Secondary
Education
Working
Group

Evidence on Learning Outcomes for Adolescents in Fragile Contexts:
A Landscape Analysis

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This report was led by:

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Acknowledgements

List of Abbreviations

AwD	Adolescents with Disabilities
AEP	Accelerated Education Program
AEWG	Accelerated Education Working Group
CEFMU	Child, early and forced marriage and unions
CLA	Citizen-led assessment
COTM	Children on the Move
Ed-tech	Education technology
EGRA/EGMA	Early Grade Reading Assessment/ Early Grade Reading Assessment
GBV	Gender-based violence
IDP	Internally displaced Person
LUL	Let Us Learn
MHM	Menstrual hygiene management
MFP	Multiple and flexible pathways
MICS	Multiple Indicator Cluster Surveys
OECD	Organisation for Economic Co-operation and Development
PISA	Programme for International Student Assessment
RCT	Randomized control trial
UDL	Universal Design for Learning
SEWG	Secondary Education Working Group
UIS	UNESCO Institute for Statistics
WASH	Water, sanitation and hygiene

Plan International / Erin Johnson, Room3

Executive Summary

This review provides an overview of the evidence base on learning outcomes for adolescents in contexts of fragility, crisis and emergencies – with a focus on adolescent girls and adolescents with disabilities (AwD). While the evidence base at the secondary level is relatively small, effective interventions echo best practices and lessons from the broader education literature.

In cases of education disruption, multiple and flexibility pathways (MFP) approaches have shown promising results in fragile and crisis contexts. Early evidence shows that accelerated education programmes are effective in improving foundational learning outcomes. These programmes tend to provide a 'bundle' of interventions, and best practices often include flexible delivery; active, relevant and structured pedagogies; condensed curriculum focused on foundational competencies; as well as competency-based grouping and differentiated instruction.

For adolescent girls, there are areas of emerging consensus, while more research is needed in others. Evidence for programmes addressing economic constraints – making schools cheaper through eliminating school fees, providing scholarships and cash transfers – as well as alleviating physical barriers to school (e.g., school construction and transport options) are considered robust and represent the strongest part of the evidence base. Evidence is lacking for interventions related to safe spaces, life-skills training, improving sanitation and menstrual health management, and other accommodations for pregnant girls. While these programmes may not directly impact educational outcomes, they play an important role in child protection, emotional well-being and fostering transferable skills. While there is strong advocacy around disability-inclusive responses for adolescents, few peer-reviewed studies specifically focus on students with disabilities. However, there is an emerging base of best practices, including incorporating Universal Design for Learning (UDL) principles in education programming.

While the evidence base is growing, there are a number of areas that would benefit from focused policy attention and research. First, there is an important research and policy agenda in strengthening data and evidence at the secondary level overall. In particular, better measurement and documentation of academic learning outcomes, as well as measures of well-being or transferable skills are a critical starting point. Second, the evidence base on flexible pathways to secondary education, including accelerated education programmes, is promising, but would benefit from more rigorous evaluations. Finally, it is important to redirect research efforts towards regions where evidence is lacking – including countries where education needs are the greatest.

1 Background, Methodology and Research Approach

This rapid evidence review has been commissioned by the Secondary Education Working Group (SEWG) with funding from UNHCR and oversight from Plan International, UNHCR and UNICEF, to synthesize evidence on improving learning outcomes for adolescents in contexts of fragility and crisis – with a focus on adolescent girls/young women and adolescents with disabilities (AwDs). This report is not a systematic or rigorous review, but provides an up-to-date (through 2021) and contextual overview of the literature, synthesizing findings from existing systematic reviews and meta-analyses.

The methodology combined desk research, key informant interviews, and testing of emerging findings and recommendations with a reference group. This was supplemented by programme documents from donor agencies and NGOs, including qualitative and quantitative evaluations, working papers, and policy reports to identify policies and practices that hold promise to improve learning[1] in secondary education. Case studies were prioritized based on those that collected learning outcomes for adolescents, and sourced from existing literature, as well as referrals from programme specialists. While many of the issues raised merit deeper analysis, this was outside the scope of this broad landscape review. However, the findings in this report aim to provide SEWG members and programme implementers, policy makers and education administrators an understanding of the current knowledge base, outline gaps and inform future directions for research, policy and programming.

The following research questions guided the inquiry:

Research Question:
What practices are successful at improving learning outcomes for adolescents in fragile and crisis-affected contexts?

Sub-questions:
- **RQ1:** What interventions are successful at improving learning outcomes for adolescents at the secondary level overall?

- **RQ2:** What interventions are successful at improving learning outcomes for adolescent girls in fragile, emergency and crisis-affected contexts?

- **RQ3:** What interventions are successful at improving learning outcomes for adolescent with disabilities in fragile, emergency and crisis-affected contexts?

- **RQ4:** What are the success factors/best practices, constraints, and lessons learned?

Inclusion Criteria and Definitions:
Context:
This synthesis covers a broad range of crisis-affected contexts, which includes Level 2 and Level 3 (L2/L3) emergencies,[2] fragile and-conflict affected countries, health-related crises as well as contexts of forcible displacement – including refugees, internally displaced populations and Children on the Move (CoTM).[3] While emergencies tend to be complex, protracted and multi-faceted – and require differentiated responses – this review takes a broader purview, and operationalizes crisis contexts as situations where education has been disrupted for adolescents. Evidence from non-crisis contexts is also cited where relevant.

Population
This study defines adolescents as young people aged 10-19. Boundaries from some programmes – particularly non-formal/alternative programmes – sometimes include children younger than 10 who transition into the secondary level.

Learning Outcomes
While learning outcomes have traditionally been referred to as competencies around literacy and numeracy, outcomes increasingly include a broader conception of skills and competencies. These include 'transferable' or soft-skills - including creativity, communication, problem solving and socio-emotional skills – as well as digital skills necessary to participate in the 21st century economy. While programmes at the secondary level often include vocational skills, evaluating programmes targeting job/labour outcomes are outside the scope of this study.

Case Studies
Selected case studies showcase programmes that illustrate best practices in improving learning outcomes for adolescents. Cases studies with quantifiable learning outcomes are prioritized.

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1   Learning primarily defined as foundational/academic skills, but also includes transferable skills. For a typology of various forms of skills, see: UNICEF (2021) Why measure the skills children and youth need for life?
2   A list of L2/L3 Countries can be found at: https://www.corecommitments.unicef.org/level-3-and-level-2-emergencies. OCHA defines a complex emergency as "a multifaceted humanitarian crisis in a country, region or society where there is a total or considerable breakdown of authority resulting from internal or external conflict and which requires a multi-sectoral, international response that goes beyond the mandate or capacity of any single agency and/or the ongoing UN country programme.
3   For typology of fragility and crisis, see INEE (2020) Background Paper Non-formal Education for Adolescents and Youth in Crisis and Conflict Contexts: a Proposed Taxonomy

2 Current Landscape and Key Issues

Global momentum to achieve universal primary education has placed increased demands on secondary education systems. There is strong evidence that completing secondary education is associated with greater economic, social and political benefits. While secondary is a bridge to further education or to the labour market for youth, in general, it has high returns for adolescent girls. Secondary education is associated with greater economic participation and development for teenage girls; increases in their health, nutrition, and wellbeing; in addition to individual equity, agency, and decision-making capabilities.[4] Furthermore, each additional year of secondary education a girl completes is associated with a lower risk of early marriage and early pregnancy, sometimes by as much as six percentage points, and better educated women have lower fertility and child mortality rates.[5] In addition, mothers' education is strongly associated with children's educational attainment and achievement.[6] In fragile and conflict-affected contexts in particular, equitable access to secondary education can alleviate the drivers of conflict by promoting shared values, mitigating youth frustrations, and signaling a government's commitment to the population.

There is renewed focus on improving access and quality of secondary education for adolescents given near universality (pre-COVID-19) of primary education and the returns to secondary education. However, of every 100 students entering primary education, 61 complete lower secondary education, and just 35 complete upper secondary.[7] Nearly 200 million adolescents aged 12–17 years remain out of school, many of whom never started or completed primary education.[8] Prior to the COVID-19 pandemic, it was estimated that of the 1.4 billion school-age children and adolescents in low- and middle-income countries, 825 million will not develop basic secondary-level skills by 2030; the pandemic has further exacerbated this situation.[9]

Education challenges are heightened in contexts of fragility, conflict, emergencies and displacement. The number of forcibly displaced people – estimated at 80 million – is the highest since the end of the Second World War.[10] Many are in protracted displacement situations lasting over five years, making it necessary to find solutions that build their long-term productive capacity. In addition, climate change – a growing driver of fragility – is expected to force the internal displacement of 140 million people by 2050.[11] Adolescents in conflict-affected countries are 50 percent less likely to complete secondary school, compared to their peers around the world.[12]

> **825 million school-age children and adolescents in low- and middle income countries will not develop basic secondary-level skills by 2030. The pandemic has further exacerbated this situation.**

In addition, recent data suggests variation *within* the secondary sector. Mastercard Foundation finds that amidst a sample of 21 conflict-affected countries in Sub-Saharan Africa, gross enrollment is 18 percent lower at upper secondary compared to lower-secondary (while the net enrollment gap is 15 percent).[13]

COVID-19 has caused an education emergency at an extraordinary scale with more than 1.5 billion learners – 90 percent of those worldwide – seeing their education interrupted. The world quickly experienced a crisis within a crisis—a global public health emergency that exacerbated an ongoing 'learning crisis'. Recent data from UIS shows that in low-income countries, lower and upper secondary schools lost 85 instruction days on average.[14] Hundreds of millions of adolescents that were attending school without acquiring basic skills in literacy and numeracy fell further behind, which in turn exacerbated dropouts and attrition at key transition points.

Recognizing the importance of secondary education for girls, recent global commitments, including by the Commonwealth and G7 leaders, have pledged to 'Leave No Girl Behind'. The 2018 G7 Charlevoix Declaration on Quality Education committed to invest in quality education for girls and women during conflict and crisis, including refugees and internally displaced persons.[15] The 2021 G7 Declaration on Girls' Education: "Recovering from COVID-19 and Unlocking Agenda 2030", reaffirmed the commitment to 12 years of quality education for all children, and specifically girls.[16]

In addition, other global goals depend on the achievement of Sustainable Development Goal (SDG) 4, which demands an inclusive and equitable quality education and the promotion of "lifelong learning opportunities for all". In particular, Target 4.1 asks that all children complete primary and secondary education of sufficient quality to ensure that they have "relevant and effective learning outcomes". The refocused global attention on learning outcomes at the secondary level is captured by indicator 4.1.1 (c), which tracks the number of children at the end of lower secondary achieving at least a minimum proficiency level in reading and mathematics. However, multiple, complex, and protracted nature of crises – such as intra-state conflicts, pandemics and forced displacement – compounded by climate change are complicating efforts to meet global targets and goals.

4 Wodon et al. (2018)
5 Evans and Yuan (2021)
6 ibid
7 World Bank. 2018. World Development Report 2018: Learning to Realize Education's Promise.
8 Generation Unlimited
9 UNICEF (2020) Secondary Education Guidance Multiple and Flexible Pathways
10 UNICEF (2021) Unlocking the Power of Digital Technologies to Support `Learning to Earning' for Displaced Youth, UNICEF, New York, 2021.
11 Plan International (2019) Left out, Left Behind: Adolescent girls' secondary education in crises
12 Education Cannot Wait (2017) Results Report
13 King et al (2019) Secondary Education for Youth Affected by Humanitarian Emergencies and Protracted Crises
14 UNESCO, UNICEF, the World Bank and OECD (2021). What's Next? Lessons on Education Recovery: Findings from a Survey of Ministries of Education amid the COVID-19 Pandemic.
15 Charlevoix declaration on quality education for girls, adolescent girls and women in developing countries
16 https://www.gov.uk/government/publications/g7-foreign-and-development-ministers-meeting-may-2021-communique/declaration-on-girls-education-recovering-from-covid-19-and-unlocking-agenda-2030

3 The Dire State of Learning for Adolescents

There is a lack of systematic data on learning at the secondary level. To identify needs, support advocacy, and inform policy responses – there is a need for measurement tools that are reliable, valid, comparable, and contextually relevant. However, global surveys reveal only 46 percent of countries collect data on reading proficiency at the lower secondary level. This figure was 33 percent for Sub-Saharan African countries, and 42 percent for Asia and the Pacific (Fig 1).[17] Even when countries collect learning data, they are often based on ad hoc assessments, and do not permit systematic tracking over time or across countries. The lack of good measurement means that education planners are often flying blind.

This data gap on learning is particularly acute in contexts of fragility, crisis and emergencies. Short humanitarian funding cycles, compounded by challenges of administering systematic learning assessments, means that there is a lack of disaggregated, reliable, and up-to-date data during emergencies. Furthermore, data collection tends to be focused on enrolment and completion, rather than on the quality of education. The lack of comprehensive education data systems means that implementing agencies often have to start data collection from scratch – a key reason indicator definitions and data collection methods vary widely among programmes. At best, this generates a fragmented system without systematic or compulsory information-sharing in place. These challenges are exacerbated for refugees, displaced populations, and children on the move, where there are no cross-national datasets to inform policy responses.

To bridge this gap, there are emerging efforts to harmonize data standards and processes at the secondary level. OECD's PISA for Development programme aims to broaden participation of low- and middle-income countries to assess learning for 15-year-olds. Although coverage is still limited, countries such as Honduras and Guatemala are participating, which are characterized by intra-state violence and displacement.[18] A Learning Metrics Task Force identified seven domains of learning that represent essential competencies that children and youth should develop, covering foundational skills such as literacy and numeracy as well as a range of social and emotional competencies relevant for young people living in adversity. To date, the effort has included consultations with 100 countries, including South Sudan and the Democratic Republic of the Congo.[19]

Another example is The Global Proficiency Framework, which articulates a global consensus of the minimum skills learners should be able to demonstrate throughout their learning journey up to grade nine in reading and mathematics. At the ground level, citizen-led assessments (CLAs) of learning serve as an important source of data where system level data collection is not feasible. Some multipurpose household surveys have also begun including rapid learning assessment modules. As these approaches are administered in non-school settings, they are better able to capture marginalized students,

including those at risk of being missed in school-based assessments.

Many adolescents with disabilities, especially girls, remain invisible in data collection efforts.[20] To address this, UNICEF and the Washington Group on Disability Statistics recently developed the Child Functioning Module for use in censuses and surveys. Starting in 2016, the module was included in UNICEF's MICS surveys and is currently being used to collect data on children aged 2 to 17. The module aims to provide a population-level estimate of the number and proportion of children with functional difficulties in learning – and is expected to provide important insights moving forward.

There is a growing recognition of the importance of 'transferable' skills - sometimes referred to as life skills, 21st century skills or socioemotional skills.[21] These skills are particularly relevant for adolescents as they prepare for increased responsibilities during adulthood, including the transition to the world of work. Transferable skills complement and facilitate the acquisition of a range of foundational, digital, entrepreneurial, and job-related skills. Secondary students in particular, require the higher-order reasoning, teamwork, and communication skills that build on foundational skills. Education systems are increasingly seeking to integrate transferable skills into national curricula to promote employability, entrepreneurship, civic engagement, and resilience among adolescents.[22] While there is no consensus on defining and benchmarking specific transferable skills, instruments such as the Life Skills and Citizenship Education (LSCE) framework and the Holistic Assessment of Learning in Syria (at the primary level), provide a basis for policy dialogue on measuring these skills.[23]

> ## Global Learning Benchmarks at the Secondary level: Programme for International Student Assessment (PISA)
>
> **Different countries define skills differently, but all share some core aspirations, embodied in their curriculums. According to the OECD's PISA benchmarks for 15-year-old adolescents, students enrolled in secondary education should typically, "locate one or more pieces of information, which may need to be inferred and may need to meet several conditions. Other [benchmarks] require recognizing the main idea in a text, understanding relationships or construing meaning within a limited part of the text when the information is not prominent, and the reader must make low-level inferences."**
>
> **In mathematics, students can typically "extract relevant information from a single source and make use of a single representational mode. Students at this level can employ basic algorithms, formulae, procedures or conventions to solve problems involving whole numbers. They are capable of making literal interpretations of the results."**

17 World Bank. 2018. World Development Report 2018: Learning to Realize Education's Promise.
18 OECD: PISA for Development. https://www.oecd.org/pisa/pisa-for-development/
19 World Bank. 2018. World Development Report 2018: Learning to Realize Education's Promise; Note: the Task Force has been disbanded.
20 UNGEI (2021) Leave no girl with disabilities behind
21 For a discussion of typology of skills, and in particular the importance of transferable skills, see: Why measure the skills children and youth need for life? https://blogs.unicef.org/evidence-for-action/why-measure-the-skills-children-and-youth-need-for-life/
22 See UNICEF 2019-2030 Education Strategy "Every Child learns".
23 Measuring Life Skills In the context of Life Skills and Citizenship Education in the Middle East and North Africa https://www.unicef.org/mena/reports/measuring-life-skills;

FIGURE 1: WORKING DEFINITION OF TRANSFERABLE SKILLS
SOURCE: UNICEF (2019) GLOBAL FRAMEWORK ON TRANSFERABLE SKILLS

Adapted from UNICEF

TRANSFERABLE SKILLS

COGNITIVE SKILLS
having to do with "thinking" and include the ability to focus; problem-solve, make informed choices, and set plans and goals

SOCIAL SKILLS
having to do with interaction with others including the ability to communicate, collaborate, resolve, conflicts, and negotiate

EMOTIONAL SKILLS
having to do with skills that relate to understanding and regulating one's own emotion. cope with stress, understanding emotions of others, and the ability to empathise with others

However, what we do know is that learning outcomes at the secondary level paint an alarming picture. A number of different estimates show that learning outcomes in low-income countries are at crisis levels. The UIS estimates that 6 out of 10 adolescents were unable to meet minimum proficiency standards in reading and mathematics globally (at the lower secondary level).[24] This figure in sub-Saharan Africa (89%) and Central and South Asia (80%) is far higher.[25] The World Bank estimates from 2021 illustrate that 'learning poverty' rates – a combination of learning and schooling deprivation – are around 90 percent in states considered fragile or under an emergency (For countries where data is available, see Annex 1 for details). Similarly, PISA for Development results show that only 6 percent of all 15-year-olds across seven developing countries demonstrated proficiency in mathematics.[26] In another study across 51 low- and middle-income countries, only 50 percent of young adult women who had completed grade 6 could read a simple sentence.[27]

Forcible displacement sits at the intersection of multiple crises, and learning challenges are exacerbated by overlapping barriers.[28] Refugees are often structurally excluded from national secondary schools, either due to explicit policy exclusion, or because access (registration places and capacity) for refugees has not been negotiated with national authorities. Formal systems generally require documentation (such as birth certificates and identity documents), and this problem is often heightened by a lack of cross-border recognition of certificates and equivalencies. For young refugees hoping to attend secondary school in a new country, increased complexity of concepts and vocabulary expected at secondary school can be challenging in a new language of instruction. These barriers are reflected in both access and quality metrics. Recent global UNHCR data suggests the gross enrolment for refugees is just 34 percent on average at secondary level.[29] While data on learning at the secondary level is limited, initial findings from the primary level reading assessments in refugee camps in Kenya and Rohingya refugee children in Bangladesh indicate that learning outcomes remain alarmingly low.[30] This challenge is likely heightened in the case of adolescents.

In many refugee camps, secondary education services are only meeting a fraction of the demand. For instance, in the Dadaab camps in Kenya, there are only seven secondary schools (relative to 33 primary schools), running at double their capacity to accommodate just 13 percent of the adolescent population.[31] Adolescent girls who are displaced frequently express disappointment that their current situation prevents them from attending school or gaining access to vocational training.[32] Interviews with refugee girls in Bangladesh, South Sudan and the Chad Basin underscore the limited availability, and distance to, schools as key barriers to schooling.[33] Similarly, interviews with adolescent girls in conflict areas in Burkina Faso highlight the destruction of schools as well as poverty, insecurity, and discrimination impacting school attendance.[34]

Compounded Barriers for Adolescent Girls and Adolescents with Disabilities During Crisis
Crisis exacerbates gender imbalances in education, increasing the risk of gender-based violence (GBV) and child, early and forced marriage and unions (CEFMU), and amplifying the socio-cultural barriers that limit girls' access to learning. Adolescent girls are the first to be pulled out of school in an

24 UIS. (2017). More Than One-Half of Children and Adolescents Are Not Learning Worldwide (Fact Sheet No. 46). UNESCO Institute for Statistics. http://uis.unesco.org/sites/default/files/documents/fs46-more-than-half-children-not-learning-en-2017.pdf
25 ibid
26 Ward (2018)
27 Sandefur, Justin, Mari Oye, and Lant Pritchett. 2016. 'Girls' Schooling is Good, Girls' Schooling with Learning is Better', Background paper for the International Commission on Financing Global Education Opportunity.
28 Dryden-Peterson (2016)
29 UNHCR (2021) Education Report 2021: 'Staying the course' - The challenges facing refugee education
30 Piper et al (2020); Uwezo. (2018). Are our children learning? Uwezo learning assessment in refugee contexts in Uganda.
31 UNHCR (2015). Education Brief 6: Secondary Education for Refugee Adolescents. UNHCR.
32 Plan International (2018) Adolescent Girls in Crisis: Experiences of risk and resilience across three humanitarian settings
33 ibid
34 Plan International (2020) Adolescent Girls in Crisis: Voice from the Sahel

emergency, and shoulder the greatest burden during crisis, including limitations on their freedom of movement, unpaid caregiving and domestic labor in their homes, to the increased likelihood of being married off. Recent analysis from UNICEF suggests that 10 million additional girls are at risk of child marriage due to COVID-19.[35] Exclusionary policies often mean that girls who are pregnant are withdrawn from school, and difficult re-entry requirements create barriers to continuing their education.[36]

Girls are almost two and a half times more likely to be out of school if they live in conflict-affected countries, and adolescent girls are nearly 90 percent more likely to be out of secondary school than their counterparts in countries not affected by conflict.[37] Among Myanmar refugees in Bangladesh, for instance, only four per cent of girls aged 15-18 attended a learning facility, compared to 14 per cent of boys.[38] Inequities in access translate to inequitable learning. According to a UIS analysis, girls fared poorly on reading outcomes, with 59 percent of girls not achieving minimum proficiency levels globally at the lower-secondary level.[39] This number is higher in sub-Saharan Africa, with 89 percent not achieving minimum levels for reading. [40]

COVID-19 also amplified existing inequities, including economic stress and mobility restrictions for adolescent girls and persons with disabilities. When schools reopened, girls were at the highest risk of not returning. A survey of almost 4,000 adolescents aged 10-19 years in Kenya showed that girls were twice as likely not to return when schools had reopened in January 2021.[41] After six months of closure in Uganda, 18 percent of girls did not come back compared to 2 percent boys at Grade 12.[42] School closures also translate to learning loss. A recent survey of adolescent girls (aged 12-19) in Bangladesh found that median literacy and numeracy scores dropped 6.25 percent in 2021 following school closures (compared to a 2018 baseline).[43]

Education Technology (Ed-tech) based solutions can exclude large groups of disadvantaged learners, including adolescent girls. Interventions that do not place inclusion at their heart, including distance or remote learning, are likely to exacerbate existing inequities.[44] There is evidence showing women and girls tend to benefit more from ed-tech than their male counterparts, both in terms of access and learning.[45] However, even prior to COVID-19, researchers underscored an important 'gender digital divide' in access to technology and remote learning devices.[46] A UNICEF review found that adolescent girls aged 15 to 19 were less likely than boys to have used the internet in 2020, and they also had lower mobile phone ownership.[47] This disparity is rooted in broader attitudinal and cultural gender biases about girls and technology – both inside the classroom and at home.[48]

Furthermore, disability status remains one of the strongest drivers of exclusion for adolescents.[49] A recent UNICEF report, Seen, Counted and Included, estimates that there are 240 million children with disabilities in the world.[50] Education for children and adolescents with disabilities has been shown to have significant economic and social returns. Cross-country research finds that each additional year of schooling for individuals with a disability decreased their probability of being in the poorest two quintiles by between 2 and 5 percentage points.[51] However, stigma around disability can be deeply entrenched, and infrastructure and urban planning designs rarely incorporate disability inclusive components in low- and middle-income countries. Adolescents and youth with disabilities may require special accommodations to help deal with practical and physical barriers to participation, which require flexible learning arrangements that are seldom readily available in crisis contexts.

While systematic data collection on disability is limited, learners with disabilities represent one of the most marginalized groups in conditions of fragility and crisis. The percentage of children (aged 5 to 17) with one or more functional difficulties was highest in countries considered fragile and affected by crisis, including Central African Republic, Chad, Sierra Leone and Iraq. In insecure environments, adolescents with disabilities face overlapping barriers to learning – including mobility restrictions, and a higher risk of abuse, gender-based violence, neglect, and long-term psychosocial trauma.[52] In Mali, for example, only 17.6 percent of women with disabilities are literate, compared to 21.4 percent of women without disabilities and 39.2 percent of men without disabilities.[53] A 2018 study of Syrian refugees in Jordan and Lebanon found that among adolescents 13 years of age and above, refugees with disabilities were more likely to be illiterate and to have never been enrolled in school.[54] According to a 2018 report by Syria Relief, four out of five children living with disabilities inside the Syrian Arab Republic reported not having access to education.[55]

35 UNICEF (2021) 10 million additional girls at risk of child marriage due to COVID-19 https://www.unicef.org/press-releases/10-million-additional-girls-risk-child-marriage-due-covid-19
36 Unterhalter (2013)
37 UNESCO EFA Global Monitoring Report (2015) Humanitarian aid for education: why it matters and why more is needed
38 ibid
39 UIS. (2017). More Than One-Half of Children and Adolescents Are Not Learning Worldwide (Fact Sheet No. 46). UNESCO Institute for Statistics. http://uis.unesco.org/sites/default/files/documents/fs46-more-than-half-children-not-learning-en-2017.pdf
40 ibid
41 Evans et al (2021)
42 Kwauk et al (2021)
43 Amin, S., M.I. Hossain, S. Ainul. 2021. "Learning loss among adolescent girls during the COVID-19 pandemic in rural Bangladesh." New York: Population Council.
44 Remote` and distance learning is understood as digital, including online and offline platforms, TV, radio or paper-based packages.
45 Zelezny-Green, R. (2011). The Potential Impact of Mobile-Assisted Language Learning on Women and Girls in Africa: A Literature Review. Ubiquitous Learning: An International Journal, 3(1). https://doi.org/10.18848/1835-9795/cgp/v03i01/40257
46 Tyers-Chowdhury and Binder (2021) What we know about the gender digital divide for girls.
47 UNESCO (2021) When Schools Shut: Gendered Impacts of COVID-19
48 Webb, D. Barringer, K. Torrance, R. Mitchell, J. (2020). Girls' Education Rapid Evidence Review. EdTechHub.
49 Leonard Cheshire Disability & UNGEI. (2017). Still left behind: Pathways to inclusive education for girls with disabilities. https://www.ungei.org/publication/still-left-behind
50 UNICEF (2021) Seen, Counted, Included: Using data to shed light on the well-being of children with disabilities, UNICEF, New York, 2021.
51 World Bank. 2018. World Development Report 2018: Learning to Realize Education's Promise.
52 INEE (2021). Mind the gap: The state of girls' education in crisis and conflict.
53 Humanity & Inclusion (2021) Education, girl, disability: An equation to solve
54 Humanity & Inclusion (2018) Removing Barriers: The Path Towards Inclusive Access – Disability Assessment among Syrian refugees in Jordan and Lebanon, Amman, 2018.
55 UNICEF (2021) Children with Disabilities in Situations of Armed Conflict: Discussion Paper

4 Evidence on Learning at the Secondary Level

This section explores the contours of the evidence base related to learning outcomes for adolescents at the secondary level. It first identifies the key constraints to quality learning at the secondary level overall. It then outlines the evidence base related to learning in fragile, crisis and emergency contexts, followed by the characteristics of programmes that are particularly effective for adolescent girls and AwDs.

The Evidence base: Limited but Growing

In contrast to a growing evidence base on learning at the primary level, empirical literature at the secondary level is smaller. However, many of the best practices and evaluation findings are replicated at both levels, suggesting that key principles remain valid. The body of evidence converges on four core principles[56]:

- **Engaging and active pedagogical approaches that promote problem-solving, cooperative learning, and constructivist-based teaching strategies have shown promise at the secondary level.**[57] Furthermore, approaches that tailor teaching to students' competencies– including through teacher led formative assessments or technology-assisted learning – have demonstrated the strongest and most consistent results at the primary level, and increasingly observed at lower-secondary levels.[58] However, there is wide variation in effect sizes depending on programme characteristics – indicating the need for more research beyond primary grades.

- **Alleviating the economic costs of secondary schooling has been shown to increase both enrollment and learning.** Making school cheaper through eliminating school fees, providing scholarships, and to some extent cash transfers – have
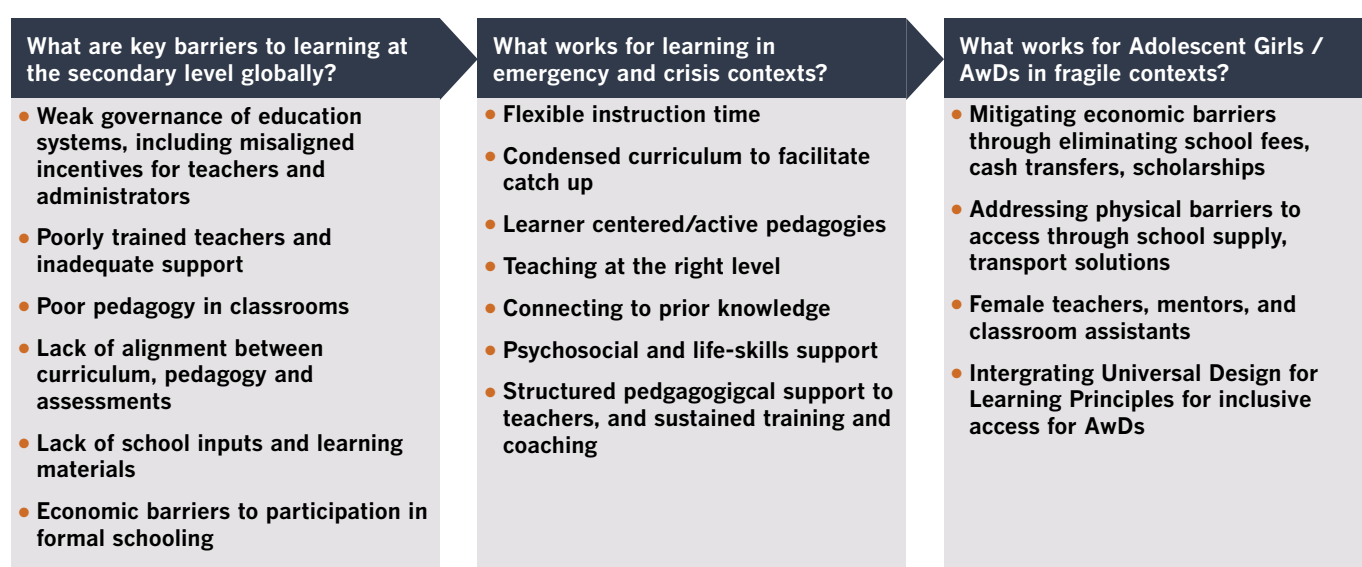
demonstrated a robust body of evidence and show strong effects for adolescent girls. There is also growing empirical evidence around alleviating physical barriers to school (e.g. reducing distance to school and provision of transport options).

- **Competent, motivated and well-supported teachers are critical to student learning.** In contrast to generalized teacher training models pervasive in many low-income countries, sustained and long term in-classroom coaching regimes – focused not on inspection, but on pedagogical improvement – have been highly effective. Structured teacher guides that outline a sequence of instruction, as well as explicit instructional strategies have also been associated with better student test scores (although this evidence is mainly drawn from the primary level).[59]

- **Inadequate school inputs combined with poor management and governance often undermine schooling quality.** Although effective governance, management and leadership does not raise student learning directly, it does so indirectly by improving teaching quality and ensuring effective use of resources.[60]

It is important to note that current literature continues to underscore the gap in evidence at the secondary level, and specifically for adolescents at the upper-secondary level.[61] While many of the findings related to learning outcomes can be reasonably presumed to apply at both the primary and secondary level, developmental and psychosocial needs of older children and youth are different, and there is an important agenda for more targeted research at this level.

FIG 2: BARRIERS TO EDUCATION AT SECONDARY LEVEL

What are key barriers to learning at the secondary level globally?	What works for learning in emergency and crisis contexts?	What works for Adolescent Girls / AwDs in fragile contexts?
• **Weak governance of education systems, including misaligned incentives for teachers and administrators** • **Poorly trained teachers and inadequate support** • **Poor pedagogy in classrooms** • **Lack of alignment between curriculum, pedagogy and assessments** • **Lack of school inputs and learning materials** • **Economic barriers to participation in formal schooling**	• **Flexible instruction time** • **Condensed curriculum to facilitate catch up** • **Learner centered/active pedagogies** • **Teaching at the right level** • **Connecting to prior knowledge** • **Psychosocial and life-skills support** • **Structured pedgagogigcal support to teachers, and sustained training and coaching**	• **Mitigating economic barriers through eliminating school fees, cash transfers, scholarships** • **Addressing physical barriers to access through school supply, transport solutions** • **Female teachers, mentors, and classroom assistants** • **Intergrating Universal Design for Learning Principles for inclusive access for AwDs**

56   Analysis drawn from prior evidence syntheses and meta-reviews, including Evans and Papova 2016; Evans and Acosta 2021; Null et al 2017; Stern et al 2020
57   Null et al (2017)
58   Evans and Papova (2016)
59   Evans and Papova 2016, Evans and Acosta 2021
60   World Bank (2018) World Development Report
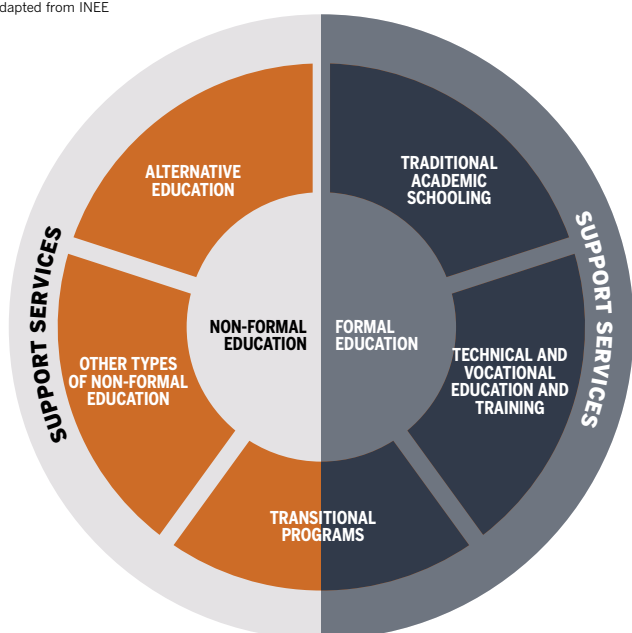61   Null et al 2017

Multiple/Flexible Pathways to Secondary Education

Following periods of interrupted instruction, whether due to the COVID-19 pandemic or another crisis or emergency, adolescents who have experienced disruption require flexible and diverse pathways that meet their distinct learning needs. A Multiple and Flexible Pathway (MFP) approach covers a wide range of programmes in different contexts, and includes formal systems as well as alternative approaches designed to cover lost ground, and prepare adolescents to start school at the right level.[62] Learners who have been out of school for less than one year may need catch-up programmes that bridge shorter gaps, while over-age learners who have missed more than one year may need Accelerated Education Programmes (AEPs) to help them recover missed content and lost learning. Other approaches may include transitional programmes, such as language classes to support children who are not proficient in the language of instruction; as well as vocational and skills-training programmes that prepare students to access income-generating activities.[63]

Plan International / Biploby Rani Dey Roy

FIG 3: TAXONOMY OF FORMAL AND NON-FORMAL EDUCATION
SOURCE: INEE (2021) PAPER ON NON-FORMAL EDUCATION AND TAXONOMY

Adapted from INEE

Particularly in fragile, crisis and emergency contexts, MFP approaches have proliferated, and represent a wide range of delivery models. For instance, following years of civil war, the Government of South Sudan established an alternative education system for over 165,000 adolescents (mostly ages 12-18), which compressed eight years of basic education into an accelerated timeline of four years, and allowed adolescents to re-enter the regular secondary school system. UNICEF Turkey supported the Ministry of National Education (MoNE) to establish an accelerated programme for out of school Syrian adolescents at the lower secondary level. The programme covered the essential curriculum content in addition to Turkish language courses to support re-integration into the formal education system. At the end of the AEP, students were evaluated and received equivalency certificates accredited by MoNE to enter into the formal education system.

Preliminary evidence on AEP programmes is promising. A recent evidence review shows that learners in AEP outperform their peers (out-of-school adolescents or counterparts in government schools) in literacy and numeracy.[64] For instance, *VAS-Y Fille! Congo* is a compressed three-year course designed to prepare 9-15-year-olds to take the national end-of-primary exam and transition. Girls who attended the programme scored approximately 15 percentage points higher on the EGRA and 10 percentage points higher on the EGMA, compared to the girls who remained out of school. Similarly, participants in Ethiopia's Speed School model, which delivers an accelerated curriculum to out-of-school adolescents up to age 14, have been shown to score between 7-10 percent higher their government school student counterparts. Similar assessments cited in the AEWG Evidence review have also found promising results from Iraq, Mali, Kenya, Afghanistan – although most programmes target primary-aged learners.[65]

While these individual evaluations paint a promising picture, most existing evaluations of AEPs are not considered rigorous, as they do not incorporate a credible counterfactual in their designs. However, case studies and preliminary evaluations provide proof of concept, and can point to promising avenues for future testing. Several effective strategies have emerged from recent programme evaluations. The core lessons drawn from successful programmes can be categorized in three areas: flexible delivery, adapting the curriculum and relevant, learner-centered pedagogy.

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62 For a typology of Alternative Education programmes, see: INEE (2020). Non-formal Education for Adolescents and Youth in Crisis and Conflict Contexts: a Proposed Taxonomy and Background Paper. New York, NY. https://inee.org/resources/non-formal-educationadolescents-and-youth-crisis-and-conflict-proposed-taxonomy-and UNICEF's Multiple and Flexible Pathways: Secondary Education Guidance. https://inee.org/system/files/resources/Policy%20Paper%20on%20Non%20Formal%20Education%20v1.1%20LowRes.pdf

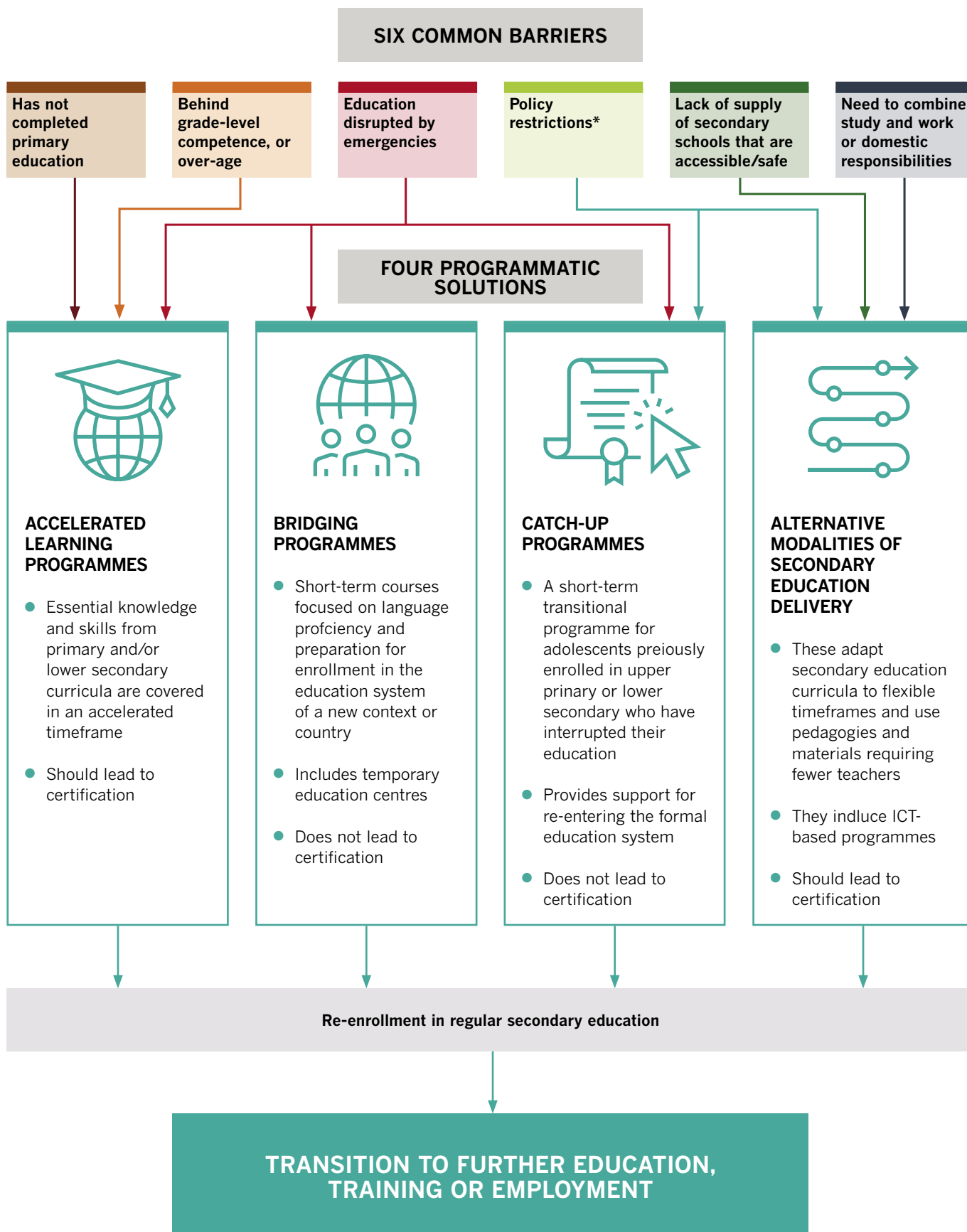63 AEWG (2017) Guide to the Accelerated Education Principles

64 Accelerated Education Working Group (2020) Accelerated Education Evidence Review, Strengthening the Evidence Base for Accelerated Education

65 Accelerated Education Working Group (2020) Accelerated Education Evidence Review, Strengthening the Evidence Base for Accelerated Education

FIG 4: MULTIPLE AND FLEXIBLE PATHWAYS TO SECONDARY EDUCATION
SOURCE: UNICEF (2020) SECONDARY EDUCATION GUIDANCE MULTIPLE AND FLEXIBLE PATHWAYS
Adapted from UNICEF

SIX COMMON BARRIERS

Has not completed primary education	Behind grade-level competence, or over-age	Education disrupted by emergencies	Policy restrictions*	Lack of supply of secondary schools that are accessible/safe	Need to combine study and work or domestic responsibilities

FOUR PROGRAMMATIC SOLUTIONS

ACCELERATED LEARNING PROGRAMMES

- Essential knowledge and skills from primary and/or lower secondary curricula are covered in an accelerated timeframe
- Should lead to certification

BRIDGING PROGRAMMES

- Short-term courses focused on language proficiency and preparation for enrollment in the education system of a new context or country
- Includes temporary education centres
- Does not lead to certification

CATCH-UP PROGRAMMES

- A short-term transitional programme for adolescents preiously enrolled in upper primary or lower secondary who have interrupted their education
- Provides support for re-entering the formal education system
- Does not lead to certification

ALTERNATIVE MODALITIES OF SECONDARY EDUCATION DELIVERY

- These adapt secondary education curricula to flexible timeframes and use pedagogies and materials requiring fewer teachers
- They indluce ICT-based programmes
- Should lead to certification

Re-enrollment in regular secondary education

TRANSITION TO FURTHER EDUCATION, TRAINING OR EMPLOYMENT

5 Best Practices to Promote Learning during Crisis

Building flexibility into programmes in terms of time, location, and delivery

Education approaches that offer flexible scheduling, location, and entry/exit have been shown to improve overall access and attendance. Flexibility can refer to time (times when learners attend, increased class hours per week,); delivery modality (face-to-face, blended, distance, and self-study); location, and certification processes. Adapting instructional hours are especially relevant in meeting needs of marginalized groups—such as girls, adolescent mothers, displaced learners, learners with disabilities, working learners, and religious and ethnic minorities. Extending contact hours, including intensive 'learning camps', demonstrate promise at both the primary and secondary level. Speed School models– which have demonstrated large learning gains for adolescents in Ethiopia and Uganda – provide class times ranging between 6 and 8 hours a day, up to 6 days a week.[66] At the secondary level, in the United States (middle school) programmes to extend contact hours, such as summer learning programmes, have consistently demonstrated learning gains.[67] MFP approaches also provide an important entry point for the integration of UDL principles to improve inclusiveness – including accommodations based on individual need, accessible learning materials in multiple formats, and multiple ways of engaging with content.

Adapting the Curriculum to Learner Needs

When schooling has been interrupted, learners may be starting at different places in their learning competencies. Learning loss rates are shaped by socio-economic status, gender, disability, ethnicity, and refugee status. Learning assessments following disruption can establish a baseline, identify learner needs, inform pedagogical strategies to facilitate catch up, or shape system-wide programmes such as teacher professional development. The Second Chance Schools in Liberia and Colombian Escuela Nueva for instance, are highly personalized and set aside days for individual formative assessments of students to gauge reading fluency and numeracy skills.

Despite the benefits, existing implementation experience suggests that learning assessments are challenging to integrate into learning processes. In practice, teachers are already overburdened, and find assessments to be time-consuming and labor-intensive – constraints that are exacerbated in contexts of crisis and emergency. There is an important research agenda on how to improve the implementation of rapid assessments, including digitally, especially at secondary levels. In particular, policymakers should consider the country context when designing assessments, including balancing the method of assessment (i.e., oral, written, or both), selecting competency-based or content-based assessments, and domains (e.g., literacy, numeracy, socio-emotional learning, language/mother tongue, or more advanced subject-specific benchmarks).

As learners return to school following protracted crises, national governments must support the education workforce to adapt existing curriculum to prioritize more foundational skills for adolescents, while also embedding social-emotional learning, including skills for collaboration, communication, and coping with possible adversity. Current evaluations of alternate and non-formal approaches point to two remedial strategies: 'on grade-level' for shorter disruptions, and accelerated education programmes for learners with longer-term disruptions.

In cases of shorter disruption (a few months to a year), programmes should stay "on grade-level" and ensure students stay in the correct grade for their age. Instead of beginning where learners had stopped, focusing on grade-level standards – with support for foundational skills integrated into curriculum – allow learners to maintain momentum and motivation.[68] In the United States, guidance following school closures from the secondary level, for instance, suggests clustering conceptually-related topics, and providing instructional scaffolds for grade-level texts, rather than restricting students to texts at their prescribed independent reading level.[69]

For longer term disruptions, accelerated education programmes that condense curriculums have delivered positive results. Condensed curriculums generally center around priority learning objectives and key knowledge and skills that students need to achieve grade-level proficiency, rather than teaching all subject areas faster. At the lower-secondary level, for instance, the Speed Schools Ethiopia model dedicates four times more time to reading than a typical formal classroom.[70] Liberian Second Chance Schools (ages 8-12) dedicated 5 hours to literacy and 2 hours to numeracy a day.[71] As adolescents in higher grades move beyond foundational competencies, there is a need to adapt these strategies for more specialized and advanced curriculum.

There is a need to support non-linear learning pathways, including identify and curate curriculum resources that are of high quality and work in a variety of resource-levels. Best practices for digital platforms tend to ensure that (i) curation and adaptation of content be 'co-created' and developed with local expertise, (ii) support for teacher capacity building is integrated into programmes, (iii) digital platforms reinforce and complement existing systems, rather than duplicating efforts.[72] UNICEF's Learning Passport, for instance, is a flexible and adaptable learning management system platform that features personalized pathways both online and offline. Every learner has a personalized record of their learning history unique to them and can be taken across physical and digital borders.[73] Kiron is a programme that aims to give Syrian adolescent refugees access to higher education through

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66 ibid
67 Terzin and Moore (2017)
68 Accelerated Education Working Group (2020) Accelerated Education Evidence Review, Strengthening the Evidence Base for Accelerated Education
69 Student Achievement Partners (SAP). 2020-2021 Priority instructional content.
70 Accelerated Education Working Group (2020) Accelerated Education Evidence Review, Strengthening the Evidence Base for Accelerated Education
71 ibid
72 Cambridge University Press & Cambridge Assessment. (2020). The Learning Passport: Research and Recommendations Report. Cambridge, UK: Cambridge University Press & Cambridge Assessment.
73 For additional resources on the Learning Passport, see https://www.learningpassport.org/about-learning-passport; https://www.cambridge.org/files/8615/8465/3596/The_Research_and_Recommendations_Report.pdf

CASE STUDY 1:

Remedial Classes for Adolescent Girls in Refugee Camps in Kenya

The World University Service of Canada programme supported a remedial education programme for adolescent girls (Grades 5 to 8), providing safe, girls-only spaces for at risk girls in the Dadaab and Kakuma refugee camps in Kenya.

Programme Features: The programme trained class teachers to identify areas of academic struggle for the girls, and tailor after-school remedial learning to the specific needs of the girls. Class sizes were limited to forty students, which allowed the teacher to provide higher levels of individualized instruction and support, compared to normal school classes (where numbers sometimes exceed one hundred). The programme also provided spaces where girls were comfortable to raise issues away from their male counterparts, in addition to a team of community mobilizers consisting of refugees themselves. These individuals supported the monitoring of the remedial programme, including following up with students that had missed lessons, and serving as a link between the schools and the community.

Results: Between 2014 and 2015, internal monitoring data of girls in Class 6 showed an improvement in literacy test scores by 10 percent. Furthermore, 91 percent of girls who attended at least 5 hours of remedial classes, improved their scores.

Source: https://www.promisingpractices.online/world-university-service-of-canada

Massive Open Online Courses (MOOCs) remotely, and partners with universities to accredit the MOOCs for quality assurance. Investing in a repository of distance learning content, including those that do not rely purely on tech solutions, such as curriculum package mailouts, is a critical agenda in a post-COVID-19 world.

Enhanced Pedagogical Strategies

Pedagogical practices refer to the activities and strategies that educators use to encourage interaction with content. For adolescents that have experienced disruption, and/or have not mastered foundational competencies, targeting instruction to existing learning levels has been shown to help them catch up. [74] Classroom instruction is most effective when it is aligned with current learning levels, a principle supported by a wide range of evidence across academic disciplines and education systems. [75]

While much of the early evidence on competency-based grouping was at the primary level, [76] this is increasingly replicated at secondary. Reviews of UNICEF's Let Us Learn (LUL) programmes show that ability-based accelerated learning (ABAL) pathways have been effective in re-engaging adolescents during and after COVID-19 closures, and were able to build back foundational skills in an accelerated timeframe. In Bangladesh, LUL targeted out-of-school children and adolescents (aged 8–14) through a flexible pathway. The programme – which operates in community-run facilities with flexible learning hours and ability-based learning (grouping students by their learning levels in each subject) – contributed to 90 per cent of ABAL learners passing standardized tests in foundational literacy and numeracy after their first year, in addition to gains in social and non-cognitive skills. [77] During the COVID-19 school closures in Nepal, LUL supported learning circles that facilitated more tailored instruction than would be possible in larger classroom settings. These platforms provided individualized support to marginalized students, such as adolescents with disabilities. [78]

Combining short-term remediation with longer-term efforts, like reorienting curriculum to match the pace of student learning, could provide one path to mitigate the long-term learning loss of the COVID-19 related school closures. In practice, however, the application of personalized learning strategies has been found challenging to implement, given the need for frequent formative assessments, and the capacity to group students based on ability at the classroom-level. Furthermore, targeted instruction must be designed locally and implemented to ensure it does not stigmatize marginalized adolescents, especially those with disabilities. Needless to say, these constraints are amplified in crisis and low-income contexts.

Learner-centered pedagogical approaches are also frequently cited in successful programmes. Studies focusing on secondary students in Nigeria and Kenya highlight teaching strategies based on problem-solving, cooperative learning, and constructivist practices as having the strongest effect on improving learning. [79] For adolescents from displaced populations, 'pedagogies of predictability' provide a sense of stability and security. The dynamic between teachers and learners is especially important in crisis contexts – particularly given the additional psychosocial support required for youth. Recent ethnographic research with Syrian secondary (Grade 9) students in Lebanon suggest refugee adolescents find great value in 'predictability', which involves a calm environment, a

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74 Evidence reviews that foreground pedagogical approaches include: Evans and Popova (2016); Evans and Fei (2019); Conn (2014), McEwan (2015), and Kremer, Brannen, and Glennerster (2013).
75 Pershad, D., Comba, R., and Bergmann, J., 'From schooling to learning for all: Reorienting curriculum and targeting instruction', Background paper prepared for the Save Our Future white paper Averting an Education Catastrophe for the World's Children, Save Our Future, 2020.
76 ibid
77   UNICEF (2021). Ready to Start School, Learn and Work: Evidence from three education programmemes for out-of-school children and adolescents in Bangladesh, Innocenti Research Report
78 UNICEF (2021). Continuing learning for the most vulnerable during COVID-19: Lessons from Let Us Learn in Afghanistan, Bangladesh, Liberia, Madagascar and Nepal, Innocenti Research Briefs no. 2021-02
79 Null et al 2017

CASE STUDY 2:

Accelerated Learning and Learner Centered Pedagogy in Speed Schools in Ethiopia

Speed Schools are an accelerated education programme model for out-of-school children and adolescents between 8 and 14 years old, covering a range of countries including Ethiopia, Lebanon, Liberia, and Uganda. In Ethiopia, students cover the first 3 years of the national curriculum in 10 months and utilize the same textbooks as government schools, after which they transition to formal schooling.

Rosie Hallam/The Luminos Fund

Programme Features: In addition to a condensed curriculum, learning occurs in the students' first language and draws on local cultural context. Activities allow for maximized time on task, and focus on foundational reading – in-classroom reading activities are allocated four times more time than in formal classrooms. The programme uses active and learner-centered pedagogy emphasizing teaching practices that center on demonstration, explanation, and dialogue between teachers and students, and group work. Activities within and outside the classroom support students' sense of belonging to the school and the community.

Results: In an assessment comparing Speed School graduates with students from government schools that were eligible but did not attend Speed Schools, former Speed School students scored 10, 13, and 7 percent more points in math, Sidama, and English, respectively.

Source: AEWG (2020) Reigniting Learning: Strategies for Accelerating Learning Post-crisis

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set schedule, and having clearly communicated and collectively established expectations for student behaviors. In addition, young people find great value in pedagogies of explaining, to overcome feelings of "being behind" when their teachers use simple terms, answer questions, reinforce ideas and concepts, focus on processes rather than facts, and engage with students on the relevance of what they are learning.[80]

Provide opportunities for learners to connect to prior knowledge and ensure practical relevance of curriculum. Purposefully integrating opportunities for learners to build on prior learned material has been widely considered best practice, where linking learning to something students already know creates a sense of familiarity. Culturally responsive educators connect their curriculum to current events and encourage their students to be agents of change.[81] Escuela Nueva's Learning Circles in Colombia include activities for children to collect stories about their neighborhoods through interviews with community elders, or to work with families to build homemade flashlights. For displaced populations, chances to learn about future careers, community and family storytelling events, and interviews with community elders can provide a link to both the past and the future. Amala, an NGO that provides a high school diploma to refugees, incorporates a pathways-advising programme and provides beneficiaries with detailed career guidance. Programme assessments have cited the students' sense of agency, and opportunities to become change-makers in their communities, as key ingredients for the success of the programme.[82]

Accommodating cultural diversity and providing socio-linguistic support. Many weak and poorly resourced systems are unable to cater to the needs of minorities in multi-ethnic states. Current models of inclusion within national education systems only partially attend to linguistic needs for refugees, IDPs and CoTM. Interviews with refugee adolescents in Uganda and Lebanon find a host-country centered approach failed to meet three key needs of young people in exile: the need for opportunity, connection, and stable roots.[83] Best practice points to an additive approach – one that builds on refugees' existing language skills (and allows for catch-up if there has been disruption), in addition to structured support for learning languages required for future educational and professional opportunities. In light of the growing need to support displaced and refugee populations, understanding how language considerations, paired with psychosocial supports, impact learning trajectories is an urgent area of future research.

Providing psychosocial support in crises and emergencies: Studies have shown that adverse events causing distress or traumatic stress symptoms among children can interfere with their learning.[84] International organizations have invested significant resources to develop child-friendly schools and spaces, and the INEE *Minimum Standards* note: "In emergency situations through to recovery, quality education provides physical, psychosocial and cognitive protection that can sustain and save lives"[85] (INEE, 2010, p. 2). While the empirical literature on psychosocial intervention is mixed, especially on learning outcomes,[86] the process of schooling provides children and teachers with a sense of structure and normalcy in an otherwise disruptive setting, and targeted mental health and psychosocial support can mitigate the harmful effects of stress and trauma.[87] In addition to protection services, schools are an entry point for providing children and communities with access to nutrition, health, or water and sanitation services.

80 Chopra, V., & Dryden-Peterson, S. (2020). Borders and belonging: Displaced Syrian youth navigating symbolic boundaries in Lebanon. Globalisation, Societies and Education, 18(4), 449–463.
81 'Culturally and Linguistically Responsive Teaching', California Department of Education website
82 Collected from interviews with Mia Eskelund and Polly Akhurst from Amala
83 Reddick and Chopra 2021, Piper et al 2020
84 Elbert et al., 2009
85 INEE (2010) Minimum Standards For Education: Preparedness, Response, Recovery. New York, USA
86 Burde et al 2016
87 Winthrop & Kirk, 2008; Davies & Talbot, 2008

Integrating Multiple Flexible Pathways into National Education Frameworks

Multiple and flexible pathways are most effective when implemented with the support and recognition of national governments. Civil society and INGO/NGO service providers should proactively engage government actors to ensure alignment with national education strategy, policy, financing, management, curriculum and monitoring/assessment systems. The Norwegian Refugee Council's (NRC), in supporting Syrian children's immediate education needs established strong relationships with the Lebanese Ministry of Education and Higher Education. It elected members of the NGO sub-committee, allowing it to provide inputs on policy decisions.[88]

The realities of protracted displacement require a comprehensive response, rather than a temporary emergency response. Forcibly displaced populations face a number of administrative and policy barriers, including lack of documentation (identity card, proof of previous education, or vaccination certificates), misalignment between home language and language of instruction, and policies that restrict non-residents' entry into the national education system and the local labor market.[89] Development partners and education actors should engage host governments to mitigate these policy barriers, including promoting refugees' meaningful inclusion within host state education systems, and ensuring non-formal programmes maintain flexibility in their enrollment policies. Equivalency and transferable certification efforts – including UNICEF and Microsoft's Learning Passport – can provide proof of learning that has taken place during displacement, and provide transferable credentials to support entry into formal education pathways.

For many adolescents for whom further education is no longer feasible, pathways to job and livelihood-related skills can expand opportunities. An important policy agenda relates to the integration of more workplace skills and vocational training at the secondary level. Skills programming that is inclusive, scalable, and aligned with local labour markets could provide out-of-school adolescents alternate pathways to meaningful livelihoods. Embedding these efforts in modernized qualification frameworks can also facilitate lateral movements between the academic and TVET streams. As the presence of online gig work and digital work grows, there is an increasing need to integrate digital skills into vocational programmes.[90] There is also a need to link humanitarian efforts with a long-term development mindset, including the economic inclusion of refugee and IDP adolescents and youth in their host communities, and the establishment of an enabling legal, regulatory and financing environment. There is some progress on this front. As one of the world's largest refugee-hosting countries, Kenya passed the Refugees Act in 2021, which aims to create an enabling environment for refugee and host community livelihoods, resilience, and self-reliance by setting aside land for agricultural use, building markets and teaching marketable skills to refugee youth.[91]

CASE STUDY 3

Flexible delivery for Syrian Refugee Adolescents in Turkey

MercyCorps' LEARN programme was designed to meet Syrian out-of-school refugee youth (aged 11-18) 'where they are at', both in terms of learning competencies and real-world constraints.

Programme Features: Given that many LEARN students have been out-of-school for long periods of time (39% were out-of-school for more than 4 years, 37% for 2-4 years), the intervention was based on four central components: i) individual instruction; ii) peer groups; iii) tablets with curated software; and (iv) caregiver information sessions. The flexible design of the programme allowed for instruction on a schedule when and where students were available to learn. Class time was supplemented with pre-loaded tablets students used in their own time. Furthermore, while the core curriculum was in Syrian Arabic, in order to support integration into their new lives in Turkey, LEARN also offered Turkish language as a core module.

Results: After two cohorts of the LEARN project, end-line data and assessments showed that learners made significant gains in mathematics, English, Arabic, and Turkish. LEARN was effective at re-engaging out-of-school adolescents in learning, as well as increasing their interest and willingness to re-enroll in the formal education system.

Source: https://www.promisingpractices.online/mercy-corps

Leveraging Technology to Support Learning for Adolescents

Education technology (or ed-tech) plays many roles: from extending contact hours, providing self-led learning during times of disruption, improving quality of instruction, to promoting household behavior change. The tech-enabled distance-learning agenda has taken on renewed urgency in light of the COVID-19 pandemic and provides important lessons for expanding service delivery in other crises and emergencies. However, reviews have found mixed impacts on student learning outcomes, existing implementation experiences points to a set of practices.[92] Technology also has the potential to exacerbate existing gender and socioeconomic inequities, and any intervention should foreground equity considerations in design and implementation.

Successful deployment of ed-tech depends on a realistic assessment of local constraints, including national infrastructure availability.[93] For instance, the Learning Passport pilot programme in Lebanon provides classes at night as a work around for daytime power shortages. Ghana's iCampus provides iBox servers that create a local Wi-Fi network, allowing learners to access content over Wi-Fi in the school grounds before and after lessons. Institutional arrangements that leverage private

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88   Save the Children, UNHCR Pearson (2017) Promising Practices in Refugee Education: Synthesis Report
89   Bengtsson & Naylor, 2016; UNHCR, 2015; Zakharia & Menashy, 2018
90   UNICEF (2021) Unlocking the Power of Digital Technologies to Support `Learning to Earning' for Displaced Youth, UNICEF, New York, 2021.
91   CGD (2021) From Displacement to Development. How Kenya Can Create Shared Growth by Facilitating Economic Inclusion for Refugees
92   Bulman and Fairlie, 2016; Escueta et al., 2020; Evans and Mendez Acosta, 2021
93   UNESCO (2018). A Lifeline to learning: leveraging mobile technology to support education for refugees. https://unesdoc.unesco.org/ark:/48223/pf0000261278

sector partnerships, including national telecom operators are one avenue to rapidly address infrastructure gaps. In Turkey, mobile network operators are tailoring mobile and internet packages to the requirements of Syrian refugees, in their own language and at an affordable price.[94]

There is promising evidence that low-tech solutions like radio and mobile phones can supplement formal classroom-based teaching to support student learning, especially when formal education is disrupted.[95] An analysis of interactive radio instruction (IRI) programmes – that combine radio lessons with classroom or community-based instruction – have been shown to have large effects at the primary level in fragile contexts.[96] Similar approaches can be leveraged at the secondary-level through recorded teacher lectures in clearly articulated segments – although this is an area for future testing and scale.[97]

The increasing penetration of mobile phones into rural and conflict-affected areas is a promising way to reach disadvantaged adolescents. Leveraging SMS or phone call tutoring services can promote learning continuity, and unlike broadcasts, basic mobile technology can facilitate two-way interaction. It also enables frequent assessments and feedback between learners and educators – considered a pedagogical best practice.[98] The ENEZA Shupavu291 programme from Kenya provides a good example of an SMS-based study tool that enables students to access the full Kenyan curriculum, lessons, assessments and term papers, in addition to enabling students to chat with a live teacher via SMS. Evaluations from the pilot implementation in Dadaab and Kakuma show that there was a positive impact – with refugee boys and girls demonstrating better learning on average than the other refugee primary school students.[99]

Increasingly, new learning technologies allow pre-loading learning content onto tablets and smartphones to be later accessed offline. Particularly for learners at the secondary level where curriculum is more advanced, tablets can compensate for the lack of textbooks, learning materials, classrooms and teachers.[100] In Zambia, the evaluation of GirlsRead! Programme showed the e-reader increased basic literacy skills for girls enrolled in Grade 7. Estimates indicated that girls in the e-reader arm scored significantly better on two basic literacy assessments as well as non-verbal reasoning, compared with girls in the control group.[101] Can't Wait to Learn, a programme of War Child Holland, used 'edutainment' games based on the national curriculum to improve learning for out-of-school primary children in Sudan, Chad, Jordan and Lebanon.

Learners play individually and can move forward at their own pace, and curriculum incorporates children's life stories, participant feedback, and drawings from local designers as the foundation for the learning environment. Research from a rigorous evaluation showed that children's scores on oral mathematics tests doubled, while control group students did not increase their scores during the same period.[102]

In addition to foundational competencies, education that goes beyond literacy and numeracy is essential in equipping adolescents to participate in the knowledge economy. Transferable skills, digital skills and STEM education – including the knowledge, skills, attitudes that enable adolescents to learn, socialize, work in digital environments – will be critical for the education and empowerment agenda in the 21st century.[103] Particularly in fragile and crisis contexts, digital skills provide an important path to accessing learning opportunities, broader livelihood opportunities, and pathways to entrepreneurship. Furthermore, failure to explicitly invest in STEM education for adolescent girls and AwD– will exclude girls and women, and AwD from a whole range of future occupations that will require technical skills. There is an important research agenda related to strengthening digital competencies among adolescents and evaluating pathways to improve STEM and digital skills.

> **Transferable skills, digital skills and STEM education will be critical for the education and empowerment agenda in the 21st century.**

Ed-tech also holds promise for supporting emotional and psychosocial well-being of adolescents. An impact evaluation of EduApp4Syria – a smartphone learning game for primary-aged Syrian children – found statistically significant improvements in oral reading fluency, but also led to improvements in children's psychosocial wellbeing.[104] Technology has also been shown to help adolescent girls build networks and maintain supportive academic relationships. In-depth interviews with female Somali adolescent refugees in the Dadaab refugee camps of Kenya identified mobile technology as key to building supportive peer networks, which in turn expanded aspirations for higher education for girls in refugee camps.[105] Deeper, and more effective psychosocial support will inevitably require resource-intensive, individualized and face-to-face presence, but case studies suggest technologies can be a quick and short-term solution to reaching children and adolescents in crisis settings.

Emergencies and crises can be a catalyst to improve system-level education data. Technology can support the disaggregated mapping of vulnerable learners, and provide insight on the impact of emergencies on particular localities or groups. There have been a number of promising developments

94 How Turkish mobile operators are helping the vast Syrian refugee population to help themselves https://www.computerweekly.com/feature/How-Turkish-mobile-operators-are-helping-the-vast-Syrian-refugee-population-to-help-themselves
95 Chris McBurnie. (2020). 'The Role of Interactive Radio Instruction in the Coronavirus (COVID-19) Education Response', EdTechHub.
96 Jennifer Ho and Hetal Thukral. (2009). 'Tuned in to Student Success: Assessing the impact of interactive radio instruction for the hardest-to-reach', Journal of Education for International Development,
97 UNICEF (2021) Reimagining Girls' Education. Solutions to Keep Girls Learning in Emergencies
98 Joe Hallgarten, Kristine Gorgen and Kate Sims. (2020). 'Report Overview of Emerging Country-Level Response to Providing Educational Continuity under COVID-19: What are the lessons learned from supporting education in conflicts and emergencies that could be relevant for EdTech-related responses to Covid- 19?'
99 UNICEF (2021) Reimagining Girl's Education. Solutions to keep girls learning in emergencies
100 UNESCO. (2018). 'A Lifeline to Learning: Leveraging mobile technology to support education for refugees', UNESCO, France.
101 Mench et al (2021) Effects of an e-reader intrervention on literacy, numeracy and non-verbal reasoning among adolescent girls in Zambia
102 UNICEF (2021) Reimagining Girls' Education Solutions to Keep Girls Learning in Emergencies
103 UNICEF (2020) Towards an equal future: Reimagining girls' education through STEM
104 Comings, J. (2018). Assessing the impact of literacy learning games for Syrian refugee children: An executive overview of Antura and the Letters and Feed the Monster impact evaluations. Washington D.C.: World Vision and Foundation for Information Technology Education and Development.
105 Dahya, N., and Sarah Dryden-Peterson. 2016. Tracing Pathways to Higher Education for Refugees: The Role of Virtual Support Networks and Mobile Phones for Women in Refugee Camps. Comparative Education (December):

on this front. In Kenya, Ethiopia, Rwanda and Malaysia, FHI360 developed a custom application for UNHCR to collect data in refugee camps and host communities. This application has also been used in Liberia to support the Ministry of Education to build their understanding of the education system's capacity after the 14-year long civil war and the Ebola outbreak in 2014.[106] In South Sudan, data collectors were equipped with android phones with GPS functionality to collect EMIS data from over 1,900 schools.[107]

More recently, the Mobenzi smartphone app has been used to collect similar data in Syria.[108] In Sierra Leone, a consortium of NGOs utilized an improved 'culture of data' developed during the Ebola outbreak to stimulate improvements in data collection and data-informed actions through the 'Leh Wi Learn' secondary education programme.[109]

In preparation for future conflict, disease, natural disasters and climate related emergencies, there is a need to strengthen system resiliency through investments in blended learning approaches. Experience suggests that multi-modal approaches are the most prudent in low-capacity contexts, including a combination of interventions that can be scaled up or down in response to local capacity and stages of school re-opening. In addition, ed-tech can be leveraged in areas it can deliver quick gains, such as facilitating formative assessments, or convening teachers and students in groups, tailoring and pacing of curriculum for each student's level, or facilitating new forms of accessibility for AwDs.

Integrating visual aids, sign language interpretations, or voice read-aloud capabilities can improve accessibility for AwDs, or language/psychosocial supports can be incorporated into the curriculum to assist displaced learners. However, more evidence is needed on which approaches work best under various types of emergencies.

Supporting Teachers During Fragility and Crisis to Improve Learning

Teachers are the lynchpin for any education innovation. Evidence shows that qualified, skilled teachers are the strongest school-level predictor of student learning at all levels. Particularly at the secondary level, teachers are expected to reinforce foundational competencies while simultaneously preparing adolescents to build subject-specific knowledge and advanced socio-emotional skills. In addition, teachers are also on the frontlines of providing psycho-social support during emergencies. There is increasing recognition of the relationship between teacher well-being and students' social and emotional development.[110]

Efforts to improve learning are compounded by the fact that secondary teachers are in short supply in emergencies and contexts of crisis, particularly female teachers. The presence of female teachers in schools has been linked to girls' higher enrollment, retention, and learning outcomes.[111] However, at

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CASE STUDY 4

https://mbsse.gov.sl/mbsse-visits-government-technical-school-on-world-education-day/

Inclusive Approaches through the Leh wi Lan Programme in Sierra Leone

Leh wi Lan in Sierra Leone is a programme that aims to improve learning outcomes in English and mathematics at the secondary level. The programme has four key objectives: making schools safe for adolescent girls, strengthening central and district level capacity for service delivery, improving learning conditions, and improving monitoring and learning. While the programme is currently being evaluated, it models a number of best practices, including:

- **Pupil-centered learning**

- **Improving data collection through tablets loaded with Tangerine software for school-based data collection and reporting**

- **Establishing a programme of in-service professional development for English and Math teachers delivered by school support officers**

- **Improving learning opportunities through assistive devices for over 2,000 children with impairments and disabilities, including 940 English language Braille books for special needs schools, voice recorders for 114 blind children and glasses for 2,085 visually impaired children.**

Source: https://mbsse.gov.sl/leh-wi-lan/

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the secondary level, only 38% of teachers in crisis-affected countries are female, compared to just over 50% in middle-income countries and the global average. The number in low-income countries is even lower: in Chad, only 7.9% of secondary teachers are female, 11.2% in Mauritania.[112] The global movement for educational quality in crisis contexts requires urgent attention on teacher recruitment, professional development and well-being.

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106 Hallgarten et al 2020. Overview of emerging country-level response to providing educational continuity under COVID-19. Education Development Trust
107 ibd
108 ibid
109 ibid
110 Falk, D., Varni, E., Finder, J., & Frisoli, P. (2019). Landscape review: Teacher well-being in low resource, crisis, and conflict-affected contexts. Education Equity Research Initiative: Washington, D.C.
111 Naylor & Gorgen, 2020
112 Inter-agency Network for Education in Emergencies (INEE). 2021 Mind the gap: The state of girls' education in crisis and conflict.

Plan International

There have been a number of lessons that have emerged from recent literature:

- **First, empirical evidence shows that individualized, repeated teacher training – tied to a specific method or task – is the most effective way of building teacher capacity on interventions such as accelerated learning.**[113] In contrast to centralized and workshop based teacher training programmes, long-term teacher mentoring or in-school teacher coaching have been shown to be more effective in boosting learning.[114] Providing teachers with clear instructions on teaching, including scripted lesson plans, has shown to have the greatest impact on improving the quality of instruction.[115] One example is the International Rescue Committee's (IRC) Healing Classrooms project for Eritrean refugees in Northern Ethiopia, where virtual peer coaching, mentorship and opportunities for further education were viewed very positively by teachers in interviews.[116]

- **Second, given the challenges in deploying qualified secondary teachers during crises –particularly female teachers – interventions that utilize para-teachers or community-based tutors, have been found to be effective in raising learning (although evidence is mostly at the primary level)**.[117] In addition, in contexts of displacement, hiring teachers from among the refugee population can also help address the acute problems of teacher shortages in refugee and IDP settings. Programmes in emergencies and crises should also incorporate interventions to support the emotional wellbeing of teachers. Teachers, like others, are also likely to experience losses, and hence, need support. Prolonged closure is also likely to impact their motivation, while facing risks of loss of income.[118]

- **Third, there is need for increased guidance related to different techno-pedagogical approaches**. The COVID-19 pandemic revealed that many teachers were unprepared to communicate and teach using online and distance learning approaches. Assisting teachers to understand the practical and appropriate uses of technologies should be a critical part of sector strategies to improve equity, quality and resilience of education systems.

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113 AEWG (2020) Reigniting Learning: Strategies for Accelerating Learning Post-Crisis
114 Evans and Fei 2019; Berlinski and Busso 2017; Yoshikawa et al. 2015
115 Evans & Popova 2015
116 Kirk & Winthrop, 2007
117 Bannerjee et al 2006
118 World Bank IEI (2021) Pivoting to Inclusion: Leveraging Lessons from the COVID-19 Crisis for Learners with Disabilities

6 Improving Learning for Adolescent Girls

Research exploring gender-disaggregated programmes find that the core barriers to learning are common to both boys and girls. Overall, the evidence points to improving teaching and pedagogy as the most effective intervention for both sexes.[119] However, while general interventions are effective at addressing shared barriers to education, girl-targeted interventions are relevant for addressing barriers that are more pronounced for girls (e.g., access to school), or barriers that are unique to girls (e.g., adolescent childbearing). [120] Fragility, crisis, and emergencies exacerbate and perpetuate these physical risks, and take on heightened importance. To improve learning for girls, policy makers need to address both pedagogical and various girl-specific barriers simultaneously.

The evidence base for adolescent girls can be split into two categories. First, a robust evidence base relates to relaxing economic constraints (eliminating school fees, scholarships and cash transfer programmes), and physical barriers to access (improving access to school through increased supply, reducing distance and safety). These interventions alleviate key constraints to accessing schooling, and have been found to be effective in boosting access and learning both in fragile and non-fragile contexts.[121] Second, interventions that promote life-skills, mentorship, safe spaces for girls, or improve sanitation, have promising associations with emotional well-being and transferable skills for adolescents, however there is limited empirical evidence pointing to improvements in academic learning.[122] These and other areas with limited evidence demonstrate opportunities for policy makers and researchers to continue innovating and testing programmes. The following section highlights current evidence and best practices (including relevant examples from low-income but non-crisis contexts):

Economic support for Adolescent Girls

Eliminating School Fees: Similar to eliminating school fees for primary schools, policy shifts at the secondary level have shown to increase access and learning across countries. Providing vouchers to cover the cost of private secondary school in Uganda increase the number of students taking the exit exam by 16 percent, with no fall in test scores, while in Colombia and Pakistan it increased both test scores and secondary school completion rates for girls (although boys benefited at the same rate)[123]. In the Gambia, eliminating secondary school fees for girls increased the number of girls taking the high school exit exam by more than 50 percent, while also increasing test scores.[124] In Tanzania, a programme that paid school fees for vulnerable girls produced higher test scores for girls than in control schools, in addition to reducing dropouts.[125]

Scholarships: Unlike boys, education is often not seen as an

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investment for adolescent girls.[126] Scholarships have been shown to offset some of the direct and indirect costs, but also improve a host of foundational and transferable skills. For instance, a scholarship programme in the Democratic Republic of the Congo for more than 100,000 girls in upper primary and lower secondary grades boosted both reading and mathematics scores.[127] At the secondary school level, providing scholarships for youth in Ghana that had passed the secondary entrance exam resulted in better test scores in both reading and mathematics, as well as an increase in senior secondary school completion rates for girls, higher likelihood of tertiary enrollment, in addition to fewer pregnancies, better political knowledge, media engagement, and a higher likelihood of having a bank account.[128]

Cash Transfers: Cash transfers are a widely used tool to address social protection risks, as well as further objectives related to health and education. Most research reports consistent and positive impacts on school enrollment for girls, with higher impacts for conditional programmes, but smaller impacts on test scores.[129] Tailoring cash and asset transfer interventions to girls' ages, and possibly school attendance, may help mitigate the risks from economic shocks during emergencies and crises. For example, in Malawi, evidence from a peer-reviewed RCT found that conditional transfers had a

119 See evidence reviews including: Evans and Yuan 2019, Psaki et al (2021), Bergstrom and Ozler (2021)
120 Psaki et al (2021)
121 Psaki et al (2021)
122 Evans et al (2021)
123 Evans et al (2020)
124 Blimpo et al. (2019)
125 Sabates et al., 2021
126 Alam et al., 2016
127 Randall and Garcia, 2020
128 Duflo et al., 2021d
129 Baird et al., 2014; Evans et al, 2020

greater impact on reducing drop-out rates among adolescent girls as compared to non-conditional transfers.[130] Under the Conditional Cash Transfer for Education Programmeme (CCTE) for Syrian refugee students (targeting both primary and secondary), families received cash support every two months through Kızılaycard on the condition that the child attended school at least 80 percent of the time. A recent evaluation demonstrated positive impacts of the programme.[131] However, conditional programmes are challenging to implement in crises and emergencies, as the necessary administrative capacity and data may not be available. In such situations, other unconditional approaches may be considered.

School Feeding Programmes: School feeding programmes provide strong incentives for adolescents to stay in school, particularly in conflict contexts where income-generating opportunities are scarce. In 2019, 38 percent of the 17 million children supported by the World Food Programme school feeding programmes were in countries affected by conflict or crises.[132] School feeding in emergencies may also contribute to the protection of adolescent girls from forced/early marriage, and various forms of child labour. A recent study from conflict-affected regions in Mali showed that school feeding had a positive impact on school enrolment, with an increase of about 10 percentage points relative to the control group, in addition to decreasing the participation of girls in any labour by about 10 percentage points.[133] Furthermore, while past studies have shown that school meals boost enrollment, recent evaluations also suggest improvements to student learning especially for girls.[134] While the evidence base on school feeding is at the primary level, smaller school feeding interventions do target adolescents, and are likely to have similar impacts.[135]

Making schools more physically accessible and secure

Building schools or learning centers closer to girls has shown strong outcomes. While school construction can be challenging in conflict and crisis settings, community-based or non-formal learning centers have been highly effective at the primary level. In Afghanistan, establishing community/village primary schools in close proximity to children's homes led to an increase in girls' enrolment by 52 percent, and average test scores by 0.65 standard deviations (compared to 0.4 standard deviation for boys). In areas affected by the Boko Haram insurgency in Nigeria, a programme increasing access to safe education through semi-permanent learning spaces targeting adolescents found significant learning gains, with girls on average demonstrating greater increases in number recognition than boys.[136] In recent years, public-private partnerships (PPP) have been viewed as a path to expand the availability of secondary schools, where public resources and capacity are limited. However, various approaches to education privatization – including vouchers, subsidies, and charter/contract approaches – remain controversial, and evidence on learning impacts remain mixed. [137]

Providing transport options have also shown promise in alleviating the challenges posed by distance to school. In conflict settings, transport services can alleviate safety and security risks for adolescent girls. In Mafraq, Jordan, for instance, local organizations set up carpools with families who had a car, and in Ramtha, UNICEF has supported a school bus service. Palestinian refugees living in a Lebanese camp have created a 'walking bus' to ensure safe passage for adolescent girls to and from school.[138] Rigorous evaluation from non-crisis contexts also provide compelling evidence. A cash transfer programme in India supported the purchase of bicycles to more than 150,000 girls, shrinking not only the gender gap in secondary school, but raising the share of girls passing the high-stakes secondary school exam by 12 percent.[139] Similarly, a programme in Zambia that distributed bicycles to secondary school girls (Grade 7) was found to have improved mathematics scores, along with reducing absenteeism, commute time, and harassment.[140]

Safe-spaces, Female Mentoring and Role Models for Adolescent Girls

Rigorous evidence increasingly shows that providing girls with mentoring and positive role models can raise learning, along with other social outcomes. A number of innovative programmes have been implemented across Africa and South Asia. An independent evaluation of the CAMFED-supported Learner Guide Programme in Tanzania – which deploys upper-secondary level girls to support other females' studies – found that girls in treatment schools were 33 percent less likely to drop out, and had double the rate of learning (in mathematics and English), relative to comparison groups.[141] Another experiment found that that showing secondary students in Uganda a film featuring a low-income adolescent Ugandan girl succeeding at chess improved student test scores by 0.13 standard deviations, with strongest effects for mathematics.[142] Similarly, in India, studies show that reserving positions for women on village councils increased girls' aspirations and enrollment.[143] Other interventions have found social benefits such as delayed fertility and marriage. Girl Empower, a mentoring intervention offered to young adolescent girls (13-14 years of age) in Liberia, offered a trained female mentor in a community designated safe space. The programme did not test learning, but reduced the likelihood of adolescent girls ever being married, reduced the number of sexual partners, and increased safe sex practices (but did not reduce the number of pregnancies).

130 Baird et al., 2011
131 UNICEF (2021) The Conditional Cash Transfer for Education (CCTE) Programmeme https://www.unicef.org/turkey/en/conditional-cash-transfer-education-ccte-programmeme
132 World Food Programme (2020) State of School Feeding Worldwide
133 Aurino et al. (2019)
134 Evans, Acosta and Yuan (2021)
135 Drake et al (2017)
136 Pereznieto et al (2017)
137 For a review of evidence on PPPs, see: Aslam, M.; Rawal, S.; Saeed, S. (2017). Public-Private Partnerships in Education in Developing Countries: A Rigorous Review of the Evidence. Ark Education
138 Pereznieto et al (2017)
139 Muralidharan and Prakash, 2017
140 Fiala et al. (2020)
141 Hanahan (2021)
142 Riley (2019)
143 Beaman et al. (2012)

Girl-friendly environments have an important role in child-protection, although the impact on academic learning remains to be seen. Current evidence, however, points to improved socio-emotional outcomes. In Rohingya Camps in Bangladesh, UNICEF provided space for community members to pilot an education model for "girls-only sessions," for girls aged 11-14. These sessions encouraged girls to build social networks, offered emotional support and mentorship, as well as a safe space where they could share information and develop critical literacy and problem-solving skills.[144] A programme that formed clubs for more than 50,000 adolescent girls in Uganda and provided vocational training and information on reproductive health, led to reduced adolescent pregnancy and more engagement in income-generating activities four years later.[145] Best practices on creating safe, nonviolent school environments are being compiled by a number of institutions, including the Campaign for Girls Education (CAMFED), Raising Voices and the World Bank's Global Programme for Safer Schools (GPSS).

> **Alternative and non-formal programmes offer an entry point to improve various transferable skills.**

Alternative and non-formal programmes offer an entry point to improve various transferable skills. A number of case studies show promising impacts on transferable skills – although the impact on learning outcomes remains inconclusive. [146] For instance, the UNICEF supported Nashatati programme is an after-school intervention for children aged 12-15 (both boys and girls) in Jordan – a context where violence and bullying remains an issue, especially for Syrian Refugee children.

The programme uses sports and games to foster life skills, tolerance and appreciation of diversity, and a shared sense of belonging. A participatory evaluation demonstrated that school teachers and students participating in the programme improved communication and problem-solving skills, and promoted a greater sense of community for adolescents.[147] Similarly, CARE's Power to Lead programme established a leadership development programme for adolescent girls in Yemen (along with five other countries), and showed positive impacts on measures of leadership skills and self-confidence.[148] In Nepal, the STEM-II programme provided financial literacy skills to adolescent girls, and was found to improve girls' self-confidence, self-efficacy, decision-making ability and agency.

Evaluations in non-crisis contexts also show positive impacts on various socio-emotional and life-skills. An evaluation in Zambia found that eighth grade girls who undertook negotiation skills training were more able to persuade their parents/caregivers of the value of continuing their education.[149] A girls'

empowerment intervention that assigned "social mobilizers" to schools to provide life skills classes and mentoring, reached over 95,000 adolescent girls in nine countries. In India, an experimental evaluation of the programme showed positive effects on drop-out rates, in addition to life skills such as future planning, empowerment, and attitude towards gender norms – although those gains did not translate to test scores.[150]

Despite approaches taken to foster girls' life skills, these programmes are challenging to evaluate and compare, given interventions differ substantially across contexts. This is an area where standardization in definitions, more rigorous evaluations (isolating the impact on skills within multi-component interventions), and expanding beneficiary groups to include AwDs, would provide value-added to policy makers.

Gender-Responsive School Facilities: Sanitation and Menstrual Health Management

Globally, WASH programmes appear to be effective in reducing dropouts and school absences, although the balance of evidence on learning is inconclusive.[151] A recent study related to the national school latrine construction programme in India, for instance, did not find any increase in learning, but girls and boys both sat for and passed their official school exams at higher rates.[152] For the youngest girls, any latrine boosted enrollment. In contrast, for adolescent girls that had reached puberty (i.e., upper primary and lower-secondary), only sex-specific facilities boosted enrollment – suggesting the importance of segregated WASH facilities at the secondary level.[153]

Many adolescent girls face stigma, harassment and social exclusion during menstruation – a risk heightened for adolescent girls with disabilities.[154] The evidence for providing menstrual hygiene materials on access or learning is inconclusive, but show positive impacts on emotional wellbeing of female students.[155] Recent estimates of menstruation-related absenteeism vary across countries, with large estimated impacts in Bangladesh and India, but small effects in Kenya, Malawi, Nepal, and Uganda.[156] In Kenya, however, providing sanitary pads reduced absenteeism and significantly improved emotional and social well-being of adolescent girls.[157] Both the impact of WASH facilities, as well as menstrual hygiene management are areas where further research is needed, but early results demonstrate they remain worthwhile investments even if the impact on learning outcomes is mixed.

Providing pathways for girls to re-enter education systems during and after pregnancies remains a critical policy

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144 INEE (2021). Mind the gap: The state of girls' education in crisis and conflict.
145 Bandiera et al. (2020)
146 INEE 2018, Guidance Note: Facilitating psychosocial wellbeing and social and emotional learning; INEE 2016 INEE Background Paper on Psychosocial Support and Social & Emotional Learning for Children & Youth
147 UNICEF: Learning, Life Skills and Citizenship Education and Social Cohesion through game-based sports – Nashatati Programmeme. https://www.unicef.org/documents/learning-life-skills-and-citizenship-education-and-social-cohesion-through-game-based
148 Miske Witt & Associates Inc (2011) The Power to Lead Alliance (PTLA): Empowering Girls to Learn and Lead https://www.careevaluations.org/wp-content/uploads/PTLA-FINAL-EVALUATION-REPORT_MWAI.pdf
149 Ashraf, N., Bau, N., Low, C., & McGinn, K. (2020). Negotiating a better future: How interpersonal skills facilitate intergenerational investment. The Quarterly Journal of Economics, 135(2), 1095-1151.
150 Edmonds et al., 2019
151 Psaki et al (2021); Evans Acosta and Yuan (2021)
152 Adukia 2017
153 ibid
154 For further details, see: UNICEF Guidance Note: Menstrual Health & Hygiene for Girls and Women with Disabilities. https://www.unicef.org/documents/menstrual-health-hygiene-girls-and-women-disabilities
155 Evans Acosta and Yuan (2021)
156 Benshaul-Tolonen et al (2020)
157 Benshaul-Tolonen et al (2021)

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challenge.[158] First, there is an important agenda in removing education bans for pregnant girls. A study of policy changes in nine African countries noted that more pregnant girls were enrolled in school two years after removal of bans related to pregnancy.[159] Second, other flexible pathways must be expanded for adolescent girls that are pregnant. During the first year of the COVID-19 pandemic, Kenya saw a 131 percent increase in the number of girls who completed their secondary school exams in the hospital after giving birth.[160] In Sierra Leone following the 2014 Ebola outbreak, the Ministry of Education, Science, and Technology (MEST), rolled out an Emergency Radio Education Programme, which provided one-hour lesson broadcasts over the radio - of which 30 minutes are dedicated to teaching, while the other half-hour was for students to call a teacher through a toll-free line teacher.

When schools reopened after 9 months of closure, MEST implemented a nationwide catch-up programme to help approximately 14,000 girls who were pregnant, in addition to non-formal education programmes in community learning centers to help pregnant girls and adolescent mothers continue their studies.[161]

In Tanzania, of the 60,000 students who drop out of secondary school every year, 5,500 leave due to pregnancy.[162] The World Bank's SEQUIP project specifically aims to keep young people in school through two alternative learning pathways: 'Open Schools' that teach the secondary school curriculum through face-to-face and self-study programmes at education centers, or through 'Folk Development Colleges' located mainly in peri-urban and semi-rural areas, which provide residential programmes for young mothers, as well as daycare services.[163]

158 Evans Acosta and Yuan (2021)
159 Evans and Acosta (2020) "Lifting bans on pregnant girls in school," Lancet, vol. 396(10252), 667-668
160 Kwauk et al (2021)
161 AEWG (2020) Catch-up Programme: 10 Principles for Helping Learners Catch Up and Return to Learning
162 World Bank: SEQUIP Programme Appraisal Document. https://projects.worldbank.org/en/projects-operations/project-detail/P170480
163 World Bank: SEQUIP Programme Appraisal Document. https://projects.worldbank.org/en/projects-operations/project-detail/P170480

7 Making learning more inclusive and flexible for adolescents with disabilities: Lessons from COVID-19

Online and distance learning present an opportunity to create more flexible, equitable and inclusive systems of education delivery. These approaches have the potential to alleviate constraints for AwD, including geographical distance from learning centers, sensory issues (e.g., vision and hearing) and mobility issues (e.g., physical disabilities), as well as gender and economic inequalities. However, disability consists of a wide spectrum, and even adolescents with mild learning difficulties, such as attention deficit disorders, may find the self-motivation to work independently in front of a computer or device a major challenge.

It is important to account for the range of barriers facing AwDs when shaping policy and programming. Learning for AwDs is complicated by the accessibility of digital technologies, the lack of accessible materials and necessary specialized instruction, differential abilities to engage with curriculum, as well as how they are prioritized for learning within households. There is renewed focus on addressing challenges for youth with disabilities from funders, practitioners, and researchers – underscored by the 2020 UNESCO Global Education Monitoring Report on Inclusion. A recent Inclusive Education Initiative (IEI) COVID-19 Survey on Children with Disabilities highlights the overlapping constraints AwD faced during the pandemic, including:

- **Inequitable access to digital technologies, including internet and digital devices.** A survey by the World Bank found that only 46 percent of parents/caregivers of children with disabilities had access to the internet, with even fewer (25 percent) noting that internet programmes had been designed in a way that was useful and accessible to children with disabilities.[164] Given the gender digital divide, this deficit is likely to be more pronounced for adolescent girls with disabilities. In addition, even when internet and devices are available in the household, intra-household dynamics may mean that other siblings get priority for learning hours.

- **Limited or no access to assistive devices or accessible learning materials.** Even if students had access to ICT

infrastructure and tech devices, the 'usefulness' of each device or material was bound by the physical, cognitive, and behavioral constraints of each individual student. For instance, 80 percent of learners with disabilities said TV, mobile phones and smartphones were not 'useful' to their learning.[165] Every remote education platform has tradeoffs, and every modality/platform can simultaneously include and exclude certain segments of the population. Providing broadcast education (i.e., radio and television) means that delivery generally occurs in only one language. Radio, while most prevalent, is difficult to make accessible to students who are deaf, hard of hearing, or deaf-blind.

- **Differences in parents' or caregivers' ability to support student learning at home.** Many remote learning platforms require significant parent engagement and assume caregivers to be literate in the language of instruction, or that caregivers' job responsibilities are flexible enough to allow them to be available as education providers. Learners from marginalized families are at a further disadvantage, increasing the intersectional barriers facing AwDs.

While there is a growing understanding of the intersectional and overlapping barriers for AwDs, there is a lack of rigorous evaluations in programmes for AwDs. What we do know is promising, but inconclusive. For instance, the GATE-GEC programme in Sierra Leone supported marginalized girls with disabilities in junior secondary schools. While an evaluation found that the project contributed to a set of enabling conditions for learning for AwDs, it had little impact on actual learning outcomes.[166] On the other hand, evidence from China (which is not a crisis country), shows that a programme that provided eyeglasses to almost 30,000 students boosted test score – equivalent to nearly a full year of schooling – for students with poor vision, benefiting both girls and boys.[167]

Despite the dearth of empirical evidence, countries around the world have demonstrated a number of good practices using both high and low-tech approaches and ensuring access

FIG 5: OVERLAPPING BARRIERS TO EDUCATION FOR AWDS
SOURCE: WORLD BANK IEI (2021) PIVOTING TO INCLUSION: LEVERAGING LESSONS FROM THE COVID-19 CRISIS FOR LEARNERS WITH DISABILITIES

Adapted from World Bank IEI

| Access to the internet at home | Sufficient quality of internet connectivity | Enough devices for children to use | Preferences for siblings without disabilities, specially boys | Skills or ability to use tech as designed for learning |

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164 World Bank IEI (2021) Pivoting to Inclusion: Leveraging Lessons from the COVID-19 Crisis for Learners with Disabilities
165 ibid
166 NFER (2021) GATE-GEC Endline Evaluation Report
167 Glewwe et al. (2016)

to accessible devices and support for parents/caregivers. In Guatemala, for example, the platform I Learn at Home provided video lessons that included subtitles for students with hearing impairment, and audio recordings were also produced to allow reading for students with blindness, low vision, or those with limited access to printed text.

Colombia's Ministry of Education engaged the Ministry of ICT and District Disability System to incorporate pedagogical strategies for curricular flexibility and home supports, and provided free access to Jaws and ZoomText software for students with visual disabilities.[168] In Ethiopia, the Centre for Disability and Development set up a toll-free hotline, a messenger service, and established virtual communities of support to provide information during the pandemic.[169]

In addition, a solar powered audio player called MegaVoice was deployed to give blind students access to textbooks and additional learning and reading materials.[170] Turkey's Özelim EÐitimdeyim (I Am Special, I Am in Education) is a mobile platform designed for students with different types of impairments (for example, loud text reading from screen, sign language, and dyslexia-friendly fonts).[171]

As schools around the world reopen, it is important to create more disability-inclusive pathways. Recent implementation experience has highlighted broad principles relevant to expanding accessibility for AwDs:[172]

A. **Designing Learning Approaches with Universal Design for Learning (UDL) principles.** Programmes that present material through one channel – such as the classroom, or telelearning through TV or radio – can exclude learners with disabilities in various ways. To improve accessibility and user- friendliness, curriculum development should adopt UDL principles to allow learners to engage with content in multiple ways, formats and on a variety of platforms. Technologies should be adapted and tailored to support individual student needs, and many best practices deploy the same curriculum through no-tech, low-tech, and high-tech approaches concurrently. UDL methodologies also call for engagement with local inclusive education specialists, special education and resource teachers, and families of AwD to better understand needs and tailor programmes where possible.

B. **Community resources should be assessed and addressed quickly through additional information, technology provisions, or financial support.** Beyond regular access to power and internet coverage, accessible devices such as radios, mobile phones, tablets, should be distributed to disadvantaged families to ensure children can stay connected to educational materials through multi-modal approaches.

CASE STUDY 5

Inclusive remote learning in Rwanda during COVID-19

Following school closures in 2020, the Rwanda Education Board (REB) mobilized quickly to develop and deliver a remote learning programme to more than 3 million students in primary and secondary. The first radio lessons aired on April 4, 2020, and designed lessons airing 7 days a week on 10 radio stations (which together covered most of the country) and 8 television channels (which have national coverage, but fewer families have access to television).

Rwanda's programme was unique in its inclusivity, as it prioritized support to students with disabilities and learning difficulties, as well as those without technology access. For instance, the REB created accessible digital Kinyarwanda supplementary readers and a student textbook for early grade students with support from UNICEF and the US Agency for International Development (USAID). These materials followed UDL principles and included a Rwandan Sign Language component. All materials were shared with Rwandan families through multiple channels, including REB's eLearning platform, YouTube, WhatsApp, radio, and television.

To ensure equitable access to remote learning devices, with the support of Save the Children, the REB distributed 950 solar powered radios to families in 10 districts, with the hope of increasing the number of districts reached. To ensure radio lessons were inclusive, REB printed and distributed the scripts from radio lessons for Grades 2–6 in Mathematics, English, and Kinyarwanda. REB, with support from UNICEF and Humanity & Inclusion supplemented television lessons with sign language interpretation to support deaf students.

To support parents, REB disseminated guidance to supplement learning materials. For example, head teachers and trained community volunteers were deployed to reach out to families of children with disabilities over the phone, or through home visits, to ensure that children interact with learning materials and remain engaged during the school closure period. Youth with disabilities were also encouraged to support families who have younger children with disabilities, strengthening community support systems.

Source: World Bank IEI (2021) Pivoting to Inclusion: Leveraging Lessons from the COVID-19 Crisis for Learners with Disabilities

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C. **Expanding Teacher Support:** There is a need to ensure teachers are able to support continuity of learning for all their learners. There is an important agenda in supporting teacher well-being and resilience, and equipping them with the technology and training needed to accommodate AwD needs when classroom learning is not possible. In times of disruption, teachers are on the frontlines in identifying and responding to learning loss, especially given that AwDs are most likely to have been excluded from education during the COVID-19 lockdowns.

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168 UNESCO (2021) Disability inclusive COVID-19 response: Best Practices
169 World Bank IEI (2021) Pivoting to Inclusion: Leveraging Lessons from the COVID-19 Crisis for Learners with Disabilities
170 ibid
171 Vidal (2020)
172 World Bank IEI (2021) Pivoting to Inclusion: Leveraging Lessons from the COVID-19 Crisis for Learners with Disabilities

8 Discussion: Contours of the Evidence base and Recommendations

What We Know

There is growing innovation and experimentation in education programming in contexts of fragility, crisis and emergencies. Early evidence from MFP approaches – including those that support accelerated education – have been shown to be promising in improving foundational learning outcomes – including literacy and numeracy. These programmes tend to provide a 'bundle' of interventions, and best practices often include flexible delivery; active, relevant and structured pedagogies; condensed curriculum focused on foundational competencies; as well as competency groupings and differentiated instruction.

For adolescent girls, there are some areas of emerging consensus, while more research is needed in others. Evidence for programmes addressing economic constraints – making schools cheaper through eliminating school fees, providing scholarships – as well as alleviating physical barriers to school (e.g., school construction and transport options) are considered robust and represent the strongest part of the evidence base. Interventions such as safe spaces, life-skills development and improving sanitation and menstrual health management, as well as inclusion of pregnant girls have generally not been evaluated for learning outcomes. However, the primary goals of these interventions – to protect girls, promote well-being, and prepare them for life after school – are important on their own merits, and have been found effective at fostering transferable skills. Furthermore, while case studies or small-sample evaluations are unable to directly inform large-scale policies, they provide proof of concept and represent an opportunity for future evaluation. While there is not enough evidence on specific interventions for AwDs, there are a number of principles and best practices that are emerging – and represent an important research agenda.

Gaps in the Evidence base

In the current evidence base, there are a number areas that would benefit from focused policy attention and research:

First, at the secondary level, academic learning outcomes are not systematically measured or documented, nor are other measures of well-being or transferable skills. Reviews of alternative programmes, for instance, underscore the wide variation in how enrollment, retention, transition and learning data are reported. For the very limited number of interventions that do measure learning outcomes, most of it is focused on basic literacy and numeracy skills. For secondary students, there is a need for more age-appropriate, holistic and standardized metrics that capture higher-level cognitive skills and abilities. Furthermore, especially in crisis contexts and for adolescent girls, there is a need for standardized metrics on psychosocial well-being, life skill acquisition, social-emotional competencies, readiness for work, and general self-confidence/self-efficacy.

The current evidence base on MFP approaches is generally limited by small samples and the lack of credible counterfactuals. Particularly in cases of crisis and emergencies, there is a need to better understand how multiple pathways can be scaled to support the broader agenda on learning. First, most existing evaluations are not considered rigorous, as they do not incorporate a credible control or comparison group in their designs. In other words, it is unclear whether any gains in learning are due to the specific intervention or outside factors. Government school students or other out-of-school children also may not be valid comparison groups, given that these students may differ in important ways from those in alternative programmmes. Second, most alternative and/or accelerated programmes combine multiple interventions, making it difficult to fully disentangle and isolate the impact of a specific intervention or approach. Finally, it is important to note that many programmes report outcomes based on programme-specific assessments. As mentioned above, standardized metrics are essential to ensure comparability across contexts and better inform policy.

While there is strong advocacy around disability-inclusive responses for adolescents, few peer-reviewed studies specifically focus on students with disabilities. Today, as education systems embrace various blended learning approaches, there is a unique opportunity to ensure systems are more equitable and inclusive. First, there is an important research agenda related to collecting and analyzing disaggregated data for AwDs. Second, there is a need to further integrate UDL principles into curriculum and pedagogy, and build an evidence base around the effectiveness of various assistive technologies in meeting learning needs. Ongoing research should examine the experiences of children with disabilities in using various distance and digital approaches during the pandemic period as a source of lessons.

There is also a need to redirect research towards regions where evidence is lacking. For adolescent girls, systematic studies have found an over-representation of research in countries such as India, Kenya, Bangladesh, and Uganda. In contrast, there are few evaluations from countries with the lowest levels of enrollment/attainment for adolescent girls such as Somalia, Central African Republic, Niger, and Chad. There is also the need to prioritize areas where research is the most challenging, but needs are greatest, including contexts of overlapping and intersecting emergencies.

Recommendations for a Future Research Agenda

There is a pressing need for more data and research at the secondary education level. First, many of the findings from the primary level can be presumed to be relevant at lower secondary level – especially for adolescents that are over-age or have had their education disrupted. However, the developmental and psychosocial needs of older children and youth differ. A more granular research agenda reflecting the needs of adolescents at different levels (distinguishing between lower and upper secondary), is critical to inform policy and programming. Second, some gender-related barriers for adolescents are less understood, including the extent to which promising interventions such as safe-schools, girl-friendly environments, access to WASH and MHM translate to sustainable impacts. Additional research in these areas will help improve education outcomes for adolescent girls.

There is an important research agenda around the intersection of secondary education and fragility, crisis, and emergencies. Most countries affected by fragility and conflict have large youth and adolescent populations, underscoring the need for education and skills development (including transferable and job-relevant skills). Furthermore, crises including conflict and disaster are increasingly of a more complex, protracted and dynamic nature. Examining the intersections between various forms of crisis could offer important insights for policymakers and shape more targeted interventions. For instance, as in past shocks, COVID-19 has led to increases in adolescent childbearing and child marriage. Similarly, given the growing numbers of children and adolescents on the move, there is an important agenda in recalibrating data systems, research priorities, and investments in programming around this agenda need to reflect this reality.

Strengthened policy-research partnerships can facilitate more effective evaluations. First, improved evaluation designs (such as RCTs) require engagement during the early stages of programme design, and must be integrated throughout various phases of implementation. Second, the most useful evaluations will be those that test multicomponent programmes in a way that offers insights into which components, or which specific combinations of components, are most efficacious. Third, in addition to identifying *what* works, there is an important gap relating to which interventions are amenable to scaling, and are cost-effective at the secondary level. This information can help policymakers, donors, and stakeholders assess trade-offs and prioritize interventions, and make the most from limited resources. Fourth, null results and negative findings also need to be disseminated. Unless we have a clear picture of what does not work, it is likely that the same evaluations will be replicated. Evidence aggregators thus have a valuable role to play in organizing and synthesizing the evolving knowledge base.

Despite the deep impacts of the pandemic, this global crisis also provided lessons on how to make education systems more adaptable and resilient. Every remote education platform has tradeoffs that exclude certain populations, but also hold the potential to promote inclusive principles and practices. In particular, AwD have much to gain from using appropriate technologies. There is an important agenda in evaluating various technologies in meeting the accessibility and learning needs of AwDs. In addition, better understanding the intersection of remote learning and pedagogy – including making learning more effective over remote/distance approaches will help improve teaching, and respond to various degrees of learning loss following periods of disruption.

Recommendations for Policy Makers, Administrators and Implementers

Education sector planners and policy makers have an important role to play in prioritizing secondary education. There are a number of areas requiring refocused attention. First, on learning, there are opportunities to improve data collection and scale up evidence-based programming, particularly at upper secondary levels. Second, education planners need to improve the capacity of systems to accommodate needs of the most marginalized learners during crisis and emergencies. Growing research underscores the persistence of gaps in enrollment, attainment, and learning for adolescent girls, as well as for AwDs.

There is a need for stronger commitment to systematic data collection and measurement across the sector, alongside increased disaggregation. Particularly during crises and emergencies, data is critical to identify the size and needs of student populations that are vulnerable to falling behind – including girls, AwDs, refugees, internally displaced persons and CoTM. There is a need to scale up creative and innovative data collection techniques where normal processes are not feasible, for instance through high-frequency monitoring based on mobile phone data, integrating rapid learning assessments into household surveys, or leveraging new inferential tools based on big data and machine learning. Second, there is a need to standardize and harmonize metrics at the secondary level. In the context of multiple and flexible pathways, there is a growing risk of fragmentation as the number of implementors and programmes grow. This is an area where bodies like the SEWG can add significant value, building on existing resources (e.g., AEWG M&E Toolkit) to harmonize indicators and measures for reporting – and allowing comparison across programmes, as well as the more systematic understanding of the scale and reach of various MFP approaches.

Policy makers and programme designers should draw on and engage with the existing evidence base to shape policies and programmes. Global reviews have found few programmes include the approaches with the strongest evidence, including those addressing poor pedagogy or using competency grouping. On areas where emerging evidence is inconclusive or mixed, it is important to focus on the underlying principles behind effective programmes, instead of focusing on the results (or "point estimates") from individual studies. In the short term, as the world emerges from the COVID-19 pandemic, there are a number of low hanging interventions policy makers should consider:

- Prioritize rapid assessments to establish baselines on learning loss and inform learning needs in priority areas. Teachers should also be supported to administer formative

assessments and adopt pedagogical approaches that promote remedial methods and prioritize foundational learning.

- Deploy ed-tech by adapting to the needs of students, being compatible with local resources and aligning local curriculum and educational priorities.
- Strengthen linkages and alignment of various MFP approaches with national education systems.
- Prioritize UDL principles in all areas of education programming, ensuring adolescents with diverse needs are accommodated.

Consider the relationship between education policies and other social sectors in improving supports for adolescents.
Education plans and policies are part of a wider socio-political system that shapes adolescent and youth experiences and opportunities. Improving access without concurrently addressing issues of quality in education, social protection, or post-schoolwork opportunities may be ineffective or have adverse effects on adolescents and youth, social cohesion and development. In this vein, there is a stronger need for coordination between government, private and civil society actors to collect data, improve communication with teachers, parents/caregivers, and students, provide last-mile service delivery in hard-to-reach areas, and to mitigate the disproportionate impact of crisis for disadvantaged populations such as adolescent girls and AwD.

Young people, adolescents, their families, and their communities should be engaged in the needs assessment, design, and implementation stages of programming.
Engaging adolescents and youth in this process helps ensure that the programming is relevant to local realities, and that programme participants' aspirations are reflected in policy and programming. Particularly for the adolescent cohort, there is a need to move beyond simple learning outcomes to support their holistic development, build their leadership skills, and give them a sense of agency in achieving their goals.

Annex 1:
Learning Poverty Indicators for which Learning Assessment data was available as of July 2021.

COUNTRY	LEARNING POVERTY RATE	DATA SOURCE/GRADE LEVEL
Afghanistan	93.4	National Learning Assessment (2013) (Grade 6)
Chad	94.3	PASEC 2019 (Grade 6)
Democratic Republic Congo	96.6	PASEC 2019 (Grade 6)
Ethiopia	90.3	National Learning Assessment (2015)
Madagascar	95.1	PASEC 2019 (Grade 6)
Myanmar	89.3	SEA-PLM 2019 (Grade 6)
Niger	90.4	PASEC 2019 (Grade 6)
Philippines	90.5	SEA-PLM 2019 (Grade 5)
Yemen	94.7	TIMSS 2011 (Grade 4)

Note: Countries selected are those classified as fragile or L2/L3 Emergencies for which learning assessment data was available. The learning poverty (LP) indicator combines the share of primary-aged children out-of-school who are schooling deprived (SD), and the share of pupils below a minimum proficiency in reading, who are learning deprived (LD).

Source: Azevedo J et al 2021. Learning Poverty Updates and Revisions: What's New?. Learning Poverty Monitoring Series; No. 1. World Bank, Washington, DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/36082

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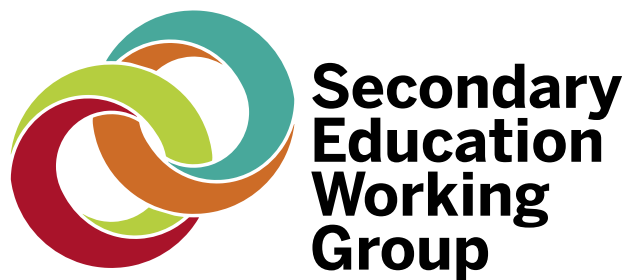
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