

Su, X., Goldstein, S., & Su, J. (1995). Science Education Goals and Curriculum Designs in American and Chinese High Schools. *International Review of Education*, 41(5), 371–388.

Sullivan, G. (1989). Curriculum in Art Education: The Uncertainty Principle. *Studies in Art Education*, 30(4), 225–236.

Swanwick, K. (1979). *A Basis for Music Education*. Routledge.

Swanwick, K., & Tillman, J. (1986). The Sequence of Musical Development: A Study of Children's Composition. *British Journal of Music Education*, 3(3), 305–339.

Swanwick, K. (2016). Music Development: Revisiting a Generic Theory *A Developing Discourse in Music Education*. Routledge.

Venable, B. (1998). Questioning the Assumptions behind Art Criticism. *Art Education*, 51(5), 6–9.

Yang, G.-M. (2000). *Exploration of Chinese art using a multimedia CD-Rom: design, mediated experience, and knowledge construction* [Ohio State University, Graduate School]. http://rave.ohiolink.edu/etdc/view?acc_num=osu1488203158826307

Context matters—Adaptation guidance for developing a local curriculum from an international curriculum framework

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Colleagues across the University of Cambridge worked alongside UNICEF and Microsoft to develop the Learning Passport (LP).¹ The aim of the LP is to contribute to achieving the UNICEF goal of providing a quality education provision to the over 30 million children and youth worldwide who are unable to access a quality education provision due to disruptions caused by crisis and displacement. This area of education is often referred to as Education in Emergencies (EiE). Education in Emergencies refers to education which takes place in an emergency situation, such as a crisis or disaster which disrupts consistent education provision. The EiE landscape is diverse, with a range of learners, learning environments and facilitators. Developing a universal curriculum or learning programme to be used unilaterally across all EiE contexts would not be a logical or ethical method for providing support (Cambridge Assessment, 2020). Instead, it was decided that a blueprint curriculum framework would be created which would provide a set of minimum concepts and principles, integrated into parsimonious learning

sequences. These learning sequences would then serve as knowledge-based blueprints for localised curriculum development across a variety of contexts.

The LP project resulted in a curriculum framework for Mathematics, Science and Literacy (Cambridge Assessment, 2020). Alongside this framework, Adaptation Guidance was also created. The Adaptation Guidance was directed towards curriculum experts that would be responsible for developing a localised curriculum based on the LP framework. Although intended to be used in the EiE context, this curriculum development guidance is relevant to curriculum experts across all educational contexts. With global movements of people consistently increasing in recent decades, the demographic of classrooms is changing in most urban areas and in many rural schools

1. More details are available at https://www.cambridge.org/files/8615/8465/3596/The_Research_and_Recommendations_Report.pdf

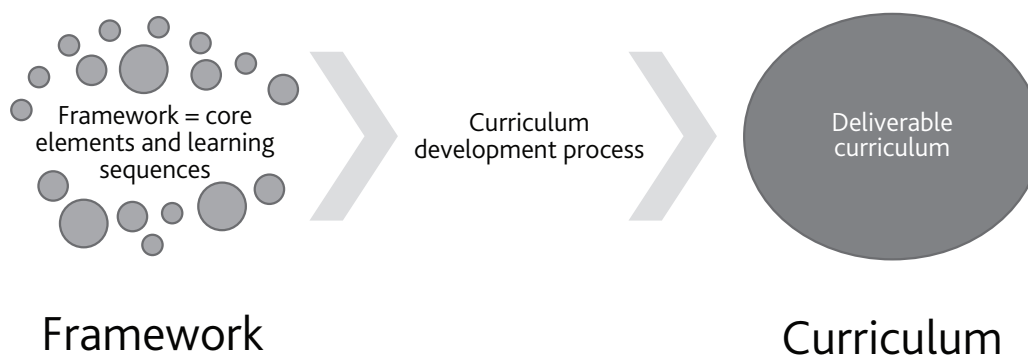


Figure 1: Developing a curriculum from a parsimonious learning framework.

as well (Sugarman, 2015). Currently, in many European classrooms the responsibility for actively including, accommodating and supporting migrant children in schools falls primarily to the teacher (European Commission/EACEA/Eurydice, 2019). However, this is not enough. Nor should the responsibility only be in the hands of teachers. A recent UNESCO report (2018) argues that laws and policies are failing migrant and refugee children and ignoring their needs, especially in terms of education provision. Furthermore, the report attests that provision alone is not enough. The learning environment must adapt and support the specific needs of those on the move. A well-designed curriculum is part of this supportive environment. UNESCO argues that curricula must be inclusive and relevant for learners, including migrant learners. A curriculum that focuses on learner diversity can have a positive ripple effect both within and beyond the classroom walls (UNESCO, 2018).

This article will consider how key guidance areas within the Learning Passport Adaptation Guidance can be applied to wider educational contexts. This will be prefaced by a brief overview of the Learning Passport Framework and the Learning Passport Adaptation Guidance in order to provide further context to the curriculum guidance that emerged.

The Framework

When conceptualising a framework, it is helpful to use the analogy of laying the foundations of a building. In this way, the framework is a guiding structure, or blueprint, for the construction of a curriculum which, importantly, would require crucial localised adaptation to make it relevant to learners in any particular context.

This interplay of centralised control and localised flexibility is an affordance of the concept of a framework. Using the analogy above, centralised control allows a generalised standard (the structural stability of the building) to work with locally relevant features that make the building fit with the surrounding cultural specificity. In terms of a learning programme, the framework provides the underpinning progression structure of important concepts that has generalisable qualities with the ability to transfer across learning contexts.

The framework approach of the LP project allowed the development team to avoid developing a strict universal curriculum programme that would potentially impose a set of knowledge, skills and understandings on all learners without incorporating the localised day-to-day experiences, culture, prior understandings and their desires for the future (Cambridge University Press & Cambridge Assessment, 2020). In this way, as few references as possible were made to specific contexts (e.g., environmental or cultural references) or materials (e.g., devices or tools required to reach understanding). Instead, the framework serves as a blueprint of the essential elements of knowledge-focused content that should be incorporated into a curriculum in order to support quality learning in that subject area. In short, the aim was to create a framework that could serve as a broad outline that covers the minimum requirements of key learning concepts, understandings and principles.

The Adaptation Guidance

The aim of the Adaptation Guidance was to provide a list of considerations that local curriculum developers should reflect upon

before they begin their curriculum development process. These guidance areas were developed based on the findings of the Research and Recommendations Report (Cambridge Assessment & Cambridge University Press, 2020) and through consultation with internal and external experts. The Adaptation Guidance was also reviewed by an external review group (ERG) that consisted of over 30 specialists working across the EiE field, including curriculum developers, practitioners, policy developers, and leaders of charities and Non-Governmental Organisations.

The five guidance areas are:

1. Curriculum developers must take into account relevant curriculum and education policies as well as previous learning experiences.
2. Locally adapted curricula should be developed and delivered in the most appropriate language(s) of instruction, after thorough consideration of a variety of factors.
3. Content in locally adapted curricula should be framed so that it is culturally sensitive.
4. Indigenous knowledge should be included in the locally adapted curricula.
5. Locally adapted curricula should support learner well-being, inclusion and success.

These elements focus specifically on curriculum development and are not intended to provide guidance relating to pedagogy, resources and assessment, although these guidance areas have some applicability to these aspects. As each guidance area is reviewed, connections with broader educational contexts beyond that of EiE will be reflected upon. Through this discussion, this article aims to highlight that the challenges that exist within some of the most deprived educational contexts have applicability in supporting quality and equality in education in all educational contexts, including the most affluent.

1. Curriculum developers must take into account relevant curriculum and education policies as well as previous learning experiences

In order to support continued learner development, the contextualisation process must consider the previous educational experiences of learners and educators as well as potential educational pathways that learners may encounter in the future. When developing a curriculum based on the LP framework, the development team should seek to consider, compare and potentially integrate elements of relevant local curriculum. This will allow learners to build on previous understandings and to support them when accessing future education pathways. To aid this process, curriculum mapping and consultation with local curriculum specialists is recommended as it can help curriculum developers identify areas of overlap and potential gaps in previous learning (Elliott, 2011, 2014; Greatorex et al., 2019). However, we recognise that due to the ad-hoc nature of some EiE education provisions, accessing information related to a learner's previous or future educational environment may not be possible. In addition to curriculum documentation, it is also vital that curriculum developers consider education policies and contextual circumstances that may have impacted the learning experiences of different groups of learners, including, but not limited to, restrictions associated with gender, ethnicity or cultural group.

The importance of considering relevant educational policies and previous education experiences that have impacted learners go beyond

the EiE. At present, many migrant children are expected to quickly assimilate into new classrooms and follow a prescribed curriculum in order to succeed (Clark, 2017). Beyond filling in forms explaining their previous education, little is done to investigate the educational experiences these learners have gone through. The process of considering previous learning as well as future education ambitions often falls to the responsibility of the classroom teacher who, after getting to know their learners and reading their learning profiles, accommodates and differentiates the content to support their needs (Clark, 2017). Some curricula allow for flexibility to incorporate relevant content and skills to support migrant learners; however, little is often done to make the curriculum itself more relevant (UNESCO, 2018).

Curriculum developers and regional or school-based curriculum facilitators should take into account student demographics in order to identify relevant curriculum and education policies that may have impacted on previous learning experiences of students. Considering previous educational experiences should not be seen as a beneficial addition, but as a necessary measure to ensure students are appropriately supported and challenged. This is not just impacting a small group of learners. In London alone, it is predicted that there are 254,000 foreign-born children and approximately 107,000 undocumented children who have either arrived in the UK illegally or who were born to undocumented parents (Jolly et al., 2020).

Although considering the previous learning experiences of all students would be difficult from a curriculum development level, considering the make-up of the student demographic in regional areas would allow curriculum developers and facilitators to focus on the larger groups in that area, in order to ensure the curriculum structure, content and expectations cohere with, are flexible to, and build on already established learning. Knowing where learners are likely to move to in their next stage of education allows curriculum designers to ensure that the curriculum progression structure will prepare learners towards reaching this point. In addition, consulting international curricula and curriculum policies can help to highlight discriminatory approaches and practices that are either explicitly or implicitly incorporated into the curriculum content and materials that migrant students interact with (Taylor & Sidhu, 2012).

2. Locally adapted curricula should be developed and delivered in the most appropriate language(s) of instruction, after thorough consideration of a variety of factors

Although the LP framework is presented in English, the curriculum derived from it is meant to be developed and delivered in a language(s) of instruction (LOI) that is most appropriate for its context of use. The decision of which language or languages to choose is worthy of careful consideration.

The use of a learner's mother tongue or native language is important for a number of reasons. Research has shown that learners thrive most when they are taught in a language they understand, as well as a language that will help them to succeed at the time of learning and in the future (Cambridge Assessment & Cambridge University Press, 2020). It is also the case that oracy and literacy development in the mother tongue or native language supports learners in acquiring the communication and understanding skills required to facilitate learning of additional languages with greater ease (Pinnock & Vijayakumar, 2009).

Language choice also links with a rights-based approach to learning

(Sandkull, 2005; Capstick & Delaney, 2016). The UN Declaration on the Rights of Minorities (UN General Assembly, 1992) advocates that adequate opportunities should be provided for linguistic minorities to have educational instruction in their mother tongue. Language allows the voice of displaced learners to be expressed. This is even more important where other rights are withheld (Kosonen, 2005) and the lack of access to a learner's native language acts as a form of linguistic discrimination (Romaine, 2013).

If a learner's native tongue or a language that they are competent in cannot be used for instruction, then several other areas of consideration should be reflected upon. For example, contexts such as the Kakuma camp in Kenya, where around 87 languages are spoken (Forsen & Guvatt, 2015), pose significant challenges in selecting a LOI. Such cases are exacerbated where the languages in use are 'distant', meaning that the languages differ greatly in terms of their phonetics, syntax and semantics (Nerbonne & Hinrichs, 2006). If it is not possible to offer the LOI in a language understood by all students, then the strategy of code-switching may help. Code-switching allows learners to move between languages through drawing on the common features of several language systems (Setati & Adler, 2000). To support this strategy, curriculum developers and teachers may use informal language when introducing a new process or concept rather than simply using a nominalised term.

Curriculum development teams should also be wary of issues of language prestige and status. Dearden (2014) reports that there is a general trend towards expansion of English as the LOI because it is believed to provide learners with more future opportunities. However, choosing a 'prestige language' as the LOI when there is a lack of quality teaching, support and resources for that language can result in ineffective pedagogy, inaccurate content delivery and lower-quality materials, which "perpetuat[es] the cycle of educational impoverishment" (Marinotti, 2016, p.5).

LOI choices in education can also be linked to a legacy of colonialism. For example, the linguistic divisions in Cameroon reflect post-colonial social divisions (Kuchah, 2018), accentuating how LOI choice is highly political and where symbolic power (Bourdieu, 1973) is evident. LOI choice can also raise significant intra-group challenges, especially where one dominant group imposes its values or traditions on others. Prohibiting certain languages in the classroom can also promote intolerance and harmful assimilation policies that can erode individual and group identities (Bourne, 2001). Consequently, development teams must carefully consider the implications that specific LOI choices will have on power and social dynamics in a given context.

It is also important to consider whether the terminology and word choices used in the educational environment foster gender equality and inclusivity. Practitioners must be conscious that the concepts and terminology used in curriculum documents and resources can influence learner cognition, affect and behaviour (Leaper, 2014). For example, different languages present gender in different ways, so curriculum developers and practitioners must reflect on the gender nuances that are conveyed through the language that is used.

In all education settings, not just those relating to EiE, it is vital that a curriculum is developed and delivered in a language appropriate for supporting learner success and inclusion. Across Europe, there are different approaches to this. In some education systems, there is an initial integration phase where language and learning support is provided to newly arrived migrant students in separate classes or lessons. In other jurisdictions, migrant students are placed directly into

mainstream classes but are still provided with additional support (European Commission/EACEA/Eurydice, 2019). However, deciding on a route of classroom-based support is not enough. Curriculum developers must reflect on the language support and limitations that are implicitly and explicitly integrated within the curriculum and assessment approaches. There are many positive effects linked to students' social, cognitive and linguistic development if a curriculum is designed in order to accommodate learning in diverse languages, especially at the primary level (European Commission/EACEA/Eurydice, 2019).

3. Content in locally adapted curricula should be framed so that it is culturally sensitive

During any curriculum development process, developers should be conscious that the content and material referred to in the curriculum is culturally sensitive. Being culturally sensitive refers to a curriculum being relevant, meaningful, respectful and responsive to learners' culture and lived experiences. Although this overlaps with language, this guidance area also focuses on cultural practices, values and histories.

In the case of LP curriculum development, developers should tailor the LP framework through the inclusion of content and examples that are relevant to the learning environment and the learners' individual experiences, needs, interests and worldviews. Gervedink Nijhuis et al. (2013) note that the most well-defined curriculum still falls short if curriculum developers do not critically reflect on whether concepts and activities are culturally sensitive. This is especially important for avoiding clashes between learners' cultural perspectives and more globalised approaches (Deniz & Borgerding, 2018) that are often found in international frameworks.

Across all education contexts, ensuring the curriculum is culturally relevant and that it supports culturally responsive pedagogy is important for rights-based education practices because it affirms students' identities and values in local contexts (Byrd, 2016; Wilson & Alloway, 2013). Addressing students' worldviews and allowing them to engage with local and global perspectives is crucial to creating a positive, inclusive and productive space for learning (Klenowski, 2009). Creating a positive space for learning can also lead to greater learner progress and achievement (Van Laar et al., 2013).

This guidance area can be illustrated through an example related to Mathematics curriculum development. A study in Alaska shows that a curriculum which draws from locally relevant examples relating to harvesting, star navigation, and fish rack construction has a positive correlation with helping students prepare to meet national assessment exams (Kaino, 2013). There is also value in expanding topic areas to include local examples that students can connect to. This helps students to connect an abstract idea to a concrete example. For instance, linking concepts to local plant and animal species, local resources and local environmental sustainability issues can help students more easily grasp complex concepts and models (Hewson, 2012).

The importance of relating science to students' lives is also demonstrated in a study by Albrecht and Upadhyay (2018), who found that local stakeholders believed science is more valuable for their children if it relates to the challenges they may face in their lives. For example, discussions around chemistry and nature are relevant if they help students understand how to respond to the aftermath of natural

disasters. Furthermore, a curriculum which helps students respond to their local settings and needs is valuable for both students and families, such as helping students to learn about agriculture-related content to help ensure they have sustainable food sources (Hewson, 2012).

Ensuring cultural appropriateness can be done by modifying or reframing content so that it is respectful, mindful and inclusive. However, this can be a complex task and requires a significant amount of academic, pedagogical and cultural expertise (Atwater et al., 2010). For example, it may be necessary to adapt the framework levelling in order to delay content until an appropriate age according to that culture. However, it should be recognised that modifications may have an impact on coherence across the curriculum leading to additional adaptations being required in order to ensure the quality of learning is upheld.

In some cases, controversial content may be deemed appropriate if framed correctly (Albrecht & Upadhyay, 2018). For example, while reproduction and sex education may be deemed inappropriate and controversial within some cultures, Tripathi and Sekher (2013) have found that in the context of India, teaching sex education with the aim of raising awareness around HIV prevention, sexually transmitted infections and teenage pregnancies has legitimised the importance of introducing this content in formal curricula. It is pivotal that development teams work with and include local experts and stakeholders in the curriculum development process in order to approach these potentially contentious topics effectively.

4. Indigenous knowledge should be included in the locally adapted curricula

The fourth guidance area focuses on developing an LP-based curriculum that includes local indigenous knowledge and indigenous worldviews. However, being aware of and respectful of indigenous knowledge is something all curriculum developers should reflect on. Indigenous knowledge refers to "the understandings, skills and philosophies developed by societies with long histories of interaction with their natural surroundings" (UNESCO, n.d.). For many areas, indigenous knowledge can "inform decision-making about fundamental aspects of day-to-day life" (UNESCO, n.d.). Even if indigenous groups are no longer present in an area, it is important to be aware of and incorporate indigenous legacies and histories within the curriculum in order to provide students with an authentic understanding of how knowledge and culture is shaped and altered.

The process of integrating local indigenous knowledge entails numerous actors and levels. Those involved in adapting and contextualising must also have the experience needed to understand and acknowledge indigenous perspectives (Aikenhead, 2017). Curriculum contextualisation must avoid presumptions, stereotyping, outdated understandings of ontologies and epistemologies, and it must critically engage with values and customs and changes over time (Carey, 2015; Aikenhead, 2017). Identifying and engaging with cultural brokers is also crucial. For example, a study conducted with Syrian refugees in Jordan illustrates the effectiveness of using a Community Readiness Model (CRM) with displaced communities, by portraying its use in evaluating community-based needs through rapid assessment including interviews, focus groups, code mapping, and workshops to identify gaps and understand attitudes (Wells et al., 2019).

Integrating indigenous and local knowledge into a curriculum is crucial for helping learners connect curriculum content to indigenous

practices, decision-making processes, social interactions, rituals and spiritual beliefs. In order to achieve this, curriculum developers must have an awareness of indigenous knowledge, create room for integration and address any conflicts or discrepancies between local views and the dominant academic discourse. While providing access to indigenous knowledge in formal education is important for protecting traditional knowledge, it is also essential for learner engagement. Research in nations facing high immigration and diversity finds that 'gaps' in achievement for learners from minorities may also be linked to the use of curricula which do not affirm learners' diverse identities (Morrison et al., 2008; Wilson & Alloway, 2013). Furthermore, cultural traditions and perceptions at home may appear to be rendered irrelevant if they are not acknowledged in schools, which can lead to cultural degradation (Skutnabb-Kangas & Dunbar, 2010).

It is important for curriculum developers to ensure curriculum content integrates and addresses concepts which are familiar to indigenous perspectives and connecting these to dominant academic discourse. This allows learners to reflect, understand, and negotiate disparities between sources of knowledge (Le Grange, 2007). This is described as cross-cultural pedagogy, where learners engage with both traditional and more globalised academic meanings of a concept side by side (Ng'Asike, 2011). Curriculum developers must also reflect on word choice. Across different languages and cultures, concepts used within the curriculum may be perceived differently. For example, a study conducted by Lee et al. (2012) found that teachers in schools in Taiwan teach time using a cross-cultural approach that is inclusive of Amis indigenous culture.² To do this, teachers teach time using approaches familiar to dominant academic discourse (such as time-keeping, clocks, and solar and lunar calendars) and they also present indigenous methods of measuring time in relation to nature or in relation to events and lived experiences. This approach enhances meaning, student awareness and learner engagement (Lee et al., 2012).

Incorporating elements of local indigenous knowledge and culturally sensitive content also helps to deconstruct the hidden curriculum that exists in many learning environments (Wren, 1999). The hidden curriculum can be defined as the unwritten rules, regulations, standards and expectations that form part of the learning process in schools and classrooms, and these elements are not specifically taught to students through the planned curriculum content (Rahman, 2012). In countries such as Australia, Sweden and Canada, studies have shown that the lack of indigenous themes within the prescribed curriculum and the Western values that dominate the hidden curriculum have resulted in lower attainment for indigenous students and a higher level of resistance and withdrawal from formal schooling (Rahman, 2012; Harper & Thompson, 2017; Svonni, 2015). Students come to school with a reservoir of cultural understandings and resources that help them to acclimatise and succeed at school. However, some indigenous students may not possess an awareness of these norms and cultural codes, which can stifle their progress in formal education (Watego, 2005). The process of linking indigenous and Western knowledge systems is effective in engaging indigenous students with mainstream education and in increasing the cultural awareness of everyone involved in the school environment (Rahman, 2012).

2. The Amis tribe is the largest of 14 indigenous tribes in Taiwan recognised by the government. The Amis have their own distinct language, cultural features, traditional customs and social structure (Lee et al., 2012).

5. Locally adapted curricula should support learner well-being, inclusion and success

While the previous guidance areas support learner well-being, inclusion and success, this specific guidance area calls for curriculum developers to explicitly reflect on these areas. Similar to the points above, supporting learner well-being is not just the responsibility of the classroom teacher and school-based support team. Curriculum developers and facilitators must also ensure that the curriculum promotes well-being, inclusion and success for all learners.

Educational spaces, including the curriculum that is taught there, are central to promoting well-being and resilience. For some students, educational spaces also help to restore a sense of normalcy and security for learners and their communities. Curriculum developers must be aware of how curriculum content and expectations positively or negatively impact childhood well-being (CWB). Childhood well-being can encompass a child's developmental progression, including important life events and life transitions (Statham & Chase, 2010). The longitudinal Fragile Families dataset (Fava et al., 2017) provides empirical support for the multidimensional construct of CWB with the following dimensions:

- **Material well-being:** The domain of material well-being may best be described as a measure of financial income, goods, resources, and the ability to provide for basic needs. For education, this relates to ensuring the child has the appropriate resources to engage in the learning environment.
- **Relational well-being:** The relationship domain represents the types of relationships, quality of relationships, and levels of affection expressed towards the child from important people in their lives (e.g., parents, grandparents and close friends).
- **Health and behavioural well-being:** This domain considers the child's physical health, access to health care, and subjective measures of the perception of the child's health by their carers. In addition, more behavioural health aspects are considered (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 reads or tells stories to the child, the number of books, toys, puzzles, and instruments that are in the home, and whether or not the child gets to go on outings, or had hobbies.

One dimension not included in the above list, yet important for many young learners and their families, is spiritual well-being (Quosh, 2013; Betancourt & Khan, 2008; Silove, 2013).

When developing a curriculum, whether it is intended for EiE context or otherwise, the above dimensions of well-being should be considered in order to ensure that explicit support for CWB is offered throughout the curriculum and that the curriculum is mindful of local CWB challenges. For example, curriculum developers should reflect on which materials are required for students to progress through the curriculum; what types of relationships are implicitly referred to within the curriculum; and, what assumptions are being made regarding learner behaviours or experiences. Reflecting on these questions can help developers to consider critically how CWB is incorporated and positioned within the developed curriculum. For more details regarding the Learning Passport Social and Emotional Learning (SEL) framework, please see Boyd-MacMillan and DeMarinis (2020).

This guidance area also considers the importance of ensuring access for all students. A core motivation for the development of the LP framework is that all children and young people have the right to good quality education through which they can actively participate and achieve success. However, in many learning contexts that involve conflict and crises, groups of learners are denied access or are not given equal access or support (INEE, 2019; Sæbønes et al., 2015). This includes, but is not limited to, learners with disabilities, cultural groups, language groups and gender groups.

An inclusive approach to curricula involves “a common curriculum for all, based upon differentiated and/or individualised instruction, rather than an alternative curriculum being developed for low achievers” (UNICEF, 2014, p.20). Therefore, curricula should be developed in a manner that ensures the inclusion of all learners including those with disabilities. It is crucial that this inclusive approach is applied to the curriculum development and selection of accompanying teaching and learning approaches, materials and assessments.

Conclusion

Although the Learning Passport project was targeted at supporting displaced learners in EiE contexts, the findings from the project regarding curriculum priorities and curriculum development processes provide a wider contribution. The development of the Framework allowed the development team to focus on the core knowledge needed to support learners across a variety of contexts. The development of the Adaptation Guidance allowed the team to investigate key areas of consideration that should be thoroughly investigated, reflected on and actively incorporated when the framework is developed into a locally based curriculum.

The recommended guidance areas above do not represent a simple, one-time reflective process. Instead, the five guidance areas call for deep and critical reflection that should involve a collaborative process with stakeholders and relevant experts. We recognise that in many curriculum development contexts, this would be a significant shift from the current development process and could lead to potentially difficult conversations and conflicting views. However, the time and resources required to action this adaptation guidance are worthwhile if the aim is to provide a high-quality education provision for all learners. Providing learners with a curriculum that is flexible, supportive and relevant to them will help them to succeed. It will also make the learning environment more inclusive and positive for all learners, which will not only improve learner well-being, but research shows that it will also raise attainment (UNESCO, 2018).

A system-wide approach to providing support is required. This includes, but is not limited to, curriculum development approaches. Beyond curriculum development, the five guidance areas discussed above also serve as valuable areas for reflection when conducting a curriculum and system review. Education ministries should also reflect on education delivery, scheduling, assessment processes, materials, digital tools, as well as professional development provided to curriculum developers, school leaders and teachers to ensure that the education system is inclusive and supportive.

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References

- Aikenhead, G. S. (2017). Enhancing school mathematics culturally: A path of reconciliation. *Canadian Journal of Science, Mathematics and Technology Education*, 17(2), 73–140.
- Albrecht, N., & Upadhyay, B. (2018). What do refugee mothers want in urban US school science: learning from the perceptions of science of three Somali mothers. *The Urban Review*, 50(4), 604–629.
- Atwater, M. M., Freeman, T. B., Butler, M. B., & Draper-Morris, J. (2010). A case study of science teacher candidates' understandings and actions related to the culturally responsive teaching of 'other' students. *International Journal of Environmental and Science Education*, 5(3), 287–318.
- Betancourt, T. S., & Khan, K. T. (2008). The mental health of children affected by armed conflict: Protective processes and pathways to resilience. *International review of psychiatry*, 20(3), 317–328.
- Bourdieu, P. (1973). *Cultural Reproduction and Social Reproduction*. Tavistock.
- Bourne, J. (2001). Doing 'what comes naturally': How the discourses and routines of teachers' practice constrain opportunities for bilingual support in UK primary schools. *Language and Education*, 15(4), 250–268.
- Boyd-MacMillan, E., & DeMarinis, V. (2020). *Learning Passport: Curriculum Framework (IC-ADAPT SEL high level programme design)*. Cambridge University Press & Cambridge Assessment.
- Byrd, C. M. (2016). Does culturally relevant teaching work? An examination from student perspectives. *SAGE Open*, 6(3), 2158244016660744.
- Cambridge Assessment (2020). *The Learning Passport: Curriculum Framework (Maths, Science, Literacy)*. Cambridge Assessment.
- Cambridge Assessment & Cambridge University Press (2020). *The Learning Passport: Research and Recommendations Report*. Cambridge University Press & Cambridge Assessment.
- Capstick, T., & Delaney, M. (2016). *Language for resilience: The role of language in enhancing the resilience of Syrian refugees and host communities*. British Council.
- Carey, M. (2015). The Limits of Cultural Competence: An Indigenous Studies Perspective. *Higher Education Research & Development*, 34(5), 828–840.
- Clark, K. (2017). Are we ready? Examining teachers' experiences supporting the transition of newly-arrived Syrian refugee students to the Canadian elementary classroom. [Unpublished Master's thesis]. *University of Toronto, Toronto, Canada*.
- Dearden, J. (2014). *English as a medium of instruction—a growing global phenomenon*. British Council.
- Deniz, H., & Borgerding, L. (Eds.). (2018). *Evolution Education Around the Globe*. Springer Berlin Heidelberg.
- Elliott, G. (2011). A guide to comparability terminology and methods. *Research Matters: A Cambridge Assessment Publication*, 2, 9–19.
- Elliott, G. (2014). Method in our madness? The advantages and limitations of mapping other jurisdictions' educational policy and practice. *Research Matters: A Cambridge Assessment Publication*, 17, 24–28.
- European Commission/EACEA/Eurydice, (2019). *Integrating Students from Migrant Backgrounds into Schools in Europe: National Policies and Measures*. Eurydice Report. Publications Office of the European Union.
- Fava, N. M., Li, T., Burke, S. L., & Wagner, E. F. (2017). Resilience in the context of fragility: Development of a multidimensional measure of child wellbeing within the Fragile Families dataset. *Children and Youth Services Review*, 81, 358–367.

- Forsen, Y., & Guyatt, H. (2015). *Refugee Household Vulnerability Study: Kakuma Refugee Camp*. Kimetrica.
- Gervedink Nijhuis, C. J., Pieters, J. M., & Voogt, J. M. (2013). Influence of culture on curriculum development in Ghana: An undervalued factor? *Journal of Curriculum Studies*, 45(2), 225–250.
- Greatorex, J., Rushton, N., Coleman, V., Darlington, E., & Elliott, G. (2019). *Towards a method for comparing curricula*. Cambridge Assessment Research Report. Cambridge Assessment.
- Harper, A. O., & Thompson, S. (2017). Structural oppressions facing Indigenous students in Canadian education. *Fourth World Journal*, 15(2), 41.
- Hewson, M. G. (2012). Traditional healers' views on their indigenous knowledge and the science curriculum. *African Journal of Research in Mathematics, Science and Technology Education*, 16(3), 317–332.
- Inter-agency Network for Education in Emergencies (INEE). (2019). INEE Guidance Note on Gender. New York, NY. www.inee.org. Creative Commons Attribution ShareAlike 4.
- Jolly, A., Thomas, S., & Stanyer, J. (2020). London's children and young people who are not British citizens: A profile. *Mayor of London Report*. https://www.london.gov.uk/sites/default/files/final_londons_children_and_young_people_who_are_not_british_citizens.pdf [Accessed 17 June, 2020].
- Kaino, L. M. (2013). Traditional knowledge in curricula designs: Embracing indigenous mathematics in classroom instruction. *Studies of Tribes and Tribals*, 11(1), 83–88.
- Klenowski, V. (2009). Respecting local, cultural contexts for assessment practice in an era of globalization. In E. L. Grigorenko (Ed.) *Multicultural psychoeducational assessment*, 77–94.
- Kosonen, K. (2005). Education in local languages: policy and practice in South-East Asia. *First Language First: Community-Based Literacy Programmes for Minority Language Contexts*, 96–132. UNESCO Bangkok.
- Kuchah, K. (2018). Early English medium instruction in Francophone Cameroon: The injustice of equal opportunity. *System*, 73, 37–47.
- Le Grange, L. (2007). Integrating Western and Indigenous knowledge systems: The basis for effective Science education in South Africa? *International Review of Education*, 53(5–6), 577–591.
- Leaper, C. (2014). Gender similarities and differences in language. In T. Holtgraves (Eds.), *Oxford handbook of language and social psychology* (pp.62–81). Oxford University Press.
- Lee, H., Yen, C. F., & Aikenhead, G. S. (2012). Indigenous elementary students' science instruction in Taiwan: Indigenous knowledge and western science. *Research in Science Education*, 42(6), 1183–1199.
- Marinotti, J. (Ed.), (2016). *Symposium on Language and the Sustainable Development Goals*. Conference proceedings in New York, 21–22 April 2016.
- Morrison, K. A., Robbins, H. H., & Rose, D. G. (2008). Operationalizing culturally relevant pedagogy: a synthesis of classroom-based research. *Equity & Excellence in Education*, 41(4), 433–452.
- Nerbonne, J., & Hinrichs, E. (2006). 'Linguistic Distances.' Proceedings of the Workshop on Linguistic Distances, Association for Computational Linguistics, Sydney. 23 July 2006.
- Ng'Asike, J. T. (2011). Turkana children's rights to education and indigenous knowledge in science teaching in Kenya. *New Zealand Journal of Teachers' Work*, 8(1), 55–67.
- Pinnock, H., & Vijayakumar, G. (2009). *Language and Education: The Missing Link*. CfBT Education Trust and Save the Children.
- Quosh, C. (2013). Mental health, forced displacement and recovery: Integrated mental health and psychosocial support for urban refugees in Syria. *Intervention: International Journal of Mental Health, Psychosocial Work & Counselling in Areas of Armed Conflict*, 11(3), 295–320.
- Rahman, K. (2012). Belonging and learning to belong in school: the implications of the hidden curriculum for indigenous students. *Discourse: Studies in the Cultural Politics of Education*, 34(5), 660–672.
- Romaine, S. (2013). Keeping the promise of the millennium development goals: Why language matters. *Applied Linguistics Review*, 4(1), 1–21.
- Sæbønes, A. M., Bieler, R. B., Baboo, N., Banham, L., Singal, N., Howgego, C., McClain-Nhlapo, C. L., Riis-Hansen, T. C., & Dansie, G. A. (2015). *Towards a disability inclusive education*. Background paper for the Oslo Summit on Education for Development, 28(4), 369–379.
- Sandkull, O. (2005, August). *Strengthening inclusive education by applying a rights-based approach to education programming*. In ISEC Conference, Glasgow (pp.1–9).
- Setati, M., & Adler, J. (2000). Between languages and discourses: Language practices in primary multilingual mathematics classrooms in South Africa. *Educational Studies in Mathematics*, 43(3), 243–269.
- Silove, D. (2013). The ADAPT model: A conceptual framework for mental health and psychosocial programming in post conflict settings. *Intervention: International Journal of Mental Health, Psychosocial Work & Counselling in Areas of Armed Conflict*, 11(3), 237–248.
- Skutnabb-Kangas, T., & Dunbar, R. (2010). *Indigenous children's education as linguistic genocide and a crime against humanity?: a global view* (pp.1–128). Kautokeino, Norway: Gáldu.
- Statham, J., & Chase, E. (2010). *Childhood Wellbeing: A brief overview* (Briefing Paper No. 1). Childhood Wellbeing Research Centre.
- Sugarman, J. (2015). Meeting the education needs of rising numbers of newly arrived migrant students in Europe and the United States. *Migration Policy Institute commentary*. November 2015. <https://www.migrationpolicy.org/news/meeting-education-needs-rising-numbers-newly-arrived-migrant-students-europe-and-united-states> [Accessed 15 June, 2020].
- Svonni, C. (2015). At the margin of educational policy: Sámi/Indigenous Peoples in the Swedish National Curriculum 2011. *Creative Education*, 6(9), 898–906.
- Taylor, S., & Sidhu, R. K. (2012). Supporting refugee students in schools: What constitutes inclusive education? *International Journal of Inclusive Education*, 16(1), 39–56.
- Tripathi, N., & Sekher, T. V. (2013). Youth in India ready for sex education? Emerging evidence from national surveys. *PLoS ONE*, 8(8), e71584.
- UN General Assembly. (1992). *Declaration on the Rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities*. 3 February 1992, A/RES/47/135. Accessed 26 January 2018 <https://www.refworld.org/docid/3ae6b38d0.html>
- UNESCO (n.d.) *Natural Sciences—Priority Areas*: <http://www.unesco.org/new/en/natural-sciences/priority-areas/links/related-information/what-is-local-and-indigenous-knowledge/>
- UNESCO. (2018). *Global Education Monitoring Report 2019: Migration, Displacement and Education—Building Bridges, not Walls*. Paris, UNESCO.
- UNICEF. (2014). *Conceptualising Inclusive Education and Contextualising it within the UNICEF Mission. Webinar 1—Companion Technical Booklet*. https://www.ded4inclusion.com/uploads/4/7/7/8/47789531/1_contextualizing_ie.pdf
- Van Laar, C., Derks, B., & Ellemers, N. (2013). Motivation for education and work in young Muslim women: The importance of value for ingroup domains. *Basic and Applied Social Psychology*, 35(1), 64–74.
- Watego, L. (2005). An Indigenous Perspective on Mathematics Contextualisation in a Pre-School: from safety to empowerment. In *MERGA* (Vol. 28, pp.769–774).
- Wells, R., Abo-Hilal, M., Steel, Z., Hunt, C., Plested, B., Hassan, M., & Laws, C. (2019). Community readiness in the Syrian Refugee community in Jordan: A Rapid Ecological Assessment Tool to build psychosocial service capacity. *American Journal of Orthopsychiatry*. Advance online publication.
- Wilson, K., & Alloway, T. (2013). Expecting the unexpected: Engaging diverse young people in conversations around science. *The Australian Educational Researcher*, 40(2), 195–206.
- Wren, D. J. (1999). School culture: Exploring the hidden curriculum. *Adolescence*, 34(135), 593–596.