 2010, p. 1,671).

#### **4.9.3.1 Differentiation and integration**

One unique feature of the IC model is the division of cognitive processing into the two variables that are comprise the developmental progression of self-regulation, differentiation, and integration. Differentiation emerges through the recognition of different dimensions or perspectives, e.g. three reasons I love school; or, two reasons I hate walking to school. If differentiation is articulated, then integration can emerge through the recognition of complex connections among different dimensions or perspectives, e.g. the reasons why I love *and* hate school; or, you love school and I hate school but we still like to play together (Suedfeld, 2010; Baker-Brown et al., 1992). Integration cannot be present without differentiation. On a scale of one to seven, IC can increase from one (no differentiation, e.g. closed, inflexible thinking/affect/social engagement, intolerant to ambiguity) to two and above with the increasing presence of

<sup>8</sup> This analysis and presentation of IC has been reviewed by international experts on this cognitive processing model.

differentiation and integration (e.g. open, flexible thinking/ affect/ social engagement that tolerates ambiguity and searches for new information and connections).

Thinking complexity has some dispositional features, i.e., trait characteristics for thinking with more or less complexity, referred to as conceptual complexity (Suedfeld et al., 1992; Suedfeld & Bluck, 1993, p. 123). In contrast, the focus of IC is situational thinking complexity, is shown to be malleable, and is the basis of self-regulation (Hunsberger et al., 1992; Park & Deshon, 2018; Boyd-MacMillan, 2016; Boyd-MacMillan et al., 2016; Liht & Savage, 2014; Savage et al., 2014). IC self-regulation is scaffolded by increased age-appropriate awareness of the two complexity variables or developmental progression of differentiation and integration, in safe learning spaces created by using IC-guided principles and methods discussed briefly below.

#### **4.9.3.2 How people think rather than what they think**

In addition to focusing on differentiation and integration, the IC model is also unique because it focuses on the ‘conceptual rules utilised when thinking, deciding, and inter-relating: *how* people think not *what* they think’ (Suedfeld, 2010, p. 1,671, emphasis original). IC measures focus on the ways in which our thinking structure – the interplay between our thoughts, feelings, and social processes – is shaped by the interaction between environmental demands and internal and external coping resources (Suedfeld et al., 1992). Any idea, belief, or thought can be expressed and enacted with more or less differentiation and integration, which in turn can guide whether or not we engage more or less peacefully with difference (Suedfeld et al., 2013; Suedfeld, 2010; Liht et al., 2005; Tetlock & Tyler, 1996). A drop in IC, the absence of not only integration but of differentiation as well, has been shown to predict destructive conflict and even violence among a range of groups (e.g. animal rights, territorial, white supremacy, Islamist, sectarian, and varying ethnic, cultural, nationalist, socio-economic groups). In contrast, the presence of differentiation and integration (IC increases) predict more peaceful engagement with difference through respect for and prosocial engagement with difference despite disagreement, while holding on to one’s own core values (*ibid.*). The IC measurement frame (coding the absence or increasing presence of differentiation and integration) has been operationalized into a method for reviewing and co-producing programming (see e.g., Boyd-MacMillan, 2016; Boyd-MacMillan et al., 2016).

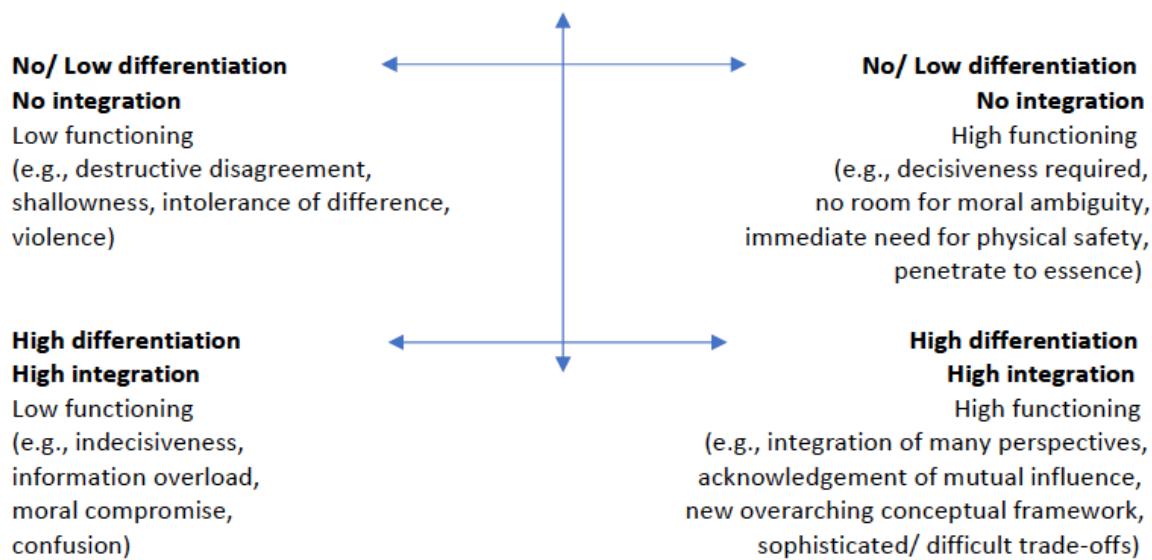
These two unique features of the IC model, the focus on the self-regulation developmental progression of differentiation and integration that underlie all SEL skills and the focus on that how rather than the what of thinking, seem to indicate that it is a particularly appropriate model for a range of cultures and contexts. A focus on behaviours rather than beliefs, on self-regulation as culturally and contextually expressed, seems to hold the promise of avoiding the imposition of Western definitions and models on non-Western populations in challenging situations. If the IC model were to be used in an SEL programme design, what would be the overall goals for the learners?

### **4.10. Self-regulation skills: Differentiation and integration appropriate for a given situation**

As the originator of the IC model, Suedfeld (2012) notes that positive and negative stress effects can be experienced by an individual simultaneously. Somewhat similarly, an individual can, in one situation self-regulate with little or no differentiation *and* with

differentiation and integration, both simultaneously. For example, an individual might move to safety in the face of immediate physical danger using very basic self-regulation skills and simultaneously develop a strategy for hiding, using sophisticated self-regulation skills. In other words, it is possible to self-regulate at different levels simultaneously. IC might therefore be depicted as two spectrums that have a degree of interplay. Low differentiation and high integration can each represent lower or higher functioning, depending on the demands of the situation and our internal and external coping resources. Basic, generic self-regulation manifesting as simple thinking (low or no differentiation, no integration) can be low functioning and impede learning through cognitive closure and intolerance of difference *or* move towards high functioning with appropriate decisiveness and moral strength. Similarly, more sophisticated self-regulation manifesting as complex thinking (basic skills differentiated into more specialised skills that integrate into complex skills) can be low functioning and almost paralysing *or* move towards high-functioning respectful engagement with difference. At any one time, we might be in several places on each spectrum regarding ourselves, a range of topics and situations, other individuals and groups/ communities, in lower or higher functioning ways. Figure 6 depicts this range of self-regulation skills as two continuums.

**Figure 6: Low and high differentiation, and integration**



The vast, mature IC literature stresses that sophisticated self-regulation manifesting as complex thinking (high IC) is not morally better and basic self-regulation manifesting as low complexity (low IC) is not morally worse (Tetlock, 1984, 1985, 1986; Suedfeld, 1986, 1992, 1998; Tetlock et al., 1994, 1996; Conway et al., 2008). For example, both anti- and pro-slavery arguments from the US Antebellum South evidence low IC (no differentiation and no integration) whereas those who suggested a compromise (e.g. a federal union with a mix of slave and free states) evidenced high IC, both differentiation and integration (Tetlock et al., 1994). This example illustrates that low IC is not always morally negative and that high IC can risk moral compromise. Both high and low IC carry risks. Self-regulation characterised by high differentiation and integration is vulnerable to information overload and indecision (Suedfeld et al., 1994). Self-regulation characterised by low or absent differentiation is vulnerable to rigidity, closure to new information, and false dichotomies (Tetlock, 1991).

Mentioned above, the IC measurement frame (Baker-Brown et al., 1992) has been used to develop an explicitly experiential interoceptive approach to increase cognitive, emotion, and social self-regulation and resilience for public mental health promotion. The approach scaffolds the developmental progression of differentiation and integration in order to support meta-cognition, critical thinking, embodied cognition, and meta-affective reasoning. Field studies in diverse cultures and contexts have confirmed laboratory research showing the malleability of IC (Liht & Savage, 2014; Savage et al., 2014; Boyd-MacMillan, 2016; Boyd-MacMillan et al., 2016; Perarcha et al., 2016; Park & Deshon, 2018; Kelly & West, 2017; Hunsberger et al., 1992). Post-intervention significant increases in differentiation and integration have been found to endure after 22 months based on qualitative longitudinal data, with increases in academic performance and social cohesion (e.g. Liht & Savage, 2014; Boyd-MacMillan et al., 2016). Post-intervention resilience measures show significant increases equalling and, in some cases, exceeding those reported by programmes specifically designed to reduce stress and anxiety (*ibid.*).

Within the MHPSS-SEL programme area outlined above, the partnering of the IC self-regulation model with the ADAPT model represents an example of the types of SEL framework suitable for EiE contexts. Within IC and ICT research, the aim is empowerment for self-regulation of thoughts, feelings, and emotions in ways that are developmentally appropriate for a given situation (Suedfeld, 1992, 2010; Boyd-MacMillan et al., 2016). Self-regulation takes more time and effort, requires more internal and external coping resources for information seeking and planning, and leads to other demands being ignored or de-prioritised (Suedfeld, 2010, p. 75). Enhanced self-regulation equips learners to judge the appropriate level of response for a situation or decision as allowed by available resources, and as warranted in comparison with other demands at the time. Excessively high or low self-regulation can be counterproductive in any given situation. High self-regulation can squander time and resources better used otherwise, and low self-regulation can miss important information required for optimal resolution of a situation.

Effective self-regulation discerns when an issue or problem does not require the investment of many resources, and can be solved at a simple level versus when a situation is both important and requires more complex engagement. Flexibility in self-regulatory skills to be able to apply the required level of resources and complexity in a given situation can be taught and learned, not least through the resources of play and learner-centred pedagogies, along with reparative strategies to address inaccurate appraisals and support ongoing learning. This requires programme planning and design within ecosocial domains and through life systems-pillars that help to organise and make sense of the displaced and vulnerable learner experiences such as those found in the ADAPT model.

## 4.11. Conclusion

This section reviewed the programme area of MHPSS-SEL, beginning with the conceptualisation of mental health, child ill-health, and the dimensions of child wellbeing. After considering the complex process of resilience as it relates to and differs from wellbeing, the discussion explored the role of education as a central pathway to improve mental health and child wellbeing, along with the benefits of play, play-based (learner-centred) pedagogies and the role of the physical environment. This discussion was linked with a brief exploration of a public mental health wellbeing promotion focus,

now prevalent in public health, which incorporates community voices, viewpoints and resources as well as the need for coordinated multi-sector participation for effective programme planning. To this end, the CRA model and CFI were reviewed, along with a very brief overview of the ecosocial multidimensional model of ADAPT, created by and for displaced and vulnerable populations with the express purpose of improving daily living and positive coping patterns in each of the five life systems (pillars) in accordance with what these populations identify as most important. Therefore, despite the title, this model is appropriately used across the MHPSS-SEL programming levels for wellbeing and resilience promotion as well as psychosocial repair in formal or informal educational settings.

After noting the need to include SEL in every layer of the MHPSS-SEL triangle, the discussion focused on SEL as a field. The benefits, dilemmas, international efforts to navigate the dilemmas, and EiE contextual parameters were considered in relation to SEL programming. The CASEL and ELTP descriptive and evaluative frameworks were considered. Given the variability of SEL programmes, and challenges of EiE contexts, the discussion focused on the underlying fundamental mechanism of self-regulation for SEL skills through the developmental progression of differentiation and integration represented by the IC model. It was suggested that the IC ADAPT SEL framework may offer a uniquely appropriate framework for SEL programme design that would be sensitive to the needs of non-Western more community-focused cultures and contexts. The IC-ADAPT SEL framework seems to offer efficient ways of designing an SEL programme specifically for displaced and vulnerable learners with the goal of developing effective self-regulation in dynamic and changing contexts. An IC-ADAPT SEL framework seems as if it would prioritise both the underlying fundamental developmental progression of SEL competencies and skills, differentiation and integration, while focusing on the experiences, needs, and active involvement of those living in EiE and other challenging contexts.

## 5 Literature review: Curriculum

### 5.1 Introduction

Having looked at the wider landscape of EiE and delved into the MHPSS-SEL programme area with a focus on public mental health promotion for wellbeing and resilience with a suggested framework for EiE contexts, the question for the current project becomes: what should we do with the Learning Passport in order to successfully address these challenges? This section and the two sections that follow on resources and assessment, take the form of more focused literature reviews that seek to identify the evidence base that can be used to answer this question. The reviews examine research and practice from around the globe that demonstrate that there are various approaches that can be taken to providing EiE. This report adopts an approach to this literature that attempts to accomplish two things: to collate research that establishes the consensus in education around the necessary principles for quality learning across these three components, and identify material that seeks to test the applicability of these principles in contexts of displacement and emergencies.

In this section, ‘Curriculum’, the reviews focus on the development of curriculum frameworks, first looking at general principles that can strengthen development, then examining how curriculum frameworks for specific subjects can be optimised for EiE and contexts of displacement. Finally, the review also considers curriculum mapping as both a key methodology of the Learning Passport’s development, and as a feature of its implementation, in environments where transition and comparison between curricula will be an important means of facilitating learners’ progression and inclusion.

### 5.2 Principles of high-quality curriculum frameworks

This review focuses on literature that can inform the development of a curriculum framework and associated guidance for the Learning Passport education model. The review is divided between material that establishes the consensus in education around the necessary principles for high-quality curriculum frameworks, and material that seeks to test the applicability of these principles in contexts of displacement and emergencies. It also considers each of the subject areas the Learning Passport will cover.

Within the scope of the Learning Passport, it is vital to recognise the particular usage of ‘curriculum framework’. This report takes a curriculum framework to be the skeleton of a curriculum: the ‘bare bones’ of the concepts, principles, and core knowledge. The curriculum framework is a ‘boundary object’ (Star & Griesemer, 1989), containing information used in different ways by different communities but with some immutable content. The curriculum framework is used to indicate what should be included in a curriculum, but the content of the framework needs to be interpreted by mediators such as resource authors, teachers, local communities, and policy makers to create local curricula, resources, and so on.

More broadly, within the literature, ‘curriculum framework’ has been taken to mean the principles, aims, concepts, and core knowledge of a curriculum, as opposed to the associated textbooks and documents, assessment, and pedagogy that ‘curriculum’ might be assumed to feature. This follows Macken-Horarik’s (2011) definition of a curriculum as a body of coherent, cumulative knowledge, setting out what is to be learned, and the

order in which it is to be learned. It is challenging to assess and collate findings from research into defining curriculum frameworks that are effective for EiE, due to the paucity of literature on the subject, and the lack of interventions that identify a curriculum framework as one of the mechanisms to be evaluated or monitored. Consequently, the bulk of literature in this area centres on High Performing Jurisdictions (HPJs) as defined by their successful performance in international assessment comparisons via the Trends in International Mathematics and Science Study (TIMSS), the Programme for International Student Assessment (PISA), and the Progress in International Reading Literacy Study (PIRLS). Many of the studies compare curriculum frameworks across these HPJs in order to establish good practice, and by contrasting how home and HPJ curricula have been known to influence national policy. For instance, Elliot (2016) and the United Kingdom Department for Education (2012) identify jurisdictions that are high performing according to non-subject-specific metrics but also according to subject.

Care must be taken when considering HPJ curricula and performance comparisons in isolation. Results are influenced by teachers' expertise, pedagogy, and ongoing CPD, expectations in the home country, the influence of assessment systems, and how they use evidence to improve results. In short, it is not only the curriculum framework that influences learners' performance. However, it is reasonable to consider whether the common features of curriculum frameworks in these jurisdictions can help to identify broad principles that can help in the development of curriculum frameworks for EiE.

Aims have been found to be a key element in the curricula of nations or regions that perform well in international comparisons (Department for Education, 2012) and primary phase frameworks analysed across international comparisons likewise found the inclusion of aims statements to be typical (NFER, 2008). Characteristics of a curriculum framework should include it specifying its organisation, progression within a subject, as well as the key building blocks within a subject necessary to make this progression. In the particular context of the Learning Passport, marking these milestones is of particular importance so that learning achievements remain clear should the learner again move school, system or country. This may lead to a necessary 'de-contextualisation' of a curriculum framework or 'context agnosticism' from any single society's set of cultural constructs (Pinar, 2019). At this high level of characterisation for aims within a curriculum, different priorities have been suggested. UNHCR's Education Strategy (2012–2016) encourages curriculum frameworks for refugees that include hard and soft skills, as well as foundation skills in literacy and numeracy, while others (including Voogt & Roblin, 2012) suggest the need for inclusion of 21st century competencies. Interestingly, much of the knowledge and skills billed as appropriate to the 21st century have been present within disciplinary knowledge for many decades (Suto, 2013).

When considering the curriculum as a whole (rather than making subject-specific recommendations), Oates (2010) suggests that content should be suited to age-related progression. With the caveats about HPJ specificity already mentioned, analysis of the ages and phases of schooling in HPJs indicates that a curriculum framework should span 11 years of schooling, starting from a primary phase, as determined in the UK government review (Department for Education, 2012) which compared HPJs' systems, the detail of which can be found in Figure 7. There will be challenges to applying models of age-related progression to implementations of the Learning Passport, as while the age range that it is anticipated it will cater for corresponds to the 11-year progression noted by Oates, specific obstacles to smooth progression are faced by displaced learners. These

are detailed elsewhere in the Report; most significantly delays and gaps in learning and late access to learning will impact this recommendation.

Figure 7: Ages and phases across the education systems of HPJs. (Source: Diagram from Department for Education, 2012, p. 11)

Age	England		Alberta		Massachusetts		New Zealand		N.S. Wales and Victoria		Singapore*		Hong Kong (for Maths)		Hong Kong (for Science) ‡		Flemish Belgium		Finland	
	EYFS	R	Preschool	Preschool	Preschool	Preschool	Preschool	Preschool	Preschool	Preschool	K	K	K	K	K	Preschool	Preschool	Preschool	Preschool	Preschool
4-5		Key Stage 1																		
5-6		Y1		K		K		Y1		Y1						P1		Preschool		Preschool
6-7		Y2		G1		G1		Y2		Y2						P2		P1		Preschool
7-8		Y3		G2		G2		Y3		Y3						P3		P2		Preschool
8-9		Y4		G3		G3		Y4		Y4						P4		P3		Preschool
9-10		Y5		G4		G4		Y5		Y5						P5		P4		G1
10-11		Y6		G5		G5		Y6		Y6						P6		P5		G2
11-12		Y7		G6		G6		Y7		Y7						S1		P6		G3
12-13		Y8	Junior high school	G7		G7		Y8		Y8						S2		S1		G4
13-14		Y9		G8		G8		Y9		Y9						S3		S2		G5
14-15		Y10		G9		G9		Y10		Y10						S4		S3		G6
15-16		Y11	H S	G10		G10	L6	Y11		Y11						S5	Second stage	S4	First stage	G7
																				G8
																				G9

Phase transition (a point where most pupils would change school or start a different type of schooling)

Non-compulsory phase of education

\* The express curriculum route was analysed as the majority of students (80%) take this route rather than the technical or academic route.

For mathematics, the closest age equivalence between England and Hong Kong is used in order to accurately and fairly capture the structured nature of maths content in the primary years.

‡ For science, the closest key stage equivalence is used as this gives a better match at secondary level, which is where most science teaching takes place in Hong Kong.

One important comparison of primary curricula (NFER, 2008) analyses the curriculum frameworks of HPJs and includes detailed comparisons of their structure and content. It gives information at a finer level for each subject and is used to establish the most common types of structure alongside the core content found amongst HPJs. This NFER report also details teaching time allocations for individual subjects and gives guidance on ideas around supporting differentiation in various countries. Judgements are also made around difficulty, breadth and implementation of curriculum frameworks. In the NFER comparison, primary curricula were found to be objective-driven and tended to be aligned in terms of their breadth. Mandatory instructions on pedagogy were likewise not included in any of the curricula analysed.

In a separate analysis of curricular changes in the primary phase (Pepper, 2008), a trend of moving towards greater application of knowledge was noted via an inclusion of concepts or competencies and skills – while, in terms of structure, areas and subjects remained the basic units for organisation. Schleicher (2018) noted how high-performing school systems use teachers rather than the curriculum frameworks to provide differentiation, thus not compromising on standards.

Finally, within this literature on the commonalities of curriculum frameworks in HPJs, and particularly in mathematics and science, the notion of ‘big ideas’ is widely discussed. This approach, or that of ‘threshold concepts’, may be worth considering in the development of a curriculum framework. Land et al. (2005) describe a threshold concept as a key step in learning to be considered when developing a framework, and they go on to describe how threshold concepts can be defined as ‘transformative points’ in learning with the curriculum needing to be designed to support these transitions. The transition between the primary and secondary phase, or the move from one country to another by learners, may also be supported by ‘big ideas’ or threshold concepts as a way of supporting curriculum continuity.

## 5.3 Curriculum frameworks for Education in Emergencies: Literacy

The remainder of this section covers research that assesses the applicability of the above findings on curricula and curriculum frameworks to contexts of displacement and emergencies, looking at each subject area specifically and isolating particular considerations that must be addressed.

### 5.3.1 Introduction

Literacy is commonly presented as *a*, if not *the*, educational priority in EiE contexts, and as the mechanism by which people can maximise their life opportunities and decrease their vulnerability, whatever their future trajectory (Frank-Oputu & Oghenekohwo, 2017). Thyne (2006) goes so far as to correlate high adult literacy rates with the lower incidence of conflict and civil war. Rationales for this position range from the rights-based vision of the UN Agenda 2030 through to more human capital, instrumentalist perceptions of literacy (e.g. Rahman et al., 2013). At times, this zeal can be such that quasi-military terminology is used, as in the Iraqi curriculum framework which states that ‘the education authorities are committed to eliminate illiteracy in the country’ (UNESCO, 2012).

Despite its seeming ubiquity in policy documents and curricula in EiE contexts, literacy is a highly contested and variously defined term, which problematises any kind of comparative analysis (Zakharia & Bartlett, 2014). In the Anglophone tradition, Fransman (2005, p. 3) identifies three established ways in which the term has been understood, namely as ‘a set of skills’ (literacy equates to reading), as something ‘applied, practiced and situated’ (literacy is functional and closely connected to socio-economic development), and as a ‘process of learning’ (knowledge is gained by doing). A fourth, more recent development is also noted, where literacy is perceived as ‘an instrument of power and oppression, legitimating dominant discourses and endangering languages, cultures and local knowledge’. The influence of this conceptualisation of the Western ‘literacy project’ is worth bearing in mind given that, according to Ethnologue, nearly half the world’s currently spoken languages have no written script. The Rohingya Refugee Crisis Response Plan (2017, p. 17–18) exemplifies this issue, noting that ‘the largely non-written nature of Rohingya (the oral language of 96 per cent of the influx population) present[ed] considerable challenges ... It is a barrier to communication across the emergency response’. Within the EiE context, it is thus worth remembering that literacy is a process rooted in oral language (Whitehead, 2004).

The impact that literacy education has on integration and the capability of displaced learners to adapt to and transition into national education systems is significant, as is recognised by the UN’s Compact for Safe, Orderly and Regular Migration (2019, pp. 13, 24). While language learning and literacy must be distinguished as separate educational domains, there are clear connections, and the effects of literacy education on language learning in a context of displacement cannot be overlooked. Literacy can be highly valuable for accessing other domains of learning, but it is similarly important for social and cultural integration. Literacy curricula for EiE must therefore, at a fundamental level, be aligned with the expected trajectories and outcomes for students, which may include integration into a host community.

### 5.3.2 Curriculum frameworks in EiE contexts

One of the key documents comparing curricula from HPJs (Department for Education, 2012) found that although English language instruction generated the largest differences between curriculum frameworks (across the three subjects under consideration here), in general, the four domains of speaking, listening, reading and writing remained predominant. Therefore, it would be pertinent to consider these as structuring strands in a curriculum framework for the Learning Passport. The United Kingdom Department for Education (2012) identified differences in specificity across nations, but comparative levels of challenge were hard to identify due to variations in curricula structures and the ‘non-linear nature’ of literacy development. Early reading was mostly centred on grapheme-phoneme correspondence with there being fewer differences across the handling of comprehension. The treatment of writing skills and content related to grammar, punctuation, and spelling varied across the frameworks, as did the presentations of speaking and listening. The report describes in detail the high-level organisation of the HPJs’ curricula alongside a comparison of their aims and principles, and details on the domains, curriculum statements, and attainment; a synthesis of these could inform the content and characteristics that support effective learning in literacy.

As with the DfE’s comparison report, distinctions in the content structure of literacy curricula were further highlighted in the comparison of primary curricula, which similarly used HPJs to establish good practice (NFER, 2008). The central analysis of

content can be viewed in Figure 8 to Figure 10. Ofsted's 2010 report on early reading in top-achieving schools in England found that concentrated and systematic teaching of phonics was central to learners' achievement at age seven; they noted how the curriculum framework allowed them to encounter a wide variety of speaking and listening experiences. The Australian National Curriculum espouses the explicit teaching of grammatical understanding (Mulder, 2011) as it supports the acquisition of skilled language use. Elsewhere, through analysis of PISA data (Brozo et al., 2008), the recommendation arose to increase the diversity of texts that learners read (in particular before age 15 when textual preferences are thought to be established) as this seemed to improve achievement in international comparisons. This literature suggests that a literacy curriculum framework should allow for encounters with a wide variety of texts, speaking and listening experiences, as well as support the acquisition of language use.

**Figure 8: Content analysis of literacy curricula in the primary phase (Source: NFER, 2008, p. 46)**

<b>British Columbia</b>	<b>Comprehend and respond</b> <b>Communicate ideas and information</b> <b>Self and society</b>
<b>Chinese Taipei</b>	Abilities to use Mandarin phonetic symbols Listening abilities Speaking abilities Literacy (spelling) and handwriting abilities Reading abilities Writing abilities
<b>Italy</b>	Listening Speaking Reading Writing Grammar (morpho-syntactic, semantic, phonological, historical)
<b>Latvia</b>	Language (communicate competence, language competence, socio-cultural competence) Literature (as an art of writing, comprehension of a literary work, literature as part of culture)
<b>Netherlands</b>	Oral education Written education Linguistics, including strategies
<b>Ontario</b>	Writing Reading Oral and visual communication
<b>Singapore</b>	Language for information Language for literary response and expression

	Language for social interaction
Sweden	No division, on principle

Discussions over time have recognised the particular importance for achievement in literacy of cumulative learning (Macken-Horarik, 2011); this could be supported by a spiral curriculum model allowing for refinement as learners progress through the grades. Knowledge and understanding could then be applied in a creative medium via contexts or textual analysis, with such decisions perhaps being left to teachers and other mediators. Another historical take on literacy curricula in the 21st century and the varying opinions within this discussion (Mills & Unsworth, 2015) highlights the key notions of skills-based approaches, whole language, systemic functional grammar, and critical literacy. Through analyses of North American, UK-based and Australasian curriculum frameworks, they concluded that literacy is a set of reading and writing skills rather than social practices. More recently, they found that curriculum frameworks include text structure, making meaning from reading, functional grammar, discourse, and genre – all thought to be key in connecting language forms with meaning in contexts. Lastly, they felt that great shifts affecting curricular content and contexts have been developed through recent changes in social and technological environments; online reading requires fresh skills, for example, strong vocabulary knowledge and generating effective key words for searching.

**Figure 9: Content analysis of mathematics curricula in the primary phase (Source: NFER, 2008, p. 21)**

England	Chinese Taipei	Hong Kong	Singapore	Netherlands	Latvia	Ontario
Level of detail compared with England	Greater	Greater	Greater	A lot less	Less	Similar
<b>Number</b>	Number and quantity	Number	Whole numbers Fractions Decimals Radio/proportion Percentage	Numbers and calculations	Formation of mathematical set of instruments Use of mathematics in analysis of natural and social processes	Number sense and numeration
<b>Shape, space and Measures</b>	Algebra	Algebra	Geometry Money, measures and mensuration Statistics	Measuring and geometry	Patterning and algebra Geometry and spatial sense Formation of mathematical models and study with	Measurement

<b>Handling data</b>	Statistics and probability	Data handling	Average rate, speed	Mathematical insight and operation	methods characteristic for mathematics	Data management and probability
<b>Process Strong emphasis in objectives</b>	Theme called connections which goes across	Only in introduction	Only in introduction	Strong emphasis throughout	Strong emphasis throughout	Strong emphasis throughout

**Figure 10: Content analysis of science curricula in the primary phase (Source: NFER, 2008, p. 34)**

England	Hong Kong	Latvia	Ontario	Chinese Taipei	Singapore
<b>Level of detail compared with England</b>	Less	Greater	Greater	Greater	Greater
<b>Scientific enquiry</b>	Scientific Investigation	Basics of Research Work	(present)	(present) The Composition of Nature	Process Skills
<b>Life processes and living things</b>	Life and Living	Nature's Systems and Processes	Life Systems	The Role of Nature	Diversity
<b>Materials and their properties</b>			Matter and Materials	Evolution and Continuity	Cycles
	Energy and Change		Energy and Control	Life and the Environment	Energy
<b>Physical processes</b>	The Material World		Structures and Mechanisms	Sustainable Development	Interactions
	The Earth and Beyond				Systems
	Science, Technology and Society				
<b>Integration with technology</b>	Yes	No	Yes	Yes	No

Unlike the other subjects under scrutiny here, there is far less reference to ‘big ideas’ when investigating literacy. However, five ‘big ideas’ relating to early literacy are presented by Vesay & Gischlar (2013): phonological awareness, accuracy and fluency, alphabetic principle, vocabulary, and comprehension. It may be useful to consider this work in developing a literacy curriculum framework.

In a key document that examines the best strategies and processes for developing curriculum frameworks, IBE-UNESCO (2017, p. 48) emphasises the importance of ‘a consistent learning experience throughout’ in which ‘there is a single set of values and principles underpinning the curriculum’ and ‘a high level of sequence and continuity in the content of their learning’. In EiE contexts, however, such aims may not be realisable for a range of political, economic, and cultural reasons. As such, while there are a number of reasonably rigorous academic studies (e.g. Batra, 2005) and government publications (e.g. UK Department for Education, 2013; Ministry of Education Singapore, 2012) on the subject in more settled and structured education systems, examples from EiE or more marginalised contexts are hard to locate. As USAID (2014, p. 9) says, ‘program documentation does not conceptualise or identify the linkages between literacy and conflict or crisis’. Given this, the best and most relevant documentation available for EiE contexts appears to be wider, more general literacy publications, tools and frameworks, many of which have been created by UN bodies.

With specific regard to a literacy curriculum framework, the task of creating such a document may be more contentious and time-consuming given the often highly politicised nature of literacy and, more widely, language. For Hanemann (2019), the ‘complex notion of literacy’ is commonly ‘broken down into ‘testable’ dimensions’, which has resulted in a narrower, more conservative interpretation of literacy becoming mainstream. Edwards and Potts (2008) describe this conceptualisation of literacy as one ‘bounded by a focus of the early years of school, assessment and accountability’ (p. 133), which prioritises the ‘utilitarian and economic aspects of literacy rather than the cultural, moral or intellectual’ (p. 134). Another factor to consider is the influence of international literacy tests such as PIRLS, which can have a significant impact on how literacy is conceptualised, but which Meyer and Benevot (Eds.) (2013) argue can threaten local traditions.

In considering literacy curriculum frameworks more widely in EiE contexts, Pflepsen et al. (2015) identify several ‘good practice’ elements for such frameworks. These include: ensuring there is no conscious or unconscious bias; including language-specific curricular objectives, scope, and sequence of instruction; connecting students’ experiences with learning activities during the teaching of reading; and using local educators and community members to shape literacy materials, which can be designed and produced locally. The Council of Europe presents another model, the ‘Linguistic Integration of Adult Migrants’, the focus of which is migrants assimilating into European education systems, but which is also relevant to refugees and IDPs in an EiE context. The focus here is on the development of language competency in relevant areas such as talking to children’s teachers, speaking to neighbours, and preparing a CV for a job. In addition, it also advocates that proficiency levels be defined in a realistic and flexible manner that reflects the needs and capacities of migrants, for example accepting that skill levels in reading, writing, speaking, and listening may be heterogeneous rather than homogenous. Finally, the home languages and plurilingual identities of migrants are valorised, seeing them as having intrinsic and instrumental value.

### **5.3.4 Broad and narrow conceptualisations of literacy**

Despite the many and diverse benefits afforded by literacy noted above, it is ‘functional literacy’, (often seen as the literacy needed to navigate daily living and employment tasks), interpreted in instrumental, economic terms which tends to dominate. This appears to be the case even in the SDGs, wherein SDG 4.6.1 explicitly references ‘a fixed level of proficiency in functional (a) literacy and (b) numeracy skills’. Hanemann (2019, p. 255) notes that it is encouraging that an ‘expanded vision of literacy’ which does not simply divide people into ‘literate’ and ‘illiterate’ is countenanced. In so doing, she echoes Graff (1987), who refers to the ‘tyranny of conceptual dichotomies’ encompassing binary distinctions between literate and illiterate, written and oral, print and script. Instead, individuals are considered as being on a proficiency continuum (WEF, 2016), one example of which is UNESCO’s LAMP (Literacy Assessment and Monitoring Programme) tool, which identifies five component skills, namely alphanumeric perceptual knowledge and familiarity, word recognition, decoding and sight recognition, sentence processing, and passage reading. Despite this, on a global scale, there is no common definition for fixed level of proficiency, no agreement on the skills or domains covered, and no global assessment or reporting framework (Hanemann, 2019). The absence of these fundamentals hints at the highly contested nature of literacy, how it is understood and what it is for, and makes it challenging in any context to create literacy curriculum frameworks that are meaningful and useful.

A further recent trend in terms of how literacy is conceptualised comes in the flexibility, or indeed pliability, of the actual term ‘literacy’. For example, the Iraqi curriculum framework explicitly references ‘financial literacy’ (UNESCO, 2012) and the Ministry of Education in Afghanistan talks of ‘occupational literacies’ (Rogers, 2014). Other commonly used terms include ‘computer literacy’, ‘media literacy’, ‘health literacy’, ‘eco-literacy’ and ‘emotional literacy’. As Cambridge Assessment (2013, p. 14) records, definitions of literacy become ‘more complex and more demanding’ as time progresses. Hanemann (2019) argues that the multidimensionality, plurality, and indeed convergence of literacy practices means that literacy should be considered as a competency. The definition presented – namely ‘the (cap)ability of putting knowledge, skills, attitudes and values effectively into action when dealing with (handwritten, printed or digital) text in the context of ever-changing demands’ (UIL, 2017, p. 2) – contrasts sharply with previous definitions of what it means to be literate. UNESCO (2006, p. 157) presents a range of ways in which literacy has been defined at the national level, including the ‘ability to read easily or with difficulty a letter or a newspaper’, ‘ability to read and write simple sentences’ and ‘school attainment’.

Perry (2008, p. 59), in talking about southern Africa, refers to literacy as being a contested space where certain forms of literacy are prized above others. This so-called ‘framework of literacy as social practice’ sees school literacy as ‘the gold standard for a narrower view of “literacy”, and children who are not adept at school literacies are marked as somehow more culturally deficient or linguistically incompetent’. So-called ‘hidden literacies’ are not valorised. In so doing, Perry (*ibid.*) draws on Street (1994) and the concept of ‘local literacies’, meaning the ‘multiple literacies that communities use – literacies which are often ‘overlooked or undervalued by those in power’. Perry (2008, p. 62) therefore argues that literacy should be conceptualised locally, specifically with regard to the issues of language, a question in southern Africa (as in many EiE contexts) which is ‘not merely pragmatic, but also relates to ethnicity, culture, and power’.

### **5.3.5 Literacy and skills**

In his detailed examination of skills development and literacy in Afghanistan, Rogers (2014) discusses four conceptualisations of how literacy is embedded in vocational training: no literacy requirement; literacy first; incorporation of skills learning into literacy-learning programmes; and incorporation of literacy learning into skills-learning programmes. UNESCO (2018), in the ‘Global Education Monitoring Report’, cites an example in Cabo Verde of a partnership and shared vision between government Ministries (Education and Immigration), NGOs, and wider civil society. The training programme which emerged covered literacy, Portuguese and vocational training, with 98 per cent of participants successfully completing the first year. One advantage of integrating or embedding literacy with other programmes is that it can attract hard-to-reach demographics, such as adult men, who may feel ashamed at their lack of literacy.

### **5.3.6 Literacy as a vehicle for social development**

There is evidence of success when literacy is conceived as underpinning societal development more widely, as a foundational good (Basu et al. (Eds.), 2013). A review of ActionAid’s REFLECT (Regenerated Freirean Literacy Through Empowering Community Techniques) programme in 11 countries noted the effectiveness of using literacy as a means of empowering communities, which could have significant benefits across all kinds of development programmes (Riddell, 2001). On the specific issue of how literacy can be used as a mechanism to help people in EiE contexts deal with trauma, Yoder (2008) argues that literacy is a powerful tool for children to foster feelings of relief from past experiences, and that it can be a vehicle for self-expression, providing connections and links to others who have also experienced traumatic events. Perhaps due to the centrality of literacy rates as an objective for broader social development programmes, the complex social and political fields that literacy can open up are well documented: for instance, Robinson-Pant’s (2010) study on Nepal reveals literacy as closely tied to wider social transformations and changes in development practice. Robinson-Pant’s broader work points to the wide-reaching social impacts of facilitation of literacy, particularly the specific ways in which these impacts can be gendered, for instance through changes to women’s roles caused by increased literacy in relation to men and their own children (Robinson-Pant, 2017).

### **5.3.7 Literacy as a lifelong concept**

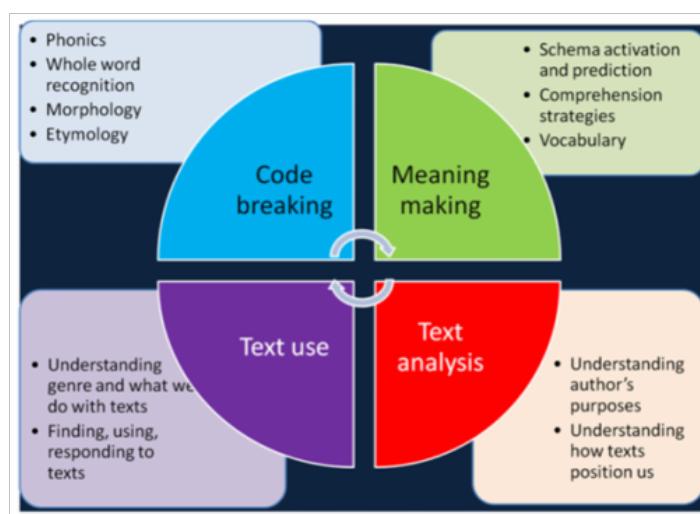
For Hanemann (2019), there are questions surrounding the extent to which policy makers understand the importance of lifelong learning in terms of addressing the literacy challenge. Indeed, in an earlier publication, Hanemann (2018) argues that ‘adult literacy and language learning’ is not ‘on the radar’ of either national governments or the UNHCR, with prominence instead being given to child literacy. Often the reason for this is connected to what USAID (2014, p. 51) calls ‘the dynamic of shame’ felt by over-age students. UNESCO Institute for Lifelong Learning (2017) argues that literacy programming should not be atomised, and instead the focus should be on creating ‘literate families’, ‘literate communities’, and ‘literate societies’.

### **5.3.8 Critical literacy**

UNESCO (2004) posits that a lack of literacy in society can result in discrimination, social exclusion, and powerlessness. Bakshi et al. (2018) point to the instrumental social

role of critical literacy in encouraging dialogue and discussion about politics and society, while Walker and Unterhalter (2007) highlight its ‘empowering role in facilitating the ability of the disadvantaged, marginalised and excluded to organise politically’. In fragile, highly sensitive EiE contexts, this kind of ‘critical literacy’ practice is not encouraged. Riddell (2001, p. 7) hints at this ‘inherent tension’ in her review of REFLECT programmes in 11 countries, noting that the ‘role of the state was an issue in several of the evaluations, not only in terms of contrasting state-run literacy programmes with REFLECT but also in terms of establishing partnerships between different stakeholders’. Burde et al. (2017) make the point that a functioning education system and high literacy rates can confer legitimacy on the state, but in so doing they may wish the ‘right kind’ of literacy to be implemented. Weninger and Kan (2013) argue that too much emphasis on a literacy curriculum framework with English language as a tool for communication results in learners not critically engaging with and interrogating the use of language. While in an EiE context it may not be possible or desirable for a literacy curriculum to inculcate ‘conscientisation’ (Freire, 1972), literacy curriculum frameworks should look at how text is analysed and used, not just at functional skills such as code breaking and meaning making. The four resources model of Luke and Freebody (1999) exemplifies this:

**Figure 11: The four resources model (Source: Luke & Freebody, 1999)**



While UNESCO (2013) argues that illiteracy is ‘an obstacle to a better quality of life, and can even breed exclusion and violence’, it may also be the case that a form of literacy which acts solely as a temporary or superficial measure and does not genuinely uplift people will not be successful in the longer term.

### 5.3.9 Literacy curriculum frameworks and their relationship with the classroom

While many literacy curriculum frameworks refer to wider conceptualisations of literacy, it is debatable how this is rendered in practice. Allbright and Kramer-Dahl (2009), for example, question the impact which they have at classroom level, citing the ‘palimpsest of cumulatively added prior policies sedimented in teachers’ pedagogy’, and ‘quasi-official phantom policies formed at local level’ (p. 201). They also note that attempted changes in Singapore were thwarted by the pressure to deliver examination results, a

finding which supports those from studies of the impact of examinations on the success of other initiatives, such as learner-centred pedagogies in India (Sriprakash, 2009, 2010, 2012). In EiE contexts, the gap between literacy curriculum frameworks and how curricula are developed, and how these curricula are subsequently delivered, may be considerable. The pre-eminence of the transmission method of teaching, coupled with the pressure on donors to show ‘results’ and ‘impact’, can lead to frameworks which Alexander (2007, p. 104) describes as promoting ‘atomised skills which are amenable to measurement and to the proliferation of learning outcomes which can be enumerated and audited’. Literacy curriculum frameworks may therefore not be shaping the kind of literacies they imagine they are – or they may be responsible for shaping a kind of literacy which is not appropriate for EiE contexts. Hanemann (2019) reports on literacy courses for migrants in Vienna in which, while ‘the general themes, methods and goals of the courses are derived from a curriculum framework, these are specified during the course in negotiation with the course participants according to their (day-to-day) needs’. However, in more typical EiE environments, where participants may have less confidence, knowledge and educational experience, this kind of dialogic approach would not be possible.

## 5.4 Curriculum frameworks for Education in Emergencies: Mathematics

### 5.4.1 Introduction

Education needs to do more than prepare young people for the world of work. It needs to equip students with the knowledge, skills, attitudes, and values essential to face an increasingly volatile, complex, and ambiguous future (Schleicher, 2018; Randall & Carmal, 2005). The quality and extent of children’s education ‘can make the difference as to whether people embrace the challenges they are confronted with or whether they are defeated by them’ (Schleicher, 2018, p. 4). The learning of mathematics forms a fundamental role in achieving this goal (Smith, 2004). Mathematics underpins the sciences, and major sectors of business and industry, and so its learning provides students with the key skills required for most forms of employment. But learning mathematics can impact students’ lives in other ways; it has the potential to empower them on both an individual and social level (Smith, 2004), and can be used to address the problems in our society (Malloy, 2002).

Whether these potentials are achieved can, to a large extent, be dependent on the content and structure of a curriculum framework. Evidence from international comparison studies such as PISA, TIMSS and PIRLS establishes that statutory curriculum frameworks do influence what happens in the classroom, and student performance in standard tests (Schmidt & Prawat, 2006). When living in an emergency situation, a framework, at its optimum, can act as a catalyst for peace-making and conflict-resolution (Kagawa, 2005). This literature review examines the characteristics of curriculum frameworks that support effective mathematics learning for displaced learners.

Two complementary approaches are applied to the gathering of evidence for this literature review. The first, following the rationale of earlier sub-sections, involves highlighting the characteristics of frameworks of HPJs, as ratified in international tests and measures. The second explores the research on the issue of transfer and applicability of such curricula to ‘High Displacement Jurisdictions’ (HDJs). Integral to understanding

the dimensions of success within HDJs, the literature specific to the learning of mathematics is considered. In doing so, the sub-section seeks to answer the following research question: ‘What are the content, characteristics, and conditions of a curriculum framework that supports effective learning for displaced learners?’

### 5.4.2 Commonalities across international frameworks

Differences in a jurisdiction’s performance can be related to differences in their curricula (Schmidt et al., 2011). Policy makers across the world regard changing the curriculum as a prerequisite to educational improvements (Mourshed et al., 2011). In this sub-section, first the contents of international frameworks are compared. Next considered are the common characteristics of the frameworks of HPJs. Finally, how frameworks are assessed is briefly outlined.

Voogt and Roblin (2012), in their extensive comparative study, explored the competencies common to eight international frameworks. Findings reveal that there was indeed consistency of intentions across the frameworks. All, for example, included collaboration, communication, and social and/or cultural competencies (including citizenship). Most frameworks also highlighted creativity, critical thinking, productivity, and problem-solving. Some of these findings were reiterated in Trier’s (2002) report from 12 OECD (Organisation for Economic Co-operation and Development) countries on leading educators’ views of schooling. Participants were asked to list the core competencies needed for young people to function successfully in society. Although the specific definitions of competencies differed from Voogt and Roblin’s study (2012), social and communication competencies again emerge as important.

The existence of overlap between the content of the frameworks is not surprising, indeed the research evidence indicates such competencies have a positive impact on learning. In mathematics, for example, the centrality of talk is widely recognised as core to meaningful learning (Barnes & Todd, 1977; Cobb, 1994; Mercer, 1996; Piaget & Inhelder, 1971; Swan, 2006; Vygotsky, 1978) and to participating in society (OECD, 2018a). Meta-analysis of classroom-based studies (e.g. Johnson & Johnson, 2002; Slavin, 2014) repeatedly illustrate the benefits to students’ mathematics learning when they collaborate with peers on problems, as opposed to working individually. There is also extensive evidence that collaborative learning can raise levels of student achievement as measured in standardised mathematics tasks (Luckin et al., 2017; Mercer et al., 2004). Likewise, studies have found that when problem-solving in mathematics, there are multiple opportunities for decision-making, autonomy, and self-evaluation. Engaging in such activities can develop students’ metacognitive regulation skills. Research suggests that this in turn is likely to support decision-making, and raise levels of achievement as measured by standard assessment criteria (Luckin et al., 2017; Stillman & Mevarech, 2010).

A key document from the United Kingdom’s Department for Education (DfE) (2012) concerning comparisons of mathematics curricula across HPJs summarises the similarities and differences across domains. For several there was agreement that confidence, fluency, and attainment in number are prerequisites for algebra. Four of the HPJs’ curricula covered the majority of fractions and decimals by the end of the primary phase. These two points should be noted in constructing learning progression in curriculum frameworks. The domain of shape, space, and measure yields the least amount of consensus across nations, whereas there was greater agreement with what was

taught in the domain of algebra. Probability was most likely to be found in upper secondary curricula.

The comparison of primary curricula by the NFER (2008) concludes that the vast majority of HPJs structured their curricula by content. They all included number and geometry/shape and space. Hence it may be advisable to follow these two patterns in developing a curriculum framework. Whether or not to keep measures separate was a differentiator along with whether probability and algebra should feature in the late primary years, and how much data handling should be included. A breakdown of the domains and processes included across the curricula is found in Figure 9. Other smaller but in-depth studies compare specific curricular content areas in mathematics, for example, geometry (Hoyle et al., 2003) and algebra (Sutherland, 2002).

In contrast to the international comparisons, the Australian Association of Mathematics Teachers (AAMT) (2009) paper provides a distinct framework for mathematical concepts (Figure 12) (for example, number, function, algorithm) and skills (for example, represent, discover, prove) and uses these alongside ‘big ideas’ to create a complete structure for mathematics curricula:

**Figure 12: Big ideas, mathematical concepts, and mathematical actions**  
 (Source: AAMT, 2009, p. 5)

Big ideas	Mathematical concepts	Mathematical actions
These 'big ideas' of mathematics are embedded across the mathematical concepts, providing the important connections between concepts	These four mathematical concepts are the organisers of 'content' which may need to be elaborated to support teacher planning	These mathematical actions or processes are typically used to represent 'doing' mathematics. They are organised into four broad areas.
	Quantity	Reasoning Arguing, justifying and proving Generating
Dimension		
Symmetry		Using procedures Comparing
Transformation	Shape and space	Calculating
Algorithm		Operating (in the sense of 'reflecting in that line' or 'find the indefinite integral of')
Patterns	Uncertainty	Communicating Visualising Representing (numbers, visuals, symbols and combinations) explaining
Equivalence		
Representation		
	Variables, relationships, and change	Solving problems Mathematical modelling Using mathematical tools

To complement this, Cunningham (2018) developed a table of trans-national indicators by modelling inter-jurisdictional mathematics assessments. The table below (Figure 13) shows the resulting developmental sequence for the introduction of mathematical content areas:

**Figure 13: Developmental sequence for the introduction of mathematical content (Source: UNESCO, 2018, p. 5)**

DOMAINS	Grades		
	1-3	4-6	7-8
Number	▲	▲	▲
Arithmetic	▲	▲	▲
Geometry	▲	▲	▲
Functions		▲	▲
Probability		▲	▲
Statistics		▲	▲
Discrete Math		▲	▲

For comparison, Schmidt (2004) summarises the curriculum content from HPJs (identified via TIMSS' results) by year group<sup>9</sup> and Confrey et al. (2014) analyse the state-wide curricula in the USA from grades K to 8 to give another version of when content should be introduced if a mathematics curriculum defines content by age-related structures. Schmidt (2004) furthermore clarifies the importance of the order in which mathematical content is introduced, explaining how it often relies on other content that precedes it. The 'TIMSS 2015 Encyclopedia' contains country chapters (including seven of the nations identified as HPJs by Elliott, 2016) with detailed information on the organisation, content, proficiencies, and achievement, and standards for mathematics across different age groups; it highlights the many and varied approaches and presentations that characterise these curriculum frameworks.

Also worth considering when designing an effective curriculum is the popular notion of 'big ideas' in mathematics, which cut across the curriculum domains. Charles (2005) describes a 'big idea' as: 'a statement of an idea that is central to the learning of mathematics, one that links numerous mathematical understandings into a coherent whole' (2005, p. 10).

These 'big ideas' could not only inform a curriculum framework but, as suggested by Charles amongst others (see, for example, Siemon et al., 2012, and Askew, 2013), play a key role in teachers' professional development. Moreover, they bring the advantage of allowing for the suggested narrowing of curriculum content without a loss of depth of understanding. Siemon suggests that slimming of content should be concentrated in the domain of number and that key concepts for a curriculum are trusting the count, place-value, multiplicative thinking, partitioning, and proportional reasoning. Finally, but

<sup>9</sup> The grade level content expectations in the majority of top-achieving countries is tabulated in Figure 1 on p. 8 of his paper. One key finding was that algebra and geometry were introduced in the middle grades including slope, functions, solving linear equations in two unknowns, congruence, similarity, and the properties of rational numbers.

significantly, cutting across the content domains is problem-solving, which has become a more central aspect of mathematics curricula over the last 20 years (Conway & Sloane, 2005).

### 5.4.3 Learning and doing mathematics

Haertel and Wiley (1993) propose that mathematical learning involves the development of procedural and conceptual knowledge and skills needed to successfully solve problems. Intrinsic to this definition is a clear description of the kinds of tasks that could test student attainment. Swan (2014), in contrast, prioritises the classification of the tasks as a means of defining specific learning goals. He categorises the learning goals as: ‘procedural fluency’, ‘the ability to carry out mathematical procedures quickly, efficiently and reliably without effortful thought’ (p. 10); ‘conceptual understanding’: ‘concepts are organic; they are an individual’s attempt to make sense of the world and as such they constantly evolve’ (p. 11); ‘strategic competence’: ‘the capability of students to solve multi-step, non-routine problems and to extend this to the formulation and tackling of problems from the real world’ (p. 15); and ‘critical competence’, the propensity to comprehensively understand, usefully evaluate, and suggest appropriate improvements to someone else’s solution to a problem. Underpinning Swan’s (2006) categories is the assumption that effective learning occurs when students work together to create, and then build on, a shared understanding of the problem situation through the re-negotiation of meaning.

There is substantial overlap between Swan’s (2014) definition of learning and doing mathematics, and PISA developers’ (OECD, 2016). Specified in terms of mathematical literacy, the developers outline the problem-solving processes of formulating a situation mathematically (making sense of a problem-situation by extracting the essential mathematics to analyse, set up, and solve the problem), employing mathematical concepts (applying mathematical concepts, facts, procedures, and reasoning to solve problems in order to attain a mathematical result), and interpreting and evaluating mathematical outcomes (reflecting on intermediate and overall mathematical results, and interpreting them in the context of the problem). Evaluating outcomes occurs when students determine whether the results are reasonable and make adjustments accordingly. Core to these processes are the competencies of reasoning, applying conceptual understanding, procedural understanding, facts, and tools to describe and predict problem-situations.

Schoenfeld (2007) uses the concept of mathematical proficiency to describe what students know, can do, and are disposed to do. Similarly to the PISA’s (OECD, 2016) definition of mathematical literacy, he embraces the processes of problem-solving. In addition, he emphasises the importance of students’ beliefs and disposition – their attitudes and motivations to engage in the mathematics. Schoenfeld (2007) also specifically references metacognition – the capacity to critically reflect on a solution as it unfolds. Later, emerging from a five-year study, he summarises the dimensions of the mathematics classroom, essential to student learning (Schoenfeld, 2014). Within these dimensions, he articulates the need for an interconnected approach to the learning of mathematical concepts, and stresses that students learn best when they engage in productive struggle. In line with the general framework designed by OECD (2018a), he considers agency, and co-agency as critical to student learning. To develop a positive identity as thinkers and doers of mathematics, Schoenfeld advises that students need to engage in each other’s mathematical ideas and explain their own ideas not just on paper,

but within a social context. Thus, he regards student collaboration as central to student learning.

Niss and Hojgaard's (2011) definition of mathematical competence echoes much of the other researchers' perspectives, particularly with regard to the process components. They specify what it means to incrementally master mathematics over time. In doing so, the researchers make links to the content domains of mathematics (e.g. numbers, algebra, geometry and so on). They suggest that how the curriculum is sequenced should reflect the ways in which mathematical ideas intertwine. Although there is not an inflexible sequence in which topics should be learned, the sequence cannot be arbitrary.

Understanding gained from one domain is used and integrated into new knowledge domains (Niss & Hojgaard, 2011). A curriculum framework should establish a progression of topics that build on, and into, the structure of mathematics, with topics in one year depending on topics learned in a previous year (Cunningham, 2018; Niss & Hojgaard, 2011). Thus careful planning and alignment is critically important for effective implementation of reforms (OECD, 2018a).

This perspective concurs with many researchers' view on mathematics – that it is an interconnected network of related ideas. A key learning goal is for students to establish 'a coherent, comprehensive, flexible and more abstract knowledge structure' of underlying concepts (Seufert et al., 2007, p. 1,056). Land et al. (2005) extend this perception by noting that some concepts are more essential for connectivity than others. These they refer to as 'threshold concepts'. Such concepts can open up previously inaccessible ways of thinking and bind a subject together. The integrative nature of threshold concepts means they can act as a gatekeeper to previously hidden interrelatedness. In mathematics, Hiebert and Carpenter reiterated the central anchoring nature of such concepts: 'the degree of understanding is determined by the number and strength of the connections.' (1992, p. 67). Referred to, by some mathematics educators, as 'big ideas', they are clusters of mathematical understandings that link into a coherent whole and to other mathematical understandings (Randall & Carmal, 2005). Ensuring students learn these 'big ideas' in a timely manner will support the cumulative nature of mathematics, and help prevent it becoming a list of isolated facts to be memorised, but soon forgotten (Randall & Carmal, 2005). This is a concern in contexts of displacement, where there is a higher risk as compared to more stable contexts that the sequence of topics learned does not reflect the cumulative nature of the subject. Missing the lessons on the 'big ideas' can prevent students accessing other areas of mathematics (Randall & Carmal, 2005).

There is a compelling rationale for educators to learn from the insights of HPJs. Despite each jurisdiction's unique history, values, strengths, and challenges, there are clear overlaps in their aspirations. Across the world, curricula embrace similar 'habits of mind' that enable students to use mathematics effectively, both within the world of mathematics and the real world. Mathematical frameworks that adopt a constructivist learning approach typically emphasise the societal, personal, and intrinsic value of studying the subject, and describe the fundamental competencies that need to be developed.

Competencies such as problem-solving and the pursuit of agency and co-agency, equity and high-order thinking, can be interpreted and incorporated with HDJs' educational systems. Such interpretations are guided by multiple factors, including the education of teachers, the on-the-ground resources, and the need to promote peace-keeping competencies. Valid assessment of students' prior knowledge and skills is also key to

ensuring continuity of their mathematics education. Given the current convergence of natural and human-made emergencies, non HDJs' education systems could also benefit from the experiences of emergency situations (Sinclair, 2002). For example, in their attendance to competencies such as identity, and co-agency. To gain a more robust understanding of the criteria for successful implementation of curricula in HDJs, however, there needs to be further research.

## 5.5 Curriculum frameworks for Education in Emergencies: Science

### 5.5.1 Introduction

Although it is generally agreed that science education is critical to supporting an individual's ability to apply knowledge and skills to everyday decision-making (Crowell & Schunn, 2016), agreement regarding what should be included in primary and secondary science education has not been reached. Around the world, stakeholders present competing aims of how science curricula should be approached (Blanco-López et al., 2015; Fensham, 2009, 2013; Ryder & Banner, 2011). This lack of consensus can be clearly seen in the results of a 2015 Delphi study (Blanco-López et al., 2015) which gathered the opinions of various science education specialists around the world and asked what aspects of science should be prioritised in science education. The results show that very little consensus could be reached. An added complexity when designing a curriculum framework for displaced contexts is that very little empirical evidence exists relating to effective science education in EiE contexts. Although a definitive approach to teaching science does not exist, many insights can be gathered through analysing relevant research in the field. These insights will then be surmised into four recommendations which can inform the development of a science curriculum framework for displaced learners.

Before considering the specific content and characteristics of an effective science curriculum framework for displaced learners, it is worthwhile to consider the current theoretical underpinnings that guide decisions relating to science curricula for primary and secondary learners in general. These general findings will later be evaluated for their relevance and applicability for curriculum frameworks for displaced learners. It emerged from the relevant research literature that important areas of consideration for science curriculum development relate to curriculum coherence, the importance of core scientific knowledge, the effectiveness of practical applications, and the importance of being mindful of student attitudes to science.

### 5.5.2 Curriculum coherence

Curriculum coherence is a common topic in curriculum development projects. It is argued that without curriculum coherence, science curricula will present the scientific discipline as a list of disconnected facts that students must only memorise (Budiansky, 2001; Gulyaev & Stonyer, 2002; Lerner, 2000; Liu et al., 2010). This type of rote memorisation does not support deep understanding nor is it believed to provide an adequate basis for continued learning (Mayer, 2002). In addition, if curriculum coherence is not achieved and the learning sequences are not apparent then learning is put at risk in one of two ways. Firstly, crucial conceptual steps can be missed, which inhibits understanding and future learning. Secondly, vital portions of knowledge can be

missed, which leaves significant knowledge gaps (Muller, 2009). Read (2019) argues that according to the theory of constructivism, students are required to construct their own understanding through experience and reflection. Such a process is facilitated if teaching activities around a particular topic are presented in a logical order that supports students in following the required learning steps. Where such structure is lacking, students may come to see science as a jumble of isolated facts that need to be memorised, rather than a coherent discipline made up of interrelated concepts.

As outlined elsewhere in this report, curriculum coherence refers to curriculum content being arranged in an evidence-based order that supports age-appropriate progression across all subject areas. Chisholm et al. (2000) argue that curriculum coherence should be viewed in two forms, distinguishing between curricula which have conceptual coherence and those which have contextual coherence. Conceptual coherence can be viewed as a logical learning sequence of the epistemological core of the discipline (Parry, 2007). Contextual coherence refers to a curriculum being structured in a way that is regionally and culturally appropriate for the area in which it is being delivered. The fundamental principle of contextual coherence is that contexts and applications of science should be used as the starting point for the development of scientific ideas (Bennett, 2017).

Muller (2009) argues that all curricula have elements of both conceptual and contextual coherence, however they vary depending on how much attention is given to each. Curriculum frameworks that are more vertical in design, meaning they are structured in a clear linear sequence that dictates the order in which concepts will be delivered, require more focus on conceptual coherence. Muller (2009) argues that the more focus there is on conceptual coherence, the clearer the knowledge basis must be.

Although there is relative consensus on the importance of curriculum coherence, there is a lack of consensus on what coherence looks like in science education. For example, Millar and Osborne (1998) argue that stories can present science in a format which can stimulate students' interest in learning science, providing them with meaningful, coherent and memorable contexts. They believe stories can give students opportunities to get a sense of the bigger picture. Boström (2006) is also of the opinion that teachers should use narratives as a tool for creating meaning to stimulate students' learning in science. Through storytelling, the subject can become meaningful and science theories can be contextualised into something students can relate to. However, Sikorski and Hammer (2017) argue that current attempts at coherence through a narrative approach may actually inhibit students in constructing deep, interconnected understandings. For example, by overly focusing on the 'storyline', students sometimes get caught up in the narrative, which they refer to as narrative seduction, and do not question the plausibility or consistency of what is being presented. Sikorski and Hammer (2017) suggest that a curriculum that is truly supportive of coherence would cultivate students' own interests. Therefore, rather than move in a pre-planned manner from concept to concept, investigation to investigation, greater emphasis would be placed on the disciplinary activity of working to identify and articulate problems that need solving and, after deciding which science practices to use, work to solve these problems. In short, students, rather than curriculum, should be recognised as the agents of coherence making (Sikorski & Hammer, 2017).

### 5.5.3 Scientific literacy

Scientific literacy is seen by many as the primary goal of school science (Millar, 2007) and in recent years the term has become increasingly prominent in discussions regarding the aims and purposes of school science education. During the 1990 World Conference on Education for All, UNESCO argued that science education should have the aim of creating a world of scientifically and technologically literate citizens (UNESCO, 1990; Layton et al., 1994). PISA refers to the idea of scientific literacy as an international aim of education (Kauertz et al., 2012). PISA defines scientific literacy as the ability to understand the characteristics of science and the significance of science in the modern world, to apply scientific knowledge, identify issues, describe scientific phenomena, draw conclusions based on evidence, and have the willingness to reflect on and engage with scientific ideas and subjects (OECD, n.d., see Figure 14). The critique of scientific literacy is that it should not be a global standard in the way that it is presented by PISA. Since scientific literacy is dictated by the competencies needed for real-life contexts, it should be reflective of the society in which the students are citizens (Fensham, 2002, 2009). Therefore, there should be regional flexibility for how scientific literacy is defined and approached.

**Figure 14: Defined scope of scientific literacy according to PISA (Source: OECD, n.d.)**

<b>Areas of scientific knowledge:</b> physical systems living systems earth and space systems
<b>Areas of (meta) knowledge about science:</b> scientific research scientific explanation
<b>The conceptual framework defines five contexts, each of which may have a personal, social or global reference:</b> health natural resources environment hazards frontiers of science and technology
<b>Processes:</b> explaining phenomena scientifically assessing scientific research and planning research interpreting data and evidence scientifically

Other tensions exist around the scientific literacy approach to science education. Millar (2011) found that teachers perceive that an emphasis on scientific literacy increases the interest and engagement of students who were previously not interested in science. However, teachers also identified key challenges when teaching through the real-life contexts that scientific literacy employs. These challenges included firstly, the inability of students to look critically at public accounts of science and secondly, more demanding classroom management due to more open discussions about science-related issues.

Blanco-Lopez et al. (2015) note that scientific literacy differs from the competencies expected of a scientist, and therefore does not do enough to prepare students to progress in scientific disciplines. Millar's research (2011) highlights the tension that exists within the school science curriculum between the aim of enhancing the science knowledge and

ability of all students versus providing a solid scientific foundation for more advanced study in the field of science for only some students.

Gott et al. (2018) argue that citizens also require understanding of the nature of scientific knowledge. This includes the ways in which scientific knowledge is obtained, checked, and refined (*ibid.*). Understanding the nature of scientific knowledge gives individuals a basis for evaluating knowledge claim and different viewpoints on a disputed issue. The Delphi study by Osborne et al. (2003) found that nine key areas of knowledge about the nature of science emerged (Figure 15). This discussion of what knowledge about science is needed to support scientific literacy leads into the question of what core disciplinary knowledge should be included in a science curriculum framework.

**Figure 15: Results from Osborne et al. (2003)**

Delphi Study
Science and Certainty
Analysis and Interpretation of Data
Scientific Method and Critical Testing
Hypothesis and Prediction
Creativity
Science and Questioning
Cooperation and collaboration in the development of scientific knowledge
Science and Technology <sup>b</sup>
Historical Development of Scientific Knowledge
Diversity of Scientific Thinking

#### 5.5.4 Scientific knowledge

Going alongside debates of the aims of science education are debates of what should be considered the core disciplinary knowledge of science. Due to the volume of knowledge that the field of science encompasses, it is challenging to distinguish which elements of knowledge should be included in school science and which should not. It is worth noting that Amin et al. (2018) have found that children are capable of abstract and rational reasoning in science from a very young age, but are less likely to display advanced reasoning skills because they have less knowledge and language to pull from. This means that an important knowledge area should not be disregarded from science education due to its complexity. Instead, the language and knowledge demand should be adjusted to suit the learner's zone of proximal development (Yung & Tao, 2004). Therefore, it is more pertinent to first decide which areas of scientific knowledge should be included in a science curriculum framework and then appropriate levelling of those areas can be considered.

Traditionally, scientific knowledge has been delivered in defined subject areas of physics, chemistry and biology. This approach is still used widely around the world in secondary-level education (Venville et al., 2012). More thematic, integrated approaches to science education tend to be used in the primary level because they more accurately reflect the lived experiences of the child and therefore, are believed to be more meaningful to students (Appleton, 2003). However, regardless if the decision is made to structure a curriculum around the traditional subject areas or thematic units, decisions must still be

made regarding what scientific knowledge should be prioritised and in what order. Muller (2009) argues that the discipline of science can follow a relatively linear structure, which means achieving conceptual coherence in a curriculum framework is perhaps more straightforward than more abstract disciplines such as philosophy or anthropology. However, this still does not mean that it is straightforward to decide what knowledge to include in the curriculum framework.

Young and Muller (2013) argue that specialised knowledge exists within every discipline that provides insight into the natural and social world, and empowers the learner to go beyond individual experience. It is this knowledge that should drive the curriculum framework. In the case of science education, powerful knowledge (Young & Muller, 2013) is beyond what students would learn in their everyday lives and has been developed by specialists in the field of science. For science, this disciplinary force comes largely from universities with the socio-epistemic rationale coming largely from empirical studies being conducted by disciplinary specialists.

Gott and Duggan (1996) argue that powerful knowledge is an important starting point, but this will not automatically evolve to skills that can be applied by the learner. Gott and Duggan (1996) warn that by defining a knowledge base without teaching the skills to practically apply the knowledge learners may not learn to utilise the creativity and problem-solving which is a necessary part of science and engineering. The importance of bringing powerful knowledge to life through practical application will be addressed in the following sub-section.

### 5.5.5 Application of scientific knowledge

In many countries, one of the key features of science education is the involvement of practical work (Abrahams & Millar, 2008). Practical application, which refers to activities that allow students to manipulate and observe real objects and materials, teamed with a coherent curriculum framework supports authentic learning and moves students away from rote memorisation of scientific facts (Wellington & Ireson, 2017). However, not all practical work is effective in supporting learning. In order for practical work to be effective, there must be a consistency between what the teacher intends students to learn, what the teacher intends students to do, what the students actually do, and what the students actually learn (Millar & Abrahams, 2009).

Gott and Duggan (2007) believe practical work in science curricula has evolved from being illustrative in nature, which usually involved a demonstration of a concept or law, to being more enquiry based. Suduc et al. (2015) found that inquiry-based science education (IBSE) proved to be stimulating for students' motivation, students' ability to apply research skills, construct meaning and acquire knowledge. According to Spencer and Walker (2009), inquiry is the basic building block for science education for the primary level as it helps students to evaluate their responses and allows them to clearly communicate and support their answers with evidence. Drawing on the work of Minner et al. (2010), the following can be seen as the core components of inquiry-based learning for learners:

- ↳ They are engaged by scientifically oriented questions.
- ↳ They give priority to evidence, which allows them to develop and evaluate explanations that address scientifically oriented questions.
- ↳ They formulate explanations from evidence to address scientifically oriented questions.

- ↳ They evaluate their explanations in light of alternative explanations, particularly those reflecting scientific understanding.
- ↳ They communicate and justify their proposed explanations.
- ↳ They design and conduct investigations.

There are similarities between the features of IBSE and the characteristics associated with problem-based learning (PBL). A PBL approach involves students learning through focusing on the investigation, explanation, and resolution of meaningful problems. PBL has its origins in teaching in medical schools, but it has now been used across a variety of subjects, including primary and secondary science education. Students work collaboratively in small groups, with the teacher acting as a facilitator to guide student learning through the process of solving the problem presented (Bennett et al., 2018).

Although IBSE and PBL approaches are seen as advantageous for students' learning in science, Abrahams and Millar (2008) have found that students are rarely given full range to problem solve when completing practical work. They found in a series of class observations of primary and secondary classrooms in the UK that practical work was generally effective in getting students to do what is intended with physical objects, but much less effective in getting them to use the intended scientific ideas to guide their actions and reflect upon the data they collect. There was little evidence of authentic problem-solving taking place or significant cognitive challenge (Abrahams & Millar, 2008). Roth and Bowen (1995) argue that for school science activities to be authentic, students need to experience scientific inquiry that has features in common with scientists' activities, in that students learn in contexts constituted in part by ill-defined problems, and experience uncertainties and ambiguities, and the social nature of scientific work and knowledge.

### **5.5.6 Importance of attitude to science**

The final theme that emerged from the relevant research literature pertaining to science education is the importance of cultivating a positive attitude and interest in the subject. These two elements are seen as critical cognitive and affective motivational variables which have significant impact on the successful implementation of any curriculum framework (Hidi & Renninger, 2006). It is vital that a curriculum framework allows for flexibility so that students' interests can be taken into account. The students' interests and their contextual relevance must be considered in order to ensure their motivation in science, and to ensure the success of any curriculum derived from the curriculum framework.

There are also notable gender correlations to interest and motivation in science which should be noted. Young children tend to start out highly motivated in science, regardless of gender, race, or even academic achievement (Patrick et al., 2008). However, this begins to shift as students get older, particularly between the age range of 10–14. Studies around the world have shown that parents tend to encourage sons in science regardless of their beliefs about their interest or competence in science, but are less likely to encourage daughters, who they believe will not like it or find it difficult (Tenenbaum & Leaper, 2003; Catsambis, 1995; Jones et al., 2000). Wang and Berlin (2010) found that in Taiwan, male students' families are more supportive of them learning science than female students' families. This correlates to males having a more positive attitude to science and being more motivated to continue their studies. Shin et al. (2015) found that Korean girls had lower intrinsic motivation to engage in science and fewer intentions to

pursue STEM careers than boys. In addition, the parental expectations for girls' participation in science were lower regardless of parents' values, education, or income.

Children from non-dominant cultures may also face barriers to getting and staying engaged with science. Ways of knowing differ by culture, as do values and means of communicating thought and knowledge (Gutiérrez et al., 1999). Children from non-dominant communities have faced discrimination in the form of poor science instruction, tracking, and low teacher expectations as compared to dominant-culture counterparts (Atwater, 2000; Oakes, 1990). Research suggests that for all children, local, culturally relevant informal science experiences may help support children's motivation to engage in science during the critical 10–14 age range (Bonnette et al., 2019).

### **5.5.7 Content frameworks underpinned by research**

In order to gain further insight into how scientific knowledge and practical applications could be incorporated into a curriculum framework for displaced learners, it is worthwhile to consider how these elements are presented in current leading science frameworks. Six science frameworks will be briefly considered for this purpose. Each framework is evidence based and represents innovative approaches to science education. All examples listed below, except for the Twenty First Century Science course, are in the public domain and are worthy of consideration when developing an evidence-based science framework.

#### **5.5.7.1 Big Ideas**

The 'Big Ideas of Science Education' presents a list of essential understandings in science that developers believed all students should acquire during their compulsory years of schooling. This study came in response to concerns that many students do not find science education interesting or relevant for their everyday lives (Harlen, 2010). The initial Big Ideas report only offers the list of Big Ideas and the corresponding rationale for each. However, a subsequent report (Harlen, 2015) offers a linear representation of how these Big Ideas would be applied when teaching students between the ages of 5 to 17.

#### **5.5.7.2 BEST Evidence Science**

The BEST (Best Evidence Science Teaching) framework resources emerged from the University of York Science Education Group. This project emerged in response to the acknowledgement that science education should be underpinned in evidence, but that many science teachers do not have the time or resources to access or implement the most recent emerging research. The frameworks and resources are divided into three strands – Biology; Chemistry and Earth Science; and Physics (University of York Science Education Group, n.d.).

#### **5.5.7.3 2061 Benchmarks**

Created by the American Association for the Advancement of Science (AAAS), the Benchmarks for Science Literacy is a framework of what all students should know and be able to do in science, mathematics, and technology by the end of grades 2, 5, 8, and 12 (AAAS, 1993, 1994). The recommendations at each grade level support gradual development towards the adult science literacy goals laid out in the project's 1989 report 'Science for All Americans' (AAAS, 1989). The aim of the Benchmarks is to help educators decide what to include in a core curriculum, when to teach it, and why.

#### **5.5.7.4 Next Generation Science Standards (NGSS)**

The goal for developing the NGSS was to create a set of research-based, up-to-date K–12 science standards. These standards were initially developed for education jurisdictions across the United States, however they are now seen globally as a leading example of an interdisciplinary approach to learning science. The aim of the NGSS is to give local educators the flexibility to design classroom learning experiences that stimulate students' interests in science and prepare them for higher education, future careers and active citizenship (NGSS Lead States, 2013).

#### **5.5.7.5 Twenty First Century Science**

Developed in partnership between the University of York Science Education Group, OCR (the Oxford, Cambridge and RSA Examinations body) and Oxford University Press, Twenty First Century Science is a GCSE-level course offered across the UK. The aim of the course is to link science to modern and engaging contexts relevant to all students, to promote scientific literacy, and to provide practical skills to allow students to work scientifically (Millar, 2006).

#### **5.5.7.6 PISA Framework**

The 2018 PISA report presents the conceptual foundations of the OECD Programme for International Student Assessment (PISA) which assesses student knowledge, skills, and wellbeing. The science framework within this report focuses on the skills, knowledge and understanding that are assessed during PISA testing. This framework is organised around the OECD definition of scientific literacy and the related competencies. Some terminology is explicitly defined in order to ensure understanding across cultures and languages (OECD, 2019).

### **5.5.8 Challenges and considerations for supporting science learning in contexts of displacement**

Moving on from the general overview of relevant research that has been provided above, a more specific focus on displaced contexts will now be discussed. Unfortunately, there is limited empirical research available on science education in displaced contexts. However, there are several research findings related to science education in developing contexts, multicultural contexts, and transnational contexts that may provide additional insights.

There has been a trend in curricula created for developing areas to focus on life competences (or competencies) (Amadio, 2013). It is believed that competency-based education is a more valuable use of potentially limited educational resources. It is argued that developing life competences in science is a way to bridge between the preparation for life that students receive in schools and what will actually be required of them in the future (Barker et al., 2004). However, Blanco-López and colleagues (2015) point out that focusing on competences without conducting an analysis of the disparity that exists within specific contexts can lead to risks of adopting a framework that is poorly conceptualised, and limited in its ability to support students. Therefore, understanding the needs of citizens is central to all these notions and should be done at the local level. Blanco-López and colleagues (2015) argue that competences are culturally and contextually tied and therefore should not be used to guide a curriculum framework that will be broadly applied.

There is a clear acknowledgement of the importance of recognising distinct cultures and contexts in science education. Ensuring cultural diversity in science means that the delivery of science curricula should be done in a way that different identities, beliefs and knowledge sources are acknowledged (Jorde & Dillon, 2012). Currently, science curricula are often exported from Western countries and used globally, which Meyer and Benavot (Eds.) (2013) argue is a result of the globalising nature of global assessment benchmarks such as PISA and TIMSS. This dominance of Western-originated curricula and Western-based research evidence can have damaging consequences on the student's sense of identity and on local culture and knowledge when applied to non-Western contexts. Snively and Corsiglia (2001) suggest that a 'trans-cultural' science education should encourage people to draw upon scientific knowledge as needed, but it would not seek to force a Western cultural perspective upon non-Western people. Aikenhead (2001) argues that adopting Western science is not the problem, but that it can be presented as a forced assimilation into a foreign culture, which can ignore the worldview of the individual (Coborn, 1996). Coborn (1996) explains that worldview refers to the culturally dependent, implicit, fundamental organisation of the mind that provides a non-rational foundation for thought. Worldview is composed of presuppositions about what the world is like and what constitutes valid knowledge. Therefore there must be flexibility and space in the curriculum framework to acknowledge and incorporate local knowledge and relevant worldviews. Different views should be investigated and problematised in a way that does not show disrespect, but also does not promote misunderstanding. Therefore, a teaching unit in science that is used internationally, especially in non-Western contexts, should ensure that it allows for space to link to or draw from the related local worldview(s). This will make it easier and quicker for students to orient themselves in the learning environment (Aikenhead, 2001).

For example, Lee et al. (2012) conducted a study which considered how science instruction in an indigenous community in Taiwan (the Amis tribe) could combine indigenous knowledge and Western science. They developed and delivered a unit linking to time. From the indigenous side, they taught the concept of time linking to students' prior understanding. This enabled access to students' prior knowledge, which in many cases came from elders in the community. Lee et al. then linked this to Western measurements of time and the scientific concept of periodicity. The conclusion of the unit involved students looking at problems related to time and choosing the best way to solve them, allowing students to pull from indigenous or more disciplinary sources of knowledge as they saw fit. In short, the goal was to find a way to solve the problem rather than to assess methods. Lee et al. (2012) conclude that exposing students to different worldviews and disciplinary knowledge while still acknowledging theirs can motivate student interest and academic achievement. However, this incorporation of indigenous knowledge must be done in partnership with the local community, and should not be integrated in a tokenistic fashion by external curriculum developers.

Another consideration when teaching science in multicultural and multilingual contexts highlighted in the research literature is the importance of defining terminology. Rosebury et al. (2010) conducted a study of how 8–10 year olds come to understand scientific disciplinary knowledge and the language they use to convey meaning. This research draws on Bakhtin's concept of heteroglossia (1981) which encompasses the various ways that different language groups conceptualise, represent, evaluate, and engage with the world of knowledge and meaning making (Morson & Emerson, 1990). In this way, languages are not distinguished from one another by their vocabularies alone but as 'specific points of view on the world, forms for conceptualizing the world in words'

(Bakhtin, 1981, pp. 291–292). Rosebury and colleagues (2010) give the example of the term cold. Cold for some children will have a different connotation depending on their life circumstances. A child who lived in Haiti will have a different perception of cold from a child from Russia. Therefore, the meaning and values for terminology, even for simple terms like cold, should not be taken for granted in the science classroom. Rosebury et al. (2010) argue that the learning of all students is limited when heterogeneity is ignored or goes unrecognised in the classroom because meaning making is restricted.

Ryu (2019) agrees that simply translating terms into students' native languages is not enough. She recommends that teachers engage students in translating science-specific ideas as opposed to simply mapping two words between two languages. This process inevitably facilitates a hybrid of academic and everyday languages in both the student's native language(s) and the language medium of the classroom, which provides opportunities to comprehend scientific ideas across different realms of knowledge. Miller (2009) found that refugees arriving in Australia were struggling in science due to the complexity and specificity of science terminology. For refugee students, there are compounded difficulties of minimal literacy in their first language, learning complex content in a new language, and students having limited science vocabulary and conceptual development due to interrupted schooling. In all of these cases, time should be taken to discuss definitions of relevant terminology and ensure understanding by all students.

Harden (2019) argues that a good definition in science education includes words appropriate to the stage of learning of the students. She warns that when teaching younger students care must be taken to ensure that simplification does not introduce or reinforce misconceptions. Writing good-quality definitions is a challenge, but is a worthy investment of time. To ensure consistency, definitions of key terminology should be provided by curriculum developers to ensure that teachers as well as students have a common understanding. Furthermore, scientific words should be chosen with great care, and so should the everyday words that are used to connect them to meaning for students. Imprecise use of everyday language to convey scientific meaning can result in students interpreting a definition in an unintended way, which may have lasting effects on their scientific understanding and future success.

It has been found that language learning in general should be supported to ensure students have an appropriate level of understanding in the language medium of the science class. Aydin and Kaya (2017) found that it was pivotal for refugee students in Turkey to receive support in language learning before they entered mainstream classes such as maths and science. Students who did not receive any language training before starting mainstream classes faced profound challenges and had a very high failure rate.

### 5.5.9 Current examples of science education in EiE

There is limited literature available that refers to current approaches to science education in EiE contexts. However, there are examples of research pertaining to accommodations and differentiation for refugee students in national contexts as well as examples of ad hoc or short-term science education initiatives within EiE contexts.

Shakfeh (2015) found that in refugee camps, science is often overlooked as an important topic of education because of a lack of experts who can provide adequate teaching materials and enthusiasm for the topic. Science, and in particular, microbiology, has

many overarching implications for individual and societal wellbeing. Shakfeh (2015) argues that providing refugees with a better understanding of microbiology and science in general would allow them to develop better critical thinking skills and practical knowledge to enhance their livelihood. Shakfeh (2015) recommends providing more textbooks and science equipment in refugee camps as this would allow refugees to see pure science with their own eyes, and understand and apply its practical applications. Students would be able to learn more about the world they live in and see how science can be used to change the world (Shakfeh, 2015).

Stephenson (2018) discusses observations of a joint initiative between Relief International, UNICEF, Boston television station WGBH, and Tufts Center for Engineering Education and Outreach. A group of science specialists spent six weeks in six refugee camps in Jordan offering a one-week teacher training workshop in each camp to support the delivery of a STEM curriculum. The team also delivered science days at each camp, which involved 3,000 students in total across all six camps. During these science days, students were given structural challenges which they needed to solve in groups. It was noted that the children were focused, mentally engaged and excited about what they were able to create. However, it was also noted that for some students their creativity was limited by what they had or had not been exposed to in the past. For example, when constructing structures from marshmallows, the majority of students only built single-level structures. When instructors encouraged the students to go higher, students struggled to conceptualise what the visiting teacher meant. The local teacher explained that many of these students had never seen a multi-storey building and therefore, were struggling to know how to construct it (Stephenson, 2018). This example highlights the importance of ensuring that references within the science curriculum are connected to the lived realities of the students. Scaffolding must be provided in order to support their understanding and help to make the unknown or the abstract more concrete. This example also highlights the value of having local teachers in EiE contexts as they are sometimes able to more accurately interpret or anticipate potential gaps in student understanding.

A 2018 UNHCR report argues that secondary education in refugee camps requires subject specialist teachers and more sophisticated learning materials as well as science laboratories. This illustrates the value that the UNHCR places on science education. In the report, the UNHCR (2018) explains that as refugee children grow older, they are often expected to take on a greater proportion of family responsibilities or to go to work. This can make the opportunity costs of continued education, which can include transport fees, school fees, and the cost of uniforms, exercise books, and textbooks, too great for refugee students to justify. The UNHCR (2018) argues that science education has the power to show students that learning science and other STEM subjects can lead to future success and future financial benefit through a career in STEM.

Other examples of literature highlight the possible correlations between science education and SEL. Perrier and Nsengiyumva (2003) argue that constructivist, hands-on, inquiry-based science activities may have a curative potential that could be valuable in a psychological assistance programme for children who have been victims of violence and war. After piloting inquiry-based science sessions with unaccompanied displaced children in Rwanda, it was found that some children who were originally isolated, silent, and sad showed a rise in happiness during the activities and an overall increase in positive attitude. Perrier and Nsengiyumva (2003) suggest that a joint development of science literacy and joy may be an interesting approach to further science education and SEL. However, class leaders and teachers must be mindful that the pedagogical

approach chosen is appropriate for all students. For example, Birman (n.d.) explains that sometimes the sound of the bell or the ticking of a timer in a science experiment may trigger memories of trauma. Sometimes the skeleton model students see in a science lab might trigger trauma. In addition, some students might also experience problems when working in a group. In all cases, reflection should occur regarding which pedagogical approaches would be appropriate for the group of learners involved. Understanding student sensitivities and mental health consequences necessitates that open communication channels be established among the different levels of the MHPSS-SEL pyramid (UNESCO, 2019b).

## 5.6 Curriculum mapping, ‘touchpoints’, and transition

### 5.6.1 Introduction

A key purpose of the Learning Passport is to facilitate learners transitioning between different curricula, so that they are able to more easily enter and integrate into education systems in their present location, and more effectively re-join an education system if they have been in a context with no formal or mainstream provision. In order to achieve this, the curriculum frameworks proposed within the Learning Passport, and its associated components for supporting learning, must have the capability to ‘translate’ into other curricula, a process performed through ‘curriculum mapping’. This must not only be implementable for curricula being used in contexts of displacement, but also those that have been used in the past by displaced learners, and those that those learners may be expected to use in the future. This sub-section includes a literature review that examines how such translations have been attempted in the past, what mechanisms and tools can be used to do so, and how this capability of the Learning Passport should be developed and used.

Curriculum mapping is a term that is widely and inconsistently used. There is no agreed universal definition, and it may be used to refer to curriculum mapping in a variety of forms. Broadly, curriculum mapping can refer to mapping within an education system – for example, mapping curricula to resources and assessment (Klenowski, 2006) – or between different education systems, such as mapping curricula from one jurisdiction to another (Darlington, 2017). In this review, we are focusing on mapping in the latter sense: of mapping curricula to other curricula for a variety of purposes. This could be using curriculum frameworks or wider curriculum documentation. Within the proposed scope of the Learning Passport, the two key aims of mapping that require examination are:

- ↳ Mapping curricula to other curricula for the purposes of informing curriculum development.
- ↳ Mapping curricula to other curricula, for the purposes of identifying ‘touchpoints’ between two or more different curricula that a child or group of children is moving between, so as to facilitate transition.

The term ‘touchpoints’ refers to the knowledge, skills, and understanding from multiple curricula (usually from different countries) which are shared, aligned or equivalent. Identifying touchpoints is important as this may help to facilitate learners in transitioning through curricula.

Curriculum mapping methods are used to relate curricula to one another, and may be used for several purposes. These methods entail comparisons between jurisdictions’

policies and practices, and can be used to inform policy, to improve a nation's own curriculum (Elliott, 2013), or to decide whether to admit students into particular programmes or education levels (Greatorex et al., 2019). Curriculum mapping includes comparing a national curriculum to international benchmarks, such as PISA (Department for Education, 2012; Creese et al., 2016) and cross-referencing between nations on elements of curricula such as specific subjects (Elliott, 2016). Comparisons and mapping can inform decisions that support children's future learning by comparing curricula to high-performing jurisdictions to meet international standards of learning, and to assess what students should be learning and achieving at different stages (Elliott, 2016; Cunningham, 2018). Furthermore, a mapping exercise can help identify how a curriculum fosters skills, and the gaps and opportunities that curriculum change may help (Sumsion & Goodfellow, 2004). Thus, comparisons can help respond to questions like what teachers should be teaching, and what students need to learn (Oates, 2011).

## 5.6.2 Tools and methods for curriculum mapping

There are varying tools through which curriculum mapping and comparison can be conducted, including either manual gridding or software-based mapping (Archambault & Masunaga, 2015). However, curriculum mapping provides a visual representation (or curriculum map) of curriculum characteristics, illustrating the elements that are relevant, and allowing for curriculum comparison and review (Greatorex et al., 2019). Curricula are thus visualised and made more transparent through charts, diagrams, or other graphic presentations to portray the links within and between different curricula (Greatorex et al., 2019). This process helps guide cross-referencing for the intended purpose of curriculum assessment, change, and reform. To date, authors have noted that recommendations for tools and guidance remain limited (Sumsion & Goodfellow, 2004; Greatorex et al., 2019). Greatorex et al. (2019) state, however, that there are six key steps which inform curriculum mapping methods: defining the purpose of the study and its parameters, deciding which curricula are to be considered and compared, determining the key features of comparison, collecting relevant documentation and data, recording data and findings into a mapping instrument (such as gridding, matrix, spreadsheet, or form) while creating space for judges' feedback, and finally, presenting the findings and relationships through visual representation. The purpose of curriculum mapping is essential to the process and influences the design of curriculum mapping. For example, Cambridge Assessment recently adopted this approach by developing different layers of curriculum mapping, using spreadsheets to understand three aspects of the education system: the system level by understanding how schools are organised, the curriculum level and its content, and assessment levels by studying what is assessed and for what purpose (Elliott, 2014). The tools for touchpoint visualisation also require programming and coding skills, and varying software to aid the development of each project (Willcox & Huang, 2017).

In contexts of displacement and emergency, understanding the relation between curricula and education systems can help compare students' learning stages as they transition from one nation or curriculum to the next, as well as support displaced children as they prepare for their future learning. This review found that data on curriculum mapping tools in EiE contexts is extremely limited. However, the importance of understanding refugee students' learning backgrounds as they move between systems has been noted by researchers, such as Dryden-Peterson (2016) who states that the educational experiences of refugees prior to resettlement in developed nations are commonly kept from teachers and schools, and represent a 'black box' of information,

which can have implications on students' learning progression and academic success. Thus, curriculum mapping tools appear especially important and a promising approach to help strengthen learning trajectories and to link students' experiences across systems, as children and youth in these contexts may miss out on years of education, face continuous uprooting and transitions across geographic spaces, and transition between different curricula and forms of learning (Baker et al., 2019).

### **5.6.3 Challenges of curriculum mapping and the identification of touchpoints in EiE**

Numerous issues challenge the operationalisation of curriculum mapping in these contexts, though these complex factors also represent the importance of developing tools that can help compare, assess, and synthesise relevant skills and learning objectives. Most importantly, education responses to refugees involve varying curricula, and sometimes, a lack of an official curriculum. Thus, while a key step to beginning a mapping exercise is to identify and select the curricula, countless curricula are currently used to provide education for children in EiE contexts, which provides numerous resources and complexities for curriculum mapping methods (Elliott, 2014). The complexities and importance of reviewing the different forms of curriculum that refugee students may move through have been outlined in research, such as the comparative study by Crul et al. (2019), which explored the learning experiences of Syrian refugees across the different policies and curricula used in Sweden, Germany, Greece, Lebanon, and Turkey. The study found that the lack of coherence in approaches may leave children unable to benefit from learning progression, as initiatives for refugees often disregarded the hosting nation's curriculum requirements, such as language and required levels of core subjects such as mathematics and science. Furthermore, the study finds that some students who last attended grade 3 were placed in grade 5 in their hosting nation based on age, portraying a lack of tracking for learning progress. However, curriculum mapping can address some of these challenges and aid the process of enrolling students in the appropriate grade by identifying overlaps in curricula by mapping previous and new curricula to assess and match students' learning levels.

An additional challenge is the implication of different forms of learning settings and the varying aims of learning programmes in refugee contexts. Learning policies and practices vary depending on whether refugees are settled in low- and middle-income countries or resettled (Naylor & Bengtsson, 2016; Dryden-Peterson, 2016). For example, displaced students may be enrolled in formal, informal, and non-formal settings depending on where refugees are settled, through which different objectives may be emphasised. While formal education places a high value on core subjects, research has shown that non-formal and informal settings may place an additional focus on social cohesion, psychosocial needs, and vocational training (Naylor, 2015; Cerna, 2019). This results in the development of curricula with different priorities compared to formal settings, and creating comprehensive curricula becomes even more challenging when looking at settlements such as camps for IDPs and refugees, where learning planning and provision is based on the resources available (Naylor & Bengtsson, 2016; Baker et al., 2019), and which may not be accessible to others. Though discussions about best practices for curriculum choice and learning values in these contexts are limited, the INEE has sought to provide guidance on curriculum assessment for children affected by emergency and displacement by providing options for choosing and forming curricula (INEE, 2010a). Furthermore, the recent UNHCR strategy strongly encourages a stronger correlation

between learning assessment in non-formal programming and the refugee-hosting nation's national curriculum (UNHCR, 2019b). While different forms of learning in EiE contexts pose challenges, these also portray the need for curriculum mapping to aid assessment and support transitions between systems.

Greatorex et al. (2019) also note that one of the key impediments to comparing curricula is the language barrier when comparing and assessing curriculum documents, and challenges with accessing curriculum documents. Due to the chaos that follows conflict, this may be even more challenging. While curriculum mapping is a representation of intended curriculum, curriculum mapping should seek to understand the differences between intended and implemented curricula (Greatorex et al., 2019). However, this process should entail speaking to stakeholders and practitioners in order to understand gaps and how the curriculum is enacted (Elliott, 2016). This process may prove difficult in some settings, where lack of access to settings affected by conflict and the unwillingness of stakeholders to cooperate due to political tensions may inhibit a greater understanding of the implementation of a curriculum. This is especially challenging as studies have shown that despite the availability of a curriculum, factors such as which language to teach, and the extent to which particular subjects are taught, may be decided by teachers and head teachers due to a lack of training, conflicting opinions, and lack of provision in these contexts (see Karam et al., 2017b).

Finally, research discussing curriculum mapping methods has highlighted the limitations of only looking at 'successful' jurisdictions in other countries and international standards when considering curriculum reform and assessment (Oates, 2011). Moreover, choosing elements in alternative systems without an understanding of the context, and why certain educational elements are successful in these settings, can prove to be unsuccessful (Elliott, 2014). For example, choosing unsuitable elements that are internationally recommended can disregard displaced students' learning needs and futures. Yet, the elements of learning that should be prioritised once children are affected by conflict and displacement continue to be debated, thus making this task more difficult. For example, in addition to core subjects, aspects of social cohesion and peacebuilding continue to be highlighted as important areas of learning and curricula (Naylor, 2015). In addition, policies around LOI, pedagogical choices, and access to university and workspaces (Dryden-Peterson, 2016; UNHCR, 2019b), are all factors which determine which elements of curricula should be selected in mapping processes. These issues represent the need for curriculum mapping tools that are specific to contexts of EiE and displacement; methods which are able to understand the relations between large amounts of data and complex relationships between policies and the layers of stakeholders and decision-makers in these contexts.

## 5.6.4 Barriers to use of curricular touchpoints

Beyond the technical and educational challenges of operationalising the processes of curriculum mapping in EiE, specific barriers exist to the usage of touchpoints and mapping exercises in these contexts.

### 5.6.4.1 Conceptual/systemic barriers

One initial foundational problem which may be encountered in using touchpoints and blending curricula together is the considerable upheaval that may result, affecting learners, teachers and institutions. As UNHCR (2017a) states, schools can provide 'a protective and stable environment for a young person when all around them seems to

have descended into chaos', and while of course it is hugely important to create curricula which are of the highest possible quality and effectiveness, it is also important not to destabilise the system through too much change. For mobile populations whose lives have already been characterised by flux, this volatility may be undesirable. UNICEF (2015), for example, cites Kurdistan as an example of where vacillating between a revised Syrian curriculum and a Kurdish curriculum has resulted in considerable instability.

Bush and Saltarelli (2000) emphasise the importance of curricula having legitimacy from a governmental authority for them to be truly successful. The high value placed on academic accreditation in mobile communities is one reason for this. As such, any kind of 'hybrid' curriculum which has been created by a multiplicity of different actors (intergovernmental, governmental, and non-governmental) runs the risk of lacking face validity. UNICEF (2015) describes the challenges faced in integrating a revised Syrian curriculum in the Turkish education system, noting the weakness of the Syrian opposition coalition and Syrian interim government, and the resultant absence of official recognition, particularly with regard to certification.

#### **5.6.4.2 Political barriers**

Given the febrile nature of EiE contexts, the political influence and impact on curricula is a crucial consideration. As noted by Novelli et al. (2014, p. 8), referencing Davies (2004), education can catalyse conflict by adopting policies and practice which 'exclude or humiliate minorities, exacerbate class and gender differences and indoctrinate students through a war or hate curriculum'. Any attempts to map different curricula, especially in highly sensitive topic areas such as history or civic education, is likely to prove especially challenging, and may indeed become a site of additional confrontation. Given this, there is a risk that any topics which could potentially be seen as inflammatory are sidelined, and where diversity and difference is homogenised and glossed over (Bush & Saltarelli, 2000). Mapping may also be (mis)interpreted as a political act, with pedagogic arguments concerning the value-add potentially offered by mapping curricula onto each other being drowned out by the political challenges posed. Bush and Saltarelli (2000) cite Kosovo as an example of the potential dangers of a 'policy of assimilation' and a 'unified curriculum', which they argue was a significant factor in the conflict there between Albanians and Serbs.

These political challenges appear to be more significant for IDPs as opposed to refugees. The UN's Office of the High Commissioner for Human Rights states that IDPs are very frequently more vulnerable than refugees who have reached the relative safety of a country of first asylum, noting that 'the internally displaced tend to remain close to or become trapped in zones of conflict, caught in the cross-fire and at risk of being used as pawns, targets or human shields by the belligerents' (Office of the High Commissioner for Human Rights, 2019). While the role of network organisations, such as the INEE, UN Organisation and INGOs may be considerable with refugees, it is less so with IDPs. A key reason for this rests in the continued influence of Westphalian notions of sovereignty wherein 'it is the Governments of the states where internally displaced persons are found that have the primary responsibility for their assistance and protection. The international community's role is complementary' (*ibid.*), thereby echoing the UN's de facto non-interventionist position.

It therefore appears that there are significant political constraints in delivering meaningful educational change with IDPs compared to refugees – the more so in such a

sensitive area as curriculum reform and/or mapping. Shanks (2019) explores some of these challenges in the Kurdistan region of Iraq (KR-I), where ‘education provision can interact with debates over return, identity and equality, each of which requires careful negotiation in the Iraqi context’. Shanks further notes that providing education for IDP children is commonly believed to be more straightforward than providing education for refugee children due to the shared linguistic and cultural heritage; for Iraq, however, this claim is debunked because Iraq’s history of ‘complex ethno-politics’ has resulted in ‘communities divided by strong linguistic and cultural identity markers’, meaning that IDPs arriving in KR-I ‘represent a variety of linguistic, cultural and religious groups’.

In an IDP context, what Stewart (2011) refers to as ‘horizontal inequalities’ (that is where grievances emerge from people’s conceptualisation of themselves as being part of a wider group rather than as individuals or family units) may be more likely to occur. In such circumstances, the curriculum’s ‘potential to communicate implicit and explicit messages’ (Shanks, 2019, p. 34) means it could be a lightning rod for ethnic tension, and as such meaning that any curricular reform may be perceived as a political, or quasi-political, act. Where curricular reform does take place, it should follow the ‘4R’ approach presented by Novelli et al. (2015), namely representation, recognition, reconciliation, and redistribution.

#### **5.6.4.3 Epistemological barriers**

Curricula are shaped, directly or indirectly, by epistemologies (Gattegno, 1984). The epistemology which informs the design of curricula has a deep and significant impact on many aspects of educational implementation, such as how learning is defined, delivered, and assessed. One of the general dangers inherent in mapping curricula is that there may be a clash of epistemologies, which could result in a messy and unclear blended curriculum. The risk of this increases the more iterations of the mapping process there are, as in the example cited by UNICEF (2015) concerning a curriculum developed for Syrian refugees that revised materials originally created by the United Nations Relief and Works Agency (UNRWA) for Palestinian refugee children in line with the official Syrian curriculum.

These different epistemologies may have a significant impact on the hierarchy of subjects, and the relative weight and importance given to them. While Oates (2011) posits that one important aspect of ‘high-performing systems’ is that ‘the fundamentals of subjects’ have ‘sufficient time allocation’, in EiE contexts this may be neither possible, nor indeed desirable. Bleazby (2015, p. 671) describes this as:

‘the epistemology of the traditional curriculum hierarchy … a pervasive and problematic idea which maintains that supposedly abstract school subjects, like mathematics and physics, are more valuable than subjects associated with concrete experience, practicality and the body, such as physical education and vocational subjects.’ (p. 671)

In EiE contexts, however, the latter subjects may be highly valuable – as UNICEF (2015, p.7) notes, ‘arts, physical education and other extracurricular activities’ are ‘much needed … by refugee children’. This epistemological clash in the curriculum mapping process may be exacerbated by physical and temporal constraints. As the same report notes, a ‘condensed and shortened Arabic–Lebanese curriculum’ was created in part

because of the constraints of double-shift schooling and the frequent delays to the beginning of the academic year (*ibid.*).

This impact is not only of theoretical concern, but has significant implications for pedagogy and classroom practice. UNICEF (2015) describes a second revision of the official Syrian curriculum which was distributed in Turkey, in which more than 400 pedagogical changes were made. It records that while the general movement towards promoting more inquiry and critical thinking in the science curriculum was welcome, these changes were inconsistently made, and the same approach was not made in other subject areas. This would be confusing for both teachers and learners alike. The report suggests that a key reason for this was the lack of a clear vision and statement to underpin the revision, a point echoed in Elliott (2014), where it is argued that when adopting a comparative approach, it is imperative to adopt a structured process. Furthermore, such a hybrid curriculum may question the ability to create what Oates (2011) describes as ‘curriculum coherence’.

#### **5.6.4.4 Language barriers**

The LOI is clearly a central consideration in the design of any curriculum. When blending curricula, this is not so much of an issue in, for example, the Venezuela–Colombia migrant crisis due to their common use of Spanish. However, Syrian refugees in Lebanon often lack the French and English required to participate fully in the education system (UNHCR, 2017a), whereas their counterparts in Jordan do not face the same challenges since Arabic is the common LOI. Bridging courses, or intensive language courses, may be a way of minimising these problems. Davies (2013) presents another solution, from Sri Lanka, where the Education for Social Cohesion programme enabled Sinhalese and Tamil speakers to learn in their mother tongues but taught the students the other language as a second language, thereby supporting the dual national language policy.

#### **5.6.4.5 Security barriers**

Naylor (2015) argues that curriculum development in EiE contexts is optimised when a conflict sensitivity analysis is undertaken, whereby ‘elements that might actively encourage conflict’ are removed. When mapping multiple curricula onto each other in highly sensitive locations, and especially with highly sensitive subjects (e.g. history, human geography, religion, civic education), the risk of this can rise significantly. Haider (2014) states that negative stereotyping and a lack of representation of particular groups may be found within such curricula – making the necessary changes and retrofitting particular components so that it works for different groups through the mapping process is likely to be a highly complex task. The INEE toolkit<sup>10</sup> might therefore be a useful tool for this process.

#### **5.6.4.6 Resource barriers**

Lebus (2010) notes the generic capacity challenges created by educational change, both pedagogic and administrative. Elliott (2014) notes the importance of taking a systematic approach to curriculum mapping, but states that the process was challenging and time-consuming (albeit ‘well worth the investment’). In resource-poor EiE contexts, there is potentially a lack of capacity to ensure that the mapping process is done as effectively as is necessary. Identifying funds to support this process may also be difficult. This

<sup>10</sup> [http://toolkit.ineesite.org/inee\\_conflict\\_sensitive\\_education\\_pack](http://toolkit.ineesite.org/inee_conflict_sensitive_education_pack)

challenge may be increased in that countries in the Global South (which are more likely to be conflict or post-conflict areas) may be unrealistic in terms of the curricula they would like to integrate into their own systems. In a report on curriculum in Sri Lanka by the National Education Commission (2014), detailed comparisons were made to Singapore, Australia and the United Kingdom. However, due to their far higher levels of gross domestic product (GDP) per capita in these countries, the feasibility and viability of inculcating these attributes are remote.

For some of the reasons stated above, the ability to undertake curriculum mapping processes may be far more complex with IDPs than with refugees, for financial reasons if nothing else. Consider, for example, the Education Cannot Wait fund, a major transnational multi-million-dollar financing initiative for educating children and adolescents in emergency situations. As their 2019 report notes, only 9 per cent of the children and youth they work with are IDPs, as opposed to 57 per cent who are refugees (Education Cannot Wait, 2019).

## **6 Literature review: Assessment and accreditation**

### **6.1 Principles of quality assessment and accreditation**

#### **6.1.1 Introduction**

This review focuses on literature that can be used to inform the assessment and accreditation approach of the Learning Passport education model. It is divided between material that establishes the consensus in education around the principles of high-quality assessment, and material that seeks to test the applicability of these principles in contexts of displacement and emergencies.

The first question to ask about any assessment is ‘what is its purpose?’ and two complementary articles by Paul Newton have served to frame the research here. In his earlier article (Newton, 2007), he makes the key point that assessment is put to a wide range of uses. In his later paper (Newton, 2017) he makes the case for ‘purpose pluralism’: that assessment designers should be able to accommodate a range of stakeholder needs as an organising principle. In this paper, he identifies three perspectives that are fundamental to test design and test use:

- ↳ Information – the use of results to make decisions, for example a placement test.
- ↳ Expertise – the use of results to enter a community of practice.
- ↳ Engagement – the use of the assessment to engage and motivate; scores may be made public, but it is the assessment itself which is engaging.

All three perspectives, Newton says, should interact in the design of the assessment. Newton’s three perspectives help to clarify how assessment can be useful in supporting learning. Typically, the information perspective tends to be the most prominent, but we shall see how this may obscure and interfere with support for learning. A learner’s purpose and needs may be better served by giving the expertise and engagement perspectives a more important role.

#### **6.1.2 Formative assessment**

No review of this kind can ignore the seminal work by Black and Wiliam (2014) on the subject of formative assessment. In Black and Wiliam’s own research and further work by researchers and practitioners, it has been concluded that feedback is key to formative assessment, as is learners’ own ability to self-assess. Teachers and learners are both involved and responsible in the process of learning and assessment. In Wiliam, et al. (2004) the authors discuss how the emphasis in schools on external examinations can preclude the use of formative assessment. Their research with science and maths teachers showed that where teachers implemented formative assessment strategies, there was an effect size of 0.32, or that improvements equivalent to approximately half a GCSE grade per student per subject were achievable. Therefore, applying formative assessment strategies in science and mathematics is hugely beneficial. How to find this time for formative assessment, amidst the pressure to focus on external examinations, is a difficulty for teachers and other stakeholders to address. We shall see in a later article by Suurtamm and Koch (2010), how this has been attempted.

If formative assessment can support learning, Harlen and Deakin-Crick’s valuable EPPI study into testing and motivation shows the importance of motivation (Harlen &

Deakin-Crick, 2003). The impact of assessment on learning is a question that divides many stakeholders. On one hand, many governments try to use assessment to raise standards; on the other, this emphasis on external assessment may only serve to demotivate. This de-motivation may further militate against the propensity for lifelong learning, a concept often promoted as important for life in the 21st century. The authors state: ‘Motivation is considered as a complex concept, closely aligned with “the will to learn”, and encompassing self-esteem, self-efficacy, effort, self-regulation, locus of control and goal orientation’ (2003, p. 169). These features are picked up in other articles in this review, as part of being a successful learner. Given that summative assessment can be considered ‘here to stay’, the authors pick out examples of how it can have a positive impact on learning, including (pp. 201–202):

- ↳ Developing students’ self-assessment skills and use of learning rather than performance criteria (Schunk, 1996).
- ↳ Using assessment to convey a sense of learning progress to students (Duckworth, 1986; Roderick & Engel, 2001).
- ↳ Supporting low-achieving students’ self-efficacy by making learning goals explicit and showing them how to direct effort in learning (Roderick & Engel, 2001).
- ↳ Creating a classroom environment that promotes self-regulated learning (Perry, 1998).

More recently, research has identified further positive impacts of low-stakes testing on learning. Testing may enable learners to reconsolidate and integrate information into their long-term memory, which benefits learning progress (Abadzi, 2006). Practising retrieving information in low/no-stakes quizzes, including quizzes which are spaced out in time, facilitates effective learning and improves memory, understanding, application of knowledge, and transferring knowledge to new situations and grades (Agarwal & Roediger, 2018). Hence, learning knowledge, accompanied by particular approaches to teaching/assessment, can result in students developing powerful knowledge (that is not context-specific and can be the basis for generalisations and predictions). Such findings accord with the aim of developing a draft curriculum framework that includes powerful knowledge.

Returning to Harlen and Deakin-Crick’s (2003) work, such is the range of their article that only a few of its many conclusions and recommendations can be mentioned. The most salient are:

- ↳ Develop and implement a school-wide policy that includes formative and summative assessment, that is, assessment for learning and of learning, and ensures the purpose of assessment is clear to all involved, including parents and learners.
- ↳ Develop learners’ understanding of the goals of their learning, the criteria by which it is assessed and their self-assessment abilities.
- ↳ Use the current resources (human and financial) given to test development to create assessment systems that assess all valued outcomes of education, including creativity and learning to learn.

Two of Harlen and Deakin-Crick’s recommendations – a policy to include ‘assessment both *for* learning (formative) and *of* learning (summative)’ and to ‘develop students’ understanding of the goals of their learning’ – are addressed in research around assessment frameworks, though others have approached this from different angles. Chen and Bonner (2019) present a conceptual framework around classroom assessment and self-regulated learning. This is interesting in that it includes not only formative but also

evaluative assessment, arguing that evaluation of learning can also have a positive impact on students' learning. An exciting paper by Bourke and Mentis (2014) discusses the creativity of teachers of students with high needs, in terms of their work, to discover how children learn and how best to assess them. They offer an assessment framework for an integrated approach that could be applied to all learners.

### 6.1.3 Subject-specific assessment

Two key articles relate to maths: Pinger et al. (2018) describe the findings from a study on the effectiveness of formative assessment on students' mathematics achievement, and also their interest in the subject. There were mixed results, but they found advantages to embedding feedback in classroom instruction. In another context, Suurtamm and Koch (2010) surveyed teachers about their assessment practice in the maths classroom, following curriculum reform. They found that teachers used a variety of assessments, and noted specifically the importance of teachers having access to coherent documentation and ongoing collaboration with peers.

In the science classroom, a study by Hondrich et al. (2016), evaluated teachers' implementation of a formative assessment programme embedded in the curriculum. They noted the importance of teachers' pedagogical knowledge and their ability to evaluate the assessment as a key to success.

Regarding literacy, Coyne and Harn (2006) describe how assessment of early literacy skills can support reading. They present an assessment system, Dynamic Indicators of Basic Early Literacy (DIBELS), which is a set of standardised, individually administered instruments to assess alphabetic understanding, accuracy, and fluency with connected text, phonemic awareness, reading comprehension, and vocabulary development. The purposes of early literacy assessment are:

- ↳ Screening, to determine which children may experience reading difficulties, so the school can provide additional instruction/intervention.
- ↳ Progress monitoring for schools to identify whether students make the necessary progress towards the required outcomes. If not, schools can use the data to inform pedagogic changes for helping pupils make the needed progress.
- ↳ Diagnostic, as teachers plan instruction based on the in-depth information about students' skills and instructional needs provided by the assessment.
- ↳ Measuring student outcomes, providing a bottom-line evaluation of student performance and effectiveness of an overall reading programme based on the results of all children in the programme and school.

All of these articles on subject-specific assessment illustrate how assessment can be used to support learning, under the right conditions. These include not only a coherent, structured approach to assessment, embedding it into the curriculum and into teachers' classroom practice, but also the need for teachers to be competent in their subject and have access to the support of colleagues and policy makers.

A further point reflects the important discussion in a paper by Schmidt and Prawat, (2006). In this paper they show that alignment – between pedagogy, assessment, textbooks, and so on – is essential. They termed this 'curriculum coherence', which should be emphasised in any discussion of how assessment can support learning. This concept has been taken forward in the UK by Tim Oates and Cambridge Assessment, in 'A Cambridge Approach to Improving Education' (2017). Newton (2007) indicates that

formative and summative assessments are not necessarily separate. A summative assessment (public examination) could be used as formative, such as placing a student in a particular set for the next stage of education. As Newton (2017) reminds us, tests do not appear in isolation. Some complain about ‘the assessment tail wagging the curriculum dog’, but as Newton points out, the dog has four legs: curriculum, learning, teaching, and assessment. We return to this in more detail in the context of large-scale examination systems.

There is also research showing that external assessment can boost learning. Students from countries with high-stakes, curriculum-based, external examination systems tend to outperform students from other countries at a comparable level of economic development (Bishop, 2000). Therefore, it is appropriate to consider, briefly, the content, characteristics, and conditions needed for robust national or large-scale examination systems.

#### 6.1.4 Conditions for large-scale examination

The core requirements of an examination system are validity, reliability, and security (Gekara et al., 2011). Validity is the ability of an examination to effectively assess that which it is intended to test. Validity relates to the interpretations and uses of examination results, rather than the examination itself. There are various types of validity, including construct validity, content validity, concurrent validity, criterion validity, and predictive validity. For full details see Brennan (Ed.) (2006), and Messick (1989, 1998). In summary:

- ↳ Construct validity pertains to the extent to which an examination is relevant to and representative of the intended construct (Shaw & Crisp, 2012). Often, construct validity is taken to encompass the other types of validity (Messick, 1998; Shaw & Crisp, 2012).
- ↳ Content validity is about the test including all aspects of the target construct or domain. For example, a chemistry examination lacks content validity if it only tests the practical skills of undertaking all aspects of experiments but omits assessing the underpinning knowledge.
- ↳ Concurrent validity refers to how well the test scores correlate with scores from another assessment taken concurrently. For instance, marks in one science examination are likely to correlate with marks on another science examination taken around the same time.
- ↳ Predictive validity focuses on how well the test can predict future performance, for instance, how well examination results at age 16 predict examination results at age 18.
- ↳ Criterion validity refers to both concurrent and predictive validity.

In short, validity of test scores helps achieve a robust and meaningful examination system. Ensuring validity is necessary, but can be nuanced and resource-hungry; for an example see Shaw and Crisp (2012).

One approach to maximising validity is to ensure the assessment tests much of the target domain. An approach to boosting validity, which would enhance curriculum coherence, is to align curriculum and assessment. Furthermore, teachers tend to teach, and learners tend to learn, the concepts, principles, and so on in the curriculum that are likely to be assessed, and to ignore other aspects of the curriculum (Yan, 2014). Therefore, curriculum and examination alignment may support effective learning.

For an examination system to be of high quality, the examinations need to be reliable (Ofqual, 2013a and b). In other words, ensuring the reliability of examinations is part of making the results fair. There are several types of reliability. For full details, see Brennan (Ed.) (2006) and Ofqual (2013a and b). In summary:

- ↳ Internal reliability is the consistency of results across items within a test.
- ↳ External reliability is the extent to which a measure varies from one occasion to another.
- ↳ Inter-rater reliability is the agreement between markers or examiners.
- ↳ Intra-rater reliability is the consistency with which individual examiners mark.

All types of reliability should be high. There are a variety of ways of measuring reliability; examples are found in Ofqual (2013b). Reliability can be maximised in several ways, such as having marking schemes with particular features (Bramley, 2008).

Measuring and maximising reliability helps to make examinations fair.

Security is a necessity for a global examination system to be fair and credible. By way of illustration, consider the case of licensing professionals in safety-critical industries. If the examination is not secure, corruption or cheating occurs, and incompetent people are licensed to practise, putting lives at risk. For example, in certain seafarer supply countries fraudulent practice in issuing certificates of competence was found (Obando-Rojas et al., 2004). Therefore, any trustworthy examination system needs to be devoid of fraud. Another major security threat is when someone impersonates the real learner. In the case of online examinations, learner impersonation can be reduced by several interventions, including restricting the time that students have to answer a question and increasing the number of questions in the question bank (Ullah et al., 2019). A safeguard used in many examinations is requiring candidates to show identification before taking the examination (Gekara et al., 2011). These are just some of the security issues that arise in transnational and large-scale assessments, and it is beyond the scope of this work to consider everything in detail. The pivotal lesson is that security needs to be high to prevent and detect irregularities in all areas of the assessment process.

### 6.1.5 National examinations

As a case study in national examination security, the examination system in Kenya was compromised recently, and to mitigate this security was increased (Barus et al., 2017). The Kenya National Examinations Council was reconstituted, the school terms were reorganised, and the Ministers of Interior and Information and Communication Technology (ICT) were included in the management of the examinations. Unauthorised materials and electronic devices were banned from the examination halls/centres, to avoid candidates copying information. The examination papers were secured in metallic containers in commissioners' offices across the country to safeguard against the papers being seen before the examination. School Heads collected the examinations personally and took them to distribution centres. Heads were required to be in school during the examination period to supervise the activities. Invigilators were more rigorously vetted. To ensure non-interference during the examination period, social activities (including prayers for the candidates and visiting of schools by strangers and relatives) were all banned during the third term. Cameras were used in marking centres as a deterrent against irregularities. These and other measures were considered to boost the security and credibility of the examinations. In the UK there were, at one point, concerns about the credibility of the GCSE. Some believed it was easy to cheat in the coursework

(individual project work undertaken in the student's own time and often marked by teachers). The concerns were mitigated by introducing more controls into the assessments, such as more external assessment (Baird et al., 2019). These cases show it is crucial that security is high to prevent and detect irregularities in all areas of the assessment process.

## 6.2 Assessment and accreditation for Education in Emergencies

### 6.2.1 Evidence from existing usages and implementations

Early mentions of the importance of assessment and accreditation in EiE were made following the Sudan crisis in the late 80s and early 90s (Joyner, 1996), noting the importance of certification/assessment and the need for transnational recognition to enhance opportunities beyond basic primary education, and stressing that '[e]xternal moderation is a priority for both school and teacher-education examinations'. However, very little research had been conducted and no conceptual framework created until Kirk conducted a more thorough review and collected examples of good practice (Kirk, 2009). To date, the field around the content, characteristics, and conditions required for assessment/accreditation to support effective learning for displaced learners remains under-researched. Even the latest studies stress that research on education policy is 'limited, fragmented and case-specific and lacks evaluation' of how successful approaches are (Cerna, 2019). Steele (2016) concludes more research is needed in the area.

The limited literature on the subject does have some clear and consistent messages. First, and most importantly and consistently across the literature, is the need for accreditation of learning in EiE (e.g. Save the Children, 2018, p. 55). As Kirk (2009) so succinctly phrases it: 'To become a passport to a brighter future in a globalised world students' learning and achievement must be officially recognised by authorities across jurisdictions. Any formal proof or documentation or achievement must have validity beyond its particular system, otherwise children's ability to use their education human capital in the marketplace, or add to it through further study, is obstructed' (2009, p. 60).

This idea of certification and accreditation of learning allowing learners in emergency or displacement contexts to demonstrate and harness their human capital is raised by many authors. OECD notes that one of the many additional challenges facing refugees is lack of documentation of their education (such as credentials and diplomas) that makes placement in the right educational context/grade very difficult (Cerna, 2019). This report also notes the need for proper credentials to avoid displaced children having to leave school without accredited learning, which could limit them to low-paying jobs or unemployment. This is not limited to employment but also opportunities to continue education. Zeus (2010), studying the Karen refugees in Thailand, identifies this impact of not having access to certification/accreditation and its limiting effect on people in EiE, leaving them unable to effectively harness and demonstrate their own human capital. He makes the point that lack of accreditation is a huge obstacle to both higher education and employment despite internal value and recognition within these refugee camps:

'Had they been able to develop to their fullest potential and receive an internationally accepted certificate in the country of

first asylum, they would be more equipped for this new and challenging life and be able to find jobs to better support themselves and their families.' (p. 75)

The Global Compact on Refugees (United Nations, 2018) dwells on the importance of accreditation, whether by its call for 'flexible certified learning programmes' where needed, or the importance of establishing 'recognition of equivalency of existing academic, professional and vocational qualifications' (p. 13). The longer-term impacts of education in times of crisis, especially in relation to restoring a sense of normality and working towards employment opportunities, are largely undermined when educational attainment is not formally recognised (Ferris & Winthrop, 2010). Several studies identify the importance of education and proper certification and accreditation in facilitating repatriation (Brown, 2001, Chelpi-den Hamer, 2011), integration into host countries (Cerna, 2019; Kirk, 2009; Brown, 2001; Chelpi-den Hamer, 2011) and reconstruction (Sommers, 1999).

Moreover, accreditation of learning is not just a statement of achieved learning, as Brown (2001) puts it in his conclusion:

A certificate is just a piece of paper and is very cheap to produce. Yet, because of what it represents, it can have an enormous effect on the recipient, in terms of self-esteem, motivation and hope for the future regarding job prospects. Accreditation and certification both for learners and teachers is important. (p. 153)

Given this importance of accreditation in EiE, it is surprising how rarely accreditation or allied concepts are mentioned in the EiE literature. Where it is mentioned, much of the literature deals with guidance on how accreditation can be done effectively and the requirements for good accreditation. Kirk (2009) sets out definitions of some key concepts in an accreditation framework:

- ✉ Certification/accreditation is defined as the mark of quality that publicly attests the worth of a learning programme.
- ✉ Validation refers to the process by which the authenticity of the accreditation is determined.
- ✉ Recognition pertains to the acceptance by an outside party of the worth and validity of the accreditation/certification of learning.

These are expanded by Steele (2016) adapting Talbot's (2006) original framework to include:

- ✉ Accreditation as the process by which a recognised authority reviews and evaluates the quality of an educational institution or programme against clearly defined criteria and processes.
- ✉ Equivalence as how a course provided by one entity relates to a course or set of courses offered by another.

The INEE sets out key actions for assessment in its 'Minimum Standards for Education: Preparedness, Response, Recovery' (INEE, 2010b). This includes details on both curriculum and assessment. In terms of assessment, the key indicators listed are:

- ✉ Continuous assessment and evaluation of learners' progress towards established objectives inform teaching methods.

- ↳ Learners' achievement is recognised and credits or course completion documents are provided accordingly.
- ↳ Graduates of technical and vocational programmes are assessed to gauge the quality and relevance of the programmes against the changing environment.
- ↳ Assessment and evaluation methods are considered fair, reliable, and non-threatening to learners.
- ↳ Assessments are relevant to learners' future educational and economic needs (p. 89).

It is noteworthy that the standards do not mention the security of examination processes or the validity of interpretations of examination results, which are key elements of an examination system. Perhaps these are implied by the reference to assessments being fair and reliable. Despite these omissions security and validity are necessary parts of an examination system for the qualifications to be credible. If the qualifications are not credible it is arguably harmful for the people to study for them. In addition, INEE (2010b) notes that:

'[I]n formal education programmes, assessment is conducted so that learners' achievements and examination results can be recognised by the education authorities. For refugees, efforts should be made to obtain recognition by the education authorities in the country or area of origin.' (p. 90)

If this can be achieved, it will support (re)-integration. UNESCO's 'Guidelines for Education in Situations of Emergency and Crisis: EFA Strategic Planning' (Bensalah (Ed.), 2002) also highlights that:

'[A]mongst the requirements for planning lie the questions: are there satisfactory arrangements for recognition of studies completed, including recognition of school leaving examinations? Early emergency measures should also include decisions on scheduling dates for the school year and for national school examinations.' (pp. 23–24)

Williams (2001) also poses these same key policy questions surrounding EiE: the need for the assessment of quality of education for displaced learners must include the importance of assessment and measures such as certification and examination results. The author adds a cautionary note that perceptions of quality vary, reflecting the values and priorities of stakeholders, and can be politically charged. The literature does not specifically demonstrate different issues for mathematics and science but issues surrounding literacy, especially in terms of the language used, are noted. OECD (2019) notes that failure to provide certification of language proficiency in the host country can lead to learners being barred from higher paying jobs.

A lot of the scholarly debate around EiE is more around curriculum than assessment issues – whether the curriculum is intended for integration or repatriation – and dealing as well with issues of accessing learning opportunities and a sense of identity. Sinclair (2002) highlights Sudanese learners in Uganda and Kenya deliberately following the host curriculum and examinations to allow progression in the host nation, but also stresses the need for access to accreditation from the home system to allow repatriation, citing examples from DRC, Mozambique and Guinea. Chelpi-den Hamer (2011) details the debates surrounding whether to use a host country or home country curriculum but

concludes that the state (either home or host) plays an important role in validating learning, which in turn promotes credibility and uptake of schooling. Similarly, Ball and Dim (2016) discuss issues around choice of curriculum for repatriation or integration, and make the point that in the case of many enforced migrants, neither the host language nor the home-country language is necessarily their mother tongue.

### **6.2.2 What are the possibilities for accreditation for displaced learners?**

The literature highlights some good examples of how accreditation for learners in EiE can be managed. In some cases, agreements exist for home-country institutions to continue to provide support and access to examinations extra-territorially. For example, WAEC has allowed displaced learners to enrol in their home or host examinations in several conflicts and emergencies (Sierra Leone, Gambia, Côte d'Ivoire, Liberia) (Kirk, 2009; Chelpi-den Hamer, 2011). WAEC education officials have also been allowed to inspect and accredit learning across conflict boundaries, for example officials from the government-controlled South being allowed access to schools in the rebel-held North in the Côte d'Ivoire conflict. Ball and Dim (2016) discuss how, in camps on the Thai–Myanmar border, the Migrant Education Integration Initiative (a programme initiated by education and migrant organisations) worked with Thai and Myanmar education officials to ensure recognition of certificates and to develop a standardised curriculum for migrants with an internationally recognised certificate/diploma recognised by both countries and Association of Southeast Asian Nations (ASEAN) countries more widely. This paper also highlights the cross-border partnership between learning centres in Thailand and the Myawaddy district schools across the river in Myanmar, allowing access to recognition of curriculum and certification for those following non-formal education, and permitting them in principle to pursue further education in Myanmar if they repatriate.

The experience of Bhutanese refugees in Nepal (Brown, 2001) demonstrates another approach. There, an aid provider acted as an accredited, and accrediting, body to help provide additional opportunities within the host education framework. CARITAS-Nepal (a Catholic charity active in Nepal) liaised with the district education office on behalf of the refugees. CARITAS supervised examinations and internal assessment grades to ensure accreditation and recognition by the Ministry in Nepal. They also provided additional subjects at various grades such as Dzongkha (the mother-tongue language), and Bhutanese history, geography, and value education (to ensure on-going links to Bhutanese culture). This allowed the district to recognise the education of these refugees, and also allowed them to sit for the Nepalese Common Board Examinations without loss of identity or increasing repatriation difficulty. CARITAS had to create a separate examinations section in their programme, authorised by the Nepalese authorities, to set additional examination papers especially for these refugees. The aid agency was a member of the district examination board, functions of which included registering students, setting examination questions, distributing stationery, supervising examinations, evaluating answer sheets, and tabulating results. Steele (2016), in reviewing the various case studies and literature, concluded that although NGOs and aid agencies, such as the IRC, can have a role in delivering education, they should not take on responsibility for certification, and this should be left to other accredited bodies, either supranational (WAEC in the first example) or state entities (the Ministry of Education in Nepal in the second).

The literature also notes the need for parallel routes and bridges between educational systems, for example the case of *écoles clandestines* and enrolment in WAEC to deal with a huge influx of Liberian refugees when the Ivorian school system could not accommodate them (Chelpi-den Hamer, 2011). Chelpi-den Hamer concludes that as learners may start in one system and end up with another, it is necessary to create these bridges between different education systems and grade equivalence to ensure learners do not lose recognition of previous learning or can restart interrupted learning.

Steele (2016) stresses the need to allow certification by means other than only by high-stakes formal assessment, due to the difficulties often presented to administer these exams in emergency or conflict situations. The paper also highlights the benefit of using existing frameworks and sector standards as a basis for accreditation, citing the International Standard Classification of Education (ISCED), Opportunity to Learn, and the INEE Minimum Standards. The paper also calls for the establishment of collaborative regional bodies to handle issues of equivalency and recognition, and that any supranational bodies need to be ‘apolitical’ and probably under the auspices of the UN.

### **6.2.3 What are the challenges for accreditation for displaced learners?**

The literature identifies a large number of challenges that face displaced learners in terms of their accreditation beyond loss of documentation and learning records. Bensalah (Ed.) (2002) differentiates the challenges between IDPs and refugees, as IDPs are typically able to continue with the curriculum that they were following before displacement and have access to their own national examinations. In contrast, refugee education is often weakened by the lack of recognised certification and difficulties of access to an appropriate curriculum. These additional hurdles faced by refugees, and including such obstacles as the LOI in the host education system, are also noted by Ferris and Winthrop (2010). Their research highlights the numerous bureaucratic, administrative, and political hurdles that refugee learners face, which stresses the need for accreditation of learning to allow these learners access to sufficient opportunities. The additional challenges faced by refugees compared to other forms of EiE are also echoed by Sinclair (2002):

‘The principal difference between education for refugees and other crisis-affected people is that refugees are separated from the education system of their own country which has its own curriculum, its own assessment and examination procedures, its own system of progressing from one level of education to the next, and its own approaches to teacher training and certification.’ (p. 71)

On the other hand, in some situations the challenges faced by IDPs can be more severe than the challenges faced by refugees, as the situation of IDPs and whose authority they fall under can be more politicised or confused, and often no agency has a specific mandate for their education or protection (Kirk, 2009).

Even where procedures are in place to allow accreditation of learning for displaced learners, the associated bureaucracy can be difficult to implement. One of the case studies in Kirk’s book (2009) highlights some of the bureaucratic hurdles facing learners

in Ingushetia, who may need to have their evidence of learning stamped by up to 10 different authorities, while many of the required stamps may be lost, stolen or involve significant travel to obtain.

Several authors raise politics as a challenge. For example, Zeus (2011) notes that accreditation of refugee learning can easily become politicised including by the refugee community, who may fear loss of identity, and that the issue of LOI is a thorny political issue. Steele (2016) also notes the potential leverage that ownership of education gives state or opposition actors with respect to learners and their families; Syria would be an example. It also notes that the desire for certification can lead learners to high-risk travel in or across conflict zones, and often requiring trust in proxies and intermediates that can place families in danger.

Sometimes these political issues lead to withdrawal of accreditation arrangements. For example, Charles Taylor's government in Liberia blocked access to curriculum and accreditation of refugees in surrounding countries in an effort to try and force repatriation of displaced Liberian nationals (Sinclair, 2002; Kirk, 2009). Kirk (2009) highlights tensions around accreditation of refugees causing competition within the host-country job market being one of the challenges of the implementation of EiE, and/or leading to the host country putting limitations on travel and employment for refugees (the experiences of Somali refugees in Kenya and Karen refugees in Thailand being given as examples).

The literature is scant and further research is desperately needed in this field, but there have been a few good studies and attempts to collate the little research and reports that exist. The consensus is that accreditation is a vital part of EiE and that, despite the many challenges and need for collaboration between often unwilling partners, good systems allowing accreditation, certification, validity, and equivalence of learning can be achieved – allowing learners in emergencies to benefit from education and access their human capital whether within their host countries or as returnees.

## **7 Literature review: Resources (teaching and learning materials)**

### **7.1 Introduction**

The evidence for the impact of the provision of learning materials on student achievement over the past 40 years is overwhelmingly positive, but materials must be available and used if they are to be effective. Researchers of EiE often highlight shortages or a lack of access to learning materials in contexts of displacement and emergency (Monaghan & King, 2018), but in many cases do not venture into further analysis other than to criticise the poor quality of textbooks (Volmink & Van der Elst, 2019). An overarching finding of the review conducted for this section was that many of the basic principles which apply to the provision of teaching and learning materials (TLMs) in countries where education is delivered in low-resource settings and there is an urgent need for improved provision, apply also in situations of displacement and emergency. As is discussed elsewhere in this report, data about displaced children is often lacking, but evidence and research into what systems exist, what works and what does not, though not always from strictly EiE situations, comes from countries where there are many of the same problems and experiences. It is these sources that are predominantly drawn on in this review.

Every situation is different and ‘realising the right to Education for uprooted children demands solutions that take into account different country contexts’ (UNICEF, 2015). Depending on the situation, development and supply of TLMs may involve anything from an international bid for the publication or purchase of a whole range of learning resources to the selection and supply of early learning titles to send in book boxes to remote areas. ‘Publishing’ includes the whole process of producing books or materials, and includes finding and dealing with authors, editing, design, managing proofs, layout and illustration, preparation for press, and supervising manufacturing, warehousing, and delivery.

Identifying priorities for the affordable and sustainable supply of effective resources will depend on research into each context and the specific needs of learners and teachers, but there will be general principles which will apply in most situations, and therefore it is worth considering at the outset the general components of the development and provision of TLMs. The review in this section proceeds through the different phases of development of learning materials, identifying instructive research and insight at each stage, and demonstrating the specific demands that emergency and displacement contexts will make on the processes of TLM development, design, production, distribution, usage, and preservation.

### **7.2 Curriculum alignment**

The first stages of design of materials begins with the identification of the content. Curriculum and syllabus design influences the affordability and sustainability of TLM provision because the curriculum determines the number of subjects and therefore the number of textbooks, teachers’ guides and other materials. Syllabus and curriculum design also dictate content and length of the materials. Liaison between curriculum design, production of TLMs and teacher training is key to controlling costs and ensuring

effective teacher use of the materials. Considering how textbooks will ‘act’ during their usage should be an embedded concern from the earliest phases of development. It should be noted that textbooks are often used as a tool for disciplinary change in education practice (Johnston, 2006). Textbooks provide a means for practically establishing new agendas and can potentially operate unpredictably; consequently, what is included and what is omitted from the content, particularly in mutable and fragile contexts such as refugee camps, is a key concern (Johnston, 2006; Couper, 2018).

What a given suite of resources actually contains can also be informed by the curriculum and syllabus content and design. This will establish a ‘minimum profile’ of learning materials, which defines the minimum set of TLMs at each grade required to deliver the curriculum, or at least the most basic materials the situation demands. The profile can include not only textbooks and teacher guides but reading materials, teaching aids, wall charts, reference books, and digital materials (Ward et al., 2006, p. 39). Activity books and other disposable resources in which students write answers and complete exercises are sometimes included, but for many low-resource environments are an expensive option as they need to be resupplied every year and are accompanied by recurrent costs of printing, distribution, and storage. For instance, in Cameroon during a World Bank project appraisal, it was recommended for sustainability and the success of the project that activity books should not be financed and textbooks should be redesigned to exclude sections to be written in (World Bank, 2013).

A significant challenge in the delivery of TLMs in low-resource environments is the potential misalignment between curriculum objectives and the capabilities and expectations of designers and publishers. There are many examples (Ward et al., 2006, pp. 33–34, 40; Read, 2015, pp. 81–86) where curriculum designers increase the number of subjects without considering the implications for teachers, time in the school timetable, and total costs. Reviewing book provision systems in Africa, Read et al. (2000) give examples of the problems created by overloaded curricula and state ‘all new curricula should be required to specify the minimum instructional materials profiles required to deliver the curriculum effectively’ (Read et al., 2000, p. 10). Curriculum developers often have little contact with publishers, and may not see any need to consult about curriculum decisions (Read, 2015, p. 84). The recommendations from the United Kingdom’s Department for International Development’s (DFID) textbook programme in South Sudan in 2013, which included a much closer coordination between curriculum, LOI, and the development of a national LTM policy, is a recent example of the identification of the need for coherence in an emergency setting: ‘ideally cross-fertilisation between all three policies [curriculum, language, materials] would result in balanced policies that recognised and took account of the practical and cost implications as the basis for future sustainability’ (DFID, 2015, p. 7).

Where content and design are specified by academics and education officials who have little experience of the age and circumstances of learners (especially in emergency situations or even in rural areas), books and teacher guides are often too long to be completed in the school timetable and at too high a level for many students (for examples see Read, 2015, pp. 81–86). In addition, vocabulary is often too difficult for not only students but teachers to understand; this is particularly true if the materials are not in the first language of the students or teachers (*ibid.*, pp. 181–182). These problems are increasingly recognised but need to be considered in every case: for instance, useful examples and suggested solutions on readability of English-medium textbooks in developing countries are outlined by the British Council and University of Bristol (2016, pp. 12, 14–15, 35).

### 7.3 Design and development

Once the minimum profile is defined, the materials themselves can be designed. The design of text content will follow curriculum requirements but will depend on authors and publishers for producing text, and artwork and page design. Guidelines for design and artwork included as part of evaluation criteria accompanying curricula have made it easier for publishers to produce suitable designs in the past. Design criteria may include usefulness, relevance and accuracy of graphics and illustrations, balance between text and illustration, readability of typefaces, appropriateness of line spacing, and quality and attractiveness of illustrations (e.g. Rwanda Education Board, 2016a).

Extracting evidence from the research literature regarding consensus or guidance around design principles specifically for EiE contexts is a challenge due to the aforementioned superficiality of much analysis of materials in these contexts. However, some insights can be obtained from research concerning the visual design of textbooks. Acar (2019, pp. 2–3) discusses and synthesises several evaluation methods used in the visual design of English language textbooks. The methods essentially function as a set of design principles that ensure quality control. Acar outlines six components regarding the effective design of textbooks: practical considerations, language content, design and organisation, language skills, exercises and activities, cultural considerations. Each area contains a set of sub-principles that provide further detail concerning the visual presentation of information.

The extent to which this kind of research into general principles of design and development learning materials can be extended to guidance for approaches in EiE is difficult to demonstrate. Some other areas of consensus around design principles can be identified in the literature. It is generally accepted (Palmer et al., 2016, pp. 35–36) that design of books for early primary grades should have sufficient space on the page to make it easy to see the illustrations, and that print size should be stipulated depending on the age of students. For reading materials and especially those for early primary, big books for use by the teacher with class participation are often recommended (Read & Treffgarne, 2011, p. 3) as are wall charts, picture books and cards. Effective and popular reading and story books have increasingly concentrated on settings and content which have relevance to the students (Palmer et al., 2016, p. 30).

Content and illustrations can be sensitive and need to be culturally acceptable, particularly with content created in the Western hemisphere: this is of a particular concern as emergency responses may rely on the fast supply of material, which can relay particular sets of inappropriate expectations and ideologies, or be conveyed using images and content that is unsuitable (Dahya, 2016, p. 27). This sensitivity around the specific content included in resources extends across a range of areas. Resources will not be educationally effective if they include images or content that is exclusionary of students, teachers or others on the grounds of any characteristic; be that gender, disability, race, ethnicity, or religious affiliation. The risk is also present that processes of authoring, design, development, and distribution can be instrumentalised for political purposes in ongoing conflict or emergency settings (e.g. Burde, 2014), and the awareness and removal of potentially sensitive materials is an ongoing process throughout the entirety of development.

Furthermore, teams of curriculum developers and textbook writers need to be as inclusive as the books themselves, to ensure the inclusion of narratives of non-dominant/marginalised social groups and their cultures and histories (Smith, 2014), for

example, there have been calls for greater Tamil involvement in textbook development in Sri Lanka (Cardozo, 2008; Herath, 2015). A common first step in post-conflict textbook change is the erasure of ‘offensive’ material, but as Weinstein et al. (2007) point out, purging textbooks in isolation from other societal change does not alter perceptions; what is needed is critical engagement with the dominant representations of the past. The evidence so far, both from Weinstein’s four-country study (Weinstein et al., 2007) and in Herath’s (2015) study in Sri Lanka, is that teachers in post-conflict societies are too afraid and/or not sufficiently supported professionally to engage in critical, open discussions on such sensitive topics.

The interplay of different kinds of sensitivities is often complex in emergency and displacement contexts, and concerns about the appropriateness of content can be multifaceted. For instance, Larsen (2018) observed that in 1990 the Sudanese government in the north of the country introduced curricula and textbooks based on Islamist values and the Qur'an for use in primary and secondary education in Southern Sudan. The textbooks contained a strong focus on Islamic and Arabic history which did not mention the history of South Sudan. During the civil war in 2011 South Sudanese resistance groups actively fought against the ideology presented in the textbooks and introduced textbooks espousing secular modernist ideologies into primary and secondary education. However, the new textbooks were based on Western epistemology and were also agnostic of the South Sudanese history and culture. Eventually the efforts to introduce a new Western curriculum through textbooks became unsustainable (Larsen, 2018; Breidlid, 2013).

Design and layout can be informed by and address dimensions of learning that may be specific to, or particularly cogent for, displaced children. For instance, the challenges in continuity of schooling and access to materials and support faced by displaced learners necessitates that learning should be able to be undertaken outside of school and allow the child to work independently at home: ‘regardless of the chosen curriculum, the learning materials should be designed for self-learning’ (Almasri et al., 2018, p. 446). This in turn has implications for the layout of any learning materials, in that they should allow for participation on behalf of the learner. Examples could include blank spaces for the learner to fill in or comment boxes to allow written feedback from a supervisor, such as recognisable ‘hinge points’ where the teacher may want to check for understanding (Black & Wiliam, 2014). Similarly, the emphases in the material can be indicated through typography designed to draw out key phrases and words to highlight to readers.

The priorities and specifications of content vary according to the specific needs of the context. In some situations, especially for early years where literacy is defined as the overwhelming need, reading books are given priority (Ward et al., 2006, pp. 40–42); further examples are found in recent emergency contexts in Kenya, Cameroon, Syria, and Jordan (Book Aid International, 2019). Read and Treffgarne (2011) state that ‘the importance of providing good basic supplies of reading books at all levels of the education system cannot be overstated. This is particularly true at lower primary level where the early achievement of literacy is a growing problem’.

## 7.4 Supply and distribution

In emergency situations when there may be no time for detailed procurement and selection, existing books may simply be ordered or reprinted. DFID Rwanda reports that when Burundian refugees fled fighting in 2016 and came to Rwanda, UNICEF and other

agencies funded the emergency supply of reading books and supplementary materials focusing on functional literacy, which were distributed to refugee camps (Personal communication). From the review of the literature, responses to EiE contexts tend to more frequently deploy existing textbooks and reading books than seek to adapt or prepare new resources (DFID, 2015; World Bank, 2019).

However, materials may be developed, written, and published in country, and responses can take the form of building capacity among education providers already present in context, such as training in publishing skills to Ministries of Education. After the Eritrean war of independence from Ethiopia, when the only learning materials were those that had been produced underground during the fighting, the Danish International Development Agency (DANIDA)-funded textbook project in Eritrea agreed with the Eritrean government to fund the publication of new curriculum textbooks, produced entirely in Eritrea, training Eritrean Ministry staff in authorship, design, editing, management, and distribution (DANIDA and Government of Eritrea, 2008).

The supply chains and networks necessary for providing TLMs are complex and often resource intensive, and require access to stable infrastructure that is often not forthcoming in emergency contexts. Variations in manufacturing capacity have knock-on effects for quality, response time, and cost. While there is a cultural case to be made for local publishing (i.e. developing and designing content itself), there is less of a case for the industrial process of printing (Read & Treffgarne, 2011, pp. 6–8; Palmer et al., 2016, p. 30). Translating decisions around design and content (and ultimately decisions around curriculum) in physical materials requires expert technical advice from printing and manufacturing specialists (Cowan, 2017, pp. 19–20, 23).

However, it is possible that the envisioned implementations of the Learning Passport will not rely heavily on conventional authorship and publication processes. The printed learning materials likely to be used by the Learning Passport may have much more in common with the production of Open Educational Resources (OER) (West, 2019). In this respect, the production of open textbooks may yield more relevant insights. ‘Open’ in this context refers to the lack of physical and fixed attributes associated with the distribution of conventional textbooks (Frydenberg et al., 2007). For the purposes of this review ‘open’ is used to denote the production of printed learning materials outside of the commercial and conventional academic publishing processes. Richard West highlights that there is little research about the effectiveness of OER in general, and points out that increasingly it is ‘no longer necessary to rely on commercial textbooks as the only source of information’ (2019, p. 226). The aims of the Learning Passport exceed those of the conventional production of textbooks; as such OER may provide advantages that would be lost in the traditional commercialised systems of production. Open textbooks provide a means of teaching indigenous knowledge, and there is an increasing demand for textbooks of this kind (Frydenberg et al., 2007). Similarly, open textbooks can be used to leverage, support, and complement or enhance existing networks of educational provision in a more flexible way than conventional publications are able.

## 7.5 Using materials

All the effort and financing of materials supply can be negated if the materials are not used. Materials that are supplied to unstable, emergency or low-resource contexts without proper support run the risk of not being used at all, negating the effort, expertise, and expense of designing, writing, publishing, and delivering, and ultimately not

benefitting the students. Poor use or non-use of textbooks has been very widely reported in many countries (Read, 2015; Palmer et al., 2016). Where teachers are not well trained, often absent, or materials are not well designed and written, or in a language or vocabulary the teachers cannot understand (Read, 2015, p. 178; Palmer et al., 2016, pp. 50–51) it is common for textbooks either not to be used or only used by the teacher.

A key issue is responsibility for management of materials. In settings where TLMs can represent very valuable assets policies for loss and damage are important, but where the teachers are afraid of being held responsible for loss or damage, they will often not use the materials (Read, 2015, pp. 178–179; Palmer et al., 2016, pp. 50–51). Relatedly, where supply is not dependable, as in many EiE situations, teachers may hoard books (Read, 2015, p. 179). Unsupported supply of materials can also create mis-usage: some teachers report being afraid to issue books in case students ask questions they cannot answer, or they simply copy the textbook onto the blackboard for the students to copy into their exercise book (if they have one) or to learn by rote (Read, 2015, p. 179; Palmer et al., 2016, p. 51). Circumvention of the learning purposes embedded within the materials can result in inactivity in students, and particularly lead to the impoverishment of reading skills (Read, 2015 p. 86, 93). It is important to recognise that usage of TLMs of all kinds is a specialist skill that requires training and support to be executed most effectively. In the overall assessment of the South Sudan textbook project completion review (DFID, 2015) the report states: ‘there is a very real need for better guidance on textbook management and use in schools because many teachers have been without books so long that they no longer know how to use them effectively’ (DFID, 2015, p. 9).

Supplementary support for usage is also not uniform, and is most successful when it takes into account the specific needs of the target population and their expected types of usage. Book Aid International’s approach provides an example of this. Their project in the Kakuma refugee camp in Kenya provided free boxes of carefully selected materials with anticipated usages both inside and outside of classrooms, including readers, phonic books, picture books, textbooks, and teachers’ guides and revision guides. Additionally, packages included solar lamps for ‘homework clubs’, as many of the students had no electricity in their homes, and teachers in receipt of the packages also received training in how to use the various resources (Book Aid International, 2019).

Evidence suggests that teachers are amenable to the required use of specific learning resources for potentially advanced pedagogical purposes if sufficient training is given. For example, in Papua New Guinea teachers received training in the application of constructivist interactive classroom pedagogies: the initiative focused on the use and development of local resources which were then embedded into the cultural and linguistic aspects of the local contexts. Learning became more contextualised and the teachers felt empowered (Robertson et al., 2018). In Indonesia, secondary school teachers received training to encourage the use of student-centred pedagogies (Allen et al., 2018). The training programme was successful; teachers reported significant changes in teaching practices, improved quality of teacher–student relationships, and improved interactions with colleagues.

## 7.6 Distribution and storage

This element of provision of books, coming almost at the end of the chain, is often where the most loss and wastage occur. In emergency or displacement contexts risks to retaining and preserving materials may be heightened by the demands of the context.

The academic role of curriculum developers and authors, and the editorial and production role of publishers are more frequently recognised as part of materials provision than the practical and physical aspects of distribution and storage, which are often neglected, and yet all learning materials can be destroyed by badly designed and managed distribution and storage.

Distribution includes packaging, transport, and delivery right up to their place of storage. On the way, distribution management and funding must cover waterproof transportation, security so that materials are not stolen, punctual deliveries so that materials arrive when they are required, and liaison with end users for deliveries, unpacking and storage, and recording of deliveries. While there is little literature covering this aspect of provision, examples can be extracted from previous programmes. In Uganda the government advertised a competitive tender for textbook distribution which was quite effective in delivering books as far as district offices, although not in all cases to delivery to schools. The final delivery to schools, and the necessity for good school storage, is often a neglected, but crucial final stage (Read, 2015, p. 168).

In Kenya, where there is a strong commercial bookseller industry, distribution was switched from state control to the private sector, via grants to schools using a simple management system (Read, 2015, p. 166–167). Bookselling flourished and was able to offer other reading materials on the back of the textbook supply where previous supply had been limited. However, monitoring was discontinued, followed by reports that many schools then had serious debts, causing delays in deliveries (Palmer et al., 2016).

Storage may involve a series of other considerations, and common problems include lack of weatherproof storage, rain, damp, fungus, dirt, vermin, lack of security, inadequate storage space and shelving, and lack of management. There are numerous examples of poor storage in low-resource settings leading to huge annual losses of materials (Read et al., 2000; Palmer et al., 2016, pp. 45–46, 48) but successful storage reform, based on proper funding and system management has been undertaken in Ghana, Rwanda, and recently via storage in containers in South Sudan (DFID, 2015).

Threats to TLMs' durability can be pre-empted in the design phase: it is easier to preserve materials which have been produced so that they are durable for several years' use. Books need strong cover card and binding to resist damage, and if they are properly stored and handled they may last several years. Training for teachers, students, and parents in covering, using, and caring for books has been a feature of many textbook projects, with handbooks designed for training in conservation techniques (Read et al., 2000; Rwanda Education Board, 2016d), and guidelines for conservation of learning materials have also been written for donor organisations (Read & Treffgarne, 2011, p. 17).

## 7.7 Non-print resources

An alternative approach to circumventing the issues of storage and preservation is through non-print resources. Providers of EiE and displacement contexts, as well as in low-resource settings, have often utilised educational resources beyond textbooks or print materials such as toys. Play is a vital part of learning and advocates of play use the acronym SPICE to highlight its benefits. SPICE represents the social, physical, intellectual, creative/cultural, and emotional areas of development (Manwaring & Taylor, 2007; Harvell & Prowle 2018):

- ↳ Social development, e.g. making and playing with friends, learning how to share and relate informally with adults.
- ↳ Physical development, e.g. playing on structures, fixed play equipment, natural features of the setting, playing games, and engaging in spontaneous sport.
- ↳ Intellectual development, e.g. through problem-solving, for example, through den building and language games.
- ↳ Creative/cultural, e.g. making things, paintings, go-karts, jewellery, celebrating cultural events and festivals.
- ↳ Emotional development of the self and others, e.g. through playing together, sharing, experiencing risk, frustration, and a full range of feelings (Manwaring & Taylor, 2007, p. 17).

Some of the aspects of the resources for SPICE may be difficult to sustain in settings of EiE, but interventions may also benefit by incorporating SPICE into their aims. Play may be useful as a means of introducing young learners to curricula or for supplementing other resources. The strengths of play-based learning derive from the less structured forms of activity engendered through it, which can augment the experiences of learners:

‘Play is often defined as activity done for its own sake, characterized by means rather than ends (the process is more important than any end point or goal), flexibility (objects are put in new combinations or roles are acted out in new ways), and positive affect (children often smile, laugh, and say they enjoy it). These criteria contrast play with exploration (focused investigation as a child gets more familiar with a new toy or environment, that may then lead into play), work (which has a definite goal), and games (more organized activities in which there is some goal, typically winning the game).’ (Smith & Pellegrini, 2008, p. 1)

In Iraqi Kurdistan, an initiative was launched to teach children to wash their hands with soap to combat the spread of conditions such as diarrhoea (Watson et al., 2019). Toys were embedded into bars of soap and distributed to the children. Handwashing became an act of exploration as the children were curious about the toys and eager to receive them. The initiative was successful in terms of promoting hygiene education and in changing the behaviour of the children. Toys and games may also be used to develop coping skills: Leclerc and McCarty (2018) explored toy design as a way of developing coping skills in children with PTSD living in war zones. Children designed toys in workshops following a range of design principles aimed at promoting empathy between the children.

Technologies such as radio and television may also be useful for the transmission of learning resources, and may be used to support or enhance the content of printed learning materials. The Somali Interactive Radio Instruction Program (SIRIP) is an example of this. Beginning in 2005 the SIRIP has delivered 940 maths lessons for children in grades 1 to 5. The SIRIP also distributed 100,000 learning materials, including LifeLine radios, MP3 players, teachers’ guides, and books (USAID, 2012). However, Ho and Thukral (2009) conducted a review of interactive radio instruction (IRI) programmes and found that while broadcasts did have greater impact when used with small groups, the wider evidence regarding the effectiveness of IRI programmes was tenuous. The impact of the broadcasts varied depending on the subject taught, and the

researchers were only able to provide speculative explanations for the variable impact of the broadcasts (Ho & Thukral 2009).

## 7.8 Case studies

Part of the challenge of the literature review presented here is the lack of research and evidence systematically collected around TLMs in emergency or displacement contexts. Instead, it has been useful to examine reports and reviews of attempted interventions to isolate evidence about resources for EiE. Emergency supply has operated in many situations for many years but has often not been formally recorded, and in particular supply to emergency situations as a conscious activity has emerged as a recent development in policy and research. A few recent projects particularly illustrate effective provision of TLMs in emergency situations; two of these are mentioned below. These two examples serve to demonstrate the parameters and requirements of delivering TLMs at scale in emergency contexts.

### 7.8.1 South Sudan, 2009–2013

In a DFID-funded programme in South Sudan (DFID, 2015), textbooks had already been identified but needed to be printed and distributed, within a budget, throughout the country. The country was suffering from ongoing conflict, where many villages were destroyed and people displaced, and where the rainy season made transport very difficult. The project achieved remarkable success in spite of the difficulties, and was considered in DFID's own evaluation 'as not only good value for money but the essential foundation for the establishment of a national LTM [learning and teaching materials] policy and ... a sustainable and affordable LTM system for the Government' (*ibid.*, p. 8).

The report records that 9,179,199 textbooks and teachers' guides, and 412,737 readers, dictionaries and wall charts were delivered direct to schools and Accelerated Learning Centres:

‘Competitive procurement procedures based on international best practice resulted in textbook printing being undertaken in South Korea and shipped to Kenya prior to onward transportation to Uganda where the LTMs were stored, picked and packed and consolidated into 90,000 plastic storage boxes prior to being distributed in containers to South Sudan.’ (p. 2)

These boxes were then put to secondary use throughout the regions: ‘the project through the provision of containers and plastic storage boxes has had a major impact on upgrading school and county storage facilities for LTM supplies in the future’ (*ibid.*, p. 2). In spite of 46 containers being destroyed, there were budget savings which were used for off-the-shelf purchase of 318,000 readers to be distributed to girls' schools whose books had been destroyed in the conflict. Other achievements included a national textbook policy and the active participation of the Ministry at all levels, with guidance on deliveries and follow-up with schools on textbook use, and an effective communication strategy involving radio, newspapers, and posters. Printing and storage were both effective due to expert manufacturing advice and storage solutions, and there

was detailed planning and in-country research prior to decisions being made, and close cooperation with government, counties, and schools.

In addition to benefits to the target populations in South Sudan, the key findings at the end of the report record that the materials were identified to have application and value in other contexts in the region: ‘several UN agencies, NGOs, and other partners have managed to reprint copies of the textbooks, through agreements negotiated with Ministry of Education, Science and Technology, facilitated by DFID. Many of these are being used in PoC [point of contact] centres, in refugee camps in Ethiopia and Uganda, and to support displaced children in temporary or normal schools within South Sudan’ (*ibid.*, p. 11).

## 7.8.2 Lebanon, 2015–2018

In the context of the World Bank-led ‘Emergency Education System Stabilization Project’ (EESP) in Lebanon (World Bank, 2019), the influx of Syrian refugees had drastically increased the number of school-age (3–18 years old) children in the country and strained the existing education infrastructure. The scope of the project was to facilitate the public education system to, in a very short timeframe, more than double its capacity while maintaining the quality of education, in order to be able to educate refugee children (World Bank, 2019, p. 5).

The EESP included a major textbook component spanning three academic years from 2015 to 2018. To support the expansion of the education system to enrol refugee children, ‘the project provided of a set of textbooks and workbooks for every child in Lebanon, approximately 8,560,680 textbooks and workbooks’ (*ibid.*, p. 12). Monitoring reports revealed that supply had been successful: in February 2018 ‘more than 90 percent of students in basic education had individual textbooks during the classroom visit and ... the quality of textbooks was acceptable’ (*ibid.*, p. 17).

The project report notes that, as the need was to expand existing education provision rather than augment overall provision through additional streams, the project aligned as closely as possible with existing frameworks and systems. To this end, it used the existing Ministry of Education book purchasing procedures, to expand services to Syrian refugee children, instead of building a parallel system for refugee education. This meant that textbooks were therefore the same for refugee and Lebanese children and, as the project used the existing textbook distribution system, ‘textbooks purchased under this project had a low unit cost compared to benchmarks in the region ... for example, grade 4 public school textbooks in Lebanon had a lower unit cost than in Jordan and Turkey’ (*ibid.*, pp. 17, 19–20). Where existing systems and infrastructure are already supplying suitable materials equivalent to those envisioned for use by displaced learners, the most effective solutions will adapt and utilise these routes for provision.

# 8 The Learning Passport: Digital support

## 8.1 Scope

As an education model the Learning Passport is not conceived of as digitally dependent, in the sense of only deliverable by digital means. It is recognised that in certain EiE situations or displacement contexts EdTech might have little or no role to play – and that its deployment may even be counter-productive. Nevertheless, there is also enormous scope for the Learning Passport to benefit from appropriate digital support, and developing this line of thinking to the point of initial recommendations is the purpose of this section. The section covers:

- ↳ Key general considerations for digitally supporting the Learning Passport.
- ↳ Process considerations: designing digital support for the Learning Passport.
- ↳ A set of Specific Recommendations regarding how the Learning Passport should be supported by digital technology. These recommendations are also summarised in the ‘Digital Support Recommendations’ section (sub-section 9.3.5) of this Report.

Framing the question of digital recommendations is UNICEF’s request for Cambridge to support software partners in developing a *platform* for the Learning Passport which could potentially:

- A. Act as a global searchable repository for EiE curriculum and instructional materials, including the project’s own;
- B. Act as a repository for children’s assessment data, and a means for updating and tracking it in the field;
- C. Potentially deliver assessments as part of an online and offline digitally based assessment option (while recognising that there will be instances where the digital option will not be viable).

It will be noted during this section that a key recommendation is working with existing available platforms already in the ecosystem. For clarity, any purpose-built Learning Passport platform would need to be compatible with other systems, or work in the gaps left by any existing provision. As an example, it might be that a context has an existing solution for content delivery, but no way of tracking student assessments.

## 8.2 Approach

While this section draws on a range of sources it differs from other sections of this report in that it is not only an analysis of the published evidence. If EiE is an emerging field of study with many evidence gaps, then the subfield of digital technology and education in displacement settings is even less well served. The approach therefore has been a blend of the following, with a strong focus on engaging with practitioners. It is acknowledged that more engagement with end users would be required in subsequent phases of the project.

- ↳ Desk Research. Two key recent reports extensively drawn on here are ‘EdTech for Learning in Emergencies and Displaced Settings’ (Tauson & Stannard, 2018) and ‘Raising Learning Outcomes: the opportunities and challenges of ICT for learning’ (Innovation Unit, Aga Khan Education Services and the Aga Khan Foundation,

- 2018).<sup>11</sup> Other desk research took in EiE blogs and news articles, NGO reports on EdTech projects, and best practice in terms of digital product design and planning.
- ↳ Existing guidelines, notably UNICEF's Technology for Development (T4D) Design Criteria, and UNICEF's 5 key programme recommendations on ICT for education.<sup>12</sup>
  - ↳ A Cambridge-based one-day workshop involving education professionals with experience of developing digital platforms and digital content. The workshop used a 'Lean Customer Development' methodology as a way in to thinking what digital support for the Learning Passport might look like.<sup>13</sup> Hypotheses generated during the workshop were then used to design discussion prompts for conversations with UNICEF and UNHCR staff, teachers, facilitators, and students.
  - ↳ Missions. Research has been informed by two field missions, to Kenya and Myanmar. Mission objectives were:
    - To learn about digital learning programmes already in operation (successes and challenges).
    - To better understand potential users of digital learning programmes (such as learners, facilitators, and project managers) and more specifically begin the process of mapping user personas for a digitally supported Learning Passport.
  - ↳ Direct engagement with UNICEF and UNHCR staff.
  - ↳ Ideation sessions while on mission. The Kenya and Myanmar missions allowed the opportunity to organise digital ideation sessions with experienced UNICEF Country Office staff. These sessions were intentionally open-ended: it was not an objective to define the digital components of the Learning Passport, or to decide solutions before engaging with end users (teachers, students, and UNICEF employees).

## 8.3 Key general considerations for digitally supporting the Learning Passport

The overwhelming consensus among educators is that, if used correctly, and supplemented with facilitator training, digital learning materials can positively impact learning outcomes (Tauson & Stannard, 2018; Al-Sharhan, 2018). A review of the existing guidance literature around EdTech makes clear that any digital intervention needs to appreciate and align itself with the following:

### 8.3.1 Blended learning has been shown to improve effectiveness of learning with digital

There is much evidence which suggests that blended learning (the combination of facilitator and digital learning materials working in tandem) is an effective means of delivery (McAleavy et al., 2018; Mendenhall, 2017). Even in displaced contexts, blended

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<sup>11</sup> Please note that these documents are cited repeatedly throughout this section, and for clarity referred to using abridged titles.

<sup>12</sup> Please see Appendix 2 for these UNICEF criteria and recommendations.

<sup>13</sup> Lean Customer Development is an approach to product development used extensively in digital businesses. It aims to put the potential user at the heart of any development and to continuously validate hypotheses about a successful project through conversations with users and iterative testing.

learning is more beneficial than learning solely through digital learning materials in isolation (McAleavy et al., 2018; Burns & Lawrie (Eds.), 2015).

### **8.3.2 The teacher/facilitator should be at the heart of any development**

This is an adaptation of one of UNICEF's 5 key programme recommendations on ICT for education (see Appendix 2), and is an underlying assumption here. Any platform should not replace the teacher, but should instead aim to enhance teaching in order to improve the quality of learning. Save the Children's 'EdTech for Learning in Emergencies and Displaced Settings' (Tauson & Stannard, 2018) covers the importance of successful engagement with the teacher in several of its recommendations. Meanwhile, UNICEF's report 'Raising Learning Outcomes: the opportunities and challenges of ICT for learning' says: 'Fundamental is the notion that "technology can amplify great teaching, but great technology cannot replace poor teaching"' (2018, p. 22). Sub-section 9.2.4 makes further recommendations to bear in mind when considering digital support for instruction. Later in this section we will talk about the need for support to teachers, teacher capacity building, and teaching content.

### **8.3.3 Infrastructure is our biggest practical challenge**

Poor digital infrastructure is the most common barrier to the publishing and distribution of digital learning materials (Tauson & Stannard, 2018; Joynes & James, 2018). Online materials can be delivered only if wifi is easily available, or if they are delivered through apps with zero rating on mobile networks (i.e. they can be used for free without using data costs). Many refugees and displaced people access the internet through mobile telephone pay-as-you-go accounts that often have fixed download limits. It is difficult to download materials and access websites with large bandwidths (Creelman et al., 2018).

#### **Example: Infrastructural challenges in Cox's Bazar**

The UNICEF ROSA (Regional Office for South Asia) report 'Education Sector Needs and EdTech Interventions' looks at the specific example of Cox's Bazar in Bangladesh:

'There is generally no electricity in the camps, no complete radio coverage (depending on the radio station), limited mobile coverage (depending on the provider). Also, mobile connectivity/Internet access is generally not permitted in the camps, except if it is used by NGO/implementing partner staff.'

To state some of the major infrastructural barriers encountered during Learning Passport research, drawn from a range of contexts:

- ↳ Legal/governmental: Cox's Bazar refugees have no officially sanctioned means to access the internet.
- ↳ Connectivity: EdTech connectivity cannot be assumed even in relatively settled contexts.
- ↳ Device availability: Poor availability of devices means that devices often have to be shared between multiple users.

While solving infrastructural challenges is outside of the remit of the Learning Passport project, they cannot be ignored. Later in this section we discuss the need to work with existing solutions, and many of these are targeted directly at infrastructural issues. In terms of assessing potential partnerships, some of the following considerations may be of use:

- ↳ Digital learning materials need to be designed alongside a strategy for sustainability, especially if the intervention is intended to yield long-term improvements in learning outcomes (Tauson & Stannard, 2018).
- ↳ Factors such as the type of hardware, cost maintenance, power, access, security offline storage, and intended use need to be considered (Johansen et al., 2018).

What we are explicitly not recommending is any hardware or infrastructural component as part of the Learning Passport.

### 8.3.4 Co-creation is a key factor in driving adoption and usage

In technology design, as in programme design, it is now standard practice to involve users in the process of developing products. This is not restricted to the design phases of any project; user feedback will be key to the evolution and development of the platform once it is in place and operational.

The displaced learner is much less likely to engage with digital learning materials if there is little or no relevance to their local context (Tauson & Stannard, 2018; Ale et al., 2017). Therefore, to increase uptake and effectiveness, all digital learning materials must be designed with a degree of flexibility to allow alignment with local context (Almasri et al., 2018). ‘EdTech for Learning in Emergencies’ states for three of its findings (2018, p. 8): ‘4. EdTech must be implemented in line with the local curriculum; 7. Examples must be relevant to the learners’ context; 8. Material that is contextually appropriate can be used by families and can help increase opportunities for social engagement’.

#### Example: Can’t Wait to Learn

<b>5. Weather</b> Expected Learning Outcome: The child is able to know, appreciate and manage weather to improve production and the economy.  Sub-themes: 1. Elements and types of weather 2. Activities for different seasons 3. Effects and management of weather	<b>5. Maths competencies</b> 1. Count to 80 in correct order 2. Recognise and write number symbols to 80 3. Write number names one-nine 4. Add horizontally and vertically to sum less than 20; no carrying 5. Identify place value in a 2-digit number 6. Show multiplication of 2 as repeated addition
<b>6. Accidents and safety</b> Expected Learning Outcome: The child is able to identify and know the common accidents; understand the effects and importance of taking precautions.  Sub-themes: 1. Accidents and safety at home 2. Accidents and safety on the way 3. Accidents and safety at school and in class	<b>6. Maths competencies</b> 1. Count 0-10 in correct order 2. Write number symbols 0-10 3. Number names 1-10 4. Match number symbols to number names 5. Compare capacity measures (using common containers) 6. Subtract up to 10 using concrete materials 7. Recognise the symbol for subtraction
<b>7. Living together</b> Expected Learning Outcome: The child is able to identify people, relate and appreciate ways of living with them harmoniously  Sub-themes: 1. The family 2. Ways of living together in the school 3. Ways of living together in the community	<b>7. Maths competencies</b> 1. Count 1-70 2. Write number symbols 0-50 3. Write number names 1-25 4. Add numbers whose sum is less than 50, vertically and horizontally, without carrying 5. Compare length, breadth and width of common objects (squares and rectangles) 6. Subtract horizontally, without borrowing, up to 20 7. Multiplying by 10 as repeated addition
<b>8. Food and nutrition</b> Expected Learning Outcome: The child is able to identify sources of food, appreciate its uses and demonstrate ways of keeping it safe.  Sub-themes: 1. Names and sources of food 2. Uses of food (to our bodies) 3. Keeping food safe	<b>8. Maths competencies</b> 1. Count 1-80 2. Recognise and write number symbols to 80 3. Writing number names to 30 4. Add vertically numbers whose sum is less than 70 5. Subtract up to 30, no borrowing 6. Make drawings to show quarters 7. Use containers and estimate capacity

War Child Holland’s Can’t Wait to Learn project takes co-creation seriously. Their developers work with children in each new country to customise the artworks, games,

and language to fit the context. Shown here is a sample of their mapping to the Ugandan curriculum.

The approach chimes with principles one, two and nine of UNICEF's T4D Design Criteria: 'Design with the User', 'Understand the Existing Ecosystem', and 'Be Collaborative'. A key outcome of co-creation is locally relevant content, and locally relevant content is of course more likely to be used. Other benefits can involve the languages used in interface design, the availability of audio help, and the adaptation of any imagery used. Allied with this, cultural sensitivities can be taken into account (as a common example, certain colour schemes may be deemed inappropriate). Local relevance will include mapping the Learning Passport to local curricula; see Section 8.5.

### **8.3.5 Accessibility**

User Experience (UX) and User Interface (UI) development which takes accessibility properly into account is a necessity. UNICEF has its own guidelines on this, and there are industry-standard practices.

We would advocate that inclusion tools should be embedded into the platform – for example the Immersive Reader application programming interface (API)/plugin could be used to make the content more readable for students with dyslexia or students learning in a non-native language.

### **8.3.6 Gender**

The question of gender and EdTech does not simply relate to content (for example, does content portray women and girls in positive roles? Is the cultural context being sensitively handled?) Access to EdTech, preconceptions of EdTech, and ways of using EdTech can also shift according to gender.

We would recommend that, as part of co-creation, the testing of a Learning Passport platform also be carried out with different gender groups, and that part of the questioning/testing should aim at identifying any differences in ease of access, preconceptions, and modes of use.

### **8.3.7 Intellectual Property (IP)**

There is a tendency amongst the teaching community to freely share resources such as lesson plans, videos of best practice, presentations etc. However, all Learning Passport stakeholders will have an obligation to observe guidelines around intellectual property and usage. Wherever resources have been identified as useful, they will also need to be assessed in terms of IP.

### **8.3.8 The digital identification of children**

A central challenge of EiE is the difficulty of permanently linking pupils to their learning records. Ideally, a pupil's learning record should travel with them: across borders, across education systems, and across short- or long-term interruptions to schooling. Assessing children on arrival, judging their needs, and guiding them back into education, become simpler and more accurate activities, with direct benefits to the child.

As such, an important goal of the Learning Passport is to secure the connection between pupil and learning record. Clearly, permanently recording a pupil's identity data digitally, and permanently linking that data to a digital learning record, offers huge system advantages in terms of speed and scale. In order to achieve the hoped-for improvements in accessibility and reduction in barriers to admission to national education systems (United Nations, 2018, pp. 13, 19–20), this would seem a natural step. Cloud storage of data would be the preferred method of storage.

However, the digital recording and use of pupil identity data is not a purely technical issue. It brings with it a wider set of considerations, which digital support to the Learning Passport must assess from the outset. These considerations are:

- ✉ National and international law relating to the collection and storage of data.
- ✉ The recording of identity data and its use is always a sensitive political matter, and depending on context may be viewed with suspicion by governments.
- ✉ For a wide range of reasons, pupils themselves (and the communities they are from) may view such data collection with suspicion.
- ✉ Depending on circumstances, identity data can be a serious threat to children if it falls into the wrong hands. The principle of 'do no harm' (also one of UNICEF's T4D principles) must be observed, and the contextual risk assessed. The Global Compact on Refugees explicitly points out the specific vulnerabilities and protection needs of girls and boys (United Nations, 2018, p. 15).
- ✉ Pupil identification can be difficult in practice, even when digital recording methods are used. For example, the Kenyan school attendance app described later on in this section relies on an import of children's data supplied by NGOs. This is examined carefully (and manually), and discrepancies sent back to the NGO for clarification – an intensive process. In cases where children shared the same name – very common in the Somali population – identification still ultimately relied on the teacher's say-so.
- ✉ In circumstances where the collection of identity data is viable, not all possible identity data needs to be collected. For example, we would recommend that access to any digital content (digital learning resources) is not made dependent on a complex formal registration process. Easy 'guest' access for the wider community would bring greater benefits.

## 8.4 Process consideration: Designing digital support for the Learning Passport

### 8.4.1 Design with the user

Taking into account principles one, two and nine of UNICEF's T4D Design Criteria (given above): 'Design with the User', 'Understand the Existing Ecosystem', and 'Be Collaborative', it is clear that the overall approach to developing any Learning Passport platform needs to be heavily focused on the user. 'Design with the User' is the first and most important principle.

Therefore, in terms of an approach to developing the Learning Passport platform, we would recommend Human Centred Design (HCD), which is informed by the well-established principles of Design Thinking. UNICEF has already used HCD in at least one project.

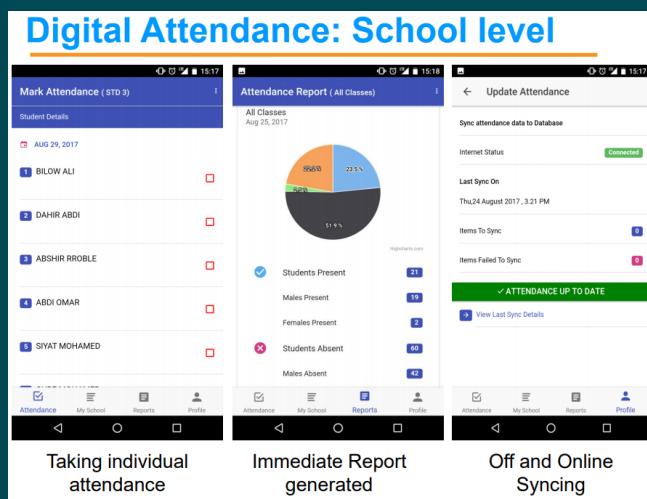
## 8.4.2 Work with local stakeholders

It is self-evident that working closely with local stakeholders will give any Learning Passport platform the best chance of being adopted and used.

- ↳ Ministries of Education will always be central to approving use of the Learning Passport.
- ↳ Ministries of Education can provide access to content and teachers, along with the expertise of Ministry staff.
- ↳ NGOs can supply localised content and digitally literate staff on the ground.
- ↳ Community leaders can, if they buy into the value of the platform, encourage teachers and students to engage with the Learning Passport platform.
- ↳ Local content providers can, with negotiation, supply OERs that are directly relevant to the target users.

### Example: UNICEF Kenya Country Office and University of Nairobi

In a project with the University of Nairobi's Computing for Development Lab team, the Kenya Country Office has produced an Android tablet application for logging student attendance. Over three years the project moved from research, to piloting in one small school, to piloting in a large school, to a wider rollout. Throughout the process, the team worked closely with teachers to test and respond to feedback about the app.



## 8.4.3 Support and training

All facilitators need to be trained in the use of digital learning materials. There is strong evidence that the success of digital learning materials is dependent on the abilities of facilitators to deliver content (Tauson & Stannard, 2018). Improving the quality of facilitator teaching is essential to improving the quality of learning (McAleavy et al., 2018). Too often, high-quality digital learning materials become ineffective due to poor facilitator training (McAleavy et al., 2018; Lewis & Thacker, 2016). In examining

EdTech projects already in the field, it is clear that initial training and ongoing support is essential to adoption and to successful implementation.

#### **Example: Vodafone**

The four Vodafone Instant Network Schools in Hagadera Camp, Dadaab, have a UNHCR resource to act as coordinator, and in-school Mentors to assist teaching staff. We observed the Mentors providing technical support to teachers in lessons, and they reported co-planning lessons with the teachers in order to find the best resources online.

In its own report, Save the Children states:

EdTech is a relatively new educational tool, as with all educational tools the teacher, or primary deliverer of content, needs to be comfortable using it, prior to using it with learners [...] If resources are stretched too thin, the implementation is rushed, and/or teacher training is not engaged with readily, then the impact of the intervention on learning outcomes is diminished. Not only does the quality of this initial teacher training need to be of a high standard, it needs to be sustained. Continued teacher development positively correlates with successful EdTech take up. (Tauson & Stannard, 2018, p. 9)

Our process recommendation here is that UNICEF appoints platform focal points, based in each Country Office where piloting is planned, in order to help set up the Learning Passport platform for each context, locate and adapt suitable content, and train teachers to use the platform.

#### **8.4.4 If possible, use what is already available**

Even a cursory literature review, web search, or conversation with teams in different locations reveals a plethora of digital projects – hardware, connectivity, software, content, or a mix of all four. In line with UNICEF's own guidelines, we would recommend building upon what already exists, rather than trying to reinvent. A successful existing project may have any of the following advantages:

- ✉ Hardware and connectivity already in place.
- ✉ An embedded user base which has invested in the system.
- ✉ Trained local support.
- ✉ An existing collection of content.
- ✉ Government backing.

As an example, in Kenya, Vodafone-sponsored tablets could be used to access Learning Passport curated content, or Learning Passport assessment data could be stored and transmitted from Kolibri devices.

#### **Example: Kolibri interface**

OERs shown in the Kolibri interface.

## 8.5 Platform recommendations

### 8.5.1 Content

The following content recommendations relate to UNICEF's initial framing guidance to investigate a platform that could:

*'A: Act as a global searchable repository for validated EiE curriculum and instructional materials, including the project's own'.*

#### 8.5.1.1 Work with existing content

UNICEF's T4D Design Criteria have 'Reuse and Improve' as their seventh point. Any Learning Passport platform project should first seek to utilise pre-existing content. There are already many freely available, adaptable, and downloadable OERs (McAleavy et al., 2018; Lewis & Thacker, 2016), as well as a plethora of platforms and resources with 'OER-like' functions, of which probably YouTube is the most used.

Nevertheless, OERs need to be used with care. Existing 'generic' digital learning materials should be adapted to the learning needs of displaced learners (Tauson & Stannard, 2018). In addition, while OERs should be used as source materials for teaching and learning in displaced contexts, they need to be modified to suit the local context (Joynes & James 2018; UNESCO, 2018).

We recommend that the Learning Passport project focus on developing a central bank of OERs, mapped in the first instance against the Learning Passport's own curriculum framework. These OERs should be cleared for reuse as a global public good. As a first step, it would make sense to collect together projects within UNICEF that are already curating OERs.

UNICEF and its partners could then rapidly respond to newly emerging EiE scenarios by deploying a ready bank of curated and mapped OERs. New OERs should be created only where gaps emerge. The Learning Passport platform would be one option for

making the bank available, but – if there are other platforms already in use – not the only option.

#### **8.5.1.2 Local content production**

Many countries have content industries devoted to creating relevant educational content (textbooks and/or digital content). It may be possible to incorporate contextually appropriate nationally procured content to augment a collection of more generic OERs.

#### **8.5.1.3 The need for content curation**

Bringing OERs or previously published content into a system is a way to grow a content repository cheaply and fast, but still requires effort in terms of curation, licensing, and technical integration. The ‘Raising Learning Outcomes...’ report states that: ‘one caveat is that the quality of content is inconsistent, in turn reiterating the need for human investment, not least to administer critical appraisal of content to ensure it contributes towards improving learning outcomes’ (2018, p. 42). End users may have different expectations for content, so it would be advisable to train and then involve local teachers and/or education officials in this process.

Curation will need to include consideration of content discoverability. This can include mapping against local curricula (covered in sub-section 8.5.1.4) but could also include the creation of a metadata standard which would map to the Learning Passport. The Dublin Core<sup>14</sup> is often used as the basis for educational metadata, and we would recommend an evaluation of the schema. This would allow, for example, searching by file format, duration of resource, or its intended end user. We recommend establishing a checklist for quality control and training curators in its use.

#### **8.5.1.4 Mapping content against local curricula**

A platform providing resources (whether newly created or curated OERs) will need navigation and metadata functionality flexible enough to not only map those resources to the Learning Passport’s own curriculum framework, but also to relevant local curricula. There are several reasons for this:

- ↳ EiE responses often use national curricula, and this is frequently governmentally mandated. For example, in Myanmar the Ministry of Education has made it clear that any platform must work with the Basic Education curriculum.
- ↳ Even if using the Learning Passport curriculum framework, teachers will typically have been trained in a local curriculum and have experience in delivering it; that curriculum will therefore be an important ongoing route in terms of content discovery.

#### **Example: e-limu in Kenya**

<sup>14</sup> <https://www.dublincore.org/>

The screenshot shows a dark-themed user interface for e-limu. On the left, there is a grid of icons representing different subjects: Mathematics (triangle), English (ABC), Kiswahili (pencil), Science (atom), Social Studies (globe), Stories (book), Did You Know? (brain), Exam Tips (lightbulb), and Parent Guide (two people). A vertical sidebar on the right contains a navigation menu with links to 'Combined Operation', 'BODMAS', 'Combined operations on Decimals', 'Combined operations on Fractions', 'Number sequence (series) or Patterns', and 'Assessment Questions'. Below the menu, there is a section titled 'BODMAS' with text explaining it and a math problem: '3 + 4 x 2 ... what part should you calculate first?'. At the bottom of the sidebar, there are buttons for 'Student 1' and 'Student 2'.

Kenya Institute of Curriculum Development (KICD) curriculum navigation in e-limu, a Kenyan curriculum-focused resource. The user chooses a subject area (e.g. maths), and then uses the side navigation to move between topic (e.g. BODMAS).

The screenshot shows the Madrasa e-learning system's main page. It features a search bar at the top with the placeholder 'What do you want to learn today?'. Below the search bar is a row of five circular icons representing different subjects: Mathematics (yellow), English (purple), Chemistry (blue), Physics (green), and Science (orange). Further down, there is a grid of smaller icons with labels in Arabic, such as 'الرياضيات' (Mathematics), 'العلوم المادية' (Physical Sciences), 'الكيمياء' (Chemistry), 'الفيزياء' (Physics), and 'العلوم' (Science). To the right, there is a detailed view of a video lesson titled 'Introduction to light' with a preview image showing a spectrum and a hand holding a prism.

The Madrasa e-learning system offers a choice of various STEM subjects, and then offers subtopics (chemistry is shown here) before linking to one of 5,000 Arabised videos.

Any purpose-built Learning Passport digital platform will need to be able to cater for multiple curricula. Its navigational structure will need to be customisable, so that teachers can find what they need according to local context.

## 8.5.2 Content types

Our research has highlighted the demand for digital content for both teachers and students; in the below sub-sections the specificities of these types of content are noted, as well as a note on user-generated content, which can span both of these types.

### 8.5.2.1 Content for teacher facilitators

Teacher-focused content falls into three categories:

**1. Content designed to educate teachers/facilitators:** One area not anticipated by the initial UNICEF brief, but which has come through very strongly in field missions, is the potential for centralised digital support for capacity building amongst teachers and facilitators. We recommend that this is pursued, whether in the context of the Learning Passport or not.

Certification would be welcomed by teachers in this regard. A single UNICEF e-learning course for facilitators could be rolled out internationally, but there may also be local courses that are suitable, for example the SITE training course developed by UNICEF in Myanmar. We have already stated that digital content works best in conjunction with face-to-face teaching, but centralised content would help with quality levels and act as a way to help teachers who cannot attend sessions.

**2. Printables – lesson plans and activity sheets:** Schemes of work, lesson plans, and activity sheets are a staple of web-based resource sites as well as traditionally published curriculum materials.

#### Example: Myanmar Create

The screenshot shows a website interface for 'Myanmar CREATE' funded by JICA. The top navigation bar includes links for HOME, SCHOOL SYSTEM, PRIMARY TEXTBOOKS, RESOURCES FOR TEACHERS, YOUR VOICE, and EN. The left sidebar has a 'Categories' dropdown set to 'Myanmar' and a 'Myanmar' dropdown under 'English Teaching Materials'. Below these are links for 'Assessment' and 'New Curriculum Introduction Training Materials'. The main content area is titled 'English Teaching Materials > G2 English Flash Cards' with a subtitle 'Flash cards to be used with new G2 English Textbook'. It displays eight PDF files for download, labeled G2\_English\_Flashcard\_Unit\_01.pdf through G2\_English\_Flashcard\_Unit\_08.pdf. At the bottom of the page are social media icons for Facebook, Google+, and YouTube, and a copyright notice: 'Copyright 2018. All Rights Reserved.'

An online collection of printables designed by the Myanmar Department of Basic Education to support the new Myanmar curriculum.

**3. Content and tools for the classroom:** As a basic functionality, the Learning Passport platform should be able to deliver instructional materials to be used in classrooms by teachers or facilitators in a wide range of formats (e.g. video, audio, interactives). This said, it should be recognised that teachers do not always value the most sophisticated content. In Cambridge's experience, formats such as PowerPoint remain highly valued, and digital versions of textbooks – even if they are merely PDF versions – are also prized by teachers as a front-of-class tool. In Dadaab, Kenya, we saw a teacher's collection of digital textbooks on a school's network, and this reflects behaviours Cambridge has seen in schools in many different territories.

#### 8.5.2.2 Content for students

The Learning Passport platform should be able to deliver a wide range of plug and play content types for use by students (e.g. documents, video, audio, interactives, and assessments). Adaptive learning is often raised in discussions around digital content. While this is attractive in theory, one needs to consider the total cost of producing adaptive content: an adaptive system requires content to be produced for a range of outcomes, multiplying the work that needs to be done. And in terms of collaborating with providers of adaptive content, it may be that their focus is powerfully on commercial models.

#### 8.5.2.3 User-generated content

Allowing teachers to create and upload their own content would be advantageous in terms of building their professionalism and digital skill levels.

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Language

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  - > Oral literature
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**COLLECTIVE NOUNS**  
Published By: Super Admin  
Date: 2019-01-16

**NOUNS**  
Published By: Super Admin  
Date: 2018-09-18

**ADVERBS**  
Published By: Super Admin  
Date: 2018-09-17

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Published By: Super Admin  
Date: 2018-09-19

**VERBS - REGULAR & IRREGULAR VERBS**  
Published By: Super Admin  
Date: 2018-09-19

**Example:** A programme supporting capacity in digital learning, which we learned about in Kenya. The programme is considered successful, having reached 700 teachers. One output has been that the teachers involved are beginning to originate their own OERs.<sup>15</sup>

However, there are dangers in terms of IP and reputational damage. Microsoft retired the facility to add user-generated content to its Microsoft Educator Community due to high levels of advertising and spam. A middle ground to be investigated with users would be the facility to give teachers their own space where they can modify and store OERs for their own use or for colleagues.

### 8.5.3 Delivery of content

The original UNICEF guidance specified only that a Learning Passport platform should act as a repository of content. However, delivery is just as important. For the reasons described above, it will be advantageous if Learning Passport approved content can be integrated into existing systems as well as delivered via its own Learning Passport platform.

<sup>15</sup> <http://oer.gesci.org/>

### **8.5.3.1 Mobile-first content**

The range of hardware where ‘digital’ is being used varies enormously according to circumstance. Although, for example, some projects can provide a tablet per user (such as War Child Holland’s Can’t Wait to Learn), other contexts are quite different:

- ↳ A school visited in Hpa An, Myanmar, had five desktop machines in total, with a further five being used for spare parts. The wifi router had recently been replaced after being stolen.
- ↳ A school visited in Dadaab, Kenya, had its own content server and a strongbox of tablets, but was expected to make them available to staff and students from three other local schools. This was logistically impossible, meaning that in practice these schools had no access to technology.

However, one constant seems to be the smartphone. As these appear to be the lowest common denominator in terms of device, mobile-friendliness should be an important selection criterion for content.

### **8.5.3.2 Community**

One concept that surfaced during ideation sessions was that of an ‘online community’, which was suggested for both teachers and students. While outside the guidance UNICEF has given, we note that this may be worth exploring. Many e-learning systems offer the facility for discussion and interaction around a particular topic, so a full-blown community platform may not be necessary.

## **8.5.4 Assessment data**

UNICEF’s initial guidance for researching and recommending platform capabilities asks Cambridge to consider the Learning Passport platform as a repository for children’s assessment data: *‘B: Act as a repository for children’s assessment data, and a means for updating and tracking it in the field’*.

### **8.5.4.1 Types of assessment data**

Here we are not considering the provision of digital assessments, but the ways in which schools and other stakeholders may already be recording progression data, and how digital methods could improve on this.

For example, the model in Myanmar is for teachers to record marks in a traditional markbook, meaning that this data stays within the classroom and cannot be easily presented or analysed. There is little time for ‘assessment for learning’ activity. The head teacher may or may not have time to review the performance of each class by reviewing quarterly test results. Only end-of-year results are fed up from the school into higher levels of education administration.

The next level of sophistication in tracking would be to record data directly into spreadsheets or a package such as Forms. Schools often create their own rubrics to allow teachers to track against the curriculum.

It is our belief that the majority of such data would in practice continue to be gathered away from digital devices, but that a platform could serve as a vital ‘second step’ in collating data and making it available for inspection, transmission, and analysis. Here primary data could be coming from, for example, termly written (paper-based) tests

tailored to the local curriculum, high-stakes government examinations, or teacher observations in the classroom.

The logging of assessment for learning (assessments made in class while teaching) should also be considered. However, in many scenarios class sizes mean that in practical terms there is little time to make qualitative judgements about individual children's progress, so this should be seen as less of a priority for the platform.

**Example: A commercially available system for logging student progress against a**

		1	2	>	Assessment										Evidence		Reporting	
		U	T	A	M	E		Pupil A0	Pupil A1	Pupil A2	Pupil A3	Pupil A4	Pupil A5	Pupil A6	Pupil A7	Pupil A8		
0	selections	<a href="#">Clear Selections</a>																
<a href="#">Solve measurement problems 4.3.4</a> Continue to solve problems involving mixed units of length, mass and capacity/volume (+)		UNASSESSED	UNASSESSED	UNASSESSED	UNASSESSED	UNASSESSED	UNASSESSED	UNASSESSED	UNASSESSED	UNASSESSED	UNASSESSED	UNASSESSED	UNASSESSED	UNASSESSED	UNASSESSED	UNASSESSED	UNASSESSED	
<a href="#">Make measurements 4.2.2</a> Write time from analogue and digital 12- and 24-hour clocks (^)		UNASSESSED	UNASSESSED	UNASSESSED	UNASSESSED	UNASSESSED	UNASSESSED	UNASSESSED	ALMOST	A	TARGET	UNASSESSED	UNASSESSED	UNASSESSED	UNASSESSED	UNASSESSED	UNASSESSED	
<a href="#">Understand units of measure 4.1.1</a> Read, write and convert time between analogue and digital 12- and 24-hour clocks		UNASSESSED	UNASSESSED	MET	MET	MET	UNASSESSED											
<a href="#">Make measurements 4.2.1</a> Read time from analogue and digital 12- and 24-hour clocks (^)		UNASSESSED	UNASSESSED	UNASSESSED	TARGET	EXCEEDING	TARGET	TARGET	TARGET	MET	MET	TARGET						

curriculum

Classroom Monitor is widely used in UK schools. On the left are statements from the English national curriculum for maths (other curricula have been mapped also). Along the top, student names. The teacher has manually recorded each child's progress with Unassessed, Almost, Met Target, Exceeding Target. This is done on the basis of continuous assessment. Cambridge's UK research indicates that most schools have ended up developing 'home-grown' systems, usually stored on paper, or in Excel documents on school networks or Google Drive.

The tracking of assessment would need to be compatible with the prevailing assessment regime. This may be the Learning Passport's, but, depending on how the Learning Passport is deployed, could well be the national curriculum. Assessments that are not mapped to the curriculum they are actually using are of little interest to teachers. Where schools are monitoring against local curriculum assessment objectives, the Learning Passport digital platform should allow for the recording of assessment data against these objectives.

Of particular importance is the logging of baseline assessments when a child enters a learning centre or school. Standardised assessments such as the Early Grade Reading Assessment (EGRA) and Early Grade Mathematics Assessment (EGMA) may be administered in the field, but equally a teacher may have their own tests to get an idea of what an individual child knows or can do.

Therefore, it might be that we need to allow individual teachers to enter their own assessment criteria into the Learning Passport platform, or at least make it possible for administrators to respond to such requests.

#### **8.5.4.2 Ownership and management of assessment data**

The ownership and management of Learning Passport assessment data needs to be carefully considered. Are stakeholders such as UNICEF comfortable with these responsibilities, and is this even appropriate in many contexts? Many of these issues touch on wider questions of pupil identification and tracking (see earlier discussion regarding the digital identification of children). If the Learning Passport platform is to contain sensitive data of any kind, data security must be a key development criterion.

#### **8.5.4.3 Reporting on assessment**

A digital platform would need to report progress out to different stakeholder groups, which could include:

- ↳ Students themselves
- ↳ Parents (termly or annual reports)
- ↳ Teachers/facilitators
- ↳ NGO management
- ↳ UNICEF Country Office
- ↳ Learning Platform management team

And at different levels of aggregation:

- ↳ Class
- ↳ Learning centre/school
- ↳ Location (e.g. a particular camp)
- ↳ Country
- ↳ All users of the system

#### **8.5.4.4 Learning Passport reporting**

Of particular interest to the Learning Passport project is reporting on students' progress as they move between contexts. The collection of student data as described is of course key to this.

Since teachers or facilitators are more likely to be motivated to track against their local curricula, the Learning Passport must find a way to relate progress against one curriculum (or the Learning Passport framework) to another curriculum.

In sub-section 9.3.3 this report recommends the establishment of an expert Tracking Working Group to separately examine the creation and tracking of learning records that might 'move with' children (portability).

#### **8.5.4.5 Further considerations for digital assessment**

In its guidance to Cambridge, UNICEF proposes that a Learning Passport platform: '...should be able to deliver digital assessments to be used in classrooms by teachers (e.g. tests and other activities)'.

Two aspects of the above statement should be highlighted. First, ‘other activities’ could include digital content which helps a teacher make assessment judgements about a child without actually directly testing the child. An example might be a stimulus for a speaking activity or a story-starter for some written work. Second, assessment need not be defined solely as the use of fully automated quizzes.

The UNICEF ROSA report on Cox’s Bazar states some of the positives with regard to using digital assessment:

‘Educational technology solutions can provide support for rapid assessments by ensuring consistency, the timely delivery of the results, and record keeping capacity. When an oral assessment is administered in-person, such as the EGRA or EGMA, there is scope for human error/bias. When written assessments are given, the tabulation of results can take time and be prone to human error. A digital solution can be used by the teacher or a student to run through exercises which will be presented consistently.’

As another example, the Myanmar field mission highlighted a potential use-case for digital assessment. The placement tests given to children returning from Thailand are difficult to administer (particularly in remote areas), rigidly timed, and require each of the more than 300 townships (centres of education administration) to write their own questions. A centrally run digital test would help enormously. However, there are major questions to consider:

- ↳ Is what is being assessed amenable to digital assessment?
- ↳ Who is going to create the large numbers of quiz questions, mapped to local curriculum standards, required of a plausible assessment platform?
- ↳ How will a teacher assign quiz questions to their students?
- ↳ How will assessments be conducted? What devices will students use, and where will assessments take place?

# 9 Recommendations for the Learning Passport

## 9.1 Overview

This section summarises key findings from the preceding literature reviews, and condenses these findings into recommendations for the Learning Passport. Some of these recommendations are drawn directly from pertinent and robust findings in the literature reviews, but most have emerged from a synthesising of multiple findings of differing relevance.

The recommendations fall into two categories. ‘Guiding Recommendations’ cover the Learning Passport as a whole, and point towards essentials of approach if the Learning Passport is to have any likelihood of succeeding. These recommendations qualify and guide the subsequent more specific recommendations, and indicate the areas where a high degree of consistency and constancy in the evidence has been found. As will be seen, there is some overlapping in these broader recommendations.

‘Specific Recommendations’ cover the specific areas of the Learning Passport – Curriculum, Assessment, Resources, Digital support, and SEL – picking out how these should be taken forward.

## 9.2 Guiding Recommendations

### 9.2.1 Localisation of the Learning Passport

‘Localisation’ here refers to the process of contextualising the Learning Passport so as to be usable in a specific displacement situation. It refers *both* to making the Learning Passport ‘context specific’ (language, culture etc.), *and* the development process of building the components of the Learning Passport to be deployed, using its frameworks and approaches as a basis. As such it is a major task.

Crises of displacement and the educational solutions required are highly diverse, and inflexibility of approach across contexts will fail to deliver quality learning. We therefore recommend the following:

- 1a. We recommend that any implementation of the Learning Passport education model (including piloting) is preceded by a formal, discrete evaluation stage of the planned intervention which identifies the particular contextual parameters of the intervention and plots the local elaboration and contextualisation process for each component and the overall model. We recommend that developing this evaluation is part of the project’s Phase 2, and that it forms part of the Learning Passport’s ‘toolkit’ of resources and associated guidance.

Allied to the above, we recommend that a formal quality review of any existing education provision is undertaken in advance of potential Learning Passport implementation, and that again developing this review tool is part of the Project’s Phase 2, and that it forms part of the Learning Passport’s set of resources and associated guidance. We also recommend that this review tool should identify all reuse and adaptation possibilities with regard to existing education provision, for example TLMs. This review should include all

MHPSS-SEL provisions and involve liaising with Ministries of Health as well as Education.

- 1b. We recommend that input from local stakeholders is mandatory for development of all localised components, and that this too forms part of the education model's formal planning pathway for implementation. For example, research repeatedly identifies that input from students and teachers (or those taking on a teaching role in the context) regarding their situational needs, and their desires and objectives, should be prioritised. For the Learning Passport as a whole, this will take the form of focus groups and interviews with mental health and educational professionals, as well as representatives from all stakeholder groups, using a specially designed CRA model and appropriate versions of the CFI. Not only will this ensure that local stakeholders' views, needs, experiences, and resources are incorporated into the delivery of the Learning Passport, but will also represent a coordinated MHPSS-SEL and local community programme endeavour.
- 1c. We recommend that, as part of the Learning Passport, guidance is provided for localisation/contextualisation of the Learning Passport.

### **9.2.2 Coherence and the Learning Passport**

Delivering quality improvement through 'coherence', in the sense outlined in this Report, is central to the Learning Passport. To this end we propose the following recommendations:

- 2a. Prospective implementation of the Learning Passport, and specifically selection of country/countries, should be examined *first* from the perspective of whether the education model can be implemented with all components (as intended), so that quality improvement through coherence can be evaluated. Further, if implementation of the Learning Passport is not possible in this 'unitary' way (as above), a different implementation model should be developed to, if possible, implement individual components and tools. We recommend that there are no steps towards preparation for implementation until the conceptual work around such alternative implementation models has been fully completed.
- 2b. We recommend that there are concrete and varied example 'deployment approaches' provided with the education model, showing how coherence can be flexibly established in different displacement contexts. We further recommend that the Learning Passport, as a set of resources and associated guidance, explicitly details the process of *maintaining and monitoring* post-deployment coherence across components (curriculum, resources, assessment); simply assuming that this will be the case is not enough.

### **9.2.3 Learner needs**

The Learning Passport aims at an improvement in the way in which the core educational needs of displaced learners are met, when access to a national education system is not possible. But the category of 'learner' in displacement contexts, versus settled contexts, brings with it a host of implications for how the Learning Passport should be developed. In short, the effectiveness of the Learning Passport will be heavily dependent on its

responsiveness to the distinctive challenges learners face in displacement contexts. We therefore recommend the following:

- 3a. That across all dimensions of development of the Learning Passport, *education interruption* is foregrounded both as fact of life for displaced children, and a series of negative educational effects on displaced children. Where, for example, specific curriculum paths, pedagogies, and remedial approaches can help counter these effects, they must be available as an intrinsic aspect of the Learning Passport education model.
- 3b. That across all dimensions of development of the Learning Passport, *accessibility* is prioritised. Areas of focus should be:
  - 3b.1. Gender. Particular attention needs to be paid to gendered dimensions of accessibility, especially given the evidence that girls and young women may be more likely to be absent from learning environments in emergency contexts. Recognition of gender-specific challenges, and approaches to overcome them, must be intrinsic to the Learning Passport education model. An ‘assessing the gender environment’ tool is recommended as part of the developed education model (there may be suitable existing tools).
  - 3b.2. Special educational needs. Displacement can both *create* complex special educational needs scenarios (for example, conflict-related disabilities), and also further *marginalise* those with special educational needs. Recognition of those with special educational needs, and the support of those with special educational needs, must be intrinsic to the Learning Passport education model. An ‘assessing the special educational needs environment’ tool is recommended as part of the developed education model (there may be suitable existing tools).
  - 3b.3. Cultural accessibility. The Learning Passport education model is meant to be a ‘displacement agnostic’ schema for local elaboration and contextualisation. However, the support it provides for localisation must detail the process by which localisation takes proper account of cultural context, beyond the truism of stakeholder involvement. An ‘assessing the cultural environment’ tool is recommended as part of the developed education model (there may be suitable existing tools). Important in this respect is ethnic and religious plurality (as well as differing legal status) amongst learners in the same displacement context, and the social dynamics between ethnic and religious groups. There are frequently marginalised communities *within* displaced populations.

#### **9.2.4 Supporting teachers**

This Report has identified that teachers (or those fulfilling a teaching role, such as facilitators) are essential to the successful delivery of education, EiE, and by extension the Learning Passport. Teachers typically play the central role in communicating and contextualising learning material, and in supporting learners in their academic and social development. As such we recommend the following:

- 4a. We recommend that efforts to train, support, and engage educators to deliver the Learning Passport first identify the strengths of existing potential educators, and use this existent expertise to define and direct the

implementation of the Learning Passport in that particular context. This may cover areas not conventionally identified with teacher expertise, for example expertise in community structures and relations.

4b. Implementation of the Learning Passport should be accompanied by implementation of adequate teacher training and ongoing professional development. Where such adequate training is *not* possible, the implementation of the Learning Passport should be seriously questioned. For Phase 2 piloting purposes, the recommendation is that a (pilot-specific) teacher training programme and CPD programme is created, or adapted from an existing programme. Such a programme must be fully coherent with the other Learning Passport components.

4c. We recommend that where the Learning Passport is digitally supported, any teacher training distinguishes between general training in the Learning Passport (as an education model for improving quality) and training in ‘how to use the technology’ as well as technology maintenance.

## 9.2.5 Language

The central role of language in facilitating (or hindering) learning, and the highly political nature of LOI in displacement contexts, point to a particular set of primary recommendations for the Learning Passport.

5a. We recommend that where possible, and in line with well-established guidelines concerning foundational literacy, students using the Learning Passport are taught in the same language that they use at home (mother tongue), in order to reduce the likelihood of students having to learn, and learn in, another language, and in order to improve the accessibility and comprehensibility of students’ education to non-students in their community (e.g. parents).

5b. We recommend that in multilingual contexts, and in contexts where many displaced learners are multilingual, the primary evaluation phase of any implementation includes an assessment of how different languages are used, in order to identify the most suitable medium of instruction. An ‘assessing the language environment’ tool is recommended as part of the developed education model (there may be suitable existing tools).

## 9.2.6 Engaging with local stakeholders

Engagement with varied local stakeholders in contexts of displacement will be a key activity, and is likely to pose key challenges to the development, effective implementation, and uptake of the Learning Passport – again pointing to the need for substantial context analysis. Our recommendations in this area are as follows:

6a. Ministries and state-affiliated institutions and departments will always be key partners in any Learning Passport implementation. Their ‘buy-in’ is likely to be essential, and more than one nation could be involved in negotiating an implementation. However, in some contexts the involvement of certain states or governments in education may be strongly resisted amongst displaced communities, as they are associated with oppression; and in some contexts, ethnic armed groups and affiliated organisations may prove key educational

actors who will need to be engaged. We therefore recommend than an ‘assessing the stakeholder landscape’ tool is developed as part of the education model (there may be suitable existing tools). We recommend that this assessment is completed before partnerships for implementation are definitively created with any one entity or set of stakeholders.

6b. Community-based, civil society and NGOs are key actors who have expertise in working for the inclusivity of marginalised groups, including women-led and disability-focused civil society organisations. We recommend that they are engaged from the viewpoint of localising the Learning Passport, to ensure the inclusivity, accessibility, and sensitivity of Learning Passport implementations.

6c. There may be assumptions amongst some stakeholders or communities about the affiliations and motivations of NGOs and UN agencies, who may be perceived to be aligned with state interests. However, in some contexts international actors may also be appreciated for their potential neutrality. We recommend that the initial stakeholder assessment (6a.) takes into account these considerations.

## 9.3 Specific Recommendations

### 9.3.1 Curriculum recommendations: Overall

The curriculum framework is the central component of the Learning Passport. Our general recommendations for its development are as follows:

1a. Our key recommendation is that subject curriculum frameworks for the Learning Passport are developed which are context-agnostic, as our research has shown that the profiles of displaced learners, the situations in which they find themselves, and their needs vary greatly. Overall, the curriculum framework needs to be flexible and appropriate for a variety of education systems, schools, teaching approaches, social/cultural settings, student identities, learner approaches to processing knowledge, and student motivation. In addition:

1b. We recommend that these frameworks should adhere closely to principles of good development and design identified in the Research and Recommendations Report, including guidance provided by the INEE.

1c. We recommend that these context-agnostic subject frameworks are used in each implementation of the Learning Passport to provide the structure for a contextualised curriculum and other contextualised components of the implementation.

1d. We recommend that guidance for contextualising the curriculum framework covers a wide range of possible EiE scenarios, both to ensure maximum flexibility and to ensure stakeholders can easily navigate the contextualisation process.

1e. We recommend that ‘curriculum mapping’ is used not only to inform curriculum framework development, but as a method of the Learning Passport to identify touchpoints between curricula; and that in collaboration

with a software partner, a discrete digital curriculum mapping tool is developed for the Learning Passport to facilitate this.

- 1f. We recommend that the linkages and equivalencies identified between curricula by the mapping conducted as part of implementations of the Learning Passport facilitate integration into national education systems, by allowing stakeholders to identify individual pathways for children between curricula.
- 1g. As displaced learners have experienced interruptions in their education trajectories, learning progress is likely to have been non-linear, meaning that students may have strong skills in some areas but gaps in knowledge in others. We recommend that flexibility in sequencing and pacing is therefore included so that students can move more rapidly over material they are familiar with, and focus on areas that are unfamiliar. This should be built into both the structure of the curriculum framework itself, and into the guidance in how to use it to create contextualised solutions.
- 1h. We recommend that the literacy curriculum, and content of the curriculum and resources addressing language proficiency, are recognised as areas that will need greater support relative to other components of the Learning Passport in terms of development.
- 1i. We recommend that, as with the literacy curriculum, the MHPSS-SEL programming design will need greater support relative to the other components of the Learning Passport in terms of development. The MHPSS-SEL programme design includes two parts: a curriculum component alongside the other curricular components, and the incorporation of MHPSS-SEL elements within the other curricular areas to fulfil an integrating function.
  - 1i.1. We recommend the use of a needs based-, adversity-distress-informed approach to promote mental health and wellbeing throughout the Learning Passport, with mental health (two-domain model), psychosocial and SEL programming and considerations, initially mapping and following changes in and intersections between wellbeing and mental ill-health patterns.
  - 1i.2. We recommend the execution of a specially designed CRA model investigation for EiE contexts to identify strong and weak areas of both resources and competencies in preparation for and contextualisation of the Learning Passport programme as a whole (including all stakeholder groups, local, regional, national, and international).
  - 1i.3. We recommend the use of appropriate versions of the CFI to facilitate cultural adaptations and for continued incorporation of the views, struggles, hopes, and other experiences of learners, families, teachers, and communities in each EiE context.
  - 1i.4. We recommend the use of an IC-ADAPT SEL framework on which to build a high-level programme design to promote self-regulation skills for wellbeing, resilience, and recovery for all layers of the MHPSS-SEL triangle.

1i.5. We recommend that the mental health and psychosocial wellbeing of EiE teachers, families, and wider communities is supported in order to support the mental health and psychosocial wellbeing of EiE learners.

1j. As for Specific Recommendations for the development of curriculum frameworks, it is recommended that curriculum framework developers consider:

1j.1. Including overall curriculum aims.

1j.2. Organising the framework in terms of subjects.

1j.3. Including an indication of progression within a subject as well as the key building blocks within a subject which are necessary to make the progression.

1j.4. Presenting the framework in a way which indicates the order in which concepts and so on need to be learned, and the basis for the sequencing is prior research and input from subject experts.

1j.5. Avoiding overcrowding the framework so that concepts can be understood in depth.

1j.6. Including MHPSS-SEL content, process, and presentation throughout the Learning Passport to fulfil an integrating function.

### **9.3.2 Curriculum recommendations: Subject-specific**

In this set of recommendations we lay out more specific subject-related development objectives for the Learning Passport, within the framework of the general recommendations already proposed.

2a. Literacy. It is recommended that the difficulties of developing a literacy curriculum framework are further explored. Not only is literacy a contested concept with multiple definitions, but the language contexts of EiE can be very complex. All this raises the question of whether a literacy curriculum is feasible.

2b. Literacy. Subject to feasibility, we recommend developing a context-agnostic, language-agnostic literacy curriculum framework, so that it may be applicable to multiple languages.

2c. Literacy. That, if a literacy curriculum framework is developed, it supports learning in mathematics and science, and supports the SEL programme design, and that additionally developers consider:

2c.1. Organising the structure in terms of skills (e.g. speaking, listening, reading, and writing).

2c.2. Allowing for encounters with a wide variety of texts, and talking and listening experiences which support the acquisition of language use.

2c.3. Allowing for the potentially varied and/or ‘non-linear’ nature of literacy development in descriptions of progression.

2c.4. Outlining the purpose of our literacy framework and providing a rationale for this choice.

2c.5. Including oral aspects of literacy as many languages have no written script.

2c.6. Indicating the sequence of learning.

2d. Mathematics and science. It is recommended that for the mathematics and science curriculum frameworks, as distinct from literacy, developers consider:

2d.1. Organising the framework in terms of content, concepts, principles, fundamental operations, core knowledge, and associated progressions.

2d.2. Including threshold concepts.

2d.3. De-contextualising content, concepts, principles, fundamental operations, core knowledge, and associated progressions from the beliefs of any particular society to avoid limiting accessibility.

2d.4. Focusing on concepts, principles, fundamental operations, core knowledge, and associated progressions rather than context and differentiation. Then teachers and relevant stakeholders *in situ* determine the contexts and activation of the curriculum framework.

2d.5. Including core knowledge for each subject.

2d.6. Providing guidance on integrating and respecting indigenous knowledge to support student learning. Indigenous knowledge should not be disregarded, but should be considered and, if appropriate, acknowledged. However, the integration of indigenous knowledge should be done at the local level and not be incorporated at the level of the overarching curriculum framework.

2e. Additionally, concerning a mathematics curriculum framework it is recommended that developers consider:

2e.1. Including so-called ‘big ideas’.

2e.2. Including the majority of fractions and decimals near the end of the primary phase (or equivalent).

2e.3. Including number and geometry/shape and space.

2e.4. Focusing on count, place values, multiplicative thinking, partitioning, and proportional reasoning.

2e.5. Developing a framework which allows for problem-solving to be included in many areas of teaching and learning.

2f. Additionally, and concerning a science curriculum framework, it is recommended that developers consider:

2f.1. Including principles and so-called ‘big ideas’ of science to help learners understand the scientific aspects of the world and make informed decisions about science.

2f.2. Ensuring literacy and language learning supports science learning.

2f.3. The issue of scientific terminology. Terminology should be carefully chosen and key definitions should be provided. The importance of ensuring a common understanding and the related risk of promoting misconceptions

should be recognised. Key definitions should be provided within the framework in order to ensure any translations are accurate.

2f.4. Issues of space and equipment availability. Although the value of practical demonstration and experimentation is clear, their availability cannot be assumed given displacement contexts. Therefore, although the framework should emphasise their importance, decisions regarding what is possible should be made at the contextualisation stage, and in collaboration with local educators. Practical activities should be relevant and link to the learner's world around them, and should be appropriate for the resources available.

2g. SEL. It is recommended that for the SEL programme developers consider:

2g.1. That within a MHPSS overarching framework, an integrated IC-ADAPT framework for EiE contexts is used to establish criteria for identifying priority SEL programme areas and outcomes in educational contexts, covering:

- SEL programme design that includes an integrating function for and with the other Learning Passport curricular areas as well as an SEL curricular component, all within the MHPSS overarching framework.
- Guidance for cultural and contextual adaptation of the context-neutral programme areas across the Learning Passport.

2g.2. That education-based MHPSS services to improve mental health and wellbeing of learners (using adapted CWB domains) to support and enhance education outcomes should consider enabling provision across all four levels of the MHPSS triangle, including Layers 1 and 4, as well as 2 and 3.

2g.3. That all implementations of the Learning Passport should consider beginning with the internationally tested CRA model, to engage all stakeholders (local, regional, national, international) as the first step in adapting the full Learning Passport to each context.

2g.4. That a special version of the internationally tested assessment instrument, CFI – with supplementary modules for school-age children and adolescents as well as an informant version that allows parents, caregivers and significant others to provide information on the learner's situation – should be considered for inclusion during initial assessments, as part of the CRA process for the whole Learning Passport.

2g.5. That the initial assessment process for the Learning Passport as a whole (e.g. using the CRA that includes the CFI) is itself recognised as an intervention for promoting mental health and psychosocial wellbeing that can jumpstart the development of social and emotional skills to support academic engagement.

2g.6. That not only adverse event, trauma, and depression-reduction techniques, but also lower functioning and attachment rebuilding and restoration strategies, with focus on wellbeing and resilience promotion, are incorporated into the SEL programming.

- 2g.7. That an IC-ADAPT framework should be considered as a fundamental organising base for SEL programming and delivery.
- 2g.8. That incorporating play, play-based pedagogies, and other evidence-based learner-centred pedagogies in multiple modalities will increase programme effectiveness and benefits for learners and youth.

### **9.3.3 Assessment and accreditation recommendations**

Effective and recognised assessment is a cornerstone of the Learning Passport. Distinctions must be made, however, between assessment as a practice within an education setting (whether formative or summative), accreditation, and the separate but related question of pupils' assessment records and their 'portability'. Separate again is the relationship between teaching and assessing. Our recommendations are as follows.

3a. Pertaining to formative and summative assessment. We recommend that implementations of the Learning Passport evaluate what summative or formative forms of assessment (including what combinations of forms) are suitable in any given context, and that implementing entities and practitioners understand sufficiently the differences in their purpose, application, and outcomes. We recommend that the protocols for this are developed in Phase 2.

3b. Pertaining to the transparency of assessment. We recommend that the Learning Passport contains protocols by which the purpose and value of any assessment is explained to test takers, those who administer tests, and those who use the test results. Rote testing, like rote learning, is not a path to quality. We recommend that these protocols are developed in Phase 2.

3c. Pertaining to accreditation. Accreditation, typically of a high-stakes examination, is one of the most vexed issues in EiE. Certain forms of accreditation (for example, a certificate) may be recognised in one territory, but not another; or there may be a lack of clarity about equivalency. Furthermore, accreditation always has a political dimension. The Cambridge team has therefore approached the question of accreditation with caution. Recommendations are as follows:

3c.1. Learning Passport stakeholders, and UNICEF in particular, should work with existing politically non-divisive regional and supranational accreditation bodies to establish recognition of the Learning Passport, rather than attempt to establish its legitimacy themselves. We recommend this engagement begins early in Phase 2, led by UNICEF.

3c.2. A high-stakes 'Learning Passport' certification, while appealing on the face of it, is not a promising route for EiE contexts when closely examined. Working *with* existing accreditation bodies, we recommend investigating more flexible accreditation alternatives to formal examinations in Phase 2.

3c.3. Certifications and accreditations arrived at through these processes should prioritise alignment and equivalency with qualifications (or other forms of recognition) that will allow displaced students to continue their education within national education systems, or to enter employment/civil society.

3d. Pertaining to tracking (portability of learning records). We recommend, as part of Phase 2, the establishment of an expert Tracking Working Group to separately examine the creation and tracking of learning records that might ‘move with’ children (portability), with the work of this group to align with the digital support effort for the Learning Passport (see further recommendations below). Based on our research we note the following:

- There is no precedent in EiE for such permanent cross-border and cross-system tracking, and the policy, privacy, and technical issues pertaining to identity and data collection, data ownership, and data security are vast, and moreover will vary from context to context.
- Issues of tracking involve a different set of national and international stakeholders from those described for the Learning Passport per se, as the issues touched on stretch well beyond education and into areas of national security, UN refugee management, etc. In our opinion it is not for any one education stakeholder to develop a tracking solution.

Regarding the Working Group, then, we firstly recommend that it is comprised of refugee policy experts from across the UN system; technical experts from across the UN system, and NGOs/INGOs with relevant experience; and assessment experts. Secondly, that the Working Group’s terms of reference are agreed between all relevant arms of the UN system.

3e. Assessment and the teacher. As with many other components of the Learning Passport, teacher or educator involvement and capacity are essential for assessment, whether formative or summative, to take place. We have a number of Specific Recommendations regarding their involvement in assessment. We recommend that:

- 3e.1. Teachers (or equivalent) use assessment to convey learning progress to learners.
- 3e.2. Teachers develop students’ understanding of learning goals, assessment criteria, and self-assessment and make learning goals explicit for low achievers and support effective ways of learning.
- 3e.3. Teachers promote students’ self-assessment skills.
- 3e.4. Teachers participate in CPD, provided through the Learning Passport (see earlier recommendations), about formative assessment to improve practice.
- 3e.5. Teachers are trained for SEL delivery and self-regulation within the MHPSS framework.

#### **9.3.4 Resources (TLMs) recommendations**

For the development of TLMs as part of the Learning Passport, our recommendations are as follows:

- 4a. All TLMs must fully reflect the localised Learning Passport curriculum, and the assessment approach of the Learning Passport, and include sufficient guidance for their use in displacement scenarios.
- 4b. In line with our primary recommendations, we recommend that any *existing* TLMs are first evaluated for their appropriateness, and

reused/adapted if possible. These may be locally published materials, NGO-originated, digital OERs, etc. We further recommend that this process of evaluation is formalised through the development of a TLM quality assurance ‘scorecard’ in Phase 2. In general, close liaison with government and education partners is essential before decisions are made, as is consideration of the links in the textbook chain.

- 4c. In line with our primary recommendations, stakeholder involvement in the development of TLMs is key.
- 4d. Again in line with our primary recommendations, any Learning Passport TLMs need to be culturally *and* displacement sensitive, while also paying attention to the need for inclusive representation.
- 4e. Given the lack of educator support in many displacement contexts, TLMs used by the Learning Passport should promote self-learning (including through the studied use of design elements).
- 4f. Learning Passport TLMs need to accommodate the wide range of ages they may have to be used for – for example by being as age-neutral as possible, so that older learners are not presented with content which assumes a younger child as the student (please also see earlier recommendations regarding gender- and disability-sensitive learning materials).
- 4g. Choice of media and materials should reflect durability, usage, storage, and dissemination needs regarding the specific context. In general, specialist advice should be taken on all aspects of printing, publishing, and distribution, as expensive mistakes can be made.
- 4h. Regarding the development of digital TLMs, we recommend the following specific principles, touching primarily on design:
  - 4h.1. All digital TLMs should be designed to complement facilitators rather than replace them, and all facilitators need to be trained in the use of digital TLMs.
  - 4h.2. It is vital that all digital learning materials contain appropriate scaffolding.
  - 4h.3. As with well-developed print TLMs, all digital learning materials need to be designed according to specific pedagogic principles.
  - 4h.4. The smart-mobile telephone is the most commonly available digital device in displacement contexts; however, attempts to utilise them for education should be aware of their limitations.

### 9.3.5 Digital support recommendations

UNICEF asked Cambridge to investigate three potential areas of digital platform functionality. Our recommendations for how this should be taken forward are grouped under each of these areas.

Area 1: To investigate how a platform could act as a global searchable repository for validated EiE curriculum and instructional materials, including the project’s own.

5a. OERs are freely accessible, openly licensed digital assets that are useful for teaching, learning, and assessing as well as for research purposes. Much work in different contexts appears to be being done to create and curate collections of OERs. We recommend that the Learning Passport project focuses on developing a central bank of OERs, mapped against the Learning Passport curriculum framework so that they can be easily related to national curricula if necessary.

5b. These OERs should be cleared for reuse in platforms as a global public good. UNICEF could then rapidly respond to new contexts by deploying the bank of OERs through its own platform or whatever platforms are available already in countries (again, there is no shortage of models for the delivery of digital content, and it would be counter-productive to compete with nationally used platforms such as the Kenya Education Cloud or Bangladesh's a2i Teacher's Portal).

5c. We recommend that as a next step this is the subject of a feasibility study, with a view to collecting together current OER initiatives and evaluating the processes of collection, curation, and storage. We believe that this would avoid duplication of effort and increase speed of deployment.

5d. Curation and adaptation for any context should be done hand in hand with local expertise, rather than centrally.

5e. One area not anticipated by the initial brief, but which has come through very strongly in field missions, is the potential for centralised digital support for capacity building amongst teachers and facilitators. In fact, this may be an ideal way to establish a first iteration of a digital platform as it is fairly self-contained, a good way to work with partners on the ground, can be rapidly deployed, and has the advantages of meeting an expressed need and being able to piggy-back on existing training efforts. We recommend that this is pursued.

5f. We recommend that any solution includes monitoring functions to prevent and stop harm (bullying, grooming, recruitment, incitement).

Area 2: To investigate how a platform could act as a repository for children's assessment data, and a means for updating and tracking it in the field.

5g. We recommend that a digital platform will be best suited as a secondary repository for data derived from written or paper-based assessment material, rather than used to collect data directly.

5h. Here we are considering ways in which schools and other stakeholders will already be recording progression data, and how a platform can assist with this; also, for tracking purposes, the link between assessment data and identity data. We recommend that the Learning Passport digital platform should allow for the recording of assessment data against both local curriculum and Learning Passport curriculum assessment objectives. Data for the platform could come from, for example, termly written (paper-based) tests tailored to the local curriculum, high-stakes government examinations, or teacher observations in the classroom.

5i. We recommend that UNICEF and project partners carefully consider the question of identity management and data ownership. Who will own

inputted data, and who will be able to see it? We recommend that the functionality of storing assessment data and other identity data is adaptable within the Learning Passport, so that contextual factors that may complicate security and ownership issues can be negotiated.

5j. Design-wise, we recommend that UNICEF uses an HCD process, beginning by testing prototype solutions with end users. This would require teams in-country to organise focus groups and user testing. A Minimum Viable Product approach could also be taken during piloting.

Area 3: Potentially deliver assessments/accreditation as part of an online and offline digitally based assessment/accreditation option (while recognising that there will be instances where the digital option will not be viable).

5k. While feasible, UNICEF will need to consider questions around the desirability of implementing digital assessments. There are questions around the difficulty of digitally assessing in displacement contexts, the value of digital testing, and the cost of building digital assessments which will all need careful consideration – and most of all, the question of whether the type of assessment required is actually suitable for digital delivery.

5l. Finally, it should be noted that we are not necessarily recommending a single platform, but a mix of approaches. A single platform *could* act as a content repository, progress tracker, and assessment engine but it is unlikely to do all three of them well enough. We recommend retaining flexibility regarding the number and function of platforms to be used in the stages of contextualised development for particular contexts, and in the ongoing development of digital support for the Learning Passport.

5m. Additionally, many contexts may have embedded solutions which already cover one or more of these areas – and it would be counter to UNICEF T4D's Design Criterion of 'Reuse and Improve' to try to replace these. We recommend that combinations of digital approaches in different contexts are developed to accommodate, complement, and enhance embedded solutions.

### 9.3.6 Summary of Specific Recommendations for digital by area

Content	Progress tracking	Digital assessment
<p>1. Starting with a feasibility study, build on existing collections of OERs to create a centralised bank mapped to the Learning Passport curriculum framework.</p> <p>2. A Learning Passport digital platform could host and deliver this content, but equally UNICEF could work with existing projects in order to avoid duplication.</p> <p>3. Co-creation is key. Curation and adaptation for any context should be done hand in hand with local expertise, rather than centrally.</p> <p>4. Digital support for teacher capacity building is an emerging but clearly expressed need that could be addressed fairly quickly and could build on existing face-to-face/printed training work.</p>	<p>1. Progress data are often (but not always) being captured in the field, but not necessarily reported and certainly not effectively transferred. This appears to be a gap in the landscape, and is a recommended area for platform development.</p> <p>2. UNICEF should explore this further with UNICEF Country Offices, using an HCD approach, prior to the next phase of the Learning Passport.</p> <p>3. The question of identity management and data ownership needs to be formally reviewed, as this is potentially a limiting factor to platform development.</p>	<p>1. A focus on digital assessment, rather than digital accreditation, is more realistic. However, to assess progress against the Learning Passport curriculum framework would still require extensive content creation (banks of assessment questions) – with considerable cost and schedule implications.</p>

# Appendix 1

## Methodology

### Overview of sources cited

A wide variety of different sources are examined in the review, reflecting the range of stakeholders involved in EiE, the relative youth and interdisciplinarity of the academic field of EiE, and the paucity of in-depth reporting on the practice, methodology, and efficacy of specific EiE interventions. The sources broadly fall into the following categories:

- ↳ Reports by international and local organisations conducting EiE: A number of international organisations (typically the UN and INGOs) have conducted interventions and run projects providing EiE. Project outputs include reports and self-evaluations, and in some cases toolkits, guidance, and curricular standards. Smaller organisations, often operating in-country or regionally where displacement and refugee crises are occurring, have also produced reports of their interventions in the field of EiE curricula. Often, these reports are more specific and cover activities that are smaller in scale, but have deployed a wider range of strategies and frameworks.
- ↳ Academic research on EiE: This category includes EiE research of two kinds. As the distinct field of EiE has only garnered significant academic attention since the 1990s, much of the research done into EiE is at a critical or theoretical level, or produces outlines for future practice or policy guidance. However, there are also a small number of studies which have examined practice and delivery, and so constitute a body of evidence on efficacy and implementation. As described elsewhere, the Report aims to offer a synthesis of the existing findings in this body of research.
- ↳ Academic research from related fields: This category includes areas of research which are not EiE-specific, but offer insights into both general and specific concerns of the Learning Passport; for example studies of alternative education, education delivered to populations which share struggles for education with the displaced, and conflict and peacebuilding studies.

Supplementing these sources were interviews and personal communication with practitioners and experts in the relevant fields, though these were used to guide subsequent engagement with the literature rather than to directly inform the Report's findings and its recommendations. The limited use of interviews with practitioners as a source material for the Report reflected the emphasis in the project's remit on establishing broader principles for implementation through evidence, and for ensuring as rigorous an approach as possible in a short timeframe. However, it represents a limitation in the material that should be noted.

It is essential to recognise that although great care has been taken to ensure that the sources used are able to support the conclusions reached in the Report and the recommendation offered, establishing exact thresholds of rigour for inclusion has not been possible. This is largely due to the nature of the field of study being investigated: the limitations of research into, and data on, EiE have been noted. However, this is also due to the reliance in the Report on qualitative research, for which the establishment of broadly applicable standards or a threshold for inclusion, as would be found in a quantitative meta-analysis or systematic review, is not possible.

To mediate this problem and ensure that high-quality research was included in the literature reviews, the principles of rigour used by the Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre) ‘Methods for conducting systematic reviews’<sup>16</sup> were used to develop our own process, detailed here.

## Researcher processes

In order to ensure consistency of approach across the research contributions, a process for literature review was developed, and researchers were required to conduct their research and create submissions according to it.

From an initial comprehensive search of the relevant identified databases, researchers completed a grid identifying the material in the field necessary for review. Specific resources were selected and evaluated according the following guidelines drawn from the EPPI-Centre methodologies:

- ✉ The trustworthiness of the results judged by the quality of the study within the accepted norms for undertaking the particular type of research design used in the study (methodological quality).
- ✉ The appropriateness of the use of that study design for addressing the review’s research question (methodological relevance).
- ✉ The appropriateness of focus of the research for answering the review question (topic relevance).
- ✉ Judgement of overall weight of evidence based on the assessments made for each of the criteria.

In addition to preparing the literature review components for the Report, contributors also prepared a grid providing an overview of the individual sources reviewed, which organised the sources according to the following information:

- ✉ Country and site type, in which ‘type’ refers to the kind of environment in which the research was conducted or concerns itself with (e.g. refugee camp).
- ✉ Research methods and quantitative data (e.g. sample size), including demographics of those studied, hypotheses, analytical framework, research instruments used, how they were administered, statistical analyses (descriptive, ad hoc, etc.).
- ✉ Main focus/research question; Main findings; Recommendations, including identification of themes that will intersect across different areas of the research, including:
  - Culture: findings, implications.
  - Gender responsiveness: findings, implications that are gender specific.
  - Disability/ies (across a wide health spectrum): findings, implications.
  - Age-related/specific findings, implications: age/developmental guidance that reflects the cumulative and lifelong cycle nature of all learning, especially SEL.
  - Relevance for teaching/teachers.
  - Relevance for learners.
  - Relevance for families/communities.
  - Eco-system (i.e. social/material environment).

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<sup>16</sup> <https://eppi.ioe.ac.uk/cms/>

## **Appendix 2**

### **UNICEF's Technology for Development (T4D) Design Criteria**

1. Design with the User
2. Understand the Existing Ecosystem
3. Design for Scale
4. Build for Sustainability
5. Be Data Driven
6. Use Open Standards, Open Data, Open Source, and Open Innovation
7. Reuse and Improve
8. Do No harm
9. Be Collaborative

### **UNICEF's 5 key programme recommendations on ICT for education**

1. UNICEF programmes should focus primarily on the support and implementation of systemic ICT for education initiatives that address ways of enhancing the learning outcomes of the most deprived and marginalised children;
2. Teachers/facilitators should be at the heart of most ICT for education programmes;
3. All UNICEF ICT for education programmes should ensure that appropriate total-cost-of-ownership financing and budgets are in place and guaranteed over the intended duration of an initiative;
4. All UNICEF ICT for education programmes should build mitigating actions for cybersecurity breaches centrally into their planning and practice; and
5. All UNICEF ICT for education programmes should include appropriate monitoring and evaluation policies and practices.

## **Appendix 3**

### **Glossary of acronyms and terms used in Section 4**

<b>Acronyms used in Section 4</b>	
<b>ADAPT (model)</b>	Adaptation and Development After Persecution and Trauma (model)
<b>CASEL</b>	Collaborative for Academic, Social, and Emotional Learning (Chicago)
<b>CBT</b>	Cognitive Behavioural Therapy
<b>CFI</b>	Cultural Formulation Interview
<b>CRA</b>	Community Readiness Assessment
<b>CWB</b>	Child Wellbeing
<b>ELTP</b>	EASEL Lab Taxonomy Project (Harvard)
<b>IAT</b>	Integrated ADAPT Therapy
<b>IC</b>	Integrative Complexity
<b>ICT</b>	IC Thinking
<b>MAW</b>	Multi-Agency Work
<b>MH</b>	Mental Health
<b>PSS</b>	Psychosocial Support
<b>PTG</b>	Post-Traumatic Growth
<b>PTS</b>	Post-Traumatic Stress
<b>SEC</b>	Social and Emotional Competencies
<b>SEL</b>	Social and Emotional Learning

<b>SPICE</b>	Social, Physical, Intellectual, Creative/Cultural, and Emotional
<b>STEM</b>	Science, Technology, Engineering, and Maths
<b>WHO</b>	World Health Organisation
<b>YRI</b>	Youth Readiness Intervention

#### Terms used in Section 4

<b>cultural broker</b>	A trusted representative of one culture who can negotiate on behalf of another party or culture with members of their own culture; a ‘go-between’.
<b>developmental progression</b>	A recognised pattern of human development.
<b>dimension</b>	A continuum on which an individual can have varying levels of a characteristic, e.g. a child is somewhere on the relational wellbeing dimension between high and low.
<b>domain(s)</b>	A high level of classification in a particular field, e.g. the domain of mental health and wellbeing, or the domain of mental ill-health.
<b>ecosocial</b>	A multilevel systems theory of disease distribution that seeks to integrate social and biologic reasoning, along with a dynamic, historical, and ecological perspective, to address population distributions of disease and social inequalities in health. Guided by the question: Who and what drives current and changing patterns of social inequalities in health? Its central focus is on how people literally embody (biologically) their social conditions, thereby generating inequitable population distributions of health.
<b>level of function</b>	The combined influence that psychological factors and the surrounding social environment have on a person’s physical and mental wellness resulting in their ability to function to a higher or lower degree.
<b>psychopathology</b>	The scientific study of mental disorders.

**public mental health**

Public mental health is the art and science of improving mental health and wellbeing, and preventing mental illness through the coordinated efforts and informed choices of society, organisations both public and private, communities, and individuals.

**regulatory gestalt  
regulatory gestalt  
mechanism**

An integrated model of regulation that can serve as an organising framework from which to think about a comprehensive set of knowledge and skills across the cognitive, social, and emotional domains and together can support complex behaviour across time and contexts.

A regulatory gestalt mechanism functions as a central mechanism for managing and modulating attention, thoughts, feelings, behaviour, and social interaction, and thereby influences a broad range of outcomes (Bailey & Jones, 2019).

**sequelae**

Any abnormality resulting from a disease, injury, other adverse event, or treatment.

## Appendix 4

### Contributor biographies

#### Lead Editorial Team

##### **Dr Christopher Martin**

*Cambridge University Press*

Dr Martin is the Education Advisor for the Education Reform group at Cambridge University Press. He is trained as a social anthropologist, receiving his PhD from the London School of Economics in 2016. Chris's research combines the study of schooling and migration: his thesis investigated the links between the educational practices and mobility (geographic and social) of young people in the Philippines. His wider research interests extend to the use of ethnographic research methods, learning and education as cultural practice, publishing practices, and the anthropological study of childhood and youth, kinship, gender, movement, and temporality. He is a participant in the Learning Passport project's Academic Advisory Board and currently leads the Cambridge Research and Recommendations Working Group for the project.

##### **Alex Moore**

*Independent Consultant*

Alex is an education and publishing consultant based in Cambridge. He has spent much of his professional career in publishing, working with Ministries of Education and education systems from Liberia to Lebanon. He is the project lead on behalf of Cambridge for the Learning Passport partnership with UNICEF.

#### Academic Advisory Board

##### **Professor Madeleine Arnot**

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Professor Arnot is Emeritus Professor of Sociology of Education, Founder of the Centre for the Study of Global Human Movement, the Cambridge Emergency and Displacement Group and chairs the Academic Advisory Group for the UNICEF–Cambridge Learning Passport project. Her research has focused on gender, poverty, and social justice issues in education in the UK, Europe, Africa, and South Asia. She co-authored 'Education, Asylum and the "Non-Citizen" Child: the politics of compassion and belonging', and a major study on the teaching of English as an Additional Language to migrant children in the UK. She has advised on the integration of displaced children in Sweden, Germany, Norway, and Ireland.

##### **Dr Yongcan Liu**

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Yongcan Liu is Reader in Applied Linguistics and Languages Education at the Faculty of Education and Bye-Fellow and Director of Studies at Downing College, University of Cambridge. His research interests lie in multilingualism in education, community/heritage language education, and Vygotsky's socio-cultural theory of mind. He has completed a series of linked projects on the schooling experience of English as an Additional Language (EAL) children funded by the Bell Foundation and is co-investigator of an interdisciplinary policy project on multilingualism funded by AHRC under the Open World Research Initiative. He is co-author of the 'EAL Assessment Framework for Schools', which won the British Council ELTons Award for Local Innovation in 2018. He founded Cambridge Research in Community Language Education Network, a university–school–community partnership specialising in community language education.

### **Professor Nidhi Singal**

*Faculty of Education, University of Cambridge*

Nidhi Singal is Professor of Disability and Inclusive Education at the University of Cambridge. She has worked extensively with persons with disabilities in South Asia and Sub-Saharan Africa. Her research has examined the educational experiences of children with disabilities, the quality of teaching and learning in mainstream classrooms, and the impact of schooling. She has worked closely with international donor and bilateral agencies and international non-governmental organisations assisting them in developing research projects, and providing evidence-based policy advice on a wide range of issues aimed at fulfilling commitments towards inclusive education. She has numerous publications, aimed at academic and policy audiences, focusing on educational inequalities and methodological issues in undertaking educational research with marginalised groups in the Global South. Nidhi also chairs the British Association for International and Comparative Education (BAICE) and is Trustee of the Cambridge Trusts.

## **SEL-MHPSS authors and Editorial Team**

### **Dr Eolene Boyd-MacMillan**

*Department of Psychology, University of Cambridge*

Dr Boyd-MacMillan works in the intersection of theory, research, practice, and policy in applied settings to promote public mental health. As co-director of the IC Thinking Research Lab, she develops interoceptive programmes to increase self-regulation and resilience in applied settings by operationalising Suedfeld's general cognitive processing model, integrative complexity (IC; Suedfeld, 2010). Current roles include directing a new programme in Sweden, in the area of public mental health promotion, in partnership with Fryshuset (youth NGO) and Umeå University (medical school); expert, EU-RAN Centre for Excellence; expert, EU-Efus project BRIDGE (Building resilience to reduce polarization and growing extremism) with 13 municipalities in seven countries; expert, EU peacebuilding project in Northern Ireland to promote public mental health in partnership with Ulster University. Her background includes supervising research while running a counselling service for children aged two and up using creative play methods in community and educational settings; generic adult counselling; counselling supervision; and government at national and international levels.

### **Professor Valerie DeMarinis**

*Public Mental Health, Public Health and Clinical Medicine Institution, Umeå University; Innlandet Hospital Trust; Uppsala University*

Professor DeMarinis conducts research in the following areas: refugee mental health; cultural information in treatment; public mental health and violent extremism. She is Director of the Wellbeing and Health section of the nationally funded IMPACT research programme/Centre of Excellence at Uppsala University; Primary Mental Health Analyst for the EU-Horizon 2020 project RESPOND: Governance of Migration; and, PI for Scandinavia projects on medical communication efficacy of the Cultural Formulation Interview (DSM-5). She has authored over 120 peer-reviewed scientific articles, as well as chapters and books. She is an elected board member of the World Psychiatry Section on Religion and Spirituality in Psychiatry. She is Guest Professor in the Public Mental Health, Public Health and Clinical Medicine Institution at Umeå University, Sweden; Professor of Public Mental Health Promotion at Innlandet Hospital Trust, Norway; and Professor in Psychology of Religion and Cultural Psychology at Uppsala University, Sweden.

### **Dr Claire Campbell**

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Dr Claire Campbell is an experimental social psychologist. Her research focuses on intergroup relations. She is currently working on two projects, the first aims to support peacebuilding in Northern Ireland by supporting the emotional resilience of children and young people. The second is a project exploring the psychological processes that underpin radicalisation. Her previous research has employed virtual reality to investigate the impact of social group memberships on helping in violent emergencies and employed implicit cognition to test interventions designed to reduce stigma. Dr Campbell has also been active in community outreach and has run peace-building days in Derry-Londonderry in conjunction with the Irish Churches Peace Project.

**Professor Siobhan O'Neill***School of Psychology, Ulster University*

Siobhan is a Professor of Mental Health Sciences at Ulster University. In 2008 she coordinated the largest ever study of mental health in Northern Ireland (NI), the World Mental Health Survey's NI study of Health and Stress. This study was one of the first to highlight the high proportions of people in the NI population who suffer from mental illness. It also identified the rates of illness associated with the Troubles. Siobhan also coordinated the largest detailed study of suicides and undetermined deaths in NI, at a time when the suicide rates were rising rapidly. Professor O'Neill has an international reputation as an expert on conflict, trauma, and suicide prevention. Her current research programmes focus on Zero Suicide in health services, mental health, and suicide prevention in schools and colleges, childhood adversities and trauma-informed practice, and the transgenerational transmission of trauma.

**Prof Roberto Lewis-Fernández, MD***College of Physicians and Surgeons, Columbia University*

Roberto Lewis-Fernández MD is Professor of Clinical Psychiatry at Columbia University, Director of the New York State Center of Excellence for Cultural Competence and the Hispanic Treatment Program, and Co-Director of the Anxiety Disorder Clinic, at NYS Psychiatric Institute. His research develops culturally valid interventions and instruments to enhance patient engagement, reduce misdiagnosis, and help overcome disparities in the care of underserved cultural groups. He led the development of the DSM-5 Cultural Formulation Interview, a standardised cultural assessment protocol. He has been Principal Investigator or co-Investigator of 24 National Institutes of Health-funded studies and other research, and published over 200 articles, chapters, and books. He is President of the World Association of Cultural Psychiatry, chair of the DSM Review Committee for Internalising Disorders and the DSM-5-TR Culture-Related Issues Review Committee, and co-chair of the ICD-11 Working Group on Culture-Related Issues.

**Professor Derrick Silove, MD***School of Psychiatry, University of New South Wales*

Professor Derrick Silove AM (Member of Order of Australia), MB ChB (Hons I), MD, FASSA is a University of New South Wales Scientia Professor of Psychiatry. He played a central role in the early development of the Service for the Treatment and Rehabilitation of Torture and Trauma Survivors (STARTTS) and remains a member of the STARTTS Board. He has worked for over 30 years with survivors of trauma and persecution. His roles have extended to service development, clinical work, supervision and training, involvement in policy formulation, and research. He and his team have produced over 450 publications including in leading world journals, for example, *Lancet*, *BMJ*, *JAMA* and *Nature* journals, and he is a co-editor on the leading text on 'Mental Health and Human Rights' (Oxford University Press). He has a special interest in family and developmental issues related to early childhood experience, trauma, stress and socio-economic deprivation. He and his team have conducted research into the epidemiology, risk factors and outcomes of mass trauma and persecution, with a particular focus on human rights issues. Research projects have included amongst refugee and asylum seeker populations in Australia and internationally, and with conflict-affected populations in countries such as Timor, Vietnam, Cambodia, the Solomon Islands, and Indonesia (Aceh).

**Professor Peter Suedfeld, OC, PhD, FRSC***Professor Emeritus, Department of Psychology, University of British Columbia*

After being on the faculties of the University of Illinois and Rutgers University, Peter served as Professor, Department Head, and Dean at the University of British Columbia, where he now holds Emeritus status. His research, described in over 300 publications, deals primarily with human strengths, adaptation, and resilience during and after challenging, dangerous, and extreme environments and experiences; he is one of the originating authors of the general cognitive processing model, integrative complexity (IC). He is an Officer of the Order of Canada and a Fellow of the Royal Society of Canada, the Royal Canadian Geographical Society, and many other scientific societies. Among his awards are the Canadian Polar Medal, the Antarctica Service Medal of the US National Science Foundation, the Canadian Psychological Association Gold Medal for lifetime achievement, and Queen Elizabeth II's Diamond Jubilee Medal.

### **Dr Alvin Kuowei Tay**

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Dr Tay PhD (Med), MPsyCh is NHMRC Research Fellow in the School of Psychiatry, University of New South Wales. Over the last decade, Dr Tay has been working with refugee and displaced communities across many countries. He led several large epidemiological (and intervention) studies with refugees and displaced persons across Papua New Guinea, Timor-Leste, Malaysia, Myanmar, and Bangladesh. He is the originator of Integrative Adapt Therapy (IAT), a psychosocial intervention based on the ADAPT model. IAT has been trialled with Myanmar refugees in Malaysia and Bangladesh, with plans to scale up across primary care and community services for refugees in Malaysia and Myanmar. Trained as a clinical psychologist, Dr Tay has been an active member/fellow with the Australia, Singapore, and Hong Kong Psychological Societies.

### **Tim Watson**

*Independent Consultant*

Tim's childhood was spent between Scotland, India, and Bangladesh, which provided him with a wealth of different cultural, educational, and family experiences, and he currently lives in the North West of England. As an educational psychologist he has been supporting children, young people, and their families in Education and Social Care settings for 25 years. Offering tailor-made training, regionally and nationally, on topics related to learning, development, trauma, and social and emotional needs, he believes that applying psychology as part of a partnership and at all levels is the most effective way to bring about positive change, and provides psychological supervision for colleagues from across a range of disciplines. As an ICthinking® (ICT) trained facilitator, he has been involved in several ICT projects and events across the UK and internationally.

### **Eva Mayer**

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Eva is an MA graduate in Refugee Protection and Forced Migration Studies from the University of London. Ordinarily resident in Oxford, she is currently based on the Greek island of Samos with the Italian NGO 'Still I Rise', which provides education and psychosocial support for refugee children living in the Samos hotspot. Alongside this, she is a research analyst for Open Doors International, an NGO that supports victims of religious-based persecution. Her research focuses on gender-specific persecution and is contributing to a report that will be released in February 2020 in conjunction with the World Watch Monitor. In addition to gender-specific persecution and education support for refugees, her research interests include the involvement of faith-based organisations in response to refugees and asylum seekers, particularly within a UK context.

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Dorien Braam is Director and Principal Consultant of Praxis Labs, a collective of humanitarian and development researchers and practitioners providing advisory services with a focus on displacement, resilience, protection, and social justice. Ms Braam has worked across Asia, Europe, and Eastern Africa with government, UN and non-governmental organisations. Research projects include the final evaluation of Oxfam's refugee programme in northern Greece, a report on child labour in migration for Alliance 8.7, and real-time assessment for GIZ Jordan's cash-for-work programme for Syrian refugees. She holds an MSc from the University of Edinburgh, an MSc and BSc from the Delft University of Technology, and is currently a PhD student and researcher at the University of Cambridge, focusing on the risk of zoonotic disease transmission in displaced populations.

**Amanda Buchan***Independent Consultant*

Amanda Buchan lived in Africa and the South Pacific before working for The British Council and then The Publishers Association in the UK. From 1990 to 2017, with Tony Read and other colleagues, she set up two companies: International Book Development and then International Education Partners to provide educational consultancy and advice to governments and aid agencies worldwide, specialising in the provision of learning materials in developing countries and areas of poverty. She travelled to and worked chiefly in Africa, the Middle East, Eastern Europe and Central Asia, for Ministries of Education and the World Bank, DFID, UNICEF, Save the Children, and other donor partners, working on policy and also travelling widely in rural areas. She has worked as a researcher and editor for studies and reports for many organisations. Since 2017 she has been working as a freelance consultant.

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Tori's background is in Psychology and Education. She has a BSc in Psychology from the University of Bath, and an MPhil in Education (Psychology and Education) from the University of Cambridge focusing on Developmental Coordination Disorder (DCD). She is currently a researcher at Cambridge Assessment where she is involved in curriculum and assessment-related research. She has worked on a range of projects relating to educational taxonomies, accessibility of examination papers, construct validity, and curriculum mapping. She is part of the team leading the curriculum development for the UNICEF–Cambridge collaborative project, being involved in the early work including the feasibility mission to Cox's Bazar in Bangladesh.

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Sheila Evans has worked on several international and national mathematics education research projects. Her work, often based in the classrooms of children aged five to 18, encompasses design research, intervention evaluation, and professional development. Sheila has produced innovative resources with proven and substantial impact. Powerful US change agents, including the Bill & Melinda Gates Foundation, used the resources as a key element in their strategies to improve teaching and learning in US classrooms. Sheila recently attained a doctorate. It focused on social metacognitive practices evidenced when students solve non-routine problems, and review the solutions of others. Her research is generally qualitative. She is also an editor of the International Society for Design and Development in Education's journal, *Educational Designer*. Previously, Sheila has held numerous teaching roles, including Head of Access Mathematics at the University of Derby, and Mathematics teacher in Kenya.

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Clare has worked in the education sector for over 35 years, with over 20 years spent managing research and completing consultancy work, with specialisms including curriculum development and educational assessment practices, mathematics, teaching, and how people learn. She has worked for Cambridge Assessment, Cambridge International and the UK examination boards OCR and Edexcel advising national and international governments, and presenting internationally. She has worked at two UK universities as a lecturer and tutor on undergraduate and postgraduate degree programmes. Other roles include teaching and coordinating subjects in the UK and abroad in mainstream education as an Advisory Teacher, in Special Educational Needs and/or Disabilities (SEND), Gifted and Talented (G & T), and Teaching English as a Foreign Language (TEFL) settings, and leading on continued professional development for teachers, lecturers, trainers, and other educational professionals.

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Jill Grimshaw is a freelance assessment consultant, having worked in the field for around 30 years. She is an alumna of Homerton College, Cambridge, where she qualified as a teacher in 1977. After 12 years of teaching languages in various countries, she returned to join what is now Cambridge Assessment, as an assessment manager. She had a long and varied career managing the production of examinations, training test writers, and running training courses for teachers worldwide. Most recently she led the development of a postgraduate course in assessment, run jointly with the Faculty of Education, University of Cambridge. She now works on a variety of projects linked to curriculum and assessment. Jill has an MA in Applied Linguistics and an MBA from the Open University, and she is a Practitioner of the Association for Educational Assessment in Europe.

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Mariam is a fourth-year PhD student at the Faculty of Education. Her research interests mostly relate to questions of cultural, social, and political contextualisation of a teaching and learning experience. Coming from an engineering background, she is mostly interested in assessing how skills that relate to mathematics education (such as problem-solving and critical thinking) are envisioned by educators and as a result experienced by learners. Her work focuses on investigating social and political power tensions that lead to the formation of the teacher mindset in a given context, and how the mentioned mathematical skills can be catered for in a learning environment while taking into consideration the contextual power dynamics. Aside from her study, she is also a Board member at Life Vision for Development, an Egyptian Development Agency that aims at elevating poverty in underserved areas in Egypt.

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Alfred is an interdisciplinary researcher of education and the sociology of digital technologies with a strong practical teaching and research background in digital design and creativity. He is currently a Research Associate in the Design Practice Group at the Engineering Design Centre (University of Cambridge). Alfred has studied and taught design and creativity in further and higher education since 2002. For his PhD thesis, Alfred developed a new type of curriculum for the teaching and study of digital making (the creation of digital content) in post-compulsory education. Alfred is also a member of the Centre for the Study of Global Human Movement, the Cambridge Emergency and Displacement Group, and the Academic Advisory Board chaired by Emeritus Professor Arnott. Alfred is interested in how migrants use digital technologies for their education and how the migrant cultures are expressed using digital technologies.

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Hiba's research tackles challenges in educational settings at the forefront of refugee migration crises, using innovative visual-based approaches to explore the wellbeing and voices of Syrian refugee students in Jordan's formal, double-shift schools. As a fellow of the Queen Rania Foundation in Jordan, she has worked closely with the organisation to reveal pivotal issues facing both Syrian refugee and Jordanian communities. In addition to her PhD research, Hiba has contributed to her field through projects including the Let Girls Learn in Conflict Settings, a UNICEF project on educating children on the move, and a project on social cohesion within refugee communities in Jordan with the University of Sussex. Her work was recently recognised by the Said Foundation for its Alumni Award, which is given for impactful contributions to the Middle East.

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Chris has worked in the field of International Education and English Language Teaching for 25 years in a variety of roles, including teacher, teacher trainer, researcher, project manager, materials writer, and author. Much of his early career was spent managing and delivering language projects in government schools across Nepal. More recently, as a freelance consultant, Chris has helped to implement master trainer training in northern Nigeria, develop materials for teacher trainers and educational managers in refugee communities in the Middle East and North Africa (MENA), upskill Syrian teachers in Lebanon, and create gender-sensitive English language materials for a major girls' education project across South Asia. He has worked in several other countries besides, including Somaliland, Senegal, India, Indonesia, Jordan, Palestine, Turkey, and China. His current research looks at the latent emancipatory potential of English in refugee communities.

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Emma is a doctoral researcher on an EU-funded project on psychosocial support for young migrants and refugees in schools across Europe. Her PhD research at the University of Sussex aims to challenge assumptions about the nature of 'integration' in contexts of migration and diversity, through an ethnography of young people's relationships in two British communities. Emma has conducted research on migrant and refugee wellbeing for international organisations including the Institute of Development Studies (IDS), Save the Children UK, and the Humanitarian Learning Centre. She holds an MA in Development Studies and is a guest lecturer on BA and MA courses on migrant and refugee wellbeing at the University of Sussex. Emma was also a member of the SEL-MHPSS Editorial Team.

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Neil Wade studied Electrical Engineering before his 20 years in industry, which involved him in significant overseas travel, delivering technical presentations and training. He subsequently trained as a teacher of science, most specifically physics. In his 20 years of teaching, he held posts as head of science, assistant head and national curriculum manager. He also established the physics course at a new sixth form college, for 16 to 18 year olds. Most recently he managed the Science Team at OCR, Cambridge Assessment's exam board for students in England, working with GCSE and A level exams. In this role he delivered training to teachers, published and spoke frequently at conferences. The transition from industry to education ignited his interest in the challenge of education across cultures, which is detailed in his MA by research relating educational theory to implementing technical projects.

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Rich has been publishing digital products for primary and secondary schools for 20 years, initially for ProQuest and then at Cambridge University Press. He has been involved in the specification, creation, and launch of digital learning platforms for US, UK and most recently international schools, and has experience of many different content management systems for the creation and delivery of digital content. He was general manager of Cambridge-Hitachi, a joint venture between Hitachi Solutions and Cambridge University Press, with a focus on educational content for front-of-class teaching – including winning the UK's top industry award for primary content. Since 2017 Rich has been working in the Digital Team in the Cambridge University Press Education publishing group, and is currently leading on the delivery of a single portal for the Press's digital services including teacher communities and professional development for teachers.

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Betty grew up in Leicestershire before reading English Language and Literature at Lincoln College, Oxford. Following this, she then studied for a Master's in Medieval English Literature at Worcester College, Oxford, before completing an internship with the Education Reform Team at Cambridge University Press. During this time, she had the opportunity to contribute to this project, helping to compile a list of recent literature in the field of EiE. She has since explored a wide range of creative and professional industries, which has included working for several international law firms and participating in a BBC Four documentary on modern literature.

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## The Learning Passport: Research and Recommendations report

The Learning Passport is a collaboration between UNICEF and the University of Cambridge to improve the quality of education for vulnerable children, and in particular those unable to effectively access national education systems. The project aims to develop an education model for rapid local adaption and deployment, and which delivers both better outcomes and better recognition of outcomes.

The **Research and Recommendations Report** has been produced by the University of Cambridge as part of the initial R&D phase of the Learning Passport project. The report summarises the evidence for effective education in displacement settings, and makes recommendations for how the project should be taken forward beyond its initial R&D phase.

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