FORCED DISPLACEMENT AND EDUCATION: BUILDING THE EVIDENCE FOR WHAT WORKS

EVIDENCE SYNTHESIS & INTERVENTION MAP

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ACKNOWLEDGEMENTS

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This document is part of the Forced Displacement and Education: Building the Evidence for What Works series. We would like to thank Noah Yarrow, Peter Davas, Paolo Verme, and Dina Abu-Ghaida from the World Bank for their guidance and contributions. We are grateful for the guidance and support provided by UNHCR, specifically Rebecca Telford and Cirenia Chavez Villegas, as well as Ciara Silke of the UK Government for her contributions.

ABBREVIATIONS AND ACRONYMS

AIR American Institutes for Research
ALPs Accelerated learning programs
CASP Critical Appraisal Skills Program
CBE Community-based education
DGBL Digital game-based learning
DRC Democratic Republic of the Congo
DRR Disaster risk reduction
ECD Early childhood development
ECE Early childhood education
EER Emergency education response
EiE Education in emergencies
IDPs Internally displaced persons
MoE Ministry of Education
M&E Monitoring and evaluation
NGO Nongovernmental organization
NYU New York University
PSS Psychosocial support
RCT Randomized controlled trial
SD Standard deviation
ToC Theory of Change
UNESCO United Nations Educational, Scientific and Cultural Organization
UNHCR United Nations High Commissioner for Refugees
UNICEF United Nations Children’s Fund
UNOCHA United Nations Office for the Coordination of Humanitarian Affairs
USAID United States Agency for International Development
WASH Water, sanitation, and hygiene
Despite the large number of forcibly displaced people worldwide (more than 84 million as of 2021), evidence on strategies for including displaced populations into host country national education systems is scarce. The limited data that do exist are scattered and often hidden in gray literature or behind journal paywalls. To address this evidence gap, the World Bank, the United Nations High Commissioner for Refugees (UNHCR), and the Foreign Commonwealth & Development Office (UK Government) designed a research program to enhance understanding of ways to improve education inclusion and learning outcomes for forcibly displaced populations and host communities living in poverty, exclusion, or distress.

As part of this research program, the American Institutes for Research (AIR) and colleagues from New York University (NYU) are studying the implementation, impact, costs, and cost-effectiveness of education interventions for forcibly displaced populations and host communities. In the first phase, the research team systematically gathered, collated, and synthesized evidence on what works to support education for forcibly displaced people and to include them in national education systems. The evidence comes from a wide range of displacement contexts, ranging from acute to protracted crises. To be included in the evidence synthesis, articles had to consist of primary research; include relevant populations, interventions, comparisons, and outcomes (PICO criteria); and meet minimum thresholds for research quality. Annex D contains detailed information about our inclusion criteria, and Annexes E and F contain the tools we used to determine whether quantitative and qualitative studies met our research quality standards as well as the risk of bias assessment for experimental and quasi-experimental quantitative studies. The risk of bias assessment did not determine inclusion but was incorporated in the analysis of the results. In this report, we summarize the results of Phase I: the existing evidence on education interventions implemented in forced displacement contexts. Phase II will use case studies to conduct an in-depth review of policies and programs that support the inclusion of refugees and internally displaced persons (IDPs) in national education systems.

2 These thresholds differed for quantitative and qualitative research. For example, quantitative research required the inclusion of a comparison group, but this was not required for qualitative research.
The intervention map identified education programs implemented by governments, international agencies, and nongovernmental organizations (NGOs) in 22 purposively selected countries (all forced displacement settings) to complement the evidence synthesis with a snapshot of on-the-ground education programming. A theory of change guided our analysis to identify which program mechanisms and outcomes lack evidence. By combining the information from the evidence synthesis with the intervention mapping results, we illustrated the extent to which research has kept pace with practice, further clarifying the relevance of evidence gaps for policy.

KEY CONCLUSIONS
Our synthesis included 32 experimental and quasi-experimental studies, 14 studies with information on costs, and 202 qualitative studies completed since 2015 that focus on education in forced displacement contexts. We excluded meta-analyses and other reviews but conducted our own meta-analyses based on the individual studies. We found 194 education interventions in 22 countries for the intervention map. We present key conclusions from Phase I below.

WHY WERE ARTICLES EXCLUDED FROM THE EVIDENCE SYNTHESIS?

Quantitative articles were excluded for four main reasons:
- Absence of a comparison group
- Lack of baseline data
- Did not focus on forcibly displaced populations or education in emergencies contexts
- Did not focus on education-related interventions

Qualitative articles were excluded at two junctures: first, if they did not meet the basic inclusion criteria (see Annex D), and secondly, if the critical appraisal of the article suggested fundamental deficiencies in the research design and/or execution. At the first juncture, many qualitative articles were excluded because they did not focus on forced displacement or EiE contexts, were theoretical papers or syntheses rather than primary research, or did not report on education programs and outcomes. At the second juncture, following the critical appraisal, articles were primarily excluded for failure to properly describe or justify the data analysis process.

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3 Full sampling considerations for the intervention map are presented in Section 4.2.3.
KEY FINDINGS FROM EXISTING EVIDENCE

• A considerable body of qualitative research shows that official policies of inclusion for refugee students often contrast with the practical and sociocultural exclusion of these students from educational opportunities and success.

• We conducted a meta-analysis that statistically pools the effect sizes of programs aiming to improve social and emotional learning showing that these programs have the potential to reduce depression and posttraumatic stress disorder.

• We conducted a meta-analysis of technology-in-education programs with diverse implementation models that showed positive effects on learning outcomes, particularly for out-of-school children, but refugees and internally displaced persons often do not have access to technology. We hypothesize that high-quality teacher training and/or coaching is a necessary requirement for effective technology-in-education programming, but current available experimental and quasi-experimental studies do not include analyses examining the causal mechanism underlying this hypothesis.

• Community-based education in Afghanistan may be cost-effective in improving access to education and learning outcomes for internally displaced children and it appears to be cost-effective to transfer implementation of community-based education from international NGOs to local governments. Although data showing cost-effectiveness of community-based education specifically for refugee populations is not available, because teachers’ salaries and monitoring are the primary source of the costs, we hypothesize that cost-effectiveness of such programs would be similar.

EVIDENCE GAPS

• Most current research focuses on education interventions that run parallel to national education systems rather than through them, despite the policy emphasis on including refugees and displaced learners in national systems.

• Evidence on the effectiveness of government-supported programs for displaced learners is limited, but this does not necessarily mean that such programs or policies are ineffective; it means they have not yet been studied in a rigorous manner.

• Most studies do not clearly identify whether interventions serve refugees, IDPs, returnees, host communities, or some combination of these groups.

• Similarly, evidence of the cost-effectiveness of education programs in forced displacement contexts is scant.
EVIDENCE GAPS

We found limited research on the effectiveness of government-supported programs and the inclusion of displaced populations into national education systems, resulting in large evidence gaps. Current research efforts focus primarily on education in emergencies (EiE) programming that is implemented outside national education systems. As a result, the current available evidence does not show the effectiveness of government-supported programs serving displaced populations; it is possible that these programs are effective but the limited research in this area has yielded modest evidence, limiting our ability to derive conclusions based on the currently available research. Most of the programs we identified through the intervention map are also implemented in parallel with, or complementary to national education systems.

The current body of evidence on the effectiveness of education programming within national education systems is very limited. This gap is critical because governments play a key role in providing education in forced displacement contexts as well as in the policy priorities of bilateral and multilateral donors such as the UK Government, the World Bank, and UNHCR. Further, Ministries of Education play a fundamental role in the delivery of education to forcibly displaced populations over the long term, as many contexts shift from acute to protracted crises. There is therefore a clear need for more evidence on the causal effects of government efforts to provide education for forcibly displaced populations. We can only hypothesize as to the reasons why less rigorous research has been done on government-supported programs serving displaced learners as compared to parallel programs, but the relatively recent shift from humanitarian-focused programming (channeled through multigovernmental and nongovernmental organizations and focused on parallel programs) to development-based programming (often carried out in partnership with government and focused on inclusion) is one plausible explanation for the dearth of research on government interventions. In addition, aid funders relatively recently started to emphasize research and evaluation of programs serving refugees and internally displaced populations, which may have led to a limited focus on government-supported programs. Researchers conducting evaluations of education programming in forced displacement contexts also often have stronger networks in international multigovernmental and nongovernmental organizations than in national government institutions. These different networks may create opportunities to conduct rigorous research with multigovernmental and nongovernmental organizations, but less so with governments. It is also likely more challenging to conduct rigorous experimental and quasi-experimental studies of government-supported programs because they are implemented as part of an education system. As a result, it is often more challenging to find credible control or comparison groups. While the number of rigorous experimental and quasi-experimental studies has increased considerably (much more so for parallel programs than for government-supported programs), the evidence available is still too thin to provide strong conclusions about the causal effects of education programs in forcibly displaced contexts. The external validity of the available evidence from impact evaluations is also unclear because experimental and quasi-experimental studies currently only focus on a limited number of interventions, which are primarily implemented outside national education systems. In addition, external validity would require studies of similar programs across countries with different contexts and capacities given the many country-specific variables that could affect implementation. For example, policies on language, the right to work, curriculum, and level of centralization would all affect the potential effectiveness of a program in different countries.

The limited use of cost-effectiveness analyses is another important gap in EiE programming and research, as it is challenging to make decisions about the scale-up and funding of education interventions in forced displacement contexts without information on costs and cost-effectiveness. Although we found 24 rigorous experimental and quasi-experimental studies, only three of those studies included a cost-effectiveness analysis. Further, the few analyses of cost-effectiveness in our review showed that costs may differ considerably over time, with scale, and by provider. It may be cost-effective to transfer implementation of community-based education (CBE) to local governments on the basis of a cost-effectiveness analysis of CBE in Afghanistan after a start-up phase delivered by international NGOs with expertise in community mobilization (Burde et al., 2019b). In addition, based on evidence from the Humanitarian Education Accelerator, scaled-up programming could yield lower costs per students than pilot programs (de Hoop et al., 2019b). However, to enable evidence-based decision making, more evidence on the costs and cost-effectiveness of programming is needed.
Lastly, most research studies do not explicitly state whether the education interventions that are the subjects of their research targeted refugees, internally displaced populations (IDPs), returnees, host communities, or some combination of these groups. As a result, it is impossible to quantify or compare the evidence on the effectiveness of education programs for each group. This is a real limitation of the existing evidence and points to the need for a more precise description of the target group of education interventions among researchers in the future.

SUMMARY OF KEY FINDINGS

We organized our Phase I research—evidence synthesis and intervention map—according to a theory of change (ToC) that we developed to guide our study based on previous work by Burde et al. (2015). We framed our findings using the three intermediate outcomes from the ToC, namely educational access, quality, and well-being for forcibly displaced populations. Exhibit 1 illustrates a simplified version of the ToC and highlights the organizing framework (access, quality, and well-being) that we used to synthesize our findings in this report.

Exhibit 1. Simplified Theory of Change

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Early-Term Outcome Levels</th>
<th>Intermediate Outcomes</th>
<th>Final Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interventions supporting administration, infrastructure, and resources</td>
<td>System</td>
<td>Access</td>
<td>Improved learning and social cohesion</td>
</tr>
<tr>
<td>Interventions targeting educational content and practices</td>
<td>Community</td>
<td>Increased enrollment, retention, and attainment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>School</td>
<td>Quality</td>
<td>Improved academic achievement and prosocial behavior</td>
</tr>
<tr>
<td></td>
<td>Individual</td>
<td>Well-Being</td>
<td>Improved, physical, mental, and emotional well-being</td>
</tr>
</tbody>
</table>
Access

The study team reviewed existing evidence and mapped interventions related to the provision of education at all levels, from early childhood to postsecondary education including higher education, vocational education, and nonformal modalities such as alternative education initiatives, accelerated learning programs, and CBE. There appears to be a disconnect between early childhood development, postsecondary programming, and reading programs and rigorous research: Although early childhood development, postsecondary, and reading programs are often implemented in forced displacement contexts, the published research on their effectiveness is limited relative to other types of programs. More research related to nonformal education programs is available, although the evidence is primarily qualitative. It is also worth noting that the majority of nonformal education interventions identified through the mapping exercise are implemented in parallel with or complementary to national education systems, rather than through host governments. This does not necessarily mean that education programming implemented through national systems is less effective, but instead likely reflects that current research primarily focuses on education programming in parallel systems. Exhibit 2 summarizes the existing evidence related to educational access for forcibly displaced populations.

### EXHIBIT 2. FINDINGS RELATED TO EDUCATIONAL ACCESS

<table>
<thead>
<tr>
<th>Intervention Topic Area</th>
<th>Papers Reviewed</th>
<th>Interventions Mapped</th>
<th>Main Findings</th>
</tr>
</thead>
</table>
| Early childhood development | 1 quantitative, 4 qualitative | 14 | • Early childhood kits provided in Senegal demonstrated statistically significant effects on mathematics and motor skills but not on language or cognitive skills (spatiotemporal differences; associations between objects, patterns, and memorization)
• Qualitative evidence showed perceived improvements in children’s school readiness across all studies and one found inclusion in Uganda’s national education system.
• The intervention mapping focused on primary school readiness and parental engagement for IDPs, refugees, and host communities. |
| Postsecondary education | 1 mixed methods, 2 quantitative, 4 qualitative | 24 | • Evidence showed a positive impact on English, math, and computer literacy from an accredited bachelor’s degree program in Rwanda, but high risk of bias and no evidence of impact from a vocational program in Afghanistan on psychosocial support outcomes for out-of-school youth.
• Qualitative evidence suggested improved aspirations for the future and access to higher learning, as well as evidence of inclusion in national education systems in Jordan and India.
• The intervention map includes higher education and vocational training programs for refugees and IDPs. |
<table>
<thead>
<tr>
<th>Intervention Topic Area</th>
<th>Papers Reviewed</th>
<th>Interventions Mapped</th>
<th>Main Findings</th>
</tr>
</thead>
</table>
| Nonformal education modalities             | 3 quantitative, 12 qualitative | 20                   | • Community-based education (CBE) in Afghanistan showed large, positive impacts on enrollment and learning outcomes; these effects remained positive but were smaller after national school enrollment increased. There was very limited evidence of impacts from a remedial education program in refugee camps in Kenya.  
• After an initial period involving start-up costs and community mobilization, CBE in Afghanistan were transferred to village-based institutions and local governments with much lower costs and similar effects than through international nongovernmental organizations (NGOs); however, this was possible after successful community mobilization in a first phase, which requires start up costs and the expertise of international NGOs.  
• In Afghanistan, requiring the recruitment of teachers that meet Ministry of Education (MoE) requirements enabled a sustainable hand-over of CBE to the MoE while maintaining positive effects on enrollment and learning outcomes.  
• Qualitative evidence suggests that alternative education initiatives successfully facilitated refugee children’s transition into host countries’ education systems and that accelerated learning programs and CBE increased access to education for displaced and marginalized learners.  
• The intervention map included remedial and accelerated education programs for out-of-school children offered primarily as complementary or parallel programs rather than through the national education system. |
Quality

The research team synthesized the evidence and current programming related to educational quality and learning outcomes by categorizing interventions as follows: technology in education; reading, literacy, and language policy; curriculum; capacity building and systems strengthening; and teachers and training. Exhibit 3 summarizes the evidence related to interventions aiming to improve educational quality and learning outcomes in forced displacement settings.

<table>
<thead>
<tr>
<th>Intervention Topic Area</th>
<th>Papers Reviewed</th>
<th>Interventions Mapped</th>
<th>Main Findings</th>
</tr>
</thead>
</table>
| Technology in education | 8 mixed methods, 8 qualitative | 48 | • A meta-analysis showed positive effects of technology-in-education programs (with diverse implementation models, including digital game-based technology and distance learning using education apps) on learning outcomes, particularly for out-of-school children. It is possible that teacher training is a necessary requirement for effective technology-in-education programming, but the current evidence does not allow for examining this hypothesis.

• Qualitative evidence showed perceived improvements in learning when educational technology incorporates gaming, as well as perceived positive effects of text messaging for teachers, offline learning technologies, and radio instruction.

• The intervention map included game-based learning technologies, internet connectivity, and computer literacy programs, among others. These interventions primarily served refugee and host communities and were mostly parallel with or complementary to the national education system.

| Curriculum | 6 qualitative | 10 | • Curricula that are culturally relevant to displaced populations are perceived to support learning and to promote integration among conflict-affected students, refugees, and IDPs.

• Curricular interventions support inclusion in the national education system in Jordan, South Sudan, and Somalia.

• All curricular programs we found targeted refugees and IDPs and were run parallel with or complementary to the national education system; however, some were connected to or based on the formal education system and relied on curricula approved by the host country. |
We see a preponderance of interventions in the education technology field, and also a relatively sizable body of literature examining the effectiveness of these interventions. Our meta-analysis shows positive effects of technology-in-education programs on learning outcomes, especially for out-of-school children. Qualitative evidence shows that, when integrated with gaming, educational technology has the potential to improve children’s learning and well-being. The factors that contribute to program effectiveness include simple yet sophisticated design of educational game technology, entertaining learning experiences, effective rewarding, clear communication of progress, and a sense of control and achievement among students. It is also possible that teacher training contributes to the effectiveness of technology-in-education programming, but we did not find experimental and quasi-experimental impact evaluations distinguishing between the effects of technology-in-education with and without teacher training.

**Well-Being**

To synthesize evidence and programming related to the well-being of forcibly displaced populations with regard to education, the research team reviewed the existing evidence and mapped interventions related to social and emotional learning (SEL) and psychosocial support (PSS), peacebuilding and social cohesion, child protection, school feeding, water and sanitation in schools, and disaster risk reduction. Exhibit 4 summarizes the evidence and programming related to the educational well-being of forcibly displaced populations.

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**EXHIBIT 4. FINDINGS RELATED TO EDUCATIONAL WELL-BEING**

<table>
<thead>
<tr>
<th>Intervention Topic Area</th>
<th>Papers Reviewed</th>
<th>Interventions Mapped</th>
<th>Main Findings</th>
</tr>
</thead>
</table>
| Social and emotional learning (SEL) and psychosocial support (PSS) | 8 quantitative, 16 qualitative | 22                   | - We conducted a meta-analysis focused on programs that emphasize SEL, which indicated that these programs have the potential to reduce depression and post-traumatic stress disorder.  
- Qualitative evidence showed that providing a space for displaced youth to discuss their experiences helped improve self-esteem, hope, and communication skills.  
- Programs targeting teachers and caregivers were perceived to better equip them to support the psychosocial well-being of students affected by trauma.  
- The majority of SEL/PSS interventions that were mapped were run parallel with or complementary to the national education system; many of these programs adhere to a specialized SEL or PSS curriculum. |
### EXHIBIT 4. FINDINGS RELATED TO EDUCATIONAL WELL-BEING (CONT.)

<table>
<thead>
<tr>
<th>Intervention Topic Area</th>
<th>Papers Reviewed</th>
<th>Interventions Mapped</th>
<th>Main Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peacebuilding and social cohesion</td>
<td>18 qualitative</td>
<td>8</td>
<td>• Qualitative results suggested positive effects of peacebuilding programming on individuals’ ability to productively engage in conflict resolution.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Qualitative studies found that programs lacked a link between program activities and a discussion of how they translate to the broader sociopolitical context.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Interventions that were mapped focused equally on peacebuilding (four) and social cohesion (four); only two programs were connected to formal schooling.</td>
</tr>
<tr>
<td>Child and social protection</td>
<td>1 quantitative, 9 qualitative</td>
<td>14</td>
<td>• A cash transfer program did not show effects on school enrollment but did show positive medium-term effects on school attendance. However, the effects on school attendance were not sustainable after access to education improved in the control group.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Qualitative evidence suggests that child protection programs created safer learning environments for children and increased access to schooling for vulnerable groups.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Interventions included cash transfer programs and child protection programs promoting children’s rights and participation, safety from violence, gender awareness, and inclusion of children with disabilities. Most programs were part of a temporary response to the refugee situation using a parallel system.</td>
</tr>
<tr>
<td>School feeding</td>
<td>1 quantitative</td>
<td>2</td>
<td>• A quasi-experimental study of school feeding in Mali did not show statistically significant effects on school enrollment, absenteeism, and attainment; however, the study had a high risk of selection bias.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• School feeding interventions mapped in Mauritania and Rwanda target refugees in camps and rely on existing physical infrastructure for delivery.</td>
</tr>
</tbody>
</table>
### EXHIBIT 4. FINDINGS RELATED TO EDUCATIONAL WELL-BEING (CONT.)

<table>
<thead>
<tr>
<th>Intervention Topic Area</th>
<th>Papers Reviewed</th>
<th>Interventions Mapped</th>
<th>Main Findings</th>
</tr>
</thead>
</table>
| Water, sanitation, and hygiene (WASH) in schools | 1 quantitative; 5 qualitative | 5                    | • Providing a water and sanitation infrastructure to schools in Mali did not show statistically significant effects on school enrollment, but the results are based on a study with a high risk of selection bias.  
• Qualitative studies suggested that WASH programs improved education for vulnerable populations by creating a more appropriate toilet infrastructure with separate facilities for girls and boys that accommodated the needs of children with physical disabilities.  
• Four of five WASH interventions we found focused on the construction of water and sanitation facilities and took place in formal schools. |
| Disaster risk reduction (DRR)                 | 1 quantitative; 1 qualitative | 0                    | • Construction of typhoon-resistant secondary schools in the Philippines showed statistically significant effects on school enrollment, driven primarily by positive effects on girls.  
• Qualitative evidence from the Philippines suggested that a DRR project helped improved the resilience of the education system and enabled learning to resume as soon as possible after a disaster. |

As shown in Exhibit 4, there is a concentration of both research and programming in the areas of SEL and PSS, peacebuilding, and social/child protection. Conversely, we found limited research and programming (at least in the 22 countries included in the intervention map) related to school feeding; water, sanitation, and hygiene; and disaster risk reduction.
Nonintervention Evidence

The research team synthesized the evidence from 61 primary research studies that did not focus on particular interventions by organizing the findings in six categories: access to education, education policy and governance, education policy versus practice, teacher experience, student experience, and parent/caregiver experience (Exhibit 5).

### EXHIBIT 5. FINDINGS FROM NONINTERVENTION STUDIES

<table>
<thead>
<tr>
<th>Topic Area</th>
<th>Papers Reviewed</th>
<th>Main Findings</th>
</tr>
</thead>
</table>
| Access to education               | 14              | • Poor conditions and unsafe school environments deter educational access.  
• Even in countries with inclusive educational policies for refugee students (such as Jordan, Turkey, and Uganda), discrimination persists and can deter refugees from accessing educational opportunities to which they are legally entitled. |
| Education policy and governance   | 7               | • Education policy and governance challenges include limited access to data on IDPs, political sensitivities (especially with respect to language of instruction), and difficulty formulating policies to apply to both government and opposition-controlled areas in conflict-affected settings. |
| Education policy versus practice  | 10              | • Often, official policies of inclusion for refugee students contrast with the practical and sociocultural exclusion of these students from educational opportunities and success.  
• Both international and domestic policies on refugee education are inconsistently adhered to. |
| Student experience                | 15              | • Forcibly displaced students experienced fundamental difficulties such as frequent disruptions, language barriers, overcrowded classrooms, unaddressed psychosocial needs, and overall inconsistency in their access to education. |
| Teacher experience                | 13              | • Teachers in forced displacement settings faced numerous challenges such as language barriers, difficulty interacting with parents, lack of government support, and lack of access to training. |
| Caregiver experience              | 2               | • Pragmatic considerations and beliefs about the value of education drive caregivers’ decision making on their children’s schooling. |
RECOMMENDATIONS FOR FUTURE RESEARCH AND PHASE II CASE STUDIES

Based on the evidence gaps, the research team recommends that our Phase II case study research, as well as other future research, emphasize interventions implemented within national education systems, especially on those that promote inclusion of displaced populations, and on more in-depth, costing and cost-effectiveness analyses. The shift in priorities to national education systems and costing as well as cost-effectiveness analyses will require strong coordination with national governments—particularly on the goal of inclusion—as well as access to cost data when implementing experimental and quasi-experimental impact evaluations. By extension, we recommend that future research places a stronger emphasis on the potential for scale-up within national education systems, which again requires coordinating closely with national and local governments to facilitate scale-up and eventual inclusion.

Future costing and cost-effectiveness analyses should focus on comparative analyses and in-depth cost analyses of programs for which cost data are available, including those linked to existing impact evaluations. Cost analyses should include comparisons between government-, multinational-, and NGO-implemented education programs and between education in refugee camps versus urban contexts in host countries.

Based on our findings from the evidence synthesis and the intervention mapping, including the identification of explicit efforts to include displaced populations in national education systems, we propose potential countries for the Phase II case studies in Section 6.6.
1. INTRODUCTION

By the end of 2019 conflicts, natural disasters, and political and economic crises had resulted in the forcible displacement of at least 79.5 million people worldwide, both within and across borders. The United Nations has registered 26 million people as refugees, in addition to an estimated 45.7 million people who are internally displaced (United Nations High Commissioner for Refugees [UNHCR], 2020a).

Although developing countries host 84% of non-Palestinian refugees (UNHCR, 2019a), the education systems in these host countries struggle to support displaced populations (Bergin, 2017). Countries attempting to provide access to high-quality education for displaced children face numerous challenges, including limited resources, the uncertain and protracted length of the displacement, and the need for intensive psychosocial support (PSS) for displaced students (Bergin, 2017; Save the Children, 2018; UNHCR, 2019c). Education in emergencies (EiE) focuses on identifying issues and delivering interventions related to improving educational access and quality in countries with populations affected by conflict and natural disasters.

Research shows the importance of integrating educational programming into a humanitarian response to achieve education objectives, and to support stability and peacebuilding efforts (Burde, 2014). This integration can also contribute to the ability of longer-term development programming to deliver high-quality education, including by providing refugees with access to host country education systems (UNHCR, 2019b). However, it is critical to collect more evidence on how education programs and policies can enable the inclusion of displaced populations in host country national education systems, and to systematically collate and synthesize existing evidence to understand what works in improving education outcomes, at what costs, and in which contexts.

In response to this need for evidence, the World Bank, UNHCR, and the UK Government are collaborating on a research program to enhance understanding of ways to improve education and learning outcomes for forcibly displaced populations and host communities living in poverty, exclusion, or distress. The World Bank contracted the American Institutes for Research (AIR), which is partnering with colleagues from New York University (NYU), to design and implement research on the implementation, impact, costs, and cost-effectiveness of education interventions for forcibly displaced populations and host communities. Our two-phased research project started with a rigorous evidence synthesis and intervention mapping to systematically examine the available evidence and current programs in these contexts. This will be followed by in-depth case studies of policies and programs that support the inclusion of refugees and internally displaced persons (IDPs) in national education systems. Exhibit 6 summarizes our approach.

This report presents the results of the Phase 1 evidence synthesis and intervention mapping. The evidence synthesis examined research that met our inclusion criteria, including minimum quality standards, and reports on the effectiveness of education interventions for displaced populations. Specifically, the research we reviewed examines the extent to which interventions facilitate education access and retention for displaced students and out-of-school youth, as well as the available information on the costs, scalability, and replicability of education programs focusing on displaced populations. The intervention mapping identified education programs in forced displacement settings and created a summary of their key characteristics, including whether they contribute to systems strengthening in support of quality education. This mapping helps to ensure that—in addition to the evidence synthesis—we document areas where no programming, low-quality programming, or very limited programming is available. Combining the evidence synthesis and mapping also helps to identify programs where little evidence is available, and to examine the extent to which research and evidence focuses on education programs that are integrated into national education systems.

4 Please see Annex D (inclusion criteria) and Annex E (quality review process) for a full description of the criteria we applied to determine whether quantitative and qualitative research should be included in the evidence synthesis.
1.2 DOCUMENT ROADMAP

This document includes the results of our rigorous evidence synthesis and intervention mapping. Section 2 describes the purpose of the Phase I research activities, and Section 3 presents the conceptual framework that underpins our study. Section 4 details our research design, including the research questions (RQs) we seek to answer through our work and the details of our research methodology for Phase I. Sections 5 presents the Phase I study results. We conclude with a discussion and recommendations for case study countries in Section 6.
2. PURPOSE OF PHASE I RESEARCH ACTIVITIES

The purpose of Phase I was to synthesize evidence on what works to improve educational outcomes—including educational access, quality of learning, and well-being—for forcibly displaced and host populations in forced displacement contexts, at the outset of displacement. To do this, we analyzed high-quality qualitative and quantitative publications through an evidence synthesis, and collated results on costs and cost-effectiveness, as well as available information on existing programming that aims to improve educational outcomes.

In contrast to literature reviews that frame a debate or provide context around a discrete theoretical argument, rigorous evidence syntheses aim to systematically synthesize all existing knowledge related to a topic. Evidence syntheses capture and consolidate information through a synthesis of “all the existing high-quality evidence using transparent methods to give the best possible generalized statements about what is known” (Waddington et al., 2012, p. 360). Systematic evidence syntheses use “a clear protocol for systematically searching defined databases, over a defined time period, with transparent criteria for the inclusion or exclusion of studies, as well as the analysis and reporting of results,” which helps in ensuring reproducibility of the analyses (Waddington et al., 2012, p. 360). Transparent inclusion and exclusion criteria help ensure that statements about a range of studies are representative of the existing evidence on education and forced displacement. Without transparent inclusion and exclusion criteria, typical literature reviews can provide biased views of the body of existing knowledge and are insufficient to identify the state of the current evidence and the gaps in research on education for forcibly displaced populations.

The collation of evidence on costs and cost-effectiveness will inform policymakers and program managers about the evidence that is currently available regarding the investments that are required to implement education interventions for displaced populations, as well as the costs of achieving improvements in access to education, learning outcomes, and children’s well-being. This information is critical because limited resources are available for EiE programming. Indeed, analyses of the overall aid architecture for EiE programming suggest that there are major funding gaps because funding is both limited and erratic (McClure & Gray, 2015; Nicolai & Hine, 2015; Results for Development & UNICEF, 2016).

Finally, creating an intervention map that collates information on existing programs that aim to improve educational outcomes in forced displacement settings is important to understand the focus of current programming, the extent to which this programming promotes the inclusion of displaced populations in host country education systems, and the extent of overlap between existing programs and evidence. The intervention map also enables us to identify gaps in programming in terms of content, geography, population, and providers (e.g., nongovernmental organizations [NGOs] versus government programming). Taken as a whole, these activities will help to ensure an informed and systematic selection of case studies for Phase II.
3. CONCEPTUAL FRAMEWORK: A THEORY OF CHANGE APPROACH TO FORCED DISPLACEMENT AND EDUCATION

We developed a theory of change (ToC; Exhibit 7) that adapts and builds on the one presented in Burde and colleagues (2015). It draws on evidence from forced displacement contexts (Bengtsson & Naylor, 2016; de Hoop, Ring, Coombes, Rothbard, Holla, 2019b; Mendenhall, Russell, & Buckner, 2017; Save the Children, UNHCR, & Pearson, n.d.), as well as from the broader literature on education in crisis- and conflict-affected countries (Burde et al., 2015, 2017). Our underlying assumption (informed by evidence) is that conflicts, political and economic crises, and natural disasters displace populations within and across borders, disrupting the education of both the displaced and recipient communities. Interventions within and outside of national education systems are critical to mitigate the effects of this displacement on education by improving educational access, quality of learning, and well-being for the forcibly displaced and host populations.

Our ToC depicts mechanisms and outcomes of education initiatives in forced displacement, framed around what works—and through which pathways—to improve learning and social cohesion for children and youth. We identified early-term and intermediate outcomes that comprise incremental steps on the pathway to the desired final outcomes (Anderson, 2014). Our ToC specifies improvements in educational access (increased enrollment, retention, and attainment), quality learning (improved academic achievement and prosocial behavior), and well-being (improved physical, mental, and emotional well-being) as intermediate outcomes to reach the long-term goals of quality learning and social cohesion. The ToC specifies four domains of early-term changes on the pathway to these intermediate outcomes: national system, community, school, and individual. System-level changes derive from providing support to and strengthening national education systems, which in turn provide more equitable and inclusive education for all. Community-level changes include capacity building and empowerment of both the affected and host communities to improve their participation in children’s learning and well-being. School-level changes include the development of innovative and inclusive approaches to formal and nonformal education to increase learning opportunities. Some of these changes are related to curriculum and textbooks, technology, language of instruction, and assessment. Individual-level changes are achieved by transforming attitudes and behavior, and by developing the skills of students, teachers, school administrators, parents, and caregivers.

Based on Burde and colleagues (2015) and our initial literature review, the ToC for this research identifies two types of interventions in forced displacement contexts that are intended to achieve the early-term, intermediate, and long-term outcomes: interventions that provide support to administration, infrastructure, and resources; and interventions that target educational content and practices. The first group of interventions includes managerial, physical, and material inputs, such as providing administrative support to community-based schools, infrastructure support to government schools, and financial and in-kind support to students. The second group of interventions uses material input and capacity-building activities to improve educational content and practices—for example, by addressing stereotypes in curricula and textbooks, discriminatory attitudes among school administrators, psychosocial problems among students, and teacher quality.

Our ToC also depicts the moderators that may either strengthen or weaken the relationship between the interventions’ early, intermediate, and final outcomes. These include the type of target population (refugees; IDPs; returnees; host communities; gender; disability; different age groups, from early childhood to adolescence and youth); the type of crisis (internal, cross-border, natural disaster, conflict, climate, political and economic crisis); the displacement context (urban, peri-urban, rural, camp setting, settlement); and the duration of displacement (short-term, protracted). For instance, we hypothesize that successful interventions that improve the education of urban refugees may differ from successful interventions that improve education for refugee students in camp settings. We also hypothesize that some interventions will be more or less effective depending on the duration of displacement.
The ToC we present here will provide guidance for both Phase I and Phase II of this study. However, because developing a ToC is an iterative process (see Monaghan & King, 2018; Stein & Valters, 2012, on the reflexivity of ToCs), it will be tested and improved over time, integrating new information from the evidence synthesis and country case studies. For example, as part of our Phase II inception report,\(^5\) we will add the mechanisms of change in education interventions (identified through the evidence synthesis; e.g., improving accreditation to increase enrollment and attainment, or increasing parents’ involvement to improve children’s well-being) to the ToC, between the early and intermediate outcomes on the pathway to the long-term outcome. Exhibit 7 presents a graphic representation of our ToC.

Importantly, we cannot rely solely on the ToC in the analysis of results. For example, funding and capacity constraints may limit the ability of EiE and development stakeholders to effectively implement the interventions depicted in the ToC. It is also critical that EiE programming responds to priorities set by ministries of education (MoEs) and humanitarian actors. We will take these and other factors into consideration when analyzing the costs, cost-effectiveness, sustainability, and scalability of education programs for forcibly displaced populations.

Exhibit 7. Theory of Change

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Early-Term Outcome Levels: Domains of Change</th>
<th>Intermediate Outcomes: Access, Quality, Well-Being</th>
<th>Final Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interventions that provide support to administration, infrastructure, and resources</td>
<td>System level: National education systems have better capacity, providing equitable and inclusive education.</td>
<td>Access: Increased enrollment, retention, and attainment</td>
<td>Improved learning and social cohesion among the displaced and host populations</td>
</tr>
<tr>
<td>Interventions that target educational content and practices</td>
<td>Community level: Communities have access to opportunities and have the skills and resources to participate.</td>
<td>Quality: Improved academic achievement and prosocial behavior</td>
<td></td>
</tr>
<tr>
<td>School level: Formal and nonformal education provides innovative, inclusive, and quality learning opportunities.</td>
<td>Well-Being: Improved, physical, mental, and emotional well-being</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual level: Key stakeholders have tolerant and inclusive attitudes, as well as the skills and resources for forced displacement contexts.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Moderators:
- Type of target population
- Type of crisis
- Displacement context
- Duration of displacement


\(^5\) Phase II of this research will include an inception report that identifies the case study countries, describes the theoretical framework, and outlines our methodological approach.
4. RESEARCH DESIGN

The team conducted an evidence synthesis and a costing and cost-effectiveness analysis to identify and assess high-quality qualitative research and rigorous quantitative research; and to synthesize findings regarding the relevance, effectiveness, costs, and cost-effectiveness of EiE programming, with a specific focus on interventions for forcibly displaced populations. We also collated available information on programming that aims to improve educational outcomes in an intervention map. This section introduces the research questions that guided the Phase I research, describes our detailed methodology, and presents the limitations of our study design.

4.1 RESEARCH QUESTIONS

The evidence synthesis and intervention mapping aimed to address the following overarching research question and related sub-questions.

1. What interventions have been implemented in countries with refugee-inclusive education systems and policies to facilitate educational access and retention for displaced students and out-of-school youth, and what is the evidence on their impact, cost, and replicability?

   a. What interventions improve policy and capacity in national education systems, increasing the provision of equitable and inclusive education for forcibly displaced children and youth, as well as for host communities? In particular, what interventions at the system level lead to increased enrollment, retention, and attainment among the target populations, and through what mechanisms?

   b. What interventions (and through what mechanisms)—at the community, school, and individual levels—increase enrollment, retention, and attainment; improve academic achievement and prosocial behavior; and improve physical, mental, and emotional well-being among the target populations?

   c. How is intervention effectiveness—at the system, community, school, and individual levels—moderated by type of target population, type of crisis, displacement context, and duration of displacement?

   d. What is the evidence on the costs and cost-effectiveness of interventions that improve education outcomes in forced displacement contexts?

   e. What is the evidence on the scalability and replicability of interventions that improve education outcomes in forced displacement contexts?

We developed a methodology to respond to these questions by comprehensively identifying education interventions, and subsequently assessing their effectiveness on the outcomes of interest. The evidence from these activities will guide our selection of case study countries for Phase II.

4.2 METHODOLOGY

This section presents an overview of our methodological approach, including (a) an overview of the evidence review phases, (b) our approaches to analyzing data from the systematic review, and (c) our approach to intervention mapping.

4.2.1 Evidence Review Phases

The evidence synthesis included the following phases: (1) determining the relevant population, intervention, comparisons, and outcomes (PICO); (2) determining the relevant study types; (3) developing the search strategy; (4) searching for evidence; (5) applying inclusion criteria; (6) reviewing full text using quality review protocols; (7) analyzing results; and (8) triangulating findings. Please see Annex C for a detailed description of the precise steps and guidelines included in our research methods.

4.2.2 Data Analysis Approaches

This section summarizes our approaches to the quantitative synthesis, costing analysis, and qualitative synthesis; and our approach to triangulating quantitative and qualitative results.
QUANTITATIVE ANALYSIS AND SYNTHESIS
We conducted a narrative synthesis to analyze the effectiveness of programs that could influence learning outcomes, access, and well-being of displaced populations. In this narrative synthesis, we calculated the standardized mean difference and the standard error for each of the outcome measures in each of the studies that met the inclusion criteria. However, we only conducted meta-analyses for outcome measures that were included in three or more studies that focused on similar programs. We provide more details on the calculation of effect sizes in Annex B.

Throughout our reporting on the results, we refer to the degree of selection bias and performance bias, which we determined based on a validated risk of bias assessment tool of Hombrados & Waddington (2012) that we adapted for this study. Selection bias is associated with a lack of equivalence in characteristics (either observable, such as age or education; or unobservable, such as motivation) across program participants and the control or comparison group. Selection bias may result from self-selection into a program, which could, for example, lead to differences between (a) students who participate in the program because they or their parents expect to benefit from it, and (b) students who do not participate in the program because they or their parents see limited or no benefits. Selection bias may also occur when a program targets schools, geographies, or students with specific characteristics. Self-selection often results in differences in unobservable characteristics, such as motivation, while program targeting often results in differences in observable characteristics.

Performance bias refers to bias that results from spillovers or contamination. Spillovers are the indirect benefits or unintended negative consequences of a program that result from interaction between the control or comparison group and the treatment group, or from changes in prices that result from linkages between the treatment group and the control or comparison group. These indirect benefits or unintended negative consequences may in turn result in underestimates or overestimates of the impact of a program, if they are not taken into consideration in the analysis. Contamination refers to benefits for the control or comparison group because of the unintentional implementation of the program in the control or comparison group. For example, on-the-ground program implementers may not know about the random assignment of schools to a program and may start implementing the program in control schools. Spillovers and contamination are less likely when the assignment of the program happens at the school level. In those cases, the likelihood of interaction between treatment students and control students is lower than when treatment and control students attend the same school. Program implementers are also less likely to make mistakes in the allocation of benefits when program assignment is at the school level than when program assignment is at the classroom or student level.

We rated randomized controlled trials (RCTs) and regression discontinuity designs with baseline data demonstrating equivalence in observable characteristics and sufficient sample sizes as having a low risk of selection bias. Impact evaluation designs that meet these criteria often allow for minimizing selection bias and creating equivalence between program participants and the control or comparison group.

We rated RCTs with small sample sizes (less than 30 treatment schools for cluster RCTs, or less than 200 treatment students for RCTs) or high attrition rates (greater than 10%) as having a medium risk of selection bias. Studies that had sufficient sample sizes and conducted difference-in-difference analysis, controlling for observable characteristics to account for program targeting, were also rated as having a medium risk of selection bias. RCTs with small sample sizes or high attrition rates often suffer from lack of equivalence across the treatment group and the control or comparison group because randomization requires a sufficient number of observations to guarantee equivalence across program participants and the control or comparison group. Difference-in-difference analysis can help to create equivalence between program participants and control or comparison schools but often does not fully eliminate selection bias.

We rated RCTs with very small sample sizes and problems in the implementation of randomization as having a high risk of selection bias, along with quasi-experimental studies with baseline data but small sample sizes. RCTs with very small sample sizes and problems in the implementation of randomization almost certainly suffer from lack of equivalence between program participants and the control or comparison group. Quasi-experimental studies with baseline data but small sample sizes are also almost certainly unable to address selection bias.
We rated performance bias based on information about program assignment (and whether that could result in spillovers) and information about likely contamination. We rated studies that relied on comparisons between students in schools and found no evidence or only marginal evidence of control group contamination as having a low risk of performance bias. We rated studies that relied on comparisons across students in different classrooms but within the same school as having a medium risk of bias, along with studies that found some evidence of contamination of the control or comparison group. Finally, we rated studies that relied on comparisons between students in the same classroom and studies that found major evidence of control group contamination as having a high risk of performance. Each of these assessments is aligned with risk of bias assessments conducted in previous systematic reviews conducted by Brody et al. (2015), Chinen et al. (2017) and Stone et al. (2020).

COSTING AND COST-EFFECTIVENESS SYNTHESIS
We synthesized all information about costs from studies that included data on the costs of intervention, including (but not limited to) experimental and quasi-experimental studies. The synthesis included information on per-student costs for 12 studies and examined how these costs changed with implementation (to the extent possible). For example, we assessed how per-student costs changed depending on the number of students reached. In addition, we reported on cost-effectiveness by combining cost estimates with impact estimates from RCTs or quasi-experimental studies. We were able to report on cost-effectiveness for three programs: two community-based education (CBE) programs in Afghanistan (Burde & Linden, 2013; Burde, Middleton, & Samii, 2016; Burde et al., 2019b) and the Kepler program in Rwanda (Bier et al., 2019; de Hoop et al., 2019b). The other experimental and quasi-experimental impact evaluations included in the synthesis did not provide information on the costs of the evaluated programs.6

QUALITATIVE ANALYSIS AND SYNTHESIS
We reviewed 231 qualitative studies and assessed 202 of these studies to be of sufficient quality to include in our content synthesis (see Annex F for guidelines). We excluded any studies that did not pass the threshold of receiving at least eight out of 12 “high” or “medium” ratings for the 10 questions in the Critical Appraisal Skills Program (CASP) checklist (see Annex F) that we consider critical elements of a high-quality study. This approach helped to ensure that the studies we reviewed for content also met a common level of methodological quality.

We synthesized qualitative nonintervention studies separately because they did not have similar inputs or outcomes that could be directly compared with those of the intervention studies. For the nonintervention qualitative studies, we looked at each of the program descriptions after recording the data in an Excel sheet and then determined common themes across studies that we could use as categories for our review. We reviewed these studies in the following categories: (a) access to education, (b) education policy and governance, and (c) education policy versus practice. We also reviewed papers that assessed inclusion of displaced populations in national education systems from the perspectives of (a) teachers, (b) students, and (c) caregivers.

TRIANGULATING FINDINGS
We triangulated the results on the quantitative effects of education programs with qualitative findings to help describe, explore, and interpret the ways in which programs can more effectively improve education outcomes for displaced populations. By triangulating findings from different types of complementary research on the same topics, we were able to present evidence on the conditions that enable and the factors that moderate effectiveness and inclusion.

4.2.3 Intervention Mapping Approach
We created an Excel database to document education interventions in displacement settings identified through a desk review. This section describes our approach to selecting the country sample, searching for intervention evidence, and organizing the intervention map.

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6 The impact evaluation of the Kepler program did not include cost estimates, but we were able to estimate the cost-effectiveness of the program by combining the data from the impact evaluation (Bier et al., 2019) with cost data from a separate costing analysis (de Hoop et al., 2019).
COUNTRY SAMPLE SELECTION
We narrowed the sample of countries for the intervention map based on the following criteria.

- **Policy environment for the inclusion of displaced populations in national systems**: As the goal of this study is to assess conditions that facilitate educational access and retention for displaced students, the sample included countries that have explicit education policies that include provisions for access to host country education systems. To provide points of comparison, we also included countries that have no explicit policy on inclusion but allow refugees to access national schools, as well as countries where refugees explicitly do not have access to national systems.

- **Socioeconomic status**: We included countries that ranged from upper-middle income levels to low-income levels, as well as fragile and conflict-affected countries, in accordance with the World Bank Income Level Classifications (2020), to assess how income-related constraints affect the policy environment.

- **Region**: We included countries from multiple regions in the global south.

- **Number of displaced people**: We included countries with a minimum of 25,000 refugees, reflecting the World Bank’s interest in countries with substantial refugee populations.

Based on the above criteria, we included 22 countries in the intervention map (see Exhibit 8).

**EXHIBIT 8. COUNTRIES INCLUDED IN THE INTERVENTION MAP AND SELECTION CRITERIA**

<table>
<thead>
<tr>
<th>#</th>
<th>Country</th>
<th>Policy Status7</th>
<th>FCAS8</th>
<th>Region</th>
<th>Income Level</th>
<th>N Displaced</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Afghanistan</td>
<td>No access</td>
<td>Yes</td>
<td>South Asia</td>
<td>Low</td>
<td>2,371,815*</td>
</tr>
<tr>
<td>2.</td>
<td>Algeria</td>
<td>Explicit/ Inclusive</td>
<td>No</td>
<td>Middle East &amp; North Africa</td>
<td>Upper middle</td>
<td>249,100**</td>
</tr>
<tr>
<td>3.</td>
<td>Cameroon</td>
<td>Explicit/ Inclusive</td>
<td>Yes</td>
<td>Sub-Saharan Africa</td>
<td>Lower middle</td>
<td>1,790,466*</td>
</tr>
<tr>
<td>4.</td>
<td>Chad</td>
<td>Explicit/ Inclusive</td>
<td>Yes</td>
<td>Sub-Saharan Africa</td>
<td>Low</td>
<td>476,399*</td>
</tr>
<tr>
<td>5.</td>
<td>Colombia</td>
<td>Unclear</td>
<td>No</td>
<td>Latin America &amp; Caribbean</td>
<td>Upper middle</td>
<td>1,100,000**</td>
</tr>
<tr>
<td>6.</td>
<td>DRC</td>
<td>Unclear</td>
<td>Yes</td>
<td>Sub-Saharan Africa</td>
<td>Low</td>
<td>963,800**</td>
</tr>
<tr>
<td>7.</td>
<td>Ecuador</td>
<td>Explicit/ Inclusive</td>
<td>No</td>
<td>Latin America &amp; Caribbean</td>
<td>Upper middle</td>
<td>381,500**</td>
</tr>
<tr>
<td>8.</td>
<td>Egypt</td>
<td>Explicit/ Inclusive</td>
<td>No</td>
<td>Middle East &amp; North Africa</td>
<td>Lower middle</td>
<td>504,100**</td>
</tr>
</tbody>
</table>

7 The research team received these classifications from UNHCR, and they are defined in Annex A.
8 Fragile/conflict-affected states.
<table>
<thead>
<tr>
<th>#</th>
<th>Country</th>
<th>Policy Status</th>
<th>FCAS</th>
<th>Region</th>
<th>Income Level</th>
<th>N Displaced</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Ethiopia</td>
<td>Not explicit/access</td>
<td>No</td>
<td>Sub-Saharan Africa</td>
<td>Low</td>
<td>769,310*</td>
</tr>
<tr>
<td>10</td>
<td>Iraq (and KRI)</td>
<td>Explicit/Inclusive</td>
<td>Yes</td>
<td>Middle East &amp; North Africa</td>
<td>Low</td>
<td>368,100**</td>
</tr>
<tr>
<td>11</td>
<td>Jordan</td>
<td>Not explicit/access</td>
<td>No</td>
<td>Middle East &amp; North Africa</td>
<td>Upper middle</td>
<td>3,300,000**</td>
</tr>
<tr>
<td>12</td>
<td>Kenya</td>
<td>Explicit/Inclusive</td>
<td>No</td>
<td>Sub-Saharan Africa</td>
<td>Lower middle</td>
<td>1,000,000**</td>
</tr>
<tr>
<td>13</td>
<td>Malaysia</td>
<td>No access</td>
<td>No</td>
<td>East Asia</td>
<td>Upper middle</td>
<td>3,400,000**</td>
</tr>
<tr>
<td>14</td>
<td>Mauritania</td>
<td>No access</td>
<td>No</td>
<td>Sub-Saharan Africa</td>
<td>Lower middle</td>
<td>64,564*</td>
</tr>
<tr>
<td>15</td>
<td>Mexico</td>
<td>Explicit/Inclusive</td>
<td>No</td>
<td>Latin America &amp; Caribbean</td>
<td>Upper middle</td>
<td>1,100,000**</td>
</tr>
<tr>
<td>16</td>
<td>Mozambique</td>
<td>Not explicit/access</td>
<td>No</td>
<td>Sub-Saharan Africa</td>
<td>Low</td>
<td>305,845*</td>
</tr>
<tr>
<td>17</td>
<td>Niger</td>
<td>Explicit/Inclusive</td>
<td>Yes</td>
<td>Sub-Saharan Africa</td>
<td>Low</td>
<td>227,816*</td>
</tr>
<tr>
<td>18</td>
<td>Pakistan</td>
<td>Not explicit/access</td>
<td>No</td>
<td>South Asia</td>
<td>Lower middle</td>
<td>1,420,673*</td>
</tr>
<tr>
<td>19</td>
<td>Rwanda</td>
<td>Not explicit/access</td>
<td>No</td>
<td>Sub-Saharan Africa</td>
<td>Low</td>
<td>539,900**</td>
</tr>
<tr>
<td>20</td>
<td>Sudan</td>
<td>Not explicit/access</td>
<td>Yes</td>
<td>Sub-Saharan Africa</td>
<td>Lower middle</td>
<td>1,200,000**</td>
</tr>
<tr>
<td>21</td>
<td>Turkey</td>
<td>Explicit/Inclusive</td>
<td>No</td>
<td>Europe &amp; Central Asia</td>
<td>Upper middle</td>
<td>5,900,000**</td>
</tr>
<tr>
<td>22</td>
<td>Uganda</td>
<td>Explicit/Inclusive</td>
<td>No</td>
<td>Sub-Saharan Africa</td>
<td>Low</td>
<td>1,428,961*</td>
</tr>
</tbody>
</table>

Source: The numbers in the “N displaced” column are from two sources: a *next to the number indicates that the number is from the UNHCR Operational Portal (https://data2.unhcr.org/en/countries/); a **next to the number indicates that the number is from the Migration Data Portal (https://migrationdataportal.org/)
SEARCH STRATEGY
We created the intervention map by following two complementary approaches: (1) building on existing maps of similar programming, and (2) hand searching websites of international development and humanitarian organizations that work with displaced populations in education.

First, we gathered information from previous mapping exercises and reviews, including those conducted by Education Cannot Wait (ECW), the Interagency Network of Education in Emergencies (INEE), Promising Practices in Refugee Education (Bergin, 2017), the Center for Education Innovations (2020), and the Brookings Institution (Winthrop, Barton, & McGivney, 2018). We used these existing maps to begin compiling a comprehensive Excel document of education interventions in forced displacement settings.

Second, we searched the following humanitarian- and development-focused websites to identify additional interventions that had not been included in the existing maps: UNHCR, the United Nations Children’s Fund (UNICEF), the United States Agency for International Development’s (USAID’s) Development Experience Clearinghouse, the World Bank, ReliefWeb, the Education in Crisis and Conflict Network, the Xavier Project, Beyond Boxes, K4D Helpdesk, INEE, the Harvard Global Education Innovation Initiative, the Global Innovation Exchange, and the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA).

During Phase II, we will conduct key informant interviews (KIIs) with selected key stakeholders involved in education for displaced populations to continue building out the map. We will also request relevant documentation on any interventions identified through the KIIs and add a new entry to the Excel document in line with the characterization criteria.

ORGANIZING FRAMEWORK
We coded interventions using the criteria presented in the coding framework in Exhibit 9, which we established following discussions with UNHCR and the World Bank.

<table>
<thead>
<tr>
<th>Characterization criteria</th>
<th>Description of relevant information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention Name</td>
<td>Name</td>
</tr>
<tr>
<td>Donor</td>
<td>Name</td>
</tr>
<tr>
<td>Relation to national education system</td>
<td>Parallel, Integrated, Complementary</td>
</tr>
<tr>
<td>Implementer type</td>
<td>NGO, INGO, CSO, Government, Other</td>
</tr>
<tr>
<td>Implementer</td>
<td>Name</td>
</tr>
<tr>
<td>Country of intervention</td>
<td>Afghanistan, Algeria, Cameroon, Chad, Colombia, DRC, Ecuador, Egypt, Ethiopia, Iraq, Iraq–KRI, Jordan, Kenya, Malaysia, Mauritania, Mexico, Mozambique, Niger, Pakistan, Rwanda, Sudan, Turkey, Uganda</td>
</tr>
<tr>
<td>Geographic scope of intervention</td>
<td>Country and region</td>
</tr>
<tr>
<td>Scale of intervention</td>
<td>Number of participants</td>
</tr>
<tr>
<td>Characterization criteria</td>
<td>Description of relevant information</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>Target group(s) by education level</td>
<td>Preprimary, primary, secondary, tertiary, out-of-school children, youth, other</td>
</tr>
<tr>
<td>Purpose of intervention</td>
<td>Description of intervention</td>
</tr>
<tr>
<td>Education type</td>
<td>Formal, nonformal, vocational, remedial</td>
</tr>
<tr>
<td>Displacement type(s)</td>
<td>Refugee, IDP, undocumented, asylum-seeker, host</td>
</tr>
<tr>
<td>Intervention setting</td>
<td>Camp/settlement, rural, urban, other**</td>
</tr>
<tr>
<td>Focus on marginalized group</td>
<td>Girls, disabled, other</td>
</tr>
<tr>
<td>Curriculum</td>
<td>Description of curriculum used for intervention</td>
</tr>
<tr>
<td>Teacher supply</td>
<td>If intervention involves teachers, where are teachers from</td>
</tr>
<tr>
<td>Teacher qualification</td>
<td>Does the intervention require certified teachers</td>
</tr>
<tr>
<td>Language of instruction</td>
<td>Host country language, mother tongue of displaced population, other</td>
</tr>
<tr>
<td>Physical infrastructure</td>
<td>Does the intervention use any physical infrastructure?</td>
</tr>
<tr>
<td>Recognition/accreditation</td>
<td>Does the intervention lead to recognition or accreditation for students/teachers?</td>
</tr>
<tr>
<td>Technology</td>
<td>Indicate if the intervention uses any technology</td>
</tr>
<tr>
<td>Learning assessments</td>
<td>Indicate if the intervention conducts learning assessments</td>
</tr>
<tr>
<td>Primary outcome(s) related to Intervention</td>
<td>Access (enrollment, admission, attendance), retention (progression, repetition, completion), learning quality, innovations or digital applications, teacher training, well-being (includes psychosocial), other</td>
</tr>
<tr>
<td>Monitoring and evaluation (M&amp;E): Ongoing M&amp;E or other data collection</td>
<td>Status of monitoring and evaluation for the intervention or other research including impact, cost, replicability. Also included indicators for results, accountability, transparency, reporting, and inputs, where applicable.</td>
</tr>
</tbody>
</table>

* Based on UNHCR estimates for origin/host country pairs.  
** We use camp or settlement to refer to programs that take place in official UNHCR camps/settlements for refugees or IDPs. We follow World Bank definition of urban and rural populations: urban areas are those designated as “urban” by national statistics offices in each country, and rural areas are those that do not fall within these urban sections. Specifically, a rural education program is one in which the program infrastructure is in a rural area. In cases where programs are predominantly virtual, we will consider a program rural if the target population is in rural areas.
We used project documents that described the features of an intervention to collect data on the indicators. The purpose of tracking these indicators was threefold:

- To classify the situation for the host and displaced community in terms of access to and quality of education
- To identify basic educational inputs and policy information, such as curriculum, language of instruction, teacher supply, teacher qualifications, physical infrastructure, training, recognition, accreditation, technology, and assessments
- To understand programs’ use of monitoring and evaluation (M&E), including data availability, reporting, inputs, results, accountability, and transparency

We categorized interventions by program type and analyzed interventions in each category. We summarized key characteristics, the extent of the focus on the inclusion of displaced populations in national education systems, and the extent to which research exists on interventions. We present these results alongside the evidence synthesis results for the same categories.

4.3 STUDY LIMITATIONS

Our study faced the following limitations.

- We only reviewed studies published in English, which means that our review may have missed high-quality, relevant studies published in other languages.
- Our search strategy may have omitted some qualitative research that does not focus on specific education interventions. While we included some research that is not related to specific education interventions, it is likely that our search terms—which needed to include the word “intervention” to return relevant quantitative studies—did not return all relevant qualitative research.
- We did not have the opportunity to access primary cost data to complement impact evaluation findings, limiting our opportunities to conduct rigorous cost-effectiveness analyses. The costing and cost-effectiveness analyses discussed in this report are based on a small number of studies and come from a limited number of contexts. As a result, we were also unable to account for differences in costs between contexts.
- The number of rigorous experimental and quasi-experimental studies on education programs in forced displacement contexts is relatively small, limiting the ability of this review to make strong claims about the causal effects of interventions for displaced populations.
- We were unable to triangulate all research findings because of the relatively small number of studies eligible for inclusion in the quantitative synthesis. As a result, we are unable to present strong evidence on how contextual characteristics moderate the effectiveness of EiE programming.
- The results of our analysis may be vulnerable to publication bias. While we included a large number of unpublished studies, it is unlikely that our review produced a comprehensive overview of all grey literature.
- Only a small number of included studies used a mixed-methods approach, limiting our ability to triangulate results for studies conducted in the same context.
5. RESULTS

This section presents our results from the evidence search, intervention mapping, and risk-of-bias assessment; followed by detailed quantitative and qualitative results on intervention effectiveness, moderators of effectiveness, and the results of cost and scalability analysis.

5.1 SEARCH RESULTS

Our initial searches returned 6,591 unique results. We reviewed the titles and abstracts for each of these results and removed 6,374 irrelevant studies. Through secondary searches, we found an additional 195 relevant studies. We reviewed the full text of 181 quantitative studies and critically appraised 231 qualitative studies (158 studies of specific interventions and 73 non-intervention studies). After removing studies that were irrelevant or of low quality, we included 42 quantitative studies (including 32 experimental and quasi-experimental studies and 14 studies with information on costs), 141 qualitative intervention studies, and 61 qualitative nonintervention studies in our synthesis, for a total of 244 final relevant studies. Exhibit 10 indicates the number of studies that passed or were removed in each review phase.

After finalizing the studies to include in our analysis, we grouped studies into topic areas under each of our primary outcomes of interest. We used the categories listed in Exhibit 11 to synthesize the results from high-quality studies, which are presented in the sections that follow. This exhibit also shows the number of included studies (quantitative, qualitative, and cost) by topic. If a study was mixed methods, we reviewed the study for each applicable method: quantitative, qualitative, or cost analysis. We also included some studies in more than one topic area if there were multiple applicable outcomes.
### EXHIBIT 11. CHARACTERISTICS OF INCLUDED STUDIES

<table>
<thead>
<tr>
<th>Primary Outcome of Interest</th>
<th>Evaluation Topic Area</th>
<th>Quantitative</th>
<th>Qualitative</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Access to education</strong></td>
<td>Early childhood development</td>
<td>1</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Postsecondary education</td>
<td>2</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Nonformal education modalities</td>
<td>4</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td><strong>Quality of education (learning outcomes)</strong></td>
<td>Technology in education</td>
<td>8</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Reading, literacy, and language policy</td>
<td>0</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Curriculum</td>
<td>0</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Capacity building and systems strengthening</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Teachers and teaching</td>
<td>2</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td><strong>Student well-being</strong></td>
<td>Social and emotional learning and psychosocial support</td>
<td>9</td>
<td>16</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Peacebuilding and social cohesion</td>
<td>0</td>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Child protection</td>
<td>1</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>School feeding</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Water and sanitation in schools</td>
<td>1</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Disaster risk reduction</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Nonintervention (no outcome)</strong></td>
<td>Access to education</td>
<td>0</td>
<td>14</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Education policy and governance</td>
<td>0</td>
<td>7</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Education policy versus practice</td>
<td>0</td>
<td>10</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Teacher experience</td>
<td>0</td>
<td>13</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Student experience</td>
<td>0</td>
<td>15</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Caregiver experience</td>
<td>0</td>
<td>2</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Exhibit 12 presents the risk of selection bias and performance bias of the included experimental and quasi-experimental studies. The risk-of-bias assessment tool we used was similar to the RoB assessment tools used in various other published evidence syntheses (Brody et al., 2015; Chinen et al., 2017b; Kersten et al., 2017; Stone, de Hoop, Coombes, & Nakamura, 2019; Waddington et al., 2014). Exhibit 13 shows the distribution of low, medium, and high risk of bias across the included studies for the two risk-of-bias categories.

Exhibit 12. Risk of Bias Assessment of Quantitative Intervention Studies

![Risk of Bias Assessment Chart]

- **Risk of Selection Bias**
  - Low risk of bias: 34%
  - Medium risk of bias: 25%
  - High risk of bias: 41%

- **Risk of Performance Bias**
  - Low risk of bias: 13%
  - Medium risk of bias: 69%
  - High risk of bias: 19%
Finally, we found 194 programs to include in the intervention map. We grouped the programs into the same topic areas that we used for the evidence synthesis, with extra categories to allow for programs that did not fit elsewhere. We used the categories shown in Exhibit 13 to synthesize the results from high-quality studies, which are presented in the sections that follow. Exhibit 13 shows the total number of interventions by topic that we included in the map.

**EXHIBIT 13. RESULTS OF INTERVENTION MAPPING EXERCISE BY TOPIC AREA**

<table>
<thead>
<tr>
<th>Primary Outcome of Interest</th>
<th>Evaluation Topic Area</th>
<th>Identified Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to education</td>
<td>Early childhood development</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Postsecondary education</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Nonformal education modalities</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Basic education</td>
<td>7</td>
</tr>
<tr>
<td>Quality of education (learning outcomes)</td>
<td>Technology in education</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Reading, literacy, and language policy</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Curriculum</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Capacity building and systems strengthening</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Teachers and teaching</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Other: Financial/material support for education (including infrastructure/tuition support/learning materials)</td>
<td>23</td>
</tr>
<tr>
<td>Student well-being</td>
<td>Social and emotional learning and psychosocial support</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Peacebuilding and social cohesion</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Child protection</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>School feeding</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Water and sanitation in schools</td>
<td>5</td>
</tr>
</tbody>
</table>
5.2 INTERVENTION EFFECTIVENESS FOR INCLUDED STUDIES

This section focuses on RQs 1a and 1b (see text box). We present results on effectiveness from qualitative and quantitative studies on well-being, access, and quality—the three major outcomes in our ToC. For each topic area, we present population characteristics from the studies we examined, followed by assessments of effectiveness, and finally any information from this body of research on the inclusion of refugee populations. We present the findings from qualitative nonintervention studies separately.

5.2.1 Access (Enrollment)

This section presents available evidence on issues of access, including for early childhood development (ECD), postsecondary education, and nonformal education.

EARLY CHILDHOOD DEVELOPMENT

We reviewed one experimental quantitative study focused on preschoolers in Senegal, and four qualitative studies focused on early childhood education (ECE) among refugees from South Sudan, the Democratic Republic of the Congo (DRC), and Rwanda who were residing in Uganda and the Philippines.

Effectiveness

Using a cluster RCT, the quantitative study found that the provision of early childhood kits had statistically significant effects on the mathematics, language, cognitive (spatiotemporal differences; associations between objects, patterns, and memorization), and motor skills (ability to copy shapes on a slate) of preschoolers in Senegal. However, the effects were only marginally significant, and the program did not find statistically significant effects on either language or cognitive skills. The study found effect sizes of 0.20 standard deviation (SD) for math and 0.15 SD for motor skills outcomes. The findings are credible because the study has a low risk of selection bias and a low risk of performance bias. Exhibit 14 presents a summary of the intervention and the study. Effect sizes are presented in Annex H.

RESEARCH QUESTIONS RELATED TO INTERVENTION EFFECTIVENESS

1a. What interventions improve policy and capacity in national education systems, increasing the provision of equitable and inclusive education for forcibly displaced children and youth, as well as for host communities? In particular, what interventions at the system level lead to increased enrollment, retention, and attainment among the target populations, and through what mechanisms?

1b. What interventions (and through what mechanisms)—at the community, school, and individual levels—increase enrollment, retention, and attainment; improve academic achievement and prosocial behavior; and improve physical, mental, and emotional well-being among the target populations?
The qualitative studies indicated that strengthening the involvement of caregivers in programs that combined cognitive and physical development with trauma recovery contributed to improvements in school readiness among preschool children (AAN Associates, 2017; Brooker et al., 2017; Maulana, 2018; Smith, 2015). For instance, a program in Uganda used ECD kits, which were associated with strengthening cognitive skills and stress relief through play activities, especially when paired with training for caregivers. Including parents as an integral part of the program helped to increase awareness of ECD and stimulate integration through community-based activities (Maulana, 2018). Simultaneously, the UNICEF country program worked at the policy level to allocate more resources to build capacity in ECD services by mainstreaming policies, plans, and existing services (Brooker et al., 2017). However, studies reported uneven distribution of benefits across the target population, as well as challenges in recruiting and remunerating qualified teachers (Brooker et al., 2017; Maulana, 2018).

Inclusion and Integration
Studies found that early education programs contributed to the inclusion of children in public education systems by improving their readiness for primary school. However, because many preschools were not properly certified, some children had to repeat public kindergarten before they could enroll in public primary schools (AAN Associates, 2017). Both programs in Uganda followed national guidelines for ECD, and ECD centers and kits were available to both refugee and host populations (Maulana, 2018; Smith, 2015). Primary school teachers said that program completers were better prepared in terms of skills and behavior and were therefore more likely to be successful in school (Smith, 2015). Minority caregivers reported that the Tahderliyyah program’s curriculum, which balanced national curriculum with Islamic values, was an important factor in deciding to enroll their children in school (AAN Associates, 2017).

POSTSECONDARY EDUCATION
We included five qualitative studies and two quantitative studies of interventions related to postsecondary education, including four studies on higher education and one on vocational training. The studies primarily reported on interventions serving refugees, mostly located in camps but also in urban areas. Programs included a tuition and stipend support program for postsecondary Syrian refugee students from camps in Jordan; a program leveraging technology to deliver an agribusiness course in a refugee settlement in Uganda; the Jesuit Commons: Higher Education at the Margins (JC:HEM) higher education program for refugees in camps in Kenya and Malawi and urban refugees in Jordan; and an entrepreneurship program for Tibetan refugees in India.

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9 Two articles discussed the JC:HEM program.
Effectiveness
One quantitative study that assessed the impact of a vocational training program on psychosocial outcomes for out-of-school youth in Afghanistan (INVEST program) did not show positive effects on personal confidence, locus of control, or perceived respect among community members. However, the program did lead to a reduction in the frequency of being treated unfairly for participants. The other study estimated the impact of a program that aimed to provide a path to an accredited bachelor’s degree (the Kepler program) on English, math, creativity, and computer skills in Rwanda and showed indications of positive impacts on English, math, and computer literacy. However, both studies had a high risk of selection bias, suggesting that the impact estimates may be less credible for the estimation of causal effects. We present a summary of the intervention and study design in Exhibit 15, and the effect sizes in Annex H.

The qualitative studies related to postsecondary education suggested that interventions enabled refugees’ access to higher learning and may have positively influenced refugees’ well-being and aspirations for the future (Al-Rousan et al., 2018; Bauer & Gallagher, 2020; Crea, 2016; Crea & McFarland, 2015; Nayak, Salovaara, & Wade, 2019). For example, an information and community technology (ICT) intervention in Uganda provided access to higher education for refugees in resource-constrained settings like camps (Bauer & Gallagher, 2020); the study in Jordan noted perceived benefits to well-being, including positive attitudes regarding the value of women’s education, and positive attitudes toward refugees among Jordanians (Al-Rousan et al., 2018).

Finally, after completing an entrepreneurial education program in India, most participants were self-employed or continued to develop their business ideas (Nayak et al., 2019). Despite the perceived benefits to well-being and aspirations, challenges included a lack of postgraduate opportunities, limited relevance to the local context, a lack of sufficient resources, and difficulty balancing studies with family responsibilities. For example, students in JC:HEM reported a lack of contextually relevant course materials; inflexible foreign instructors; and limited relevance of the college credit, which was not transferrable to the local context (Crea, 2016). Refugees in Jordan and Malawi also worried about finding work after receiving a university degree (Al-Rousan et al., 2018; Crea, 2016).

Inclusion and Integration
Most postsecondary interventions were parallel programs that operated outside of the national education system, and students earned college credits or degrees that were often not recognized in the host country (Crea, 2016). This raises questions about the relevance of programs for inclusion and integration if refugees remain in host countries and are not resettled in places where credits and degrees will be recognized. However, in contexts where credits and degrees are recognized (e.g., de Hoop et al. 2019b), the interventions could be useful for employment. For example, the study on entrepreneurship education for Tibetan refugees in India perceived a positive influence on integration, with most participants establishing their own business or actively working to start their own company (Nayak et al., 2019).

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10 A more recent study examined the impact of the same program using a more robust randomized controlled trial, but that study did not meet our inclusion criteria because the outcome measures did not focus on education (Lyall, Zhou, & Imai, 2019).
11 The sample size for the study was very low, with only eight participants in total.
REMEDIAL AND NONFORMAL EDUCATION MODALITIES
We reviewed 12 qualitative studies and four quantitative studies that explored nonformal education programs that aimed to improve educational access and quality for children and youth. These interventions targeted Syrian refugee children in Lebanon and Jordan; children in refugee camps in Kenya; refugee children in South Africa; children working on the streets and marginalized children and adolescents in conflict-affected areas in Afghanistan; children affected by conflict in northern and eastern Sri Lanka; adolescents in conflict-affected regions, children released from the armed forces and other armed groups, orphans, and other vulnerable children and adolescents in South Sudan; youth and young adults in Sudan; and children affected by violence in Colombia.

Isolation and marginalization resulting from discrimination by mainstream public services were the most pertinent features of conflict-affected and refugee communities. We categorized the interventions into four main nonformal education approaches that aimed to reach out to these communities and serve their educational needs.

- **Alternative education initiatives:** We identified five qualitative interventions that had the specific goal of responding to the unique needs of their targeted groups. The participants in these initiatives ranged from primary school-aged children to adolescents. The five programs offered various cycles and were administered by different stakeholders, ranging from a small local NGO to a university to an international agency. The overarching goals of these programs were to support refugee children along their pathway into the mainstream education system, or to help improve their learning outcomes. We also included a quantitative evaluation of remedial education in this category.

- **Accelerated learning programs (ALPs):** We reviewed five ALP interventions, three of which were ALP components of a larger multidisciplinary program reaching out to children age 10 and older, or to young adults. The ALPs were organized as single-cohort learning communities that aimed to cover two grades per year, with a program cycle of approximately 3 years. The main goal of these ALPs was to offer primary education so that graduates could continue at the secondary education level, when and if possible.

- **Community-based education:** There were two CBE interventions, which established small classes in a physical space provided by communities. They had a 3- or 4-year program cycle, the aim of which was to provide primary education services.

- **Interventions to support government/formal schools:** We reviewed one multisectoral program that had several components, including an education component. This component provided direct support to existing government schools.

**Effectiveness.**

**Alternative education initiatives:** The preponderance of evidence in this category reports successfully facilitating refugee children’s entrance and/or transition into the host nation’s education system (Abu-Amsha & Armstrong, 2018; Cohen, 2019; Perumal, 2015; Vega & Bajaj, 2016). A few common themes appeared throughout these studies. First, these initiatives were instrumental in helping students to both enroll and remain in the mainstream education system, due to the caring and nurturing nature of the educational environment they were able to offer. Second, making refugee students’ educational experiences “meaningful” and “relevant” for them and their families was a key to success. In Lebanon, Syrian refugee children received help to overcome many barriers, including feeling a lack of relevance and usefulness in pursuing an education in a host country (Abu-Amsha & Armstrong, 2018; Cohen, 2019). In South Africa, refugee children were offered a learning environment that gave them opportunities to display self-confidence and creativeness (Perumal, 2015); in Colombia, refugee children who had witnessed or experienced violence were provided with emotional support services that helped them persevere in their education (Vega & Bajaj, 2016).

The four quantitative studies on alternative education initiatives used RCTs and a regression discontinuity design to determine the impact of weekend and holiday remedial education on girls’ school attendance, enrollment, and learning outcomes in Kakuma and Dadaab refugee camps, and the impacts of CBE on school enrollment and learning outcomes in Afghanistan.
The evaluations of the remedial education program in Dadaab and Kakuma did not show positive effects on school enrollment, attendance, or learning outcomes, with the exception of positive impacts on a small subgroup of students who attended remedial education for more than 50 hours and lived in food-secure households in Kakuma (Ring et al., 2019). However, qualitative data from one of the studies highlighted the “kindness” teachers displayed to their students (Ring et al., 2019) and indicated improved academic performance among the girls. It is important to exercise caution in interpreting this result because we only found two studies focused on remedial education, and both focused on the same program (implemented by World University Service of Canada (WUSC) in two refugee camps in Kenya). In addition, one study in Kakuma had a medium risk of selection and performance bias, and a study in Dadaab had a high risk of selection and performance bias.

The evaluations focused on village schools and CBE in Afghanistan showed that CBE had large and positive impacts on school enrollment in Afghanistan, and on learning outcomes (Burde & Linden, 2013; Burde et al., 2016). The CBE implemented by Catholic Relief Services (CRS) over a 1-year period (2007–08) showed average positive effects of 0.53 SD on learning outcomes and 0.42 SD on enrollment. The replication of the first evaluation found that the CBE program had qualitatively similar but smaller effects on enrollment and learning. On average, the program had a positive impact of 14 percentage points or 0.43 SD on school attendance, and 0.28 SD on learning outcomes, after 1 year of implementation.

Follow-up research showed that CBE implementation by village-level community institutions and local government education offices was almost as effective in improving learning outcomes and school enrollment, and was less costly than implementation by international NGOs, after accounting for initial startup costs. This longer-term research showed that transferring implementation to village-level institutions led to improvements in learning outcomes and school enrollment that were only marginally smaller than the improvements reported when the CBE was implemented by international NGOs. In addition, a cost analysis suggested that the costs of continued implementation by village-based institutions and local governments were a lot smaller than the costs of startup and implementation by international NGOs. We present more details on the latter result in our discussion of the costing and cost-effectiveness analysis.

In addition, the second evaluation of CBE showed that imposing a rule that required NGOs to only recruit teachers with education levels that permitted them to pursue credentials to work under MoE administration led to improvements in learning outcomes and school attendance that were comparable to contexts where this rule was not applied. On average, school attendance and learning outcomes were slightly higher when this so-called qualification constraint was applied, but the effects were not statistically significant relative to villages where the rule was not imposed. The results suggest that it is likely feasible to maintain learning gains delivered by the introduction of CBE after it has been transferred from community management to national education systems in the context of rural Afghanistan.

Finally, the second evaluation of CBE did not find additional, statistically significant effects on learning outcomes and attendance for a package of community engagement activities designed to enhance school attendance. This community mobilization campaign focused on the effects of Qur’anic messages emphasizing the importance of education and adult reading groups. However, it is possible that the community engagement activities did not show statistically significant effects because of a relatively low “dosage.” We summarize the interventions and study designs in Exhibit 16 and present the effect sizes in Annex H.
**EXHIBIT 16. SUMMARY OF REMEDIAL AND NONFORMAL EDUCATION**

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Summary Program Description</th>
<th>Country</th>
<th>Target Group</th>
<th>Outcome Measures</th>
<th>Evaluation Methods</th>
<th>Risk of Selection Bias</th>
<th>Risk of Performance Bias</th>
</tr>
</thead>
<tbody>
<tr>
<td>World University Service of Canada’s (WUSC’s) remedial education program in Kakuma</td>
<td>Holiday and weekend remedial education</td>
<td>Kenya</td>
<td>Girls in 7th and 8th grade in Kakuma refugee camp</td>
<td>Attendance</td>
<td>Randomized controlled trial (RCT)</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>WUSC’s remedial education program in Dadaab</td>
<td>Holiday and weekend remedial education</td>
<td>Kenya</td>
<td>Girls in 7th and 8th grade in Dadaab refugee camp</td>
<td>Enrollment</td>
<td>Regression discontinuity design</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Partnership for Advancing Community Education in Afghanistan</td>
<td>Introduction of village-based schools and teacher training</td>
<td>Afghanistan</td>
<td>Children of primary school age in Afghanistan</td>
<td>Learning outcomes</td>
<td>RCT</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Community-based education (CBE)</td>
<td>Integrating CBE into the government system</td>
<td>Afghanistan</td>
<td>Schools in rural areas of Afghanistan</td>
<td>Attendance</td>
<td>RCT</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>
Alternative education initiatives: The qualitative evidence in this category reported that programs facilitated refugee children’s entrance or transition into the host nation’s education system (Abu-Amsha & Armstrong, 2018; Cohen, 2019; Perumal, 2015; Vega & Bajaj, 2016). Two common themes appeared throughout these studies. First, these initiatives were helped students to both enroll and remain in the mainstream education system, due to the caring and nurturing nature of the educational environment. Second, making refugee students’ educational experiences “meaningful” and “relevant” for them and their families was a key facilitator. For example, in Lebanon, Syrian refugee children received help to overcome barriers including feeling a lack of relevance and usefulness in pursuing an education in a host country (Abu-Amsha & Armstrong, 2018; Cohen, 2019); in Colombia, refugee children who had witnessed or experienced violence were provided with emotional support services that helped them persevere in their education (Vega & Bajaj, 2016).

Accelerated learning programs: Qualitative evidence from all the studies that explored ALPs reported increased access to education and improved school attendance. Through an ALP in Afghanistan, children working on the streets were offered vocational training and business-development skills, in addition to literacy training (Guillaume, 2017). One parent of a participating child reported, “This program has lots of positive impacts on our children’s education. Before, they were only selling plastic bags; since the start of this program they have attended school, they are studying, and they know reading and writing” (Nicolle & Guillaume, 2017, p. 37). An ALP in South Sudan added health education to its curriculum (Nicholson, 2018), and the program for former armed forces members included a school meal component to improve its effectiveness (Sevenants, 2019). Finally, the successful graduates of an ALP that formed part of a larger youth intervention in Sudan were able to continue their formal education in Grade 8 (Ba Tall, Elfatih Elsheikh, & Abbas Ali, 2015).

The planning and implementation of ALPs in these communities had numerous challenges, including favoritism and nepotism in the participant selection processes (Nicolle & Guillaume, 2017); a lack of education supplies, and delays in obtaining those supplies (Nicholson, 2018); and high turnover in the teaching force and inadequate teacher training (Sevenants, 2019; Jantzi et al., 2019). A common challenge across all ALP interventions was enrolling girls in the programs, and then retaining and graduating them.

Community-based education: Qualitative evidence on the two CBE interventions in Afghanistan reported high levels of willingness among parents to send their children—both girls and boys—to CBE, as well as appreciation among parents for CBE (Burde et al., 2016; Jantzi et al., 2019). Both studies included interviews with district, provincial, and Kabul education officials, which indicated that CBE is an essential modality for extending basic education service delivery to those most marginalized by protracted conflict. The studies highlighted the recognition of CBE in national education policies and strategies.

The intervention that targeted government primary schools reported reduced disparities in learning achievements among diverse groups of children as a result of the multipronged intervention (International Institute of Development Training, 2015). The school self-assessment framework was highlighted as one of the most significant changes adopted by schools that could be replicated further, along with many other intervention components ranging from physical infrastructure development to teacher training.

Inclusion and Integration

The goal of these interventions was to help students enter and persevere in the mainstream education systems from which they were excluded for reasons including distance; discrimination; lack of relevance; lack of necessary resources; and the language, cultural, and social barriers they faced. The ultimate goal of the alternative education initiatives was to prepare students to integrate into formal schools (Abu-Amsha & Armstrong, 2018; Cohen, 2019; Perumal, 2015; Vega & Bajaj, 2016). The bridging program for refugee children in South Africa, for instance, helped students obtain the necessary documentation, along with other services, to access mainstream education (Perumal, 2015). A program in Colombia (a recent adaptation of the Escuela Nueva program) focused on the social and emotional stability of displaced children to help prepare them to enter the national education system (Vega & Bajaj, 2016). Although inclusion was a goal for all ALPs, only Guillaume (2017) discussed issues related to this goal, suggesting that most of the adolescents were able to join government schools at the end of the intervention. Burde and colleagues (2016) and Jantzi and colleagues (2019) addressed the inclusion of CBE graduates in government schools. Despite national policies that fully embraced the concept of inclusion, logistical, administrative, and resource (financial and personnel) constraints prevented the development of an effective process for integrating marginalized children into the government education system in Afghanistan.
5.2.2 Quality (Learning Outcomes)

This section reports on studies we reviewed under topic areas that had aspects of quality education—including learning—as a primary outcome, including technology in education, reading literacy and language policy, curriculum, capacity building and systems strengthening, and teachers and teaching.

TECHNOLOGY IN EDUCATION

We reviewed eight studies using qualitative methods and eight studies using experimental or quasi-experimental methods to evaluate technology-in-education programs that estimated impacts on learning and other educational and psychosocial outcomes. The programs we reviewed quantitatively had diverse implementation models and ToCs, and often reported different outcomes, even for the same indicators. The Feed the Monster and the Antura and the Letters programs focused on distance learning using education apps for out-of-school children in Syria. The Can’t Wait to Learn (CWTL) program focused on out-of-school children in Sudan but delivered in-person education using tablets. In Jordan, the CWTL program used a different implementation model, focusing on in-person education for in-school Syrian refugee children and the host population in primary schools. While many of the programs focused on children of primary school age, the Evoke program in Colombia focused on youth. Finally, the Ideas Box implemented by Libraries Without Borders (LWB) focused on in-school children in Burundi and children in a community center in Jordan. Two of the programs we reviewed quantitatively explicitly supported refugees’ inclusion in national education systems: the CWTL program in Jordan and Sudan.

Five qualitative studies focused on interventions targeting refugee populations in Jordan, Kenya, and Uganda; one focused on an intervention targeting host community members and refugees in Jordan; one focused on an intervention targeting conflict-affected populations in Sudan; and one focused on an intervention targeting populations affected by natural disaster in Sierra Leone. Five of the interventions focused on young learners and primary school-aged children, one targeted young adults, and two targeted refugee teachers. All but one of the interventions focused on beneficiaries outside of national education systems, and none of the interventions explicitly discussed refugees’ inclusion in national education systems.

In the interventions included in our analysis, technology was primarily used to improve student learning, well-being, and teacher capacity. Technology helped to deliver subject knowledge directly to students, often in entertaining ways; supported teacher training; and connected individuals to build a community. Based on our analysis, we organized the technology-based interventions into four categories.

- **Innovative digital applications:** We identified four digital game-based learning (DGBL) programs that used innovative digital applications. DGBL is an instructional method that incorporates educational content or learning objectives into digital games. Two of the DGBL interventions we reviewed were directly delivered to children in a camp setting, while the other two were integrated by teachers into the classroom or curricula (i.e., blended learning).

- **Text and instant messaging:** Two of the programs used mobile technology and social networks to support teacher training and ongoing professional development. Transnational mentoring and peer-to-peer networks were mediated via text and instant messaging.

- **Solar-powered, offline technology:** A higher education intervention used a solar-powered, offline technology that emitted a Wi-Fi hotspot, mimicking an online experience. The technology aimed to overcome the logistical barriers of resource-constrained environments.

- **Radio instruction:** A school-based education project was redesigned as a radio education program when schools closed due to the Ebola outbreak in a remote district of Sierra Leone.

Effectiveness

The eight mixed-method studies generally showed positive effects on learning outcomes, but the evidence on psychosocial outcomes was mixed. For example, studies of the Feed the Monster and Antura and the Letters programs showed positive impacts on literacy outcomes in Syria (Koval-Saifi et al., 2018a; Koval-Saifi et al., 2018b), and the CWTL program showed positive effects on literacy and math outcomes in Sudan.
Qualitative evidence from the same studies showed perceived improvements in spelling, pronunciation, and vocabulary in Syria; and literacy and math in Sudan (Brown et al., forthcoming; Koval-Saifi et al., 2018a; Koval-Saifi et al., 2018b). Similarly, the Ideas Box showed positive effects on reading and literacy outcomes in Burundi (Peich, 2016). The evidence suggests that it may be more challenging to improve learning outcomes when integrating technology programs into national education systems, or when targeting in-school children who benefit from existing national education systems. While the CWTL program showed positive impacts on learning outcomes for out-of-school children in Sudan (Brown et al., Forthcoming), it did not show positive effects for in-school children in Jordan (de Hoop et al., 2020).

Three qualitative and two mixed-method studies reported mixed evidence on psychosocial outcomes resulting from technology-based education programs, ranging from perceived positive psychosocial effects (de Hoop et al., 2019b; Koval-Saifi et al., 2018a) to increases in peer interaction and motivation (Koval-Saifi & Plass, 2018b) and negative impacts on psychosocial outcomes (de Hoop, Ring, Rothbard, Hunt, & Holla, 2019). Three of the studies indicated that the programs were intended to have a direct effect on psychosocial factors, including feelings of happiness among children, a sense of ownership and attachment, and emotional states and social behaviors. Two of the studies aimed to assess program effects on psychosocial indicators without providing any direct PSS, theorizing that engagement with the technology may affect psychosocial processes related to happiness, cognition, and emotional regulation (Koval-Saifi et al., 2018a; de Hoop et al., 2019b). Based on quasi-experimental evidence, the CWTL program in Sudan showed positive effects on psychosocial outcomes for some but not all outcome measures, just like the evaluation of the CWTL program in Jordan. Evidence from the Ideas Box in Jordan showed indications for unintended negative effects of the program on psychosocial outcomes, but caution needs to be exercised in interpreting this result because the study had a high risk of selection bias (de Hoop et al., 2019d).

While none of the studies had a low risk of selection bias, the overall quality of the evidence was reasonable. Of the eight studies focused on technology-in-education programs, five had a medium risk of selection bias and all but one of the studies had a low risk of performance bias. Exhibit 17 presents details for each of the interventions, including program descriptions, target groups, outcome measures, evaluation methods, and the risk of selection bias and performance bias. Annex H summarizes the effect sizes of the different technology-in-education programs.
We also conducted a meta-analysis of technology-in-education programs with a low or medium risk of selection bias and a focus on primary education to determine their impact on learning outcomes. As shown in Exhibit 18, the meta-analysis suggested that technology-in-education programs had a positive effect on learning outcomes, with an average effect of 0.14 standardized mean differences (SMD) (CI = 0.03, 0.26). These positive effects were driven by programs that focused on out-of-school children. The effect size increased to 0.44 SMD (CI = 0.04, 0.84) when we excluded War Child Holland’s CWTL program in Jordan—the only study that focused on in-school children. However, a meta-regression showed that the difference in effects on learning for in-school and out-of-school children was not statistically significant, most likely because of the small number of included studies. Finally, we hypothesize that high-quality teacher training and/or coaching is a necessary requirement for effective technology-in-education programming, but current available experimental and quasi-experimental studies are not able to examine this hypothesis using experimental or quasi-experimental designs.

**EXHIBIT 17. SUMMARY OF TECHNOLOGY IN EDUCATION PROGRAMS IN EXPERIMENTAL AND QUASI-EXPERIMENTAL STUDIES (CONT.)**

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Summary Program Description</th>
<th>Country</th>
<th>Target Group</th>
<th>Outcome Measures</th>
<th>Evaluation Methods</th>
<th>Risk of Selection Bias</th>
<th>Risk of Performance Bias</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can’t Wait to Learn Jordan</td>
<td>Game-based learning technology</td>
<td>Jordan</td>
<td>In-school children in a protracted crisis setting</td>
<td>Literacy outcomes, Math outcomes, Psychosocial outcomes</td>
<td>DID analysis</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td>Can’t Wait to Learn Sudan</td>
<td>Game-based learning technology</td>
<td>Sudan</td>
<td>Out-of-school children in a protracted crisis setting</td>
<td>Math outcomes, Psychosocial outcomes</td>
<td>DID analysis</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td>Evoke</td>
<td>Project-based learning model</td>
<td>Colombia</td>
<td>Youth</td>
<td>Psychosocial outcomes</td>
<td>Randomized controlled trial</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td>E-Learning Sudan</td>
<td>Game-based learning technology</td>
<td>Sudan</td>
<td>Out-of-school children in a protracted crisis setting</td>
<td>Math outcomes</td>
<td>DID analysis</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Ideas Box Burundi</td>
<td>Portable media center and learning hub</td>
<td>Burundi</td>
<td>In-school children of primary school age</td>
<td>Literacy and math outcomes</td>
<td>DID analysis</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Ideas Box Jordan</td>
<td>Portable media center and learning hub</td>
<td>Jordan</td>
<td>Refugee children and host population in community center</td>
<td>Psychosocial outcomes</td>
<td>DID analysis</td>
<td>High</td>
<td>Low</td>
</tr>
</tbody>
</table>
Innovative Digital Applications

Qualitative evidence indicated that, when integrated with gaming, educational technology may have the potential to improve children’s learning and well-being. However, evidence from two quasi-experimental studies only showed positive effects on learning outcomes for out-of-school children, and only limited evidence for positive effects on children’s well-being. Evaluations of four DGBL programs—directly delivered to refugee children via tablets (Koval-Saifi & Plass, 2018a, 2018b) or integrated into the school curriculum (Brown et al., forthcoming; de Hoop et al., 2019b)—perceived improvements in literacy and psychosocial well-being, but the quantitative evidence was less conclusive. Technical evaluation of the apps demonstrated children’s positive engagement with the games, albeit with declining interest over time (Koval-Saifi & Plass, 2018a, 2018b). Overall, simple and polished game design, entertaining learning experiences, effective rewarding, clear communication of progress, and children’s sense of control and achievement were among the factors that may have contributed to positive experiences. The high rate of smartphone use among parents also had promising implications for the widespread download and use of the games (Koval-Saifi & Plass, 2018a, 2018b). However, impact evaluations only showed positive impacts on learning outcomes for out-of-school children in Sudan; integrating DGBL into the Jordanian curriculum led to the same learning gains as in the comparison group (de Hoop et al., forthcoming). In all the programs, some students experienced boredom due to repetition and pacing, prompting a recommendation for more personalized gaming experiences. Finally, when the program was integrated into the formal school system, teachers reported challenges with balancing or aligning DGBL with traditional curriculum (Brown et al., forthcoming), which may have contributed to the lack of positive impacts in the quasi-experimental study of the CWTL program in Jordan.

Exhibit 18. Meta-Analysis for Technology in Education Programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Effect (95% CI)</th>
<th>% Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>WCH Jordan</td>
<td>0.01 (-0.14, 0.16)</td>
<td>26.51</td>
</tr>
<tr>
<td>Feed the Monster</td>
<td>0.20 (0.01, 0.40)</td>
<td>25.43</td>
</tr>
<tr>
<td>Antura</td>
<td>0.22 (0.02, 0.41)</td>
<td>25.44</td>
</tr>
<tr>
<td>WCH Sudan</td>
<td>0.95 (0.65, 1.24)</td>
<td>22.62</td>
</tr>
<tr>
<td>Overall, DL ($I^2 = 90.1%, p=0.000$)</td>
<td>0.32 (0.01, 0.64)</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Note: Weights are from random-effects model
**Text and Instant Messaging**
Qualitative evidence from two programs in the Kakuma refugee camp in Kenya showed that teachers considered mobile phones an effective device to support them as they applied what they had learned in teacher training programs (Dahya, Dryden-Peterson, Douhaibi, & Avissais, 2019; Mendenhall, Skinner, Collas, & French, 2018). Specifically, teachers used text and instant messaging to communicate with transnational educators in and outside the camp, building a community of professionals who shared knowledge, helped refine skills, and solved problems. The studies pointed to three main reasons for program effectiveness: (a) text and instant messaging connected people and resources inside and outside the camps; (b) participants not only tested and improved teaching methods, but also disseminated their knowledge to other non-program participants; and (c) sharing perspectives and experiences in a professional community helped teachers build confidence and motivation. Challenges associated with the use of mobile phones for teacher training included the following: Keeping up with messages was time consuming for teacher educators and project management teams; archiving and searching for information was more difficult on a mobile phone, compared with tools like e-mail and word processing; and engaging all the participants in regular communication was difficult.

**Solar-Powered, Offline Technology**
Qualitative evidence suggested that solar-powered, offline technology may mitigate the logistical barriers of displacement settings, expanding educational opportunities for refugees. A process evaluation of one such intervention showed that the program helped refugee youth access and complete an agribusiness course offered by a U.S. university (Bauer & Gallagher, 2020). The program overcame logistical barriers such as cost, connectivity, access to power sources, and access to Internet-enabled devices in a refugee settlement.

**Radio Instruction**
Research on a radio education program implemented amid an epidemic in Sierra Leone suggested that radio instruction may help to maintain access to education during a crisis, promote learning, and develop teacher capacity. Qualitative evidence indicated that radio broadcasts may have contributed to the development of life skills, literacy, and numeracy skills among learners; hygiene practices among learners; and knowledge of child protection issues and increased use of child-friendly teaching strategies among teachers (Institute for Development, 2016, as cited in Barnett et al., 2018). The program built on existing relationships with communities and authorities, a participatory and child-friendly approach, and community ownership and participation (Barnett et al., 2018). One challenge was children’s hesitation to participate in “listening groups” due to the difficulty of the topics discussed (e.g., gender-based violence, stigma, isolation) and family influence.

**READING, LITERACY, AND LANGUAGE POLICY**
We reviewed eight qualitative studies on programs related to reading, literacy, and language. Three studies focused on refugee populations in Jordan and Turkey; two focused on host community and refugees in Jordan; and three focused on conflict-affected populations (including protracted crisis and post-conflict settings) in Sudan, Sri Lanka, and Myanmar. All programs targeted young children or learners in primary and secondary school, and five focused on students in public schools. We grouped the literacy and language programs into three categories.

- **Digital game-based learning:** We identified four programs that used DGBL to improve literacy outcomes. Two of the DGBL interventions were directly delivered to children in a camp setting, while two were integrated into the classroom or curricula (i.e., blended learning). We reviewed these studies under the technology-in-education topic area.

- **Teacher professional development:** Two programs focused on improving the quality of instruction through teacher training to promote literacy and language learning.

- **Language and social cohesion:** Two programs were related to the role of language in promoting social cohesion.

**Effectiveness**
Teacher professional development and literacy outcomes: Qualitative evidence from two programs indicated that teacher training was perceived to improve the quality of instruction for literacy and language learning (UNICEF, 2016a; USAID, 2015). Further, when combined effectively with other interventions, improved teacher pedagogy reportedly developed students’ literacy and language skills, as well as their reading and analytical skills (UNICEF, 2016a; USAID, 2015). One
of the programs introduced public school teachers in Jordan to effective literacy and language instruction techniques to promote refugee students’ engagement with and participation in classroom activities (USAID, 2015). Teacher training was supported by activities such as forming reading clubs, enhancing school libraries with contextually relevant and inclusive reading resources, and training librarians. Most teachers reported acquiring new skills, which allowed them to create learning environments in which both Jordanian and Syrian students wanted to read more and developed analytical skills. In a similar vein, evidence from Sri Lanka indicated that the training program developed teachers’ competency in using effective instructional methods for literacy and language learning (UNICEF, 2016a). Improved quality of instruction, combined with caregiver engagement and community mobilization, reportedly contributed to students’ literacy and mastery of language (UNICEF, 2016a). Teachers noted challenges related to the application of new techniques learned from the programs, including large numbers of students, uncooperative principals, and the absence of a connection between the training material and the traditional curricula (USAID, 2015).

Language and Social Cohesion. Qualitative evidence from two programs indicated that language policy could help improve social cohesion among IDPs and host communities. In Turkey, a nonformal education program that targeted refugee students from a public school (Kucuksuleymanoglu, 2018) suggested promising results for improved relations with host community students after improving their language skills. In Myanmar, the Peacebuilding, Education, and Advocacy (PBEA) program promoted an explicit language policy built on two assumptions: “(1) that children learn best when taught in their mother tongue at an early age and (2) the process of addressing language issues and tensions can promote social cohesion” (UNICEF, 2016b, p. 4). The evaluation found that repeated interaction and joint discussion while developing the policy helped to strengthen social cohesion among stakeholders in the region of analysis and relationships between the MoE and the National Education Committee. The process also increased public awareness of the benefits of mother tongue–based and multilingual education. However, some participants raised concerns that the policy initiative was happening outside the peace process and may not ultimately be enacted by the state (UNICEF, 2016b).

Inclusion and Integration
Two programs in this section explicitly supported the inclusion of displaced populations in national education systems. One targeted teachers in Jordan’s public schools that were hosting Syrian refugees (USAID, 2015). The teachers were trained in methodologies for literacy and language instruction to facilitate learning environments in which Syrian and Jordanian students could interactively engage in learning. The training was combined with other activities such as reading clubs and libraries with inclusive reading resources. Qualitative data indicated that the program “contributed to the inclusion of Syrian students, while giving them the opportunity to express themselves and break the ice with others during Arabic classes” (USAID, 2015, p. 25). (The program’s second component—teacher training in PSS and interactive pedagogy—also supported refugee inclusion and is discussed in the “Teachers and Teaching” section of this report). The second program, which targeted refugee students’ language skills in a Turkish public school, also implemented activities to promote social cohesion and group work between Syrian and Turkish students (Kucuksuleymanoglu, 2018). The program was perceived to have helped with refugee students’ language learning and coping skills, and to have positively influenced collaboration between refugee and host community students.

Curriculum
We reviewed six qualitative studies of curriculum interventions. Most studies focused on citizens in countries affected by conflict. Specifically, the programs included an ECE intervention integrating “balanced curricula” in the Philippines; a peacebuilding intervention in South Sudan; a school for Syrian refugee children, which used a modified curriculum to help children transition to life in Turkey; a program to engage youth to draft a national curriculum framework for peacebuilding in Somalia; a peacebuilding program in Ethiopia; and a nonformal education program for Syrian refugees and Jordanian adolescents, focused on inclusive education.
Effectiveness
Multiple studies found that using culturally relevant curriculum supported learning and promoted integration among conflict-affected students, refugees, and IDPs (AAN Associates, 2017; Cohen, 2019; Hos, 2016; Knezevic & Smith, 2015b). Curriculum that is not inclusive of students’ experiences can inhibit learning and cause students to withdraw from the classroom (Cohen, 2019; UNICEF, 2016b). The PBEA programs in South Sudan and Somalia encouraged MoEs to adopt or revise national curricula to incorporate peacebuilding, making education more inclusive of students’ experiences (Knezevic & Smith, 2015a; Knezevic & Smith, 2015b).

Inclusion and Integration
The study of the Forseh Tanieh (FT) program, which provided nonformal education in Jordan, noted the importance of using student-centered learning approaches in nonformal education settings to promote the inclusion of refugees (Cohen, 2019). Upon completion, students receive a Grade 10 certificate from the MoE, enabling them to enroll in high school or vocational and technical training. The host community school in Turkey is a parallel intervention, as students follow a modified Syrian curriculum instead of the Turkish curriculum. While the study did not find that the program promoted inclusion in the national education system, it did find that the intervention supported the integration of refugees into Turkish society by helping students transition to life in Turkey (Hos, 2016). In South Sudan and Somalia, incorporating peacebuilding into the national curricula created a more inclusive learning environment by recognizing the experiences of children and adolescents affected by conflict.

EXHIBIT 19. SUMMARY OF SCHOOL MANAGEMENT INTERVENTIONS IN EXPERIMENTAL AND QUASI-EXPERIMENTAL STUDIES

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Summary Program Description</th>
<th>Country</th>
<th>Target Group</th>
<th>Outcome Measures</th>
<th>Evaluation Methods</th>
<th>Risk of Selection Bias</th>
<th>Risk of Performance Bias</th>
</tr>
</thead>
<tbody>
<tr>
<td>COGES School Committees</td>
<td>School committee to improve accountability, management, and access</td>
<td>Niger</td>
<td>All primary schools in Niger</td>
<td>Enrollment Dropout</td>
<td>Randomized controlled trial</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>

CAPACITY BUILDING AND SYSTEMS STRENGTHENING
We reviewed four qualitative intervention studies related to capacity-building and systems-strengthening interventions within the education sector. We found only one quantitative study, which focused on the improvement of school management in Niger. The qualitative studies reported on interventions serving refugees, IDPs, and persons living in fragile and humanitarian contexts; and the interventions themselves targeted government officials, teachers, parents, and other education stakeholders. Capacity-building and systems-strengthening interventions in the education sector aimed to build capacity in terms of planning, M&E, and the provision of education services (both formal and informal) in humanitarian settings. Specifically, programs included training on school self-assessment and school development planning in conflict-affected areas of Sri Lanka; training for ministry officials on crisis-sensitive education planning in South Sudan; capacity building for education planning, monitoring, and evaluation in Myanmar; and support for the MoE to improve M&E and quality assurance under the Emergency Education Response (EER) in Jordan. The quantitative study used a cluster RCT to determine the impact of introducing school management committees to improve accountability, management, and access in Niger. The program aimed to strengthen systems by including parents in the monitoring of education quality (Beasley & Huillery, 2012).
Effectiveness
The study on school management committees to improve accountability and management in Niger showed improvements in school enrollment and school dropout rates. On average, the program increased enrollment by 0.11 SD and reduced dropouts by 0.09 SD. The authors presented evidence that these results were more closely related to improvements in parental participation than to improvements in the quality of education (Beasley & Huillery, 2013). We consider these findings credible because of the low risk of selection bias and the low risk of performance bias. Exhibit 19 presents a summary of the intervention and the study, while Annex H shows the effect size.

The qualitative studies assessed multiple types of capacity building and systems strengthening, including in data collection and planning. Under the Widening Horizons and Creating Opportunities for Sustainable Livelihoods program in North and East Sri Lanka, school self-assessments indicated that training in-service officers on monitoring helped enhance school supervision (International Institute of Development Training, 2015). In South Sudan, support for crisis-sensitive education sector planning was reported to build both capacity and ownership of education officials involved in education sector analysis and the education sector plan (ESP) (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2016). In Myanmar, the Township Education Improvement Plan (TEIP) institutionalized the practice of needs assessments and heightening the awareness of MoE staff regarding collecting and using valid data. However, there was limited funding to implement improvements planned under the TEIP, and decision making remained decentralized at the national level (Montrose, 2016). In Jordan, data on implementing partners’ activities improved under the EER, but the measurement of educational outcomes and quality remained limited (Culbertson et al., 2016).

Most studies concluded that further capacity building was needed, particularly in quality assurance. Culbertson and colleagues (2016) said in relation to Jordan’s EER, “Capacity building has started, but there is a further need to build MOE management capability, sustainably pay teachers, build infrastructure and expand MOE quality assurance programs for schools” (Executive Summary p. 2). Studies also emphasized the importance of ownership and stakeholder involvement in monitoring activities as key determinants of an intervention’s effectiveness and sustainability. For example, training ISAs to build relationships with parents and community groups in Sri Lanka was seen as critical to ensuring increased accountability at the school level (International Institute of Development Training, 2015). Similarly, in South Sudan, governmental ownership of the 2017–21 ESP was perceived to contribute to greater governmental commitment, and therefore more effective execution of the sector plan (UNESCO, 2016). In Jordan and Myanmar, a lack of funds limited the effectiveness of capacity-building interventions (Culbertson et al., 2016; Montrose, 2016). Finally, highly centralized governments impeded the success of some evidence-based decision-making initiatives.

Inclusion and Integration
Only one of the four studies on capacity building—the evaluation of the EER in Jordan—dealt explicitly with the inclusion of displaced populations in national systems. The EER aimed to provide safe, appropriate, and free education to Syrian refugees in Jordan, following the Jordanian government’s 2012 decision to provide education to Syrian refugees in host communities and camps under the formal MoE system. The evaluation reported the following:

The achievements of the EER are considerable and include: structured formal education for 130,000 children, informal and non-formal education for 35,000 children; 69 schools with furniture and equipment and 65 schools with prefab classrooms; 98 additional double-shifted schools that expanded access; training for 2,100 teachers; outreach and information services; measures to target vulnerable children (such as PSS); mobilizing significant resources for the education response; and engaging the skills of stakeholders including the Government of Jordan, UNICEF and NGOs (Culbertson et al., 2016 p. vii).

Despite these achievements, the evaluation found that the EER should have placed greater emphasis on the needs of out-of-school children, improved the performance and equity of double-shift schools, and improved the quality and safety of school learning environments.

TEACHERS AND TEACHING
We included two studies using quantitative methods and 10 studies with qualitative methods to evaluate programs on improving teacher capacity, resources, and pedagogy. The programs targeted refugee
and host community teachers in Kenya, Jordan, Lebanon, and Turkey (six studies); teachers of IDPs in Colombia (one study); and teachers of conflict-affected populations (including in protracted crisis and post-conflict settings) in Uganda, Iraq, and Sri Lanka (three studies). We assessed impact for two of these studies. The first used a cluster RCT to determine the impacts of a gender socialization program on the use of gender-friendly practices among teachers in schools in Uganda; and the second used a cluster RCT to estimate the impact of a teacher coaching program on learning outcomes, student well-being, and the quality of school interactions in the DRC.

The qualitative studies assessed interventions that targeted teachers or, more commonly, incorporated a teacher training component into an integrated, multifaceted program. We only included programs that had a major focus on teachers, creating change in teacher behavior, or creating change in student outcomes through teachers. As teachers’ experiences and attitudes are critical aspects of teaching, we also focused on teachers’ challenges and needs in nonformal education settings. We categorized programs on teachers and teaching into three groups.

- **Teacher professional development:** We identified one quantitative study and six qualitative studies of programs that delivered teacher training and/or used various support mechanisms (e.g., peer-to-peer learning, community involvement) to improve the quality of instruction and promote inclusive learning environments.

- **Teachers’ experiences, biographies, and identities:** Three studies examined the challenges facing teachers working with displaced children in nonformal education settings.

- **Teacher compensation:** One program implemented an incentive payment system to increase the retention and motivation of volunteer refugee teachers.

**Effectiveness**

**Teacher professional development:** Qualitative data from forced displacement and post-conflict settings indicated the **perceived effectiveness of teacher training in improving instructional methods** (Dickson & Ladefoged, 2017; Khan et al., 2016; UNICEF, 2016). When combined effectively with other interventions, improved teacher pedagogy also reportedly allowed students to learn better. Programs targeting Lebanese teachers hosting refugees in their classrooms (Khan et al., 2016) and public schoolteachers in Sri Lanka (UNICEF, 2016) developed teachers’ competency in effective teaching techniques. The studies perceived that improvements in the quality of instruction, together with other program components (e.g., providing material support to schools, building principals’ capacity, and engaging with the community), positively influenced student learning (Khan et al., 2016; UNICEF, 2016). While the cohesive approach was perceived as successful in both programs, some of the challenges in adopting new teaching methods included a lack of resources (e.g., ICT equipment) and logistical barriers (e.g., crowded classrooms, insufficient classroom space) (Khan et al., 2016).

Additional evidence showed that **teacher training, especially when combined with appropriate support mechanisms, helped teachers create inclusive learning environments.** In two of the programs we reviewed, teacher training aimed to promote gender-inclusive practices among refugee teachers in Kenya (Dahya et al., 2019) and conflict-affected teachers in Uganda (Chinen et al., 2017b). Qualitative data from Kenya indicated that peer-to-peer networks, mediated via mobile phones, may have contributed to teachers’ uptake of the gender-inclusive practices they learned from the training program (Dahya et al., 2019). Peer-to-peer learning was a critical mechanism in another program that successfully supported teachers to build safe and inclusive environments for refugee students in Jordan’s public schools (USAID, 2015).

Quantitatively, the teacher training program in Uganda, which aimed to promote positive gender socialization in the conflict-affected region of Karamoja, positively influenced teachers’ knowledge of and attitudes on gender-related issues but did not have statistically significant effects on the adoption of gender-sensitive practices (Chinen et al., 2017a). Findings suggested that traditional gender norms were a barrier to behavior change, underpinning the importance of involving communities in similar programs. The quality of the evaluation was high, with a low risk of selection bias and a low risk of performance bias. However, the study only estimated impacts on teacher outcomes, not on children’s outcomes.
The other quantitative study estimated the impact of a teacher coaching program on the reading and math skills of children in Grades 2–4 in the DRC. It found small but positive impacts on literacy outcomes but impacts on math outcomes were not statistically significant. The study did find positive impacts on the quality of school interactions, however. While the study showed a medium risk of selection bias, the overall quality of the study was high, with a low risk of performance bias (Aber, 2016).

Another study focusing on the same sample of students in the DRC examined in more detail the mechanisms through which the program achieved improvements in learning outcomes. The results suggested that the program achieved these improvements through improvements in the quality of the school and classroom environment (Aber et al., 2017).

Exhibit 20 presents a summary of the interventions, while Annex H shows the effect sizes.

**Teachers’ experiences, biographies, and identities:** Teachers’ experiences, biographies, and identities are critical aspects of teacher professional development in crisis-affected settings (Burde et al., 2015). Qualitative evidence from two programs highlighted the hidden needs of and challenges facing teachers.

An ethnographic study among Syrian refugee teachers in Turkey demonstrated the ways in which teachers’ instructional methods in refugee schools were shaped and informed by the limitations of their former teaching experiences in Syria (Guven, 2018). In prewar Syria, the sociopolitical environment did not allow teacher agency, banned critical thinking from classrooms, and confined teaching to textbook instruction; teachers internalized these techniques and found them difficult to change (Guven, 2018). Findings from programs targeting IDPs in Colombia (Vega & Bajaj, 2016) and refugees in Turkey (Hos & Cinarbas, 2018) illustrated the highly challenging work environment for teachers working with displaced populations and the need for teacher training to address challenges related to students’ backgrounds and psychosocial needs.

**Teacher compensation:** Existing qualitative evidence from refugee teachers in Turkey indicated promising results for the use of incentive payment schemes to promote teacher retention and attendance in forced displacement settings. The evaluation showed that the teacher incentives program stabilized the cadre of volunteer refugee teachers in Turkey, motivated them to stay in their positions, and increased their attendance at work (Durston et al., 2019). Financially, however, program sustainability was a major challenge.
Inclusion and Integration

Four programs on teachers and teaching supported the inclusion of displaced populations in national education systems (Durston et al., 2019; Khan et al., 2016; USAID, 2015; Vega & Bajaj, 2016). Two programs aimed to build teacher capacity and resources in public schools hosting refugees in order to promote inclusive learning environments and social cohesion (Khan et al., 2016; USAID, 2015). In Jordan, trainings for host community teachers in PSS and interactive pedagogy (USAID, 2015) were perceived to help them better engage with Syrian students, resolve conflicts, and integrate group work into their teaching, which in turn improved students’ inclusion and reduced dropout (USAID, 2015). In Lebanon, where PSS training was combined with other interventions in host schools, teachers reported improving their classroom management and conflict resolution skills (Khan et al., 2016). Challenges related to classroom contexts in both programs—such as age and number of students—indicated the need for adaptable PSS strategies.

UNICEF’s education response in Turkey, which included the incentives program discussed above, targeted both host community and refugee teachers (Durston et al., 2019). Though the teacher training component was not evaluated, evidence from the program’s other components (e.g., the use of an information management system, the gradual transition from Temporary Education Centers to public schools) indicated promising results for refugee inclusion (Durston et al., 2019). Through the strong partnership between the government, the private sector, and UNICEF, Syrian students and teachers were incrementally included in national schools. Although Syrian teachers cannot teach in public schools, they are being assigned new roles to facilitate their inclusion (Durston et al., 2019). However, the incentive scheme is not sustainable, which means that the long-term prospects for these teachers remain unclear. In Colombia, a nonformal education program aimed to reintegrate IDP and other vulnerable students into the educational system (Vega & Bajaj, 2016); however, the study did not explicitly deal with inclusion, focusing on teachers’ experiences of the program instead.

5.2.3 Well-Being

We synthesized evidence on programs that targeted well-being into the following topics: SEL and PSS; peacebuilding and social cohesion; child protection; school feeding; water, sanitation, and hygiene (WASH) in schools; and disaster risk reduction (DRR).

Social and Emotional Learning and Psychosocial Support

We reviewed nine quantitative studies that used experimental and quasi-experimental methods to estimate impacts on psychosocial outcomes, including propensity score matching, RCTs, and other matching techniques. The studies were conducted in Nepal, Palestine, Bosnia, and Uganda and targeted a range of participants including child soldiers, mothers of young children, and displaced children in schools. The studies reported outcomes that were not identical across programs but were similar enough to allow comparisons. For example, a classroom-based intervention program in Nepal (Jordans et al., 2010) and a psychosocial intervention program in Bosnia (Dybdahl, 2001) reported depression using different outcome measures.

We reviewed 16 qualitative studies on interventions that aimed to affect social emotional or psychosocial outcomes. The studies focused on conflict-affected populations (including refugees and IDPs) in Uganda, Jordan, South Sudan, Syria, Uganda, Jordan, Kenya, Serbia, and Gaza. All of the programs targeted outcomes for children of primary and secondary school age, with the exception of three studies, which focused at least partly on young adults through age 24.

Effectiveness

Experimental and quasi-experimental evidence indicated that social emotional learning programs were effective at shaping beliefs, improving child functional impairment and prosocial behavior, and reducing depression and post-traumatic stress disorder (PTSD). For example, a classroom-based psychosocial intervention in conflict-affected Nepal showed statistically significant effects in improving children’s functional impairment condition and increasing prosocial behavior. While the education reintegration package in Nepal and the psychosocial intervention for mother–child pairs in Bosnia did not show statistically significant effects on depression or PTSD, this is likely due to limited statistical power. Indeed, a meta-analysis that we discuss below showed statistically significant reductions in PTSD and depression when we pooled the different studies with low and medium risk of selection bias with these outcome measures. The program in Bosnia was also successful at improving other measures of children’s mental health, such as symptoms of hyperarousal.
The quality of the evidence varied considerably. All studies either had a medium or a high risk of selection bias, indicating that we should exercise some caution in interpreting the results. However, most studies had a medium or low risk of performance bias. Exhibit 21 presents a summary of the interventions, while effect sizes are presented in Annex H.

**EXHIBIT 21. SUMMARY OF PROGRAMS FOCUSED ON SOCIAL EMOTIONAL LEARNING**

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Summary Program Description</th>
<th>Country</th>
<th>Target Group</th>
<th>Outcome Measures</th>
<th>Evaluation Methods</th>
<th>Risk of Selection Bias</th>
<th>Risk of Performance Bias</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education Reintegration Package</td>
<td>Portfolio of reintegration packages offered on a needs basis to child soldiers</td>
<td>Nepal</td>
<td>Child soldiers</td>
<td>Depression</td>
<td>Propensity score matching and difference in difference (DID)</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Child post-traumatic stress disorder (PTSD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Child functional impairment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching Recovery Techniques</td>
<td>Psychosocial intervention based on cognitive behavioral therapy</td>
<td>Palestine</td>
<td>10- to 13-year-old Palestinian school children</td>
<td>Self-focused Control-enhanced Distraction</td>
<td>Randomized controlled trial (RCT)</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pathways into Reconciliation</td>
<td>Yearlong peace education program</td>
<td>Israel</td>
<td>10th grade Israeli and Palestinian students</td>
<td>Central beliefs Peripheral beliefs</td>
<td>Other matching</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classroom based intervention</td>
<td>Primary schools in conflict-affected rural areas</td>
<td>Nepal</td>
<td>11- to 14-year-old school children</td>
<td>Function impairment Prosocial behavior Child PTSD symptom scale Depression self-rating scale</td>
<td>RCT</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Psychosocial intervention</td>
<td>Therapeutic discussions and child-raising techniques support</td>
<td>Bosnia</td>
<td>Mothers of young children</td>
<td>Child’s mental health problems Concentration problems Depression</td>
<td>RCT</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Program Name</td>
<td>Summary Program Description</td>
<td>Country</td>
<td>Target Group</td>
<td>Outcome Measures</td>
<td>Evaluation Methods</td>
<td>Risk of Selection Bias</td>
<td>Risk of Performance Bias</td>
</tr>
<tr>
<td>------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
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<td>------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>MindUp Programme</td>
<td>Mindfulness-based social and emotional learning program through weekly lessons</td>
<td>Uganda</td>
<td>Students in preK to 8th grade</td>
<td>Anger</td>
<td>Other matching</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>School Mediation Intervention</td>
<td>Meditation program aimed at enhancing conflict resolution and social dialogue</td>
<td>Palestine</td>
<td>10- to 14-year-old students in the Gaza strip</td>
<td>PTSD symptoms, Psychological distress Depression Friendship quality Prosocial behavior General aggression</td>
<td>DID</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Child Friendly Spaces</td>
<td>Establishment of safe environments to help children regain a sense of normalcy</td>
<td>Uganda</td>
<td>Congolese refugee children residing in Rwamwanja refugee settlement</td>
<td>Protection concerns</td>
<td>DID</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Creating Opportunities through Mentoring, Parental Involvement and Safe Spaces</td>
<td>Safe spaces that focus on social empowerment programs including educational sessions, peer relationship building, and mentorship</td>
<td>Ethiopia</td>
<td>Adolescents ages 13–19 years from three refugee camps</td>
<td>School enrollment</td>
<td>RCT</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>
We also conducted a meta-analysis to determine the impact of all programs with a focus on social emotional learning and a low or medium risk of selection bias on psychosocial outcomes. As shown in Exhibit 22, the meta-analysis suggested that social emotional learning programs, on average, contributed to reducing depression and PTSD, and that the effect was statistically significant. While only one study found statistically significant negative effects, the meta-analysis showed a reduction in depression and PTSD of approximately 0.30 SMD on average (CI = -0.43, -0.16).

We present results from qualitative studies for the three types of PSS interventions, which we further categorized as (a) curriculum or programming that aimed to directly affect students (seven studies); (b) programming that aimed to enhance teachers or caregivers' ability to support students’ psychosocial well-being (five studies); and (c) technology-based programs that indicated psychosocial well-being as a direct or indirect outcome of their programming (five studies). We included the latter analysis in the technology-in-education section of this report.

### Direct Student Support

We included seven studies that identified strengths of curriculum or programming that aimed to directly provide PSS and build social and emotional intelligence among students, as indicated by behaviors such as self-regulation, building resilience, and knowledge of and ability to employ coping mechanisms. Three of the studies (Maulana et al., 2018 [Uganda]; Matsuba et al., 2020 [Uganda]; van der Veen et al., 2015 [Jordan]) evaluated programs for pre-primary through secondary school students that aimed to affect psychosocial outcomes through research-based interventions. For example, Matsuba and colleagues (2020) found “significant decreases in anger, hostility, and rejection” among fifth and sixth graders who participated in “a mindfulness-based SEL program that consists of fifteen 45-minute lessons taught once a week” (p. 1); while van der Ven and associates (2015) reported improvements in Syrian students’ mood, emotional regulation, and feelings of safety from Child Friendly Schools (CFS) in Jordan. Maulana and colleagues (2018) reported growth in Ugandan refugee children’s social and emotional skills and cognitive development after playing with the UNICEF ECD kit and locally made toys.

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**Exhibit 22. Meta-Analysis for Social Emotional Learning Programs**

<table>
<thead>
<tr>
<th>Program</th>
<th>ES (95% CI)</th>
<th>% Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching Recovery Techniques</td>
<td>-0.32 (-0.51, -0.12)</td>
<td>50.25</td>
</tr>
<tr>
<td>Classroom-based intervention</td>
<td>-0.30 (-0.52, -0.08)</td>
<td>40.42</td>
</tr>
<tr>
<td>Psychosocial intervention</td>
<td>-0.16 (-0.62, 0.29)</td>
<td>9.34</td>
</tr>
<tr>
<td>Overall (I-squared = 0.0%, p=0.831)</td>
<td>-0.30 (-0.43, -0.16)</td>
<td>100.00</td>
</tr>
</tbody>
</table>

**Impact of Socio-emotional interventions on Psychosocial outcomes**

Note: Weights are from random-effects model.
Four of the studies (Bhabha et al., 2017; Martin, 2018, Cohen, 2019; & Transition International, 2015) looked at programs that aimed to support youth by involving them in courses that addressed their psychosocial experiences as part of marginalized communities. The studies commonly found that providing a space for displaced youth to discuss their experiences helped improve self-esteem (Bhabha et al., 2017), hope (Martin, 2018), and communication (Cohen, 2019). For example, Martin (2018) reported that participants in Kakuma were engaged and appreciated the opportunity to learn from each other; though the program offered “a space to hope more” (p. 216), participants still struggled with a lack of agency and control in their schooling and their lives.

**Teacher and Caregiver Skills**

Though they still targeted student outcomes, five of the programs at least partially focused on equipping teachers, caregivers, administrators, or other community members with skills to support the psychosocial well-being of students affected by trauma. All of the studies perceived a positive influence on providers’ ability to support students; for example, UNICEF (2015) found an “improved protective environment for vulnerable and affected children,” noting that the “capacity of psychosocial workers, counsellors, CBO staff and volunteers was improved to provide psychosocial support (PSS), educational and recreational support” (p. 9). Marrar and colleagues (2018) reported that “many teachers’ positive discipline methods improved, and students were more likely to seek out school counselors for psychosocial support, both key indicators of improved capacity to provide psychosocial support to children” (p. 3).

**Inclusion and Integration**

Three of the SEL and PSS-related studies (Bhabha et al., 2017, Cohen, 2019; USAID, 2015) explicitly evaluated interventions that aimed to provide PSS for displaced populations in national education systems. All studies indicated that the displaced populations (Roma students in Serbia and Syrian students in Jordan) experienced discrimination, despite stated policies indicating that inclusion should be achieved through participation in the national education system. The studies found that directly addressing challenges associated with inclusion, psychosocial development, and social cohesion with both displaced and national populations could contribute to an “ongoing process” (Cohen, 2019, p. 6) of cultivating and navigating a culture of inclusion.

**PEACEBUILDING AND SOCIAL COHESION**

We included 18 studies that qualitatively evaluated programs related to peacebuilding and social cohesion. The studies primarily evaluated programs in conflict-affected or post-conflict areas or among refugees. Studies took place across many locations, including Turkey, Pakistan, India, Uganda, Kenya, Somalia, Bosnia, South Sudan, Jordan, and Sri Lanka. We also included a multi-country study conducted by UNICEF (2020) of “54 programmes with peacebuilding objectives and/or outcomes currently being implemented by UNICEF country offices and 89 related programmes that, at least in part, address peacebuilding goals” (p. 28).

**Effectiveness**

The comprehensive UNICEF (2020) evaluation articulated a finding that was the primary theme throughout the other evaluations included in our study: Across the peacebuilding programs, “many country teams struggled to develop a program rationale that adequately links intended outcomes/goals with clear causes of conflict or articulates how programs address gendered conflict causes” (p. xiv). The study also found that “Programmes often focus the majority of their energy and resources in providing young people peacebuilding-oriented life skills and young people-led initiatives at the local level while neglecting the broader institutional ecosystems which young people inhabit” (p. xiv).

We present results on the perceived effectiveness of peacebuilding interventions, categorized as follows: (a) interventions that directly addressed peacebuilding in terms of individual-level outcomes (nine studies); (b) interventions that directly addressed peacebuilding in terms of ethnic or national-level conflict (seven studies); and (c) interventions that indirectly aimed to affect peacebuilding through other types of programming (two studies), including cash stipends for education (Al Rousan et al., 2018) and early childhood programming (Smith, 2015).

**Individual-Level Peacebuilding Outcomes**

The nine evaluations that assessed peacebuilding interventions at the individual level looked at outcomes such as resilience, interpersonal conflict resolution and communication, and life skills education. Across the studies, results indicated that peacebuilding programming had a positive effect on individuals’ ability to productively engage in conflict resolution (e.g., Herrington, 2015; King & Monaghan, 2015,
UNICEF, 2016), and improved resilience and social cohesion among participants (Kuçuksuleymanoğlu, 2018; Datzberger, 2015; UNICEF, 2016, 2020). Five of the six studies evaluated programs related to UNICEF’s PBEA program and included components related to teacher training on peaceful conflict resolution, the establishment of youth clubs, and the training of youth in “peacebuilding competencies” (UNICEF, 2020, p. xiv) that would enable them to develop and lead their own community-based peacebuilding initiatives.

**Macro-Level Peacebuilding Outcomes**

Each of the seven studies that looked at programs aiming to affect peacebuilding at a macro level—including within communities, between ethnicities with a history of conflict, and up to the national level—evaluated outcomes such as social cohesion, awareness of conflict and drivers of violent conflict, and understanding of and attitudes toward outgroup members, such as members of other ethnicities. Despite the programs’ stated aims to affect peacebuilding beyond the individual level (i.e., at the supra-community, inter-community, and intra-community level, as identified in Duncan & Cardozo, 2017), the studies described individual-level effects, including positive changes in soft skills and in attitudes and behaviors toward outgroup members (Cromwell, 2019; Kaul, 2015), and in teachers’ personal experiences and beliefs as mediators of program effectiveness (Clarke-Habibi, 2018; Lauritzen et al., 2016a).

Most of the studies observed that the programs tended to lack a direct link between individual training activities and the translation of peacebuilding activities to the macro-level context. For example, Lauritzen and colleagues (2019b) found that a post-conflict peace education program in Kenya made no direct link between individual-level conflict resolution and post-election violence, or to the country’s political economy generally. Participants thought the program was more relevant to everyday interpersonal interactions (95% of participants), rather than political issues at a national level (47%). Similarly, Duncan and Cardozo (2017) observed that despite communities’ interest in working toward inter-religious reconciliation, the approach to official peacebuilding programming was not relevant to the population. Specifically, teachers criticized the government-led initiatives, which did not “address societal and educational inequalities which the majority of educators ascertain as the root causes of ethnic conflict, but instead assert[ed] a one-size-fits-all approach of individual happiness and positivity to a plethora of underlying complex factors” (p. 86).

**Indirect Effect on Peacebuilding**

The two studies that evaluated programs which aimed to have an indirect effect on peacebuilding at the individual level reported positive effects on well-being. Al-Rousan and colleagues (2018) reported that a stipend to pursue postsecondary education had positive effects on Syrian refugee youth’s hope for the future, sense of peace, and well-being. Smith and colleagues (Uganda, 2016) conducted a case study of a pre-primary peacebuilding program (focused on access, teacher support, and policy) in Western Uganda and reported that ECD “helps children recover from trauma and abuse through play and encouragement” and “supports community reconciliation and conflict mitigation by establishing and keeping lines of communication open” (p. 30). However, neither of these programs directly addressed the peacebuilding-related, individual-level indicators identified in the other programs.

**Inclusion and Integration**

Only one study (Kuçuksuleymanoğlu, 2018) evaluated a peacebuilding intervention that specifically aimed to facilitate the inclusion of displaced populations in mainstream education systems. The 28-week program used group play–based activities to encourage language acquisition, conflict resolution, and the creation of friend groups among primary and secondary school-aged Syrian refugee students and host community students in a Turkish school. The study found that in addition to improving individual-level coping skills among refugee students, the program enhanced Turkish students’ tolerance of Syrian students and increased prosocial behaviors in both groups.

**CHILD PROTECTION**

We reviewed nine studies on interventions that aimed to affect aspects of child protection for displaced populations, only one of which included quantitative methods. The interventions targeted either internally displaced or refugee children of primary school age in countries such as Nepal, Sri Lanka, Lebanon, and Eswatini (known as Swaziland at the time of the evaluation). Two programs focused on getting out-of-school children back in the classroom, one focused on street-working children in Afghanistan, and one focused on out-of-school girls and children with disabilities in South Sudan. Eight of the reviewed interventions covered child protection aspects such as child-friendly schools, violence in schools, and social reintegration for children affected by conflict. One study evaluated a social protection program—specifically, a cash transfer program for displaced children in Lebanon.
**Effectiveness**

Only one study on cash transfers for Syrian refugees in Lebanon used a quasi-experimental design to determine the impact of the program on school enrollment and attendance. The program did not find statistically significant impacts on school enrollment using a regression discontinuity design. However, the midline results suggest that the program improved student attendance among enrolled children by 0.5 to 0.7 days per week, which is an improvement of about 20% compared with the control group and about 0.19 SD (de Hoop et al., 2019a), midway through the school year. Self-reported school attendance rates at endline, which took place at the start of the new school year, showed a smaller margin of improvement because both treatment and control students had high rates of school attendance, with an average of approximately 4.85 days of attendance per week out of 5 days (de Hoop et al., 2019a). The findings are credible because the study had a low risk of selection bias and a low risk of performance bias. Exhibit 23 presents a summary of the intervention and the study, while Annex H shows the effect size.

The qualitative part of the evaluation suggested that the program had a positive influence on child protection, by reducing work responsibilities; and on child well-being, with children expressing that they were more optimistic and happier (de Hoop et al., 2018a).

While all child protection programs created safer places for children through improvements in access to and the quality of the school environment, two main approaches were used: protection from violence (AAN Associates, 2017; Clarke et al., 2015; FHI 360, 2016; UNICEF, 2017), and the promotion of equitable access to schooling (Cambridge Education, 2019; UNICEF, 2017). The Ma’an (Together) towards a Safe School Environment Programme program in Jordan perceived a decrease in verbal and physical violence against children in school through a multilevel advocacy approach (AAN Associates, 2017). Other programs had less direct outcomes; for example, the CFS increased awareness of children’s rights and promoted the use of positive discipline rather than physical discipline. Program information on changes to the experience of violence was missing (Clarke et al., 2015; FHI 360, 2016; UNICEF, 2017).

Programs were successful in increasing equitable access to schooling for vulnerable groups. In South Sudan, the Back to Learning program’s social mobilization advocacy led to higher enrollment rates, especially among girls (Cambridge Education, 2019). In Afghanistan, a program increased education among street-working children and improved children’s safety by shifting labor to work within the household (UNICEF, 2017). In Nepal, limited effects were observed on the reintegration of children affected by armed conflict, which was mostly attributed to ongoing shocks to the country (Specht, 2016).

**Inclusion and Integration**

The interventions concerned with child protection achieved inclusion by keeping particular vulnerable populations in, or returning them to, the school system. Two of the studies elaborated on inclusion. The evaluation of CFS in Asal counties in Kenya reported that community involvement helped to identify out-of-school children, support children with special needs in school, and organize opportunities for children to develop life skills (FHI 360, 2016). The program for street-working children in Afghanistan sought to include children by improving their attendance and broadening their future aspirations (UNICEF, 2017).
SCHOOL FEEDING
We found no qualitative studies on school feeding programs and only one study that estimated the impact of a school feeding program. This program, delivered in a conflict setting in Mali, did not show positive impacts on school attainment, enrollment, or absenteeism. However, we need to exercise considerable caution in the interpretation of these results, because the study had a high risk of selection bias and a high risk of performance bias. We summarize the study and program design in Exhibit 24 and present the effect sizes in Annex H.

EXHIBIT 24. SUMMARY OF SCHOOL FEEDING PROGRAMS

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Summary Program Description</th>
<th>Country</th>
<th>Target Group</th>
<th>Outcome Measures</th>
<th>Evaluation Methods</th>
<th>Risk of Selection Bias</th>
<th>Risk of Performance Bias</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Feeding Program</td>
<td>Provision of food in schools</td>
<td>Mali</td>
<td>In-school children of primary school age in conflict setting</td>
<td>Enrollment, absenteeism Attainment</td>
<td>Propensity score matching</td>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>

WATER AND SANITATION IN SCHOOLS
We reviewed one quantitative study and five qualitative studies related to WASH conditions and their impact on educational outcomes. The interventions targeted school children in arid, semi-arid, and flood-prone areas; districts affected by violence in Kenya; Syrian refugees in camps and settlements at the Syrian/Jordanian border and in host communities; people affected by armed conflict and IDPs in northern and eastern Sri Lanka; and government schools in Afghanistan. All of these interventions, with the exception of one in Afghanistan, were multipronged programs that included WASH in Schools (WinS). The quantitative evaluation focused on the impact of providing water and sanitation facilities to primary schools in Mali. None of these studies discussed the inclusion of marginalized populations in mainstream education.

The overarching goals of all interventions were to provide safe and sustainable drinking water sources and hygienic sanitation facilities, raise awareness, and improve the hygiene habits of schoolchildren and communities. These goals apply to the WinS components that were added to help integrate WASH issues into teacher training and curricula. We report the effects of WinS on education-related outcomes.

Effectiveness
All five qualitative studies pointed to the perceived strengths of WASH programs in improving the lives of vulnerable populations, including providing a more appropriate toilet infrastructure in schools in Kenya, with separate facilities for girls and boys (FHI 360, 2016; UNICEF, 2016c); WASH blocks at schools in Jordanian host communities, Syrian refugee camps, and the tent settlements of Rukban and Hadalat (International Solutions Group, 2019); and WASH facilities that accommodated the needs of children with physical disabilities in conflict-affected regions in Sri Lanka and Afghanistan (International Institute of Development Training, 2015; Society for Sustainable Development of Afghanistan, 2017).

In addition to infrastructure components, each intervention had a knowledge component on teacher capacity training, community awareness, disseminating knowledge, and offering activities to hygiene behaviors. In Kenya, community members reported that integrating mass handwashing into daily school routines had created a new “social norm,” not only for primary school students but also for family members at home (UNICEF, 2016c). In Sri Lanka, behavior change campaigns to educate school children about the proper use of latrines and good hygiene habits were designed and implemented so beneficiaries would gain “maximum benefits” from the physical infrastructure (International Institute of Development Training, 2015). Qualitative evidence suggested that children were quick to adopt new hygiene and sanitation habits.
Despite no quantitative evidence on the effects of WASH programs on enrollment, parents in Kenya reported that “access to water made it easier for to justify coming to school” (FHI 360, 2016, p. 25). A qualitative study that explored the effects of UNICEF Kenya’s WASH program, which included a WinS component, said that schools embraced the requirements for sanitation facilities as an integral part of what a “complete school” should look like (UNICEF, 2016c).

Effective coordination with national and local governments and stakeholders was a challenge throughout the interventions. In Jordan, for instance, WinS implementors were not prepared for the MoE’s requirement that all school interventions be delivered “as a package” (International Solutions Group, 2019). Moreover, some facilities remained nonoperational after completion, due to failure to secure permits for connecting new infrastructure to existing systems before starting construction. Failure to engage MoE during implementation led to a lack of ownership of the mechanisms of sustainability after the interventions were completed. A study in Afghanistan highlighted that the lack of active involvement among local stakeholders—especially women—in the planning and construction of facilities resulted in inappropriately designed and low-quality construction work (Society for Sustainable Development of Afghanistan, 2017).

Despite positive qualitative results, the quantitative study—which used a combination of matching and difference-in-difference analysis to estimate the impact of the program on school attendance—did not find statistically significant effects on school attendance. However, the study showed a high risk of selection bias, indicating that the impact evaluation results may not be robust. We summarize the intervention and study design in Exhibit 25 and present the effect sizes in Annex H.

**EXHIBIT 25. SUMMARY OF WATER AND SANITATION PROGRAMS**

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Summary Program Description</th>
<th>Country</th>
<th>Target Group</th>
<th>Outcome Measures</th>
<th>Evaluation Methods</th>
<th>Risk of Selection Bias</th>
<th>Risk of Performance Bias</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dubai Cares WASH in Schools Initiative in Mali: Impact Evaluation Report</td>
<td>Provision of WASH facilities to schools</td>
<td>Mali</td>
<td>Primary and secondary schools in 6 regions of Mali</td>
<td>Attendance</td>
<td>Other Matching</td>
<td>High</td>
<td>Low</td>
</tr>
</tbody>
</table>
Disaster Risk Reduction
We only reviewed one qualitative study and one quantitative study related to DRR, both of which focused on the Philippines. While we identified other programs with a DRR component during our review, these programs did not focus on education outcomes or our population of interest.

The quantitative study focused on the impact of constructing typhoon-resistant secondary schools and providing instructional resources on educational attainment in the Philippines. The study showed that combining the construction of typhoon-resistant schools with the provision of instructional materials had positive impacts on educational attainment. In addition, it demonstrated that adding the construction of typhoon-resistant schools to the provision of instructional materials was more effective in improving educational attainment than providing instructional materials alone. However, we need to exercise caution in interpreting these results because of a high risk of selection bias. We summarize the intervention and study design in Exhibit 26 and present the effect sizes in Annex H.

EXHIBIT 26. SUMMARY OF DISASTER RISK REDUCTION PROGRAMS

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Summary Program Description</th>
<th>Country</th>
<th>Target Group</th>
<th>Outcome Measures</th>
<th>Evaluation Methods</th>
<th>Risk of Selection Bias</th>
<th>Risk of Performance Bias</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typhoon Aid and Development: The Effects of Typhoon-Resistant Schools and Instructional Resources on Educational Attainment in the Philippines</td>
<td>Construction of typhoon-resistant schools and providing instructional resources on educational attainment</td>
<td>Philippines</td>
<td>Typhoon affected secondary schools</td>
<td>Attainment</td>
<td>Difference-in-Difference Analysis</td>
<td>High</td>
<td>Low</td>
</tr>
</tbody>
</table>

Disaster Risk Reduction
We only reviewed one qualitative study and one quantitative study related to DRR, both of which focused on the Philippines. While we identified other programs with a DRR component during our review, these programs did not focus on education outcomes or our population of interest.

The quantitative study focused on the impact of constructing typhoon-resistant secondary schools and providing instructional resources on educational attainment in the Philippines. The study showed that combining the construction of typhoon-resistant schools with the provision of instructional materials had positive impacts on educational attainment. In addition, it demonstrated that adding the construction of typhoon-resistant schools to the provision of instructional materials was more effective in improving educational attainment than providing instructional materials alone. However, we need to exercise caution in interpreting these results because of a high risk of selection bias. We summarize the intervention and study design in Exhibit 26 and present the effect sizes in Annex H.

The qualitative study, a UNICEF Child-Centered DRR Project, targeted students in natural disaster-prone areas in the Philippines. The project aimed to prioritize child-centered DRR and management and planning to make schools safer for learners. The study found that the program helped to improve the resilience of education systems, allowing learning to resume as soon as possible during or after a disaster. However, the study also noted areas for improvement, such as the need for safe education facilities (Internal Displacement Monitoring Center, 2019). The study discussed resuming learning for students who were likely to be affected by disaster but did not explicitly discuss provisions for including IDPs in education systems.

5.1.4 Qualitative Nonintervention Studies
We reviewed 73 qualitative nonintervention studies, all of which included primary research and data collection. Of these, 61 met our quality threshold for inclusion in this study and are summarized in this section. We have organized qualitative nonintervention studies into six main topic areas: access to education, education policy and governance, education policy versus practice, teacher experience, student experience, and caregiver experience.

ACCESS TO EDUCATION
We reviewed 14 qualitative nonintervention studies that focused on access to education (pre-primary to postsecondary) for refugees, IDPs, and persons living in conflict-affected or post-conflict settings. The studies were geographically concentrated in the Middle East and sub-Saharan Africa, with five studies focused on Syrian refugees’ access to education in neighboring countries. Only two studies were conducted in Asia (Bangladesh and Malaysia).
**Findings**
The studies cited many barriers to accessing education, the most prevalent of which are summarized in Exhibit 27.

<table>
<thead>
<tr>
<th>Educational Access Barrier</th>
<th>Cited in</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Discrimination</strong></td>
<td>Sieverding et al. (2018)—Jordan; Kupfer (2016)—Uganda; Zino (2019)—Turkey, Lebanon, and Jordan; Shanks (2019)—Iraq; Garbern et al. (2020)—Lebanon; Eid &amp; Rokis (2019)—Malaysia; Charles (2018)—Uganda</td>
</tr>
<tr>
<td><strong>Financial constraints</strong></td>
<td>Sieverding et al. (2018)—Jordan; Novelli et al. (2016)—South Sudan; Kupfer (2016)—Uganda; Zino (2019)—Turkey, Lebanon, and Jordan; Dahya &amp; Dryden-Peterson (2017)—Kenya; Lorisika et al. (2015)—Jordan, Lebanon, Turkey, and Iraq; Shanks (2019)—Iraq; Garbern et al. (2020)—Lebanon; Eid &amp; Rokis (2019)—Malaysia</td>
</tr>
<tr>
<td><strong>Age for grade</strong></td>
<td>Sieverding et al. (2018)—Jordan; Kupfer (2016) Uganda</td>
</tr>
<tr>
<td><strong>Cultural, practical, and/or political irrelevance of education programs</strong></td>
<td>Novelli et al. (2016)—South Sudan; Benhura &amp; Naidu (2019)—Zimbabwe; Garbern et al. (2020)—Lebanon</td>
</tr>
<tr>
<td><strong>Documentation requirements</strong></td>
<td>Sieverding et al. (2018)—Jordan; Lorisika et al. (2015)—Jordan, Lebanon, Turkey, and Iraq</td>
</tr>
<tr>
<td><strong>Distance to school</strong></td>
<td>Novelli et al. (2016)—South Sudan; Kupfer (2016)—Uganda; Dahya &amp; Dryden-Peterson (2017)—Kenya</td>
</tr>
<tr>
<td><strong>School conditions/facilities and safety</strong></td>
<td>Beltekin (2016)—Turkey; Benhura &amp; Naidu (2019)—Zimbabwe; Kupfer (2016)—Uganda; Prodig &amp; Garnett (2019)—Bangladesh; Zino (2019)—Turkey, Lebanon, and Jordan; Dahya &amp; Dryden-Peterson (2017)—Kenya; GCPEA (2019)—DRC; Garbern et al. (2020)—Lebanon; Eid &amp; Rokis (2019)—Malaysia; Charles (2018)—Uganda</td>
</tr>
<tr>
<td><strong>Lack of options/space available</strong></td>
<td>Novelli et al. (2016)—South Sudan; Prodig &amp; Garnett (2019)—Bangladesh; Lorisika et al. (2015)—Jordan, Lebanon, Turkey, and Iraq; Shanks (2019)—Iraq</td>
</tr>
<tr>
<td><strong>Language of instruction</strong></td>
<td>Beltekin (2016)—Turkey; Kupfer (2016)—Uganda; Prodig &amp; Garnett (2019)—Bangladesh; Eid &amp; Rokis (2019)—Malaysia; Lorisika et al. (2015)—Jordan, Lebanon, Turkey, and Iraq; Charles (2018)—Uganda</td>
</tr>
</tbody>
</table>
While levels of access to education and specific barriers to access varied by context, there were commonalities across contexts, such as the prevalence of poor school conditions and unsafe school environments, serving as deterrents to educational access. Further, even in countries with inclusive educational policies for refugee students (such as Turkey, Jordan, and Uganda), discrimination persists and can deter refugees from accessing educational opportunities to which they are legally entitled. Nonintervention studies cited fewer solutions to overcoming barriers to access, but Dahya and Dryden-Peterson (2017) did find that the use of mobile technology and online social networks targeting women in Kenyan refugee camps increased access to higher education opportunities.

EDUCATION POLICY AND GOVERNANCE
We reviewed seven qualitative nonintervention studies that discussed education policy and governance and their effect on refugees, IDPs, and returnees. Studies focused on policies and governance practices in South Sudan, Myanmar, Kenya, and Lebanon and tended to highlight either contextual challenges that made effective education policy formulation difficult or the effects of these policies on displaced students.

Findings
Several studies highlighted governance and policy challenges associated with providing education to refugees, IDPs, and returnees. Thwe (2018) argued that formulating educational programs and policies for IDPs in Myanmar is particularly difficult given the limited access to data on IDPs and the government’s reluctance to fund or coordinate education for IDPs. Higgins et al. (2016) also found that education policies in Myanmar are complicated by—and at times, at odds with—peacebuilding and social cohesion efforts: “The focus on redistributing educational resources and reducing access-related barriers to schooling may work against goals of recognizing the plurality of viewpoints and actors (e.g., regarding language of instructing)” (p. 5). Smith and colleagues (2016) point to the sensitivity of educational policies in South Sudan, arguing that teacher salaries (for national versus state teachers, and permanent versus contract teachers) and policies on language of instruction (English versus Arabic) are highly charged political issues. Further complicating the educational policy landscape, Smith and colleagues (2016) argue that in Kenya, there is a “lack of community participation; lack of oversight and accountability; and insufficient mechanisms in place to ensure budgets are not lost to corruption” (pg. viii). Nicolai (2016) acknowledged the difficulty of establishing educational policies across both government- and opposition-controlled areas in conflict settings.

Two studies pointed to international influences that complicate or impede domestic education policies for displaced students. Novelli and colleagues (2016) found that while a range of policy initiatives had attempted to address education inequity in South Sudan,12 “specific policy strategies reflect the influence of global education agendas, with less attention to context-specific dimensions of inequity linked to conflict in South Sudan, including ‘pastoralist’ communities and older youth” (p. vii). Nicolai (2016) identified “donor fatigue” and difficulty coordinating across humanitarian and development landscapes as complicating factors in the education response in South Sudan, but also noted the usefulness of global initiatives and mechanisms to help overcome these challenges.

Two studies highlighted how policies have the potential to negatively affect displaced students’ experiences with education. Nyang (2017) found that the “settlement method” and resulting educational plan for IDPs and returnees in South Sudan was ineffective and led to dropouts and competition over scarce educational resources. Trzmiel (2017) found that in Lebanon, policies on language of instruction and the emphasis on national values in the curriculum presented obstacles for refugee students in Lebanese schools. Further, in higher education, there was no procedure to grant refugees equivalency for academic credentials, and no solution for partial or missing documentation.

EDUCATION POLICY VERSUS PRACTICE
We reviewed 10 nonintervention studies that compared educational policy and practice in forced displacement settings, often pointing to disconnects between the two. Several studies also found a contrast between what educational policies aimed to achieve and the lived experiences of students affected by those policies. The studies were based on research in Lebanon, Indonesia, Kenya, and Turkey, and also included multi-country or global-level research.

Findings
Six studies articulated the contrast between official policies of inclusion for refugee students and the practical and sociocultural exclusion of these students from educational opportunities and success. Dryden-Peterson (2016) argued that despite numerous

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12 South Sudan ensured the right to education for refugees in the 2012 Refugee Act.
initiatives and policies promoting inclusion, refugee students commonly experienced language barriers and discrimination in school settings. In a more recent paper, Dryden-Peterson (2016) highlighted the importance of examining both structural and relational integration to explore not only official policies but also refugees’ lived experiences of inclusion in and exclusion from national education systems. Arar and colleagues (2019) found that despite a formal policy of inclusion, Syrian refugee students in Turkish classrooms were often viewed and treated as temporary “guests” by educators. Arar and associates (2020) also found that despite a higher education policy in Turkey that was intended to be inclusive, Syrian refugee students faced practical obstacles—such as documentation requirements, language barriers, limited guidance, and financial constraints—that ultimately limited their access to public higher education opportunities in Turkey. At Kakuma refugee camp in Kenya, Bellino and Dryden-Peterson (2019) found that despite the global push for integrating and including refugee students in national education systems, “few refugees integrate up into government schools, while most integrate down into segregated camp schools” (p. 1). Dryden-Peterson and associates (2019) argue that refugees’ access to essential resources is limited in nation-states of exile, and that they face multiple layers of exclusion.

Three studies pointed to cases of nonadherence with national and international policies on refugee education. Mendenhall and colleagues (2017) argued that gaps between policy and practice were a result of the “…lack of capacity in government schools, low levels of capacity among civil servants, autonomy of local and school administrators, and discrimination and xenophobia by the host communities” (p. 8). Buckner and colleagues (2018) found that in Lebanon, many unofficial education programs operated against official government policy. Similarly, in Indonesia, Kranrattanasuit (2020) argued that Indonesian national laws that specified the right to education for refugees were not fully implemented or recognized.

One study (Adelman, 2018) described the alignment between education policy and practice in Lebanon. This study pointed to the many refugee students enrolled in second-shift schools as evidence of Lebanon’s compliance with the national Reaching All Children with Education (RACE) strategy. The study argued that Lebanon’s success in adhering to the RACE strategy was due in part to the fact that accommodating refugees in the national system had not required substantial changes to the structure or content of education (such as a new curriculum), and that local actors were willing to take on the added responsibility of more students in the system.

**STUDENT EXPERIENCE**

We reviewed 15 qualitative nonintervention studies that assessed student experiences (from pre-primary to postsecondary) among refugees, IDPs, and persons living in conflict-affected or post-conflict settings. Eight of the studies focused on Syrian refugees’ experiences in schools in Turkey and Lebanon, and one study focused on Syrian student decision making related to enrolling in a graduate business program; otherwise, three studies looked at refugee learning experiences in Kenya; one focused on the Roma population in Bulgaria, and two were general.

**Findings**

Dryden-Peterson (2015) highlighted that one of the most fundamental difficulties for displaced students is that they experience frequent disruptions and limited access to education. Beyond students’ difficulty with educational access and consistency, multiple studies identified challenges affecting student experiences with education that were similar to those identified in Exhibit 28 on educational access barriers, including difficulty with language of instruction (e.g., Dogutas, 2019; Dolapcioglu & Bolat, 2019; Dryden-Peterson, 2015), unaddressed psychosocial issues, and cultural differences, among others. For example, Tosten, Toprak, and Kayan (2017) found that Syrian refugee students attending Turkish primary schools “are under the effect of post-traumatic stress disorders, they have problems understanding and communicating the content in class, [and] there are issues stemming from overcrowded classes” (p. 1149). Studies suggested the importance of directly addressing these challenges in students’ experiences through programs that engage both displaced and host students to facilitate their inclusion.

**TEACHER EXPERIENCE**

We reviewed 13 qualitative nonintervention studies on teachers’ experiences teaching displaced students in national education systems. Most of the studies focused on Syrian refugees in Turkey or Lebanon, while two took place in Indonesia, one in Malaysia, and one in Kenya.
Findings
As in the studies highlighting student experiences, studies of teacher perspectives on including displaced and marginalized populations in national education systems indicated the following fundamental challenges that inhibit teachers: language barriers and interactions with parents (Mostafa, 2017; Yaser & Amac, 2018), socioeconomic barriers and a lack of governmental support (Mostafa, 2017), and teachers’ lack of understanding around pedagogy and instructional practices (Mendehall et al., 2015). Mendehall et al. (2015) argue that most of these issues stem from a lack of coherent policy to guide teacher practice.

Most of these studies also indicated that teachers of displaced populations often lacked the direct training or support that would enable them to serve the needs of the populations (e.g., Maher, 2020; Greaves, Nabhani, & Bahous, 2019; Yasar & Amac, 2018), and that teachers were therefore drawing on their own experiences and limited knowledge to meet student needs (e.g., Greaves et al. 2019). Studies suggest that, in addition to providing basic training for teachers and other school administrators on including displaced or marginalized populations, it is important to consider the effect of teachers’ individual experiences on the process of inclusion. For example, Lopez Cardozo and Shah (2016) found that teachers in Aceh, Indonesia, were unable to play an effective role in peacebuilding because of their own experiences in the conflict. Adelman (2019) suggests that “If they are to foster quality education for refugees, global frameworks and funding mechanisms must consider the personal and professional needs of teachers of refugees” (p. 116).

5.3 MODERATORS OF EFFECTIVENESS
This section aims to answer research RQ 1c, which describes how intervention effectiveness—at the system, community, school, and individual levels—is moderated by type of target population, type of crisis, displacement context, and duration of displacement. Importantly, the small number of experimental and quasi-experimental studies limited our ability to provide strong, conclusive evidence about target populations, crisis types, displacement contexts, and durations of displacement, especially because we included only a small number of experimental and quasi-experimental studies in each intervention category. This limits our ability to reliably assess the ways in which different moderators influence the effectiveness of education programs in forced displacement contexts because it is challenging to distinguish between the intervention category and other potential moderators in explaining the results. Nonetheless, we were able to gather some evidence on how different individual-level, school-level, community-level, and system-level factors moderate the effectiveness of education programs in forced displacement contexts. In this section, we focus primarily on results of studies with a low risk of selection bias.

One factor that is critical in determining the effectiveness of education programs is the baseline level of school enrollment in a specific setting. In Afghanistan, Burde and Khan (2016) assessed parents’ decision-making processes around sending children to school in Uruzgan, Afghanistan; while Nael (2017) explored considerations around sending children to school among parents of Syrian refugee children in Zaatari camp in Jordan. Neither of the studies directly addressed the inclusion of displaced populations in national education systems.
refugee children in Lebanon in a time when school attendance was relatively low. However, the same study no longer found statistically significant effects at endline when school attendance had increased considerably. Both Burde and colleagues (2016) and de Hoop and associates (2019a) attribute the differences in impact estimates to increases in school enrollment and attendance over time.

Various other studies examined the role of gender in determining the effects of education programs in forced displacement contexts and found some evidence that programs focusing on access to schooling had larger effects on school enrollment and attendance of girls than of boys. For example, a quantitative study in the Philippines found positive effects of the construction of typhoon-resistant schools on educational attainment of girls, while the effects for boys were determined not to be statistically significant (Cas, 2016). Similarly, Burde and Linden (2013) found larger effects of CBE on the school enrollment of girls than of boys. It is possible, however, that the larger effects for girls were driven primarily by differences in school enrollment at baseline. Burde and colleagues (2016) no longer found statistically significantly larger effects of CBE on girls’ school enrollment than on boys’ school enrollment after girls had increased their baseline levels of school enrollment. De Hoop and colleagues (2019a) also did not find evidence for differential effects by gender of a cash transfer program in Jordan.

We also found only limited evidence for differential effects of education programs in forced displacement contexts on learning outcomes for boys and girls, although some studies found larger effects for girls when their baseline levels of learning were lower. For example, the quasi-experimental evaluations of the CWTL program in Jordan and Sudan did not show statistically significantly higher effects for boys or girls on either learning or psychosocial outcomes. Similarly, Spier and colleagues (2018) did not find evidence for differential effects by gender in their evaluation of an ECE program in Senegal. In addition, Aber and associates (2017a) did not find evidence for differential effects by gender in their cluster RCT of the Healing in the Classroom study. However, the quasi-experimental study of the Feed the Monster program in Syria did show larger effects on girls’ literacy outcomes than on boys’ literacy outcomes, possibly because of the lower baseline levels of learning of girls who participated in the program. However, the Feed the Monster program also had a high risk of selection bias; therefore, caution must be exercised in interpreting this result.

Some interventions focused on SEL found larger contributions to reductions in depression for girls than for boys. For example, Barron and colleagues (2016) found that the effects of a teaching recovery technique on reductions in depression were larger for girls than for boys. Similarly, Jordans and colleagues (2010) found larger contributions to reductions in depression among girls than among boys in a classroom-based psychosocial intervention in Nepal.

Overall, it is challenging to provide conclusive evidence about the differential effect by gender of education programs in forced displacement contexts because most studies have a very small sample size. Thus, the studies that we included may not have sufficient statistical power to detect meaningful effects of education programs in their full sample, as indicated by the median sample size of 402 students. Considering the limited statistical power for detecting average program impacts, it is not surprising that most studies do not have sufficient statistical power to detect differential effects by gender. This would require studies with larger sample sizes.

We found some evidence that education programs in forced displacement contexts may have larger effects on learning outcomes of out-of-school children than on learning outcomes of in-school children. For example, the meta-analysis of technology-in-education programs showed larger positive effects of programs that focused on out-of-school children than of programs that focused on in-school children. Again, however, the results are not necessarily conclusive because of limited statistical power. While the effect size of technology-in-education programs was considerably larger for technology-in-education programs that focused on out-of-school children than for in-school children, the results were not statistically significant.

Finally, some studies demonstrated the importance of fidelity of implementation and the dosage of interventions in determining their effects on educational outcomes. For example, WUSC’s remedial education program in Dadaab did not show statistically significant effects on learning outcomes, on average. However, the same program did show statistically significant effects for girls living in food-secure households who attended at least 50 hours of remedial education. Further, the study results indicated that the program may have been more effective with higher remedial education attendance rates. Burde and colleagues
(2016) also did not find larger positive effects of a CBE program after the introduction of a community mobilization component. The study attributes the lack of larger positive effects to the program’s small take-up rate. They suggest that the take-up rate may have increased if the program had been implemented with a larger dosage.

5.4 COST ANALYSIS AND SCALABILITY

In this section, we present evidence on costs of interventions and related evidence on the scalability and replicability of interventions that improve education outcomes in forced displacement contexts. We analyze RQs 4 and 5 together because, given the limited funding for EiE programming (Nicolai & Hine, 2015), it is challenging to scale education programs with high costs. For this reason, we believe that discussions of program scalability ideally must be grounded in a cost analysis.

Several studies that we included explain that governments were unable to scale effective education programs because costs were too high. For example, an evaluation of the Ma’an (Together) towards a Safe School Environment Programme in Jordan indicated that a program to reduce violence against children may have contributed to reduced violence against children (AAN Associates, 2017). However, the same study showed that the program was not scalable because of the high costs associated with program implementation (AAN Associates, 2017). In addition, an evaluation of a program providing access to basic education and gender equality in Afghanistan suggested that it was not possible to scale a CBE program delivered by NGOs given the high costs of teacher learning materials and teacher salaries. The same study indicated that the integration of CBE into national education systems may enable the reduction of costs, which could help in increasing the scalability of the program (Jantzi et al., 2019).

Evidence from the Humanitarian Education Accelerator (HEA) study suggests that scaling education programs in forced displacement contexts is particularly challenging when funding is not available to set up well-functioning business and administrative systems. Allocation of funding to plan and solidify systems would enable implementers to use resources freely to purposefully develop business systems that function in the long term. This includes building organizational capacities to scale (e.g., by ensuring that administrative systems are aligned with the scale-up) and supporting the business model and codification of the program.

We did include 14 studies with either quantitative or qualitative information about costs. These studies ranged from those that provided a detailed breakdown of costs using activity-based costing to studies that provided some qualitative information on perceptions of stakeholders about the costs and cost-effectiveness of EiE programming. Remarkably, our cost analysis was driven by interventions focusing on Afghanistan or South Sudan. We found four cost analyses with a focus on South Sudan and five cost analyses with a focus on Afghanistan. The five other studies, which focused on Iraq, Jordan, Palestine, Rwanda, and Sudan, indicated that evidence about the costs of education programs is available only in a very limited number of forced displacement settings.

Three of the studies suggested that education programs may achieve cost savings after an initial pilot stage based on an analysis of the link between scale and the costs of EiE programming (UNICEF, 2015; Jones et al. [Forthcoming], cited in de Hoop et al., 2019b; de Hoop et al., 2019c). These studies focus on the CWTL program implemented by War Child Holland in Sudan; the Kepler program, which is implemented in Kiziba refugee camp in Rwanda; and the community-based psychosocial protection program in East Jerusalem. A simulation analysis of the CWTL program indicated that the costs per program participant can decrease significantly after the program moves to scale because of relatively high start-up costs. Similarly, the Kepler program may achieve cost savings of close to $67,000 if it replicates its program outside of Kiziba refugee camp. Kepler could achieve these cost savings because of a better understanding of program needs through its experience implementing the program, resulting in efficiencies in implementation and changes in personnel. Finally, cost estimates of the community-based psychosocial protection program in East Jerusalem show reductions in costs per program participant from $65.76 in Year 1 to $33.39 in Year 4.

These findings align with some of the main findings from the HEA study, which suggested that scaled-up programs are likely to achieve greater cost-effectiveness due to economies of scale. Funding larger scale programs will enable implementers to focus on expanding education programs in the same context to reach a larger number of program participants, which can reduce the costs per student.
5.3.1 Costs per Student

The studies that we included showed large differences in costs per student between different implementation models, even within the same study. For example, a study in Jordan showed that the costs per program participant per year increased from $2.82 per child to $9.31 per child after the introduction of a relatively inexpensive program to reduce violence against children (AAN Associates, 2017). While these costs are relatively low, another study showed costs per program participant per year of slightly above $2,500 for an education and livelihoods program for street children in Afghanistan, demonstrating large differences in program costs between different programs. In South Sudan, cost analyses showed costs of $174.13 for an education program covering basic education, skills training, and livelihoods; $796 per learner for a remedial education program; and $18.31 per learner for a higher education initiative. By contrast, the cost of an education program for adolescents in Iraq was $42.36 per program participant. We summarize each of these cost estimates in Exhibit 28.

<table>
<thead>
<tr>
<th>Program</th>
<th>Summary Program Description</th>
<th>Country</th>
<th>Target Group</th>
<th>Cost per Program Participant per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ma’An (Together) towards a Safe School Environment Programme</td>
<td>Behavior change program that aims to reduce violence against children</td>
<td>Jordan</td>
<td>School-based staff such as principals, counselors, teachers, school administrative staff</td>
<td>$9.31</td>
</tr>
<tr>
<td>Increasing Access to Basic Education and Gender Equality Program</td>
<td>Program aimed at improving vulnerable children’s access to education and improving capacity of community-based schools’ teachers and government</td>
<td>Afghanistan</td>
<td>Out-of-school children (OOSC), particularly girls, ages 7–9; and OOSC children and youth, especially girls, ages 10–15</td>
<td>$80.00</td>
</tr>
<tr>
<td>Adolescent Development Program</td>
<td>Development program that focuses on adolescents and youth as leaders; aims to develop the next generation of agents of change to bring various groups together within the social fabric of the community</td>
<td>Iraq</td>
<td>Adolescents and youth who are any of the following: refugees, IDPs, host community members, women and girls, people living with disabilities, or religious and ethnic minorities</td>
<td>$42.36</td>
</tr>
<tr>
<td>Program</td>
<td>Summary Program Description</td>
<td>Country</td>
<td>Target Group</td>
<td>Cost per Program Participant per Year</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
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<td>---------------------------------------</td>
</tr>
<tr>
<td>Community-based psychosocial protection services</td>
<td>Project that promotes a protective environment for children and adolescents living in East Jerusalem by strengthening community-based protection services, including psychosocial support</td>
<td>Palestine</td>
<td>Children, adolescents, caregivers</td>
<td>$33.92</td>
</tr>
<tr>
<td>Youth leadership, empowerment, advocacy, and development program</td>
<td>Socioeconomic and peace development program through increased equitable engagement in sustainable livelihoods, peacebuilding, and use of economic and social services</td>
<td>South Sudan</td>
<td>Youth and young men and women ages 10–24</td>
<td>$18.31</td>
</tr>
<tr>
<td>Improving Street-working Children’s Access to Education and Livelihoods Support for their Families</td>
<td>Project that addresses drivers of child labor, including limited household income and lack of understanding of children’s rights, while simultaneously providing educational support</td>
<td>Afghanistan</td>
<td>Street-working girls and boys</td>
<td>$2,598.78</td>
</tr>
<tr>
<td>Program</td>
<td>Summary Program Description</td>
<td>Country</td>
<td>Target Group</td>
<td>Cost per Program Participant per Year</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td>--------------</td>
<td>------------------------------------------------------------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>Oxfam’s Accelerated Education Program</td>
<td>Project that aims to help primary school curriculum completion by using a condensed form of the primary curriculum, enabling learners to complete the primary cycle in 4 years instead of 8</td>
<td>South Sudan</td>
<td>Children and youth ages 12–18 who have enrolled in lower primary classes, dropped out, or could not access education</td>
<td>$796.00</td>
</tr>
<tr>
<td>Education Sector Governance and Peacebuilding</td>
<td>Program that explores the relationships among education sector management, inequality, conflict, and peacebuilding</td>
<td>South Sudan</td>
<td>All actors in the education system</td>
<td>$174.13</td>
</tr>
<tr>
<td>YouthLEAD Initiative</td>
<td>Project that aims to equip youth to become productive members of their communities and to reduce conflict-related vulnerabilities through education and livelihood support in selected counties in Eastern Equatoria, Jonglei, and Upper Nile states</td>
<td>South Sudan</td>
<td>Children and youth ages 10–24</td>
<td>$3.40</td>
</tr>
<tr>
<td>Kepler</td>
<td>Program that provides a path to a bachelor's degree from Southern New Hampshire University using a blended-instruction approach</td>
<td>Rwanda</td>
<td>Refugee youth with a high school degree</td>
<td>$276.51</td>
</tr>
</tbody>
</table>
While the cost estimates are informative, they are hard to interpret because of differences in methodology, context, implementation models, timing, and scale as well as uncertainty about program effectiveness. Several of the evaluations make claims about value for money based on cost estimates alone, but such claims are not credible without comparing costs to benefits estimated in rigorous experimental or quasi-experimental impact evaluations. In addition, it is challenging to compare program costs across different contexts, especially because evidence shows that the costs of education programs differ tremendously across contexts (Evans & Popova, 2016).

A series of studies about CBE in Afghanistan show the importance of incorporating cost estimates in impact evaluations by comparing costs and cost-effectiveness of various implementation models in the same context in Afghanistan (Burde & Linden, 2013; Burde et al., 2016; Burde et al., 2019b). By incorporating cost estimates in multi-arm, cluster RCTs with different intervention modalities, they address concerns about comparing cost estimates when context and scale differ as well as concerns about the uncertainty of program effectiveness.

Perhaps most importantly, the cost analyses of CBE showed that the implementation of CBE is considerably less costly when implementation happens through village-based institutions and local governments than through international NGOs. On average, CARE and CRS paid $154.42 per child to operate a CBE program for two years (Burde et al., 2016). The average cost of the implementation of CBE by village-based institutions was $80.52 per child (Burde et al., 2019).

The drivers of the cost differences between international NGOs and village-based institutions were differences in direct and indirect staff costs and monitoring and oversight costs. The staff costs of international NGOs were considerably higher than those of village-based institutions. In addition, the costs of the program implemented by international NGOs included a fund for teacher training that was considerably larger than the funds included for community institution capacity building in the model implemented by village-based institutions. Finally, it was possible to reduce monitoring and oversight costs by making village shuras (councils) responsible for monitoring the CBE classes, with occasional visits from local government officials.

### Exhibit 28. Cost Estimates of Included Education Programs (Cont.)

<table>
<thead>
<tr>
<th>Program</th>
<th>Summary Program Description</th>
<th>Country</th>
<th>Target Group</th>
<th>Cost per Program Participant per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community-based education delivered by CARE and Catholic Relief Services</td>
<td>Intervention that provides community-based education and village schools</td>
<td>Afghanistan</td>
<td>Children of primary school age in Afghanistan</td>
<td>$154.42</td>
</tr>
<tr>
<td>Community-based education delivered by village-based institutions</td>
<td>Intervention that provides community-based education and village schools</td>
<td>Afghanistan</td>
<td>Children of primary school age in Afghanistan</td>
<td>$80.52</td>
</tr>
</tbody>
</table>

Note: Cost estimates reported after converting cost estimates of foreign currencies to current exchange rates but before inflating annual expenditures to current prices using the Consumer price index.
5.3.2 Cost-Effectiveness

The synthesis of studies that we included reveals major evidence gaps on the costs and cost-effectiveness of education for displaced learners, however. Only one of the 23 experimental and quasi-experimental studies that we included combined its impact estimates with a rigorous cost analysis, indicating that the current evidence base on education programming for displaced learners includes very few credible estimates of cost-effectiveness analysis.

However, the study on the cost-effectiveness of village-based education in Afghanistan suggested that investing in such programs may be one of the most cost-effective ways to improve educational outcomes in low- and middle-income countries. A comparative cost-effectiveness analysis reported by Bhula et al. (n.d.) showed that the presence of a community-based school13 led to an improvement of 2.13 SD in learning (n.d.) showed that the presence of a community-based school13 led to an improvement of 2.13 SD in learning and 0.18 SMD in attendance for every $100 spent at the time of the evaluation. The findings suggested that investing $100 to recruit a qualified teacher yielded an increase of 0.215 SD in a child’s learning at the time of the evaluation compared to only a change of 0.153 SD if the same amount is used to recruit a teacher from within the village at the time of the evaluation. In addition, the findings indicated that investing $100 to hire a qualified teacher increased attendance by about 0.106 children at the time of the evaluation, whereas investing $100 to recruit a local teacher increased school attendance by only 0.074 children at the time of the evaluation (Burde et al., 2016).

While replications of the same program suggested a smaller cost-effectiveness than estimated in the original study, the same study indicated that transitioning the program to village-based institutions could result in significant improvements in cost-effectiveness. Specifically, Burde and colleagues (2016) found that an investment of $100 in CBE yields an increase in attendance of 0.092 children and 0.21 SD in learning outcomes at the time of the evaluation, which is considerably lower than the estimates from the comparative cost-effectiveness analysis reported in Bhula et al. (n.d.). However, at the same time, Burde and colleagues (2019) showed that transferring the program to village-based institutions could result in cost savings of 53.7%. Because the impact estimates were only marginally smaller, transferring the program to village-based institutions could yield an increase of 0.33 SD in learning and 0.18 SMD in attendance for an investment of $100 at the time of the evaluation.

Importantly, however, it is not easy to say whether the village-based institutions could have achieved the same results as the international NGOs in improving learning outcomes if they had implemented the program from the start. Setting up CBE programs required the capacity to mobilize communities, define the curriculum and classes (even if following the national curriculum), identify appropriate teachers, and undertake other efforts that require considerable dedication and expertise. However, sustaining such classes and the benefits they offer in terms of school access and learning can be achieved at a lower cost than that required to start the CBE program.

One other lesson from the cost-effectiveness analysis in Afghanistan is that imposing a rule that NGOs recruit only teachers with education levels permitting them to pursue credentials to work under MoE administration is cost-effective in improving learning outcomes and attendance. The findings suggested that investing $100 to recruit a qualified teacher yielded an increase of 0.215 SD in a child’s learning at the time of the evaluation compared to only a change of 0.153 SD if the same amount is used to recruit a teacher from within the village at the time of the evaluation. In addition, the findings indicated that investing $100 to hire a qualified teacher increased attendance by about 0.106 children at the time of the evaluation, whereas investing $100 to recruit a local teacher increased school attendance by only 0.074 children at the time of the evaluation (Burde et al., 2016).

While only two of the included primary studies include a rigorous cost-effectiveness study, we were able to include one more cost-effectiveness analysis by combining data from an impact evaluation of the Kepler post-secondary program in Kigali, Rwanda, with a separate cost analysis of the program in Kiziba refugee camp. For this cost analysis, we assumed that the impact estimates from the impact evaluation focused on students in Kigali could be credibly extrapolated to the refugee setting in Kiziba refugee camp. While this assumption may not be completely valid, a cost-effectiveness analysis based on this assumption may still provide relevant information.

The cost-effectiveness analysis suggests that the cost-effectiveness ratios of the program depend heavily on whether the program has to invest in additional startup costs or can use the knowledge gained from some of its previous investments in Kiziba refugee camp. As discussed previously, the program could save $67,000 if it were to replicate its program outside Kiziba refugee camp. The program would achieve a benefit of 0.30 SD in computer literacy, 0.02 SD in critical thinking, 0.13 SD in writing, 0.16 SD in reading, 0.09 SD in logic, 0.10 SD in English, and 0.06 SD in math for every $100 spent at the time of the costing analysis if it were to replicate its program outside of Kiziba refugee camp and reach the same number of students as in Kiziba refugee camp. However, the program’s cost-effectiveness ratio benefit

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13 CBE is an education service delivery model that aims to improve access to and the quality of primary education in remote or otherwise hard-to-reach areas (Burde, 2019)
declines to 0.13 SD in computer literacy, 0.01 SD in critical thinking, 0.06 SD in writing, 0.04 SD in reading, 0.04 SD in logic, 0.10 SD in English, and 0.03 SD in math for every $100 spent in Kiziba refugee camp at the time of the costing analysis when the program reaches the same number of students (189), as was the case at the time of the evaluation.

5.4 INTERVENTION MAPPING

This section presents a summary of programs we found and included in the intervention map under each topic category. The summaries present the number of interventions we found under each category, followed by basic descriptive information on the types of interventions and the extent to which the programs are integrated with national education systems.

5.4.1 Early Childhood and Basic Education

We identified 14 ECE interventions in nine countries that targeted displaced populations, refugees, and (in four instances) host communities. Most of these interventions provided nonformal education, with the goals of increasing primary school readiness and strengthening parental awareness of the benefits of ECD and schooling. A program in Mozambique showed the potential for integrated programming by combining ECD with nutrition, health, and child protection components. Two other programs combined adult education with early childhood development and care. For instance, War Child Canada in Afghanistan offered vocational training to women while engaging their children in ECD, and the Little Ripples project in Chad sought to build refugee women’s capacity to manage and implement ECE. These examples indicate opportunities for ECD interventions to be further integrated into existing systems and programming to potentially increase usage and effectiveness.

We also identified seven interventions providing basic education in six countries: Colombia, Jordan, Kenya, Malaysia, Sudan, and Turkey. Five of the interventions provide education to refugees that runs parallel to or complements the national system. In Turkey, the Ministry of National Education is planning to gradually phase out its basic education intervention (the Temporary Education Center program). This program was introduced as a temporary solution, but the ministry has since acknowledged that Syrian refugees are likely to remain in the country and will focus on integrating Syrians into the Turkish state system (rather than having a separate education program). This example shows national responsiveness to changes in long-term perspectives. The other interventions in this category are intended to remove barriers to accessing education for out-of-school children or refugees. The effectiveness of these interventions, or of integrating children from these education programs into the national system, is unknown because program evaluations were missing.

5.4.2 Postsecondary Education

We identified 24 interventions focused on postsecondary education across nine countries, including six on higher education and 18 on vocational training. The interventions primarily targeted refugees and IDPs, with a few also including host communities. The higher education programs focused on tertiary teacher education and degree programs, such as the Borderless Higher Education for Refugees (BHER) project in Kenya and the Kepler Kibiza program in Rwanda. Most of the higher education programs ran parallel to national education systems through international programs that lacked local equivalencies. However, degrees granted by Kepler in Rwanda and the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) in Jordan, were recognized by local education authorities.

Vocational training programs focused on developing skills for certain trades and specializations, financial and market literacy, and entrepreneurial skills. Most vocational training programs were complementary, with a few interventions taking place in the context of national systems. For example, UNRWA’s technical and vocational training centers in Jordan are national centers, and graduates sit for the comprehensive exam for graduates from all community colleges in Jordan. The Womanity Foundation’s School in a Box program in Afghanistan is implemented in public schools, and two schools are running a vocational training pilot program for women. Of the 24 interventions, only four had reliable, ongoing M&E.

5.4.3 Remedial and Nonformal Education Modalities

We identified 20 remedial and accelerated education interventions across eight countries. Programs in Afghanistan, Colombia, the DRC, and Ethiopia targeted IDPs, while programs in Jordan, Kenya, Mozambique,
and Uganda focused on refugee and hosts populations. Most accelerated schooling programs targeted out-of-school children seeking to return to primary education. Programs showed considerable variation in duration and method of reintegration. One program in Afghanistan compressed 6 years of primary school into 3 years, after which program completers could enter public secondary school. Other programs sought to reintegrate children into primary school after program completion or passing a final test. While some of the programs were integrated into the national education system, more than half were offered as complementary or parallel programs. Of the remedial learning programs, all were complementary or ran parallel to the national system, providing educational services and materials such as tutoring, summer schools, and learning tools. We found that four programs had evaluation data available, including process analysis and indicators on well-being and learning achievements. However, due to limited M&E data, it is unclear how successful programs were in returning students to school, and keeping them in school, particularly non-national programs.

5.4.4 Technology in Education

We identified 48 interventions focused on technology-in-education programs across 18 countries, primarily targeting refugees and host communities. Roughly one in four interventions were informal in nature. Only three interventions were integrated into the national system; the rest were either complementary (23 interventions) or ran parallel (22 interventions) to the state-run education system. An example of a national intervention is War Child UK’s CWTL program, which employs DGBL in displaced settings in Jordan. Of the 48 interventions, 12 had reliable, ongoing M&E in the form of external and internal evaluations.

The technology-in-education interventions addressed aspects of education delivery such as matching students to appropriate content (e.g., Youth for Technology Foundation Academy), providing Internet connectivity (e.g., Global Business Coalition for Education - Rapid Education Action), supporting school districts in planning (e.g., EduTrac), and providing teacher training (e.g., Badiliko). This was reflected in the diverse target groups of these interventions: out-of-school children, adult learners, teachers, rural adult women, and primary and secondary school-aged students. We included interventions that leveraged technology to achieve scale; for example, Mobile Solar Computer Classroom uses modified SUVs fitted with solar panels to take mobile computer classrooms around Uganda to teach computer skills to rural students.

5.4.5 Reading, Literacy and Language Policy

We identified 26 interventions related to reading, literacy, and language policy across nine countries. A large cluster of eight reading and literacy projects was found in Afghanistan, and additional interventions were spread across countries such as Colombia, Mexico, Jordan, Pakistan, and Uganda. Most programs focused on IDPs and refugees rather than host communities, targeting primary school-aged children and youth. Of all the interventions, only one was integrated into the national education system. This program promoted the integration of Syrian children into the Turkish education system and had multiple components, but it emphasized Turkish language training for school children, their parents, and preschool students. Other interventions ran parallel to or complemented the national system and included establishing libraries and literacy classes. Programs for older children often concentrated on a combination of literacy, practical life skills (such as financial literacy), and information about nutrition and hygiene. Several interventions used technology: Radio programs were used in Afghanistan; mobile phone and tablet applications were used in Afghanistan, Jordan, Pakistan, and Mexico; and computer-based classes and e-books were used in Colombia and Uganda. Four programs provided evaluation data, and the technology-based interventions provided the potential for ongoing monitoring of progress and usage.

5.4.6 Curriculum

We found 10 interventions related to curriculum across six countries. The programs all offered parallel or complementary interventions for refugees and IDPs. However, several interventions were connected to the formal education system and used state-approved curricula. For instance, Escuela Nueva in Colombia used a child-centered curriculum for hard-to-reach children, incorporating more flexibility and tutoring for students while following the regular course material. Some of the curricula offered were less traditional and focused on particular skills (such as basic life skills) or the use of technology in education. These alternative methods contributed to children’s skill development and knowledge, but they did not always provide opportunities for further learning in the national school system. It is unclear whether these 10 interventions had any M&E activities to further assess program effectiveness.
5.4.7 Capacity Building and Systems Strengthening

We identified 32 interventions focused on capacity building and systems strengthening across 13 countries. Most of these interventions were characterized by their adoption of a wide-ranging approach to improving education. For example, the Norwegian Refugee Council–funded Recovery of Acholi Youth (RAY) Northern Uganda program intends to support refugee and IDP out-of-school children and youth through three components: an accelerated learning program, youth education, and school construction. Around one in five interventions (six out of 32) were integrated into the national education system. The rest were evenly divided between working parallel to the national education system (14 out of 33 and complementing the system (12 out of 32). One example of a nationally integrated intervention is the Saving Access to Education Services program in Sudan. This program takes a multipronged approach to improving access to quality protective education services for vulnerable IDP children by providing learning materials to students, conducting training for parent–teacher associations, and organizing interest groups for children. Twenty-two of the 33 interventions were implemented by NGOs, either international or local. A majority (20) of the capacity-building and systems-strengthening interventions focused on refugees. Eight interventions had a stated focus on supporting girls and women in the contexts where they work. Of the 33 interventions, only two had a reliable, ongoing M&E component.

5.4.8 Teachers and Teaching

We identified 29 interventions focused on teacher training across 15 countries. Almost all of these interventions were either complementary (10 interventions) or ran parallel (12 interventions) to the national education system. For most of these interventions, it was unclear whether teachers required any qualifications to be eligible for the program; seven interventions did not require any qualifications. Teachers received recognition or accreditation in six of the 29 interventions. Most of these interventions focused on improving the quality of existing teachers by training them on better teaching techniques. For example, the Corporación Educativa Huellas de la Esperanza program in Colombia stresses holistic teaching and learning in math and language. We also identified interventions that engaged with noncurricular components of teaching practice. For example, the Peace Education Curriculum for Afghan Students aims to motivate Afghan teachers to abandon corporal punishment and create a safe learning environment for students. The Access to Quality Education in Rural Uganda intervention focuses on placing Ugandan university graduates in rural schools to enable capacity building among the school’s staff. The interventions use varied channels for content delivery and teacher engagement, such as teacher guides (School in a Box), and technology-enabled global mentorship (Teachers for Teachers: Strengthening Support for Refugee Teachers). Of these 29 interventions, 20 targeted refugees, with a few focusing on IDPs and host communities. Only four of the 29 teacher training interventions we identified had a reliable M&E component.

Twenty-three other interventions included financial and material support for education. These interventions were found across 12 countries and targeted IDPs, refugees, and host communities. Nine interventions offered support in terms of learning materials, such as notebooks, books, and backpacks, often in combination with teacher training and infrastructure development. Some contributed to the development of national schools, while others—such as the School-in-a-Box kits in Rwanda and Mauritania—responded to complementary needs. Eight interventions provided financial assistance, two contributed to teachers’ stipends, and others provided scholarships and tuition support to students or paid for lodging for secondary school students. Interventions were aimed at national, parallel, and complementary systems, with the aim of increasing the retention of high-quality teachers and improving access to schooling. Twelve interventions included the construction or improvement of existing school buildings and infrastructure. These programs mainly focused on expanding access to formal and nonformal education, but some also improved quality and well-being by providing ICT facilities and creating gender-sensitive classrooms. We did not find any M&E data for these interventions.

5.4.9 Social and Emotional Learning

We identified 22 interventions focused on SEL and PSS across 13 countries. Only two interventions are integrated into the national school system; the remainder run parallel to (eight interventions) or complement (12 interventions) the national education system. Eleven of the 22 interventions are set in urban areas. The identified interventions are mostly (12 out of 22) nonformal in nature. Almost half of the interventions (10 out of 22) are implemented in more than one country. For instance, the Healing and Education through the Arts program is operational in 22 countries, including Egypt, Haiti, Iraq, Jordan, Lebanon, South Sudan, Syria,
and Uganda. The social emotional learning and PSS interventions target a diverse group of participants, such as out-of-school children, pre-primary and primary school-aged children, youth, and adults. Ten of the 22 interventions have developed their own curriculum to be implemented in their programs. For example, the Skate and Create program in Afghanistan uses a customized, arts-based curriculum with semester-long educational topics. Of the 22 interventions, only three have a reliable, ongoing M&E component.

5.4.10 Peacebuilding and Social Cohesion

We identified eight interventions across four countries that targeted peacebuilding and social cohesion. Of these, four focused on peacebuilding and four focused on social cohesion. Programs in Afghanistan, Colombia, and Iraq targeted IDPs, including ex-combatants, while the interventions in Pakistan targeted refugees. All interventions either ran parallel to or complemented the national education system, with only two programs connecting to formal schooling. The peacebuilding interventions covered a range of topics, such as peaceful conflict resolution and human rights education, cultural tools, and communicative competences training. The four programs focused on social cohesion paid extra attention to literacy and remedial education. A program for Afghan refugees in Pakistan, delivered by Relief International, is particularly noteworthy. This program included an advocacy campaign to help caregivers understand how to enroll their children in school, explain the benefits of education, and address any cultural or religious concerns about children’s school attendance. The program made caretakers an integral part of keeping children from vulnerable families in school. We did not find any ongoing M&E efforts for these interventions.

5.4.11 Child Protection

We identified 14 child and social protection interventions across eight countries, of which 11 focused on child protection and three focused on social protection. The three social protection interventions are conditional cash transfer programs; they are all part of the national system and are seeking to ensure access to education for refugee children. The child protection programs had a wider range of focus areas, including children’s rights and participation, safety from violence, gender awareness, and the inclusion of children with disabilities. A lot of these programs were nonformal and offered a temporary response to the refugee situation, using a parallel system. While many of the child and social protection topics—especially protection from violence, gender equality, and equity—are relevant across populations, a more formalized approach in the national system could be helpful. The current contribution of these interventions is unclear as they all lack M&E data and could be strengthened by adopting a more integrated approach.

5.4.12 School Feeding

We identified two interventions focused on school feeding in two countries: Mauritania and Rwanda. Both these interventions are nonformal in nature, focusing on refugees in camps. These interventions use existing physical infrastructure for implementation, such as preschool centers and schools in camps. While the intervention in Mauritania runs parallel to the national school system, the program in Rwanda is set up to be complementary. The school feeding program in Rwanda has reliable, ongoing M&E; it is unclear whether the program in Mauritania has an M&E component. An internal M&E evaluation of the Rwanda program found that overall, beneficiaries considered the intervention adequate for their needs.

5.4.13 Water and Sanitation (WASH)

We identified five WASH interventions across three countries: Ethiopia, Pakistan, and Sudan. The interventions focused on refugees in Ethiopia and Pakistan and IDPs in Sudan. Four of the interventions—which constructed WASH facilities, primarily latrines for children at school—were integrated into the national education system. The fifth program was part of a parallel intervention in an informal school setting. In this program, girls in a refugee camp in Pakistan received education in personal hygiene, home management skills, and religion. After gaining trust, the girls’ education expanded to cover subjects like language, math, and history. All five programs were gender sensitive. With the exception of the girls’ education program in Pakistan, all the construction programs included separate latrines for boys and girls, which enabled girls (especially older girls) to stay in school. None of the five interventions had reliable M&E data.
6. DISCUSSION

MAIN EVIDENCE AND INTERVENTION GAPS

While the evidence on EiE programming has increased considerably since 2015, the 194 interventions we identified through the mapping exercise remain largely unresearched, thus confirming that significant gaps remain. Our synthesis includes a total of 244 studies, including 32 experimental and quasi-experimental studies, and 202 qualitative studies completed since 2015 that focus on education in forced displacement contexts. In addition, we included 14 studies that included cost data. Thus, the evidence base is considerably larger than that identified in a previous comprehensive evidence synthesis conducted by Burde and colleagues (2015).

We found many qualitative studies that met a quality threshold for inclusion in the review. These studies covered categories ranging from programs focused on peacebuilding and SEL to those focused on technology in education, enabling us to examine perceived effects on access to education, learning outcomes, and children's well-being as well as gain insights into the mechanisms through which such programs can achieve benefits in forced displacement contexts.

We found only a limited number of studies that make credible claims about the impact of education programs on access to education, learning outcomes, and children's well-being in forced displacement contexts, but were able to conduct meta-analyses for some intervention categories. Most of the studies we included suffered from a medium or high risk of selection bias; nevertheless, we were able to conduct meta-analyses on the effects of technology-in-education and SEL programs, indicating that the evidence from these categories has increased considerably since 2016. A meta-analysis showed that technology-in-education programs (ranging from digital game-based technology to distance education through education apps) has positive impacts on learning outcomes, particularly for out-of-school children. Further, a meta-analysis of programs on SEL showed that these programs can reduce depression and PTSD. We only found a small number of experimental and quasi-experimental studies for other program types, indicating that the evidence base is still too limited to make strong claims about the effects of these interventions. The available evidence also comes from limited contexts with specific capacities and policies, thus limiting the external validity of the included experimental and quasi-experimental studies.

We found only three studies that combined credible impact estimates from rigorous experimental or quasi-experimental studies with cost data, which indicates a large evidence gap in this area. These same studies showed the importance of including cost data in impact evaluations, especially because differences in costs between providers (e.g., local government versus NGO) were substantial. The few cost-effectiveness analyses included in our review showed that costs differ considerably over time, with scale, and by provider. For example, the Kepler program would be less costly to implement because it no longer requires the start-up costs of developing the curriculum for implementation in Kiziba refugee camp, Rwanda (de Hoop et al., 2019b). In addition, the costs of CBE are considerably lower when transferring the implementation from international NGOs to village-based institutions and local governments in Afghanistan after an initial start-up phase that requires investment and expertise in community mobilization. Importantly, however, the current evidence base does not allow for making strong conclusions about the cost-effectiveness of education programming for displaced learners. This would require greater access to cost data and combining these cost data with impact estimates of education interventions on access to education, learning outcomes, and children's well-being.

These and other examples illustrate the importance of prioritizing research on government-supported programs and programs that work within national education systems; currently, however, very few studies focus on the effectiveness of such programs. Further, we see from the intervention map that the majority of the programs operated in parallel to national education systems. In addition, the minority qualitative studies discussed the ways in which education programs worked to include displaced populations in national systems, reinforcing the fact that current evidence
While quantitative surveys may also result in social desirability bias, this bias is unlikely to play a role in providing and supporting education in forced displacement contexts.

**IMPACT ON ACCESS TO EDUCATION, LEARNING, AND PSYCHOSOCIAL OUTCOMES**

Preliminary evidence suggests that education programs in forced displacement contexts may achieve larger effects on access to education and learning outcomes than programs that focus on populations with relatively low baseline levels of school enrollment and large numbers of out-of-school children. For example, we found larger effects of CBE and cash transfer programs in contexts in which school enrollment and attendance were relatively low. In addition, we found some evidence of larger effects of technology-in-education programs on the learning outcomes of out-of-school children.

In general, impact evaluations of technology-in-education programs showed some evidence that such programs can achieve positive effects on learning outcomes in forced displacement contexts. Clearly, the design and implementation of technology-in-education programs has improved since initial pilots were shown to be less effective. Nevertheless, it is important to continue critically examining the design and implementation of technology-in-education programs, because various evaluations showed important implementation challenges, including a lack of adaptive tailoring to individual strengths and contextually appropriate content. In particular, we hypothesize that teacher training may be critical to achieve positive effects of technology-in-education programs on learning outcomes.

In addition, we found some evidence that programs focused on SEL/PSS can be effective in reducing the likelihood of depression and PTSD. A meta-analysis of these programs showed statistically significant reductions in these outcomes despite the fact that only a minority of the individual studies showed statistically significant effects. An analysis of the qualitative aspects of studies on PSS and SEL indicated that programs that aim to provide direct PSS through activities for students and teachers—such as counseling, dialogue, and emotion regulation practice—would be more likely to affect outcomes than programs that indirectly aim to improve psychosocial outcomes through other modalities. This is consistent with the quantitative synthesis, which showed only mixed evidence for positive effects of education programs on psychosocial outcomes.

While various other studies showed promise in improving access to education, learning outcomes, and children's well-being, the evidence is too limited to make solid claims about the effects of such programs. It will be important to continue to strengthen the research to make more decisions guided by evidence on education programming in forced displacement contexts.

Nonetheless, qualitative evidence provided some important insights into how children, parents, and other key stakeholders currently perceive the effects of education programs in forced displacement contexts. In addition to some of the findings described previously, qualitative results indicated that participants were more likely to perceive that programs were more effective than was evident in the quantitative data. A variety of reasons may account for this perception. For example, teachers, parents and caregivers, or other informants may have captured changes in individual-level behaviors of students that either were too hard to measure in quantitative research or not consistent enough to show a quantitatively significant difference. Alternatively, the qualitative research study respondents might have faced some challenges in addressing counterfactual questions about how much children would have learned in the absence of the program. In addition, qualitative research on the effects of education programs may suffer from social desirability bias in which respondents answer questions in a manner that is viewed favorably by others. Importantly, the qualitative findings point to a general willingness and interest among displaced populations to engage with education programming, as well as a vested interest in ensuring the high quality and utility of education.

In addition, qualitative studies on peacebuilding and social cohesion, as well as the relational components of programs across topic areas, underscored the importance of directly addressing drivers of conflict at both the individual and the macro levels. The evidence indicated that displaced and host populations found that efforts to discuss social challenges related to education were useful both for making displaced populations feel...
included and for assuaging feelings of resentment or misunderstanding among host communities. Likewise, it was clear that teachers and administrators could benefit from training that helps them address conflict at school while simultaneously considering their individual needs and experiences related to conflict, though these efforts were limited.

COST-EFFECTIVENESS

Although we were able to present cost-effectiveness estimates only for three studies, the results of our analysis showed promising findings. For example, CBE in Afghanistan is among the most promising education interventions to cost-effectively improve access to schooling and learning outcomes for children in forced displacement contexts (Bhula, Mahoney, & Murphy, n.d.). The Kepler program also showed potential for cost-effectively improving learning outcomes for refugee youth in Rwanda and other contexts if the program can reduce its start-up costs based on lessons gained from evaluation of the Kiziba refugee camp program.

However, as discussed earlier, it is critical to learn more about the costs and cost-effectiveness of government-implemented education programs in forced displacement contexts. Estimates of these costs may be considerably lower than those of programs that are most commonly covered in the current research literature.

Preliminary evidence suggests that it may be feasible to cost-effectively transfer education programs in forced displacement contexts from international NGOs to local government agencies. For example, a study on CBE in Afghanistan showed that while the expertise of international NGOs may be required in setting up cost-effective CBE programs, village-based institutions likely could implement such programs more cost-effectively in the long term. However, much more evidence is required to present more definitive recommendations on ways to implement education programs in forced displacement contexts.

Further, more evidence on the costs of education programs is critical for examining ways to effectively move education programs to scale in forced displacement contexts. Several studies that we included in our analysis indicated that the costs per student may decline when education programs move to scale (de Hoop et al., 2019b). However, more evidence is needed to examine this mechanism in detail.

SUSTAINABILITY AND INCLUSION IN NATIONAL SYSTEMS

Some studies discussed concern about program sustainability because of lack of available resources, local ownership, and government buy-in. Studies on remedial and accelerated education and WASH, for example, indicated that sustainability is the most critical challenge in need of ongoing efforts. The WASH studies described a lack of a robust institutional structure, a multisectoral network, or resources to maintain operation of the facilities in humanitarian contexts (FHI 360, 2016; UNICEF, 2016c), while others mentioned that programming lacked government buy-in at the policy level. One study concluded that unless issues and capacity building are integrated into government policies and strategies, challenges will remain (Society for Sustainable Development of Afghanistan, 2017).

Very few studies examined the ways in which integration into government policies and strategies could improve sustainability. For example, in Afghanistan, a proposal to recruit only teachers who meet government requirements may increase the chances of successful adoption of effective CBE programs by MoEs (Burde et al., 2016). Other examples come from Jordan and Sudan, where continued engagement between War Child Holland (WCH) and the government plausibly increased the likelihood that MoEs will adopt the CWTL program into national education systems (de Hoop et al., 2019b). However, a study by Burde and colleagues (2019) showed that the adoption of CBE programs within national education systems requires well-coordinated support from national, provincial, and district government authorities, including a funding mechanism.

The studies that did find an increase in perceptions of relational integration or social cohesion resulted from interventions that directly worked to facilitate relationships between host communities and displaced populations. However, qualitative studies pointed to a disconnect between international and national policies that promoted inclusion and realities on the ground in forced displacement settings. Research on policies, practices, and teacher and student experiences indicated that even in countries with inclusive educational policies for refugee students (such
as Turkey, Jordan, and Uganda), discrimination persists and can deter refugees from accessing educational opportunities to which they are legally entitled. Policies may support structural integration at the legal level, but reality may impede relational integration between host communities and displaced populations (Dryden-Peterson, 2016).

**RECOMMENDATIONS FOR FUTURE RESEARCH**

We recommend a stronger emphasis on research focused on government-implemented education programs in forced displacement contexts to increase the transferability of research findings to larger scale education programming in forced displacement contexts. Ideally, such research should include larger sample sizes to enable the estimation of differential effects of subgroups and the collection of both cost and impact data. It is critical to increase the number of studies that focus on the cost-effectiveness of education programs in forced displacement contexts, to enable decision making about the distribution of resources by MoEs, and bilateral as well as multilateral donor agencies. In addition, it continues to be important to strengthen the available evidence on the impact of education programs on access to education, learning outcomes, and children’s well-being in forced displacement contexts, particularly for ECD, post-secondary education, and reading programming: while we identified a considerable number of programs in these areas in the intervention map, there is a dearth of rigorous evidence on ECD, post-secondary, and reading programs.

Secondly, we recommend that future research focuses on the extent to which programs make efforts to and are able to promote inclusion of displaced populations into national education systems. By extension, we recommend that future research place a stronger emphasis on the potential for scale-up. We did find a number of studies related to policy and teacher and student experiences with inclusion; however, evaluations that specifically assess the ways in which programs that focus on access, learning, and psychosocial outcomes can eventually lead to inclusion of students in national systems are extremely limited. Thus, these programs may not be coordinating with national governments specifically on the goal of inclusion. This recommendation relates closely to findings from the HEA study (de Hoop, 2019b), which suggested that pilot programs should coordinate closely with national and local governments to facilitate scale-up and eventual inclusion.

Thirdly, we recommend that future research carefully distinguishes which interventions and corresponding findings pertain to refugees, IDPs, returnees, host communities, or a combination of these groups. Most of the existing evidence fails to make these distinctions, and therefore it is impossible to differentiate the effectiveness (or even the sheer existence) of education programs by displacement type.

Finally, we recommend conducting more in-depth cost analyses of programs for which impact estimates are available, but for which cost data are currently missing. Obtaining access to these cost data would enable researchers to augment the existing evidence on the cost-effectiveness of education programs. Other analyses that researchers may be able to consider performing with additional data include comparisons of costs between government- and NGO-implemented education programs and comparisons of the costs of education in refugee camps relative to urban contexts in host countries.

**CASE STUDY COUNTRY CONSIDERATIONS**

Based on the findings from the evidence synthesis and intervention mapping, we make preliminary suggestions for potential case study countries in Exhibit 30. The Phase II case studies will highlight the institutional, political, and sociocultural factors that facilitate or constrain the establishment of inclusive and resilient education systems, with a specific focus on inclusion of displaced populations into national education systems. The evidence generated from these case studies will produce the following: (a) a proposed action plan and decision tools for governments; (b) toolkits for operational teams, including strategies for engaging host governments and development partners, and assessing the scope of the resource needs and the institutional capacities required for an inclusive and resilient system; and (c) monitoring tools for accountability and participation for all stakeholders. In addition, our recommendations from the evidence synthesis will be stronger with primary research that considers the local, national, and international perspectives and policy challenges related to inclusion.
Based on the findings from the evidence synthesis and intervention mapping, the team has determined that it is important to examine diverse cases\(^\text{16}\) (Seawright & Gerring, 2008) with variation in the following: number of displaced persons, policy on access to host country education systems, the extent to which inclusion has been studied, income status of the host country; current conflict status, and access to cost data.

To contribute to addressing evidence gaps on the costs and cost-effectiveness of EiE programs, it will be important to ensure that we have sufficient access to cost data of education programs for at least a subset of the selected countries. Gaining access to and analyzing such cost data will enable us to contribute to addressing evidence gaps on the costs of EiE programming. Ideally, we would also combine cost data of specific education interventions with impact estimates from the evidence synthesis. For example, for the current list of countries, we may be able to combine impact estimates from impact evaluations of specific education interventions in Nepal, the DRC, and Colombia with cost data from programs evaluated in those studies if cost data would be available for those programs.

Exhibit 29 presents a list of potential case study countries that reflect variation in geography, policy environment, and capacity to account for the success factors and barriers to including refugee populations in national education systems. We will work with the World Bank and UNHCR to select 6-8 countries from this list.

\(^\text{16}\) Diverse cases vary along dimensions of interest. In education interventions for the forcibly displaced, diverse cases could vary in terms of, for example, the partnership models adopted in each place, the types of interventions, the geographic regions or countries, and/or the type of displaced population affected by a humanitarian development intervention.
### EXHIBIT 29. CASE STUDY COUNTRY SELECTION RECOMMENDATIONS AND RATIONALE

<table>
<thead>
<tr>
<th>Potential Case Study Country</th>
<th>N Displaced</th>
<th>Policy Status(^{17})</th>
<th>Evidence</th>
<th>Income Level</th>
<th>FCAS</th>
<th>Access to Cost Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turkey</td>
<td>5,900,000**</td>
<td>Explicit /Inclusive</td>
<td>High</td>
<td>Upper Middle</td>
<td>No</td>
<td>Unclear</td>
</tr>
<tr>
<td>Ecuador</td>
<td>381,500**</td>
<td>Explicit/Inclusive</td>
<td>Low</td>
<td>Upper Middle</td>
<td>No</td>
<td>Unclear</td>
</tr>
<tr>
<td>Colombia</td>
<td>1,100,000**</td>
<td>Unclear</td>
<td>Low</td>
<td>Upper Middle</td>
<td>No</td>
<td>Unclear</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>2,371,815*</td>
<td>No access</td>
<td>High</td>
<td>Low</td>
<td>Yes</td>
<td>Unclear</td>
</tr>
<tr>
<td>South Sudan</td>
<td>1,968,657*</td>
<td>Explicit/Inclusive</td>
<td>High</td>
<td>Low</td>
<td>Yes</td>
<td>Unclear</td>
</tr>
<tr>
<td>Sudan</td>
<td>1,200,000**</td>
<td>Not explicit/ access</td>
<td>Low</td>
<td>Lower Middle</td>
<td>Yes</td>
<td>Unclear</td>
</tr>
<tr>
<td>Chad</td>
<td>476,399*</td>
<td>Explicit/Inclusive</td>
<td>Low</td>
<td>Low</td>
<td>Yes</td>
<td>Unclear</td>
</tr>
<tr>
<td>Mauritania</td>
<td>64,564*</td>
<td>No access</td>
<td>Low</td>
<td>Lower Middle</td>
<td>No</td>
<td>Unclear</td>
</tr>
<tr>
<td>DRC</td>
<td>963,800**</td>
<td>Unclear</td>
<td>Low</td>
<td>Low</td>
<td>Yes</td>
<td>Unclear</td>
</tr>
<tr>
<td>Nepal</td>
<td>490,800**</td>
<td>Unclear</td>
<td>Low</td>
<td>Lower Middle</td>
<td>No</td>
<td>Unclear</td>
</tr>
<tr>
<td>Jordan</td>
<td>3,300,000**</td>
<td>Not explicit/ access</td>
<td>High</td>
<td>Lower Middle</td>
<td>No</td>
<td>Unclear</td>
</tr>
<tr>
<td>Rwanda</td>
<td>539,900**</td>
<td>Not explicit/ access</td>
<td>Low</td>
<td>Low</td>
<td>No</td>
<td>Unclear</td>
</tr>
<tr>
<td>Pakistan</td>
<td>1,420,673*</td>
<td>Not explicit/ access</td>
<td>High</td>
<td>Lower Middle</td>
<td>No</td>
<td>Unclear</td>
</tr>
</tbody>
</table>

Source: The numbers in the “N displaced” column are from two sources: a “**” next to the number indicates that the number is from the UNHCR Operational Portal [https://data2.unhcr.org/en/countries/]; a “*” next to the number indicates that the number is from the Migration Data Portal [https://migrationdataportal.org/]

\(^{17}\) The research team received these classifications from UNHCR, and they are defined in Annex A.


Bahou, L. (2016). ‘Why do they make us feel like we’re nothing? They are supposed to be teaching us to be something, to even surpass them!’: Student (dis)engagement and public schooling in conflict-affected Lebanon. *Cambridge Journal of Education*, 1–20. doi:10.1080/0305764X.2016.1216086


Global Coalition to Protect Education from Attack. (2019). ‘All that I have lost’: Impact of attacks on education for women and girls in Kasai Central Province – Democratic Republic of Congo.


Lorisika, I., Cremonini, L., & Safar Jalani, M. (2015). Study to design a programme/clearinghouse providing access to higher education for Syrian refugees and internal displaced persons: Final report. PROMAN.


UNICEF. (2016a). Developmental evaluation for the peacebuilding, education, and advocacy programme in Myanmar.


USAID. (XXXX). Developing rehabilitation assistance to schools and teachers improvement (D-RASATI 2): Final performance evaluation report.


Zino, B. (2019). Beyond policy: Governments, NGOs and the provision of educational services to refugee children in Turkey, Jordan, and Lebanon [Doctoral dissertation, Rutgers University-Graduate School-Newark].
ANNEX A. KEY TERMS AND DEFINITIONS

In this study, we use the terms education in emergencies, education in humanitarian contexts, and education in crises interchangeably to refer to the education interventions designed to meet the education needs of populations affected by conflict and crises. Although notions of emergency or crisis imply sudden and intense disruptions evoking rapid responses, humanitarian crises often endure for years, leading to the “protracted” nature of the crises (Burde, Guven, Kelcey, Lahmann, & Al-Abbadi, 2015).

Keeping in mind that emergencies are uneven and that the label may seem like a misnomer to those actually living their daily lives amid crises or conflicts (Burde, 2014), for the sake of analytical clarity, we offer the following definitions here. First, a crisis is a situation in which a community has been disrupted by armed conflict, natural disaster, or severe human rights violations, thereby provoking instability and humanitarian concerns (Burde et al., 2015). Depending on the time and intensity, crises may be characterized as acute or protracted. Second, an acute crisis presents events creating disruptions that are recent or have recently intensified, such as an initial phase of a conflict or a worsening situation of conflict. Third, we follow the United Nations High Commissioner for Refugees’ (UNHCR’s) definition of a protracted crisis as one in which at least 25,000 refugees from the same country or origin have spent 5 or more consecutive years in exile. Thus, a protracted crisis will include not only the humanitarian elements of the conditions created by the crisis but its political and strategic aspects. Finally, acute and protracted crises are not always mutually exclusive. Protracted crises may present acute events that require urgent attention. We include research and programming from both acute and protracted crises into our discussion of EiE in this study.

For the purposes of this study, education in forced displacement contexts is a subset of education in emergencies. Forced displacement settings include the countries of origin that are affected by conflict and crises, as well as the countries of asylum that receive the displaced populations. Low-, middle-, and high-income countries around the world all host displaced people that flee conflict and natural disasters. Low- and middle-income countries are often the first destination for displaced populations, a small number of whom are then resettled in high-income countries. Although high-income countries also receive refugees, we focus on low- and middle-income countries in this study—as well as the countries of origin—that host the majority of the world’s displaced.

Finally, this research focuses on education interventions that aim to improve education outcomes (access, quality, and well-being) for both the displaced and host children and youth. These interventions include the actions of national and local government, UN agencies, and international and national nongovernmental organizations (NGOs). On the basis of Burde et al. (2015) and Burde, Kapit, Wahl, Guven, & Skarpeteig (2017) we distinguish between two types of education interventions: interventions that provide support to administration, infrastructure, and resources, which also encompasses those that contribute to system strengthening, and those that focus on educational content and practices (see the “Theory of Change” for more detail). These interventions target both formal and nonformal learning that takes place either in a national education system (i.e., in government schools) or in alternative learning spaces, such as non-government camp schools, NGO offices, community centers, or other learning spaces.

DEFINING POLICY STATUS

The research team received guidance from UNHCR on how to categorize countries’ policy status regarding access to education for displaced populations. These terms are defined as follows:

- **Explicit**: Existing or pending explicit education policy or asylum law with provisions for access to national schools/exams in host country national system schools.
- **Not explicit/access**: No explicit education policy; refugees can access host country national schools/exams through application of the 1951 convention, regional practices and/or other legal frameworks and instruments.
- **No access**: Refugees do not access national schools/exams.

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18 This may change if, for example, the refugees in question are well integrated into the education system of a high-income country (e.g., refugees from Bosnia living in New York City).
INCLUSION AND INTEGRATION INTO NATIONAL SYSTEMS:

In this study, we use the term *inclusion* to examine access to national education systems for forcibly displaced populations. Inclusion into national systems generally occurs in two ways: (1) displaced and host community students study together in the same classrooms in public schools; and (2) displaced students do not have access to public schools, but they can follow state curriculum, take national examinations, and receive certification (Dryden-Petersen et al., 2019; UNHCR, 2017).

The terms inclusion and integration into national systems are often used interchangeably in the context of forced displacement and education. Although there is little distinction between the two concepts, we prefer to use inclusion for two reasons. First, in addition to physical or structural access to national systems (i.e., inclusion), integration denotes identity transformation among refugees and their sense of belonging in the host community (Bellino & Dryden-Peterson, 2018; Dryden-Peterson et al., 2019). The term integration thus presumes future opportunities for refugees (e.g., sociocultural or economic integration), which may or may not be available through structural inclusion into national systems (ibid). Second, refugee inclusion is the accepted term for UNHCR in relation to both education and other sectors (UNHCR, 2019; UNHCR, 2020b).

PARALLEL SYSTEMS EDUCATION:

We use the term parallel systems to refer to education programs that operate outside of national school systems. These initiatives are typically uncertified by the host government. An example of such an intervention is an open-air school run by educated adults who are not trained teachers. As a UNHCR (2018) review of refugee education notes, they “persist as a temporary response to refugee emergencies, even though they are usually of poor quality, are far less likely to follow a formal curriculum, and result in unrecognized certification.”. Such systems typically do not aid a displaced student in progressing to formal secondary education in the host country because their education in parallel systems is not certified.

COMPLEMENTARY EDUCATION:

We use the term complementary education to refer to systems of education that are not meant as non-formal alternatives to the state-run education system but are designed specifically to complement them (DeStefano and Moore, 2010). They use a variety of approaches to help children achieve the same educational objectives as in state schools (Save the Children, UNHCR & Pearson, n.d.). Typically, they serve populations that have limited access to government-provided schooling. “non-formal learning opportunities for refugee children to catch-up, learn and thrive in host country formal education systems.”

FORMAL EDUCATION:

We use the term formal education to refer to education that is provided in the system of schools, colleges, universities, and other state-recognized educational institutions that constitutes a progression of full-time education for children and young people. (UNESCO, 2020) Children typically enter this system of learning between the ages of five to seven and, depending on the context, continuing up to 20 or 25 years old.

NONFORMAL EDUCATION:

We use the term nonformal education to refer to education that is “is an addition, alternative and/or a complement to formal education within the process of the lifelong learning of individuals.” (UNESCO, 2013). This type of education is generally institutionalized and planned by an education provider. It differs from formal education in that it does not have a continuous pathway-structure. It is typically provided in the form of short courses, workshops or seminars. It differs from formal education in another way: education provided through nonformal providers is not recognized by the relevant national educational authorities.
We calculated the standardized mean difference and the standard error for each of the outcome measures in each of the studies that meet the inclusion criteria. However, we conducted meta-analyses only for outcome measures that are included in three or more studies that focus on similar programs for studies that have a low risk of selection bias.

**For quantitative intervention studies,** we calculated effect sizes for each eligible study. We used the effect sizes to conduct a meta-analysis that pools effect sizes across studies to “identify patterns among study results, sources of disagreement among those results, or other interesting relationships that may come to light in the context of multiple studies” (Stone, de Hoop, Coombes, & Nakamura, 2016, p. 26). We also calculated standard errors and 95% confidence intervals when possible. We calculated Hedges’ g sample size–corrected standardized mean difference (SMD) for continuous outcome variables:

We calculated Cohen’s $d$ by dividing the mean difference by the pooled standard deviation:

$$
SMD = \frac{Y_t - Y_c}{S_p}
$$

where $Y_t$ is the outcome for the treatment group, $Y_c$ is the outcome for the comparison group, and $S_p$ is the pooled standard deviation, calculated as follows:

$$
S_p = \sqrt{\frac{(SDy^2)(nt+nc-2)-(\beta^2(nt+nc))}{nt+nc}}
$$

Equation 1

$$
S_p = \sqrt{\frac{(nt-1)st^2+(nc-1)sc^2}{nt+nc-2}}
$$

Equation 2

Where $SDy$ is the standard deviation for the point estimate from the regression, $nt$ is the sample size for the treatment group, $nc$ is the sample size for the control group, and $\beta$ is the point estimate. We used Equation 2 for regression studies with continuous dependent variables and Equation 3 when information about standard deviations for treatment and comparison groups is available.

To transform Cohen’s $d$ into Hedges’ $g$:

$$
SMD_{corrected} = SMD(1-\frac{3}{4\times(nt+nc-2)-1})
$$

To calculate the standard error of the SMD:

$$
SE = \sqrt{\frac{nt+nc}{nt+nc} + \frac{SMD^2}{2\times(nc+nt)}}
$$

We imputed effect sizes and standard errors based on $t$ or $F$ statistics or $p$ and/or $z$ values, using David Wilson’s meta-analysis effect-size calculator, wherever we were unable to calculate effects sizes because of missing data.
C.1 EVIDENCE REVIEW PHASES

The evidence synthesis included the following phases, detailed below: (1) determining the relevant population, intervention, comparisons, and outcomes (PICO); (2) determining the relevant study types; (3) developing the search strategy; (4) searching for evidence; (5) applying inclusion criteria; (6) reviewing full text using quality review protocols; (7) analyzing results; and (8) triangulating findings.

Determining the relevant population, intervention, comparisons, and outcomes (PICO)

We determined the terms to return articles with relevant populations, interventions, comparisons, and outcomes (PICO) based on the research questions, knowledge about education in humanitarian contexts, and understanding of experimental and quasi-experimental methods. Our PICO criteria were as follows:

- **Population**: refugee*, displace*, IDP, humanitarian, exile*, asylum seeker*, host countr*, host communit*, forced migration, humanitarian, conflict, crisis, disaster, fragile state, conflict-ridden, crisis-affected, fragile country, low-income countr*, middle-income countr*, developing countr*, less developed country, LMIC
- **Interventions**: school, learn*, educat*, teach*, programme, program, project, intervention
- **Comparators**: none.
- **Outcomes**: achievement, attendance, enrollment, enrolment, evaluat*, attainment, psychosocial, well-being

Our target population included refugees, asylum seekers, IDPs, and other displaced populations in low- and middle-income countries. We restricted our search to return evaluations specifically of interventions, projects, and programs on education. We did not include comparator terms so that our searches would return qualitative studies, most of which do not have comparison groups. Finally, we determined outcome criteria to reflect the outcomes of interest in our ToC, including access, quality, and well-being.

Determining the relevant study types

We included two study types in the evidence synthesis: 1) experimental or quasi-experimental quantitative studies with a control or comparison group, and 2) qualitative studies of programs or interventions.

To collect evidence on the impact of education interventions on refugee, displaced, and host populations, we included both experimental studies that use random assignment to the intervention and quasi-experimental designs with non-random assignment. To be included, quasi-experimental studies needed to use either known allocation rules (such as assignment on the basis of a threshold on a continuous variable or geographic variation in the assignment of the program) or include pre- and post-test measures of the outcome variable of interest. Knowledge about allocation rules may enable the use of regression discontinuity designs or natural experiments to determine the impact of the program, while the inclusion of pre-test and post-test measures of outcome variables enable researchers to use methods that control for selection bias, such as interrupted time series models, difference-in-differences regression analysis, statistical matching (e.g., propensity score matching or covariate matching), instrumental variables, and Heckman selection models.

We only included quasi-experimental studies that used methods that can credibly address selection bias. Cook, Shadish, and Wong (2008) and Shadish (2011) demonstrate that quasi-experimental studies can address concerns regarding selection bias, but only under certain conditions. Controlling for selection bias from covariates and including pre-test measures of outcome variables are particularly effective in reducing selection bias (Shadish; Steiner, Cook, Shadish, & Clark, 2010). We therefore only included quasi-experimental studies that either included a baseline measurement of the outcome of interest or other relevant confounding factors or in which allocation rules enable the use of regression discontinuity designs or analyses on the...
basis of natural experiments. We excluded quasi-experimental studies that do not include a baseline measure of the outcome of interest and do not enable the use of either regression discontinuity designs or analyses on the basis of natural experiments.

To fully address Research Question 1, we also included qualitative evidence with relevant details on intervention design, implementation, and context. Following the approach of Snilstveit and colleagues (2016) systematic review on the effects of education programs on education access and learning outcomes in low-and middle-income countries, we included qualitative studies focused on interventions meeting at least one of the following two criteria:

1. A study collecting primary data using qualitative methods of data collection (e.g., interviews, document review, focus groups), and analysis and reporting on all of the following: the research question, the procedures for collecting data, and the sampling and recruitment.

2. A process evaluation assessing whether an intervention was implemented as intended. Process evaluations may include the collection of qualitative and quantitative data from different stakeholders to cover subjective issues, such as perceptions of intervention success, or more objective issues, such as how an intervention was operationalized.

Finally, our searches returned some qualitative research articles that examined schools and systems aiming to mainstream refugees, but that did not follow a specific intervention. Because we included “intervention or program” as part of our search terms, it is likely that we did not return all of the existing “nonintervention” qualitative evaluations. Nonetheless, we decided to review the qualitative articles that examined integration of displaced populations into national education systems and that passed our quality threshold. We separately analyzed these studies in the qualitative synthesis.

Search strategy, evidence search, and applying inclusion criteria

This section provides an overview of our search strategy, evidence search, and process for applying inclusion criteria. Section C.2 includes more detailed information on these processes.

We used the study PICO criteria to develop separate search strings for each database, as it is not possible to use standardized search strings across databases. We also included a timeframe of 2015–2020 in the search parameters, which we determined to limit our results to studies published since the comprehensive Burde et al. systematic review (2015). We aimed to make the search strings as broad as possible within the timeframe and criteria of interest to retrieve the maximum amount of potentially relevant items from all databases. We conducted two rounds of searches as follows:

1. First, following the development of the search strings, researchers searched international education-focused databases to identify articles from peer-reviewed academic journals. We simultaneously conducted a comprehensive search of websites of prominent international development organizations and academics in the field to identify unpublished, or “gray,” literature, which included unpublished evaluations of education programs for displaced populations. We conducted an initial scan of titles and abstracts for the articles resulting from this first round of searches against the PICO criteria to determine which articles would move to the full text review stage (described in the following section). See Annex D for additional details on the inclusion criteria.

2. Second, to capture additional relevant studies, we reviewed bibliographies of accepted articles to identify articles that the database and website searches did not identify and subsequently collected these articles. We also searched the websites of prominent academics who publish work in the field.

3. During the second round of searching, we also conducted a citation search on Google Scholar using all studies that met the inclusion criteria. First, we searched for each included paper on Google Scholar to see if any other publication cited the paper. Second, we selected the papers that were cited in at least 10 other publications. We found that 15 papers in our initial final list of studies had 10+ citations, which added up to 446 in total. We checked all of these 446 items and reviewed the studies that met the inclusion criteria. Out of 446 citations, 69 studies met the criteria to be included in our final list of papers that were analyzed for this report.

21 Because of the small number of experimental and quasi-experimental studies, we did include all experimental and quasi-experimental studies from Burde et al. (2015) even if they were published before 2015. This approach was in line with the protocol and allowed for a more comprehensive analysis enabling us to provide more detail in the quantitative synthesis. We did not search for studies published before 2015, however, and thus implicitly assumed that Burde et al. (2015) included all relevant experimental and quasi-experimental studies of education in emergency programming.
4. Finally, we also conducted a search of key terms in Google Scholar. We searched the following simple search terms: “education and forced displacement,” “education and forced migration,” “education for refugees,” “refugee education,” “education for internally displaced,” “education for IDPs.” We limited our review to the first 80 papers that showed up for each of the searches, which added up to 380 unique results after accounting for duplicates. We reviewed each of these studies against the inclusion criteria, and 40 of the studies met the criteria to be included in our full review; after we removed four duplicates, we ultimately included 36 studies from Google Scholar in our full text review and synthesis.

Researchers tracked results by database for each stage of the searches in an Excel document that specified the inclusion criteria as well as other key study indicators, as detailed in Annex D.

Reviewing full text using quality review protocols

We compiled and assigned articles—including those which met the inclusion criteria and those which were still unclear—for full-text review according to study methods. We used the following quality review protocols, which we detail in the following sub-sections:

- **Quantitative studies:** an adapted version of a risk of bias (RoB) assessment tool developed by Hombrados and Waddington (2012)
- **Qualitative studies:** an adapted version of the Critical Appraisal Skills Program Qualitative Research Checklist (Critical Appraisal Skills Program, 2018)
- **Mixed-methods studies:** both the RoB and CASP protocols.

Risk of Bias Assessment for Quantitative Studies

Researchers individually reviewed quantitative studies and the quantitative section of mixed-methods studies with experimental or quasi-experimental designs using the RoB assessment tool discussed above (Hombrados & Waddington, 2012), discussing questions and recording decision-making to ensure accuracy. We reread studies several times if something was unclear and used all available information. We based our assessment on the reporting in the primary studies, assuming that when something was not reported it was not done. For example, in those cases in which it was not clear whether standard errors were clustered, we assumed the standard errors were not clustered and used that information in our risk of bias assessment.

Adapting the RoB assessment enabled the team to evaluate rigor in the time available for this rapid evidence synthesis in line with various other published systematic reviews (e.g., Brody et al., 2015; Chinen et al., 2017b; Kersten et al., 2017; Stone, de Hoop, Coombes, & Nakamura, 2019; Waddington et al., 2014). Specifically, we assessed the risk of the following biases:

- Selection bias and confounding, to be evaluated by considering the quality of the identification strategy to determine causal effects and by assessing equivalence across the beneficiaries and nonbeneficiaries, differential attrition, and the overall level of attrition
- Performance bias, to be evaluated by determining the extent of spillovers to comparison groups and the contamination of the control or comparison group

However, we did not assess the risk of outcome and analysis reporting bias and other biases because of time constraints.

Critical Appraisal Skills Program (CASP) Research Checklist for Qualitative Studies

We used the CASP tool to assess the research design, methods, data analysis, ethical considerations, and relevance to practice of each full-text qualitative study. Reviewers assessed 10 questions (each with sub questions) per article by assigning a rating of high, medium, low, N/A, or not mentioned and justifying the rating. The questions assessed elements of research design, ethics and reflexivity, and relevance to the field.

The five qualitative reviewers first rated the same two studies to discuss ratings, make adjustments to definitions, and ensure a common understanding of the quality categories. At this stage, the team revised the protocol for understanding and added subquestions.
under the primary questions related to appropriateness, research design, recruitment, data collection, and data analysis. The remaining articles were each reviewed by one individual. We include the full quality review protocol in Annex F.

C.2 DETAILED SEARCH STRATEGY

The research team worked with other researchers and the AIR librarian to identify appropriate online databases and websites of international development organizations for our search.

- **Online Databases:** EBSCO Host (included searches in Academic Search Premier, ERIC, Education Source, APA PsychINFO), JSTOR, 3ie, ProQuest Central, ProQuest Education

- **International Development Organizations:** INEE, UNESCO, UNICEF, DFID,²² OECD, National Bureau of Economic Research, USAID, World Bank

We used the “NOT” Boolean operator to filter results from geographies that were not part of the scope of this study such as Canada, USA, Australia and other developed countries.

The ability to use Boolean logic and the rules for using it are also different across various databases. In addition, some databases limit the length of search strings, like JSTOR. As noted in the report, the team modified the search string according to each academic database. Exhibit C–1 summarizes the search strings for each academic database.

### EXHIBIT C–1. SEARCH STRINGS FOR ACADEMIC DATABASES

<table>
<thead>
<tr>
<th>Database</th>
<th>Search strings</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBSCO</td>
<td>Refugee* OR displace* OR IDP OR humanitarian AND school OR learn* OR educat* AND achievement OR attendance OR enrollment OR enrolment OR evaluat* AND programme or program OR project OR intervention NOT America OR “united states” OR Australia OR Canada OR Germany</td>
</tr>
<tr>
<td>3ie</td>
<td>(refugee OR displace* OR IDP OR exile* OR asylum seeker OR host countr* OR host communit* OR forced migration OR humanitarian OR conflict OR crisis OR disaster OR fragile state OR fragile country OR low-income countr* OR middle-income countr* OR developing countr* OR less developed country OR LMIC)</td>
</tr>
<tr>
<td>JSTOR²³</td>
<td>Search 1: (Refugee* OR displace* OR IDP OR “asylum seeker*” OR “host countr*” ) AND (school OR learn* OR educat* ) AND (quantitative OR qualitative OR “mixed method*” OR “mixed-method*”) NOT (“America” OR “Australia” OR “Canada”)</td>
</tr>
<tr>
<td></td>
<td>Search 2: (“host communit*” OR “forced migration” OR humanitarian OR conflict OR crisis OR disaster) AND (school OR learn* OR educat* ) AND (quantitative OR qualitative OR “mixed method*” OR “mixed-method*”) NOT (“America” OR “Australia” OR “Canada”)</td>
</tr>
</tbody>
</table>

²² Now UK Government.
²³ JSTOR limits characters in the search bar; as such, we split our search terms over multiple strings. Search strings with a method descriptor (quant/qual/mixed) yielded more relevant results relative to search strings that include “intervention” criteria terms such as “intervention” or “programme”. Additionally, we applied the following filters: Education, Development Studies, Economics, Peace and Conflict Studies, Political Science, Public Policy and Administration and Sociology.
## EXHIBIT C–1. SEARCH STRINGS FOR ACADEMIC DATABASES (CONT.)

<table>
<thead>
<tr>
<th>Database</th>
<th>Search strings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Search 3: (“fragile” OR &quot;low-income countr*&quot; OR “middle-income countr*” OR “developing countr*”) AND (school OR learn* OR educat*) AND (quantitative OR qualitative OR &quot;mixed method*&quot; OR &quot;mixed-method*&quot;) NOT (“America” OR “Australia” OR “Canada”)</td>
</tr>
<tr>
<td>Proquest Education</td>
<td>Refugee* OR displace* OR IDP OR &quot;asylum seeker*&quot; OR humanitarian OR conflict-affected OR conflict-ridden OR crisis-affected OR disaster OR “host countr*” OR “host communit*” AND school OR learn* OR educat* OR teach* AND achievement OR attendance OR enrollment OR enrolment OR attainment OR evaluat* OR psychosocial OR wellbeing AND programme or program OR project OR intervention NOT US OR “United States” OR USA OR UK OR “United Kingdom” OR Australia OR “Australian” OR Germany OR England</td>
</tr>
<tr>
<td>Proquest Central</td>
<td>Refugee* OR displace* OR IDP OR &quot;asylum seeker*&quot; OR humanitarian OR conflict-affected OR conflict-ridden OR crisis-affected OR disaster AND school OR learn* OR educat* OR teach* AND attendance OR enrollment OR enrolment OR achievement OR attainment OR evaluat* AND programme or program OR project OR intervention NOT “United States” OR US OR USA OR Australia* OR Canada OR Germany OR England OR “United Kingdom” OR UK OR Sweden</td>
</tr>
</tbody>
</table>

To ensure the search strings would return the most relevant results, we checked that the searches included four articles on education interventions in forced displacement settings which fit the inclusion timeframe, as recommended by our principal investigators. If the four articles were not available in the academic databases, researchers used their judgement to ensure that there was a sufficient number of relevant studies returned in the first 50 results. This additional measure helped researchers modify the search strings accordingly.

We imported citations found through the above search methods into the Mendeley reference management software (http://www.mendeley.com/). Mendeley automatically extracted bibliographic data from each reference and removed all duplicates. At this stage, we identified and exported 6,591 unique documents.

### Bibliography review

To ensure we captured all of the relevant and applicable literature, we reviewed the bibliographies of accepted articles and reports to identify relevant and high-quality studies that might fit our criteria. We then searched for these studies and applied our inclusion criteria.

---

C.3 QUALITATIVE DATA ANALYSIS APPROACH

Qualitative Analysis and Synthesis

We used an Excel spreadsheet to track information from each study on the following key content indicators: program description, population, target group, inputs, outputs, and domain of change. We also categorized studies by types of programs we had anticipated would be evaluated, namely, programs that addressed: curriculum; technology in education; psychosocial skills and social and emotional learning; reading, literacy and language policy; and remedial and accelerated education. We added the following categories of program type that emerged during analysis: teacher training; early childhood education; postsecondary education; peacebuilding and social cohesion; child protection; capacity building and systems strengthening; disaster risk reduction; and water and sanitation in schools.

Researchers analyzed the characteristics and results of all qualitative studies of interventions by the program type indicator. We categorized multiple studies under more than one program type; for example, we would analyze a study of a teacher training intervention using technology under both the ‘teacher training’ and ‘technology in education’ categories. We summarized the primary characteristics of the studies under each category, as well as common results, including approaches that were perceived as effective or ineffective based on the qualitative data. We also assessed the extent to which interventions supported inclusion of displaced populations into national education systems for each study.
ANNEX D. INCLUSION CRITERIA

We divided citations among reviewers, who applied the predetermined inclusion criteria to each title and abstract. Our inclusion criteria were purposefully broad because we did not want to miss any relevant studies. Any article that did not meet one of the following five threshold criteria was automatically excluded from further review:

- Published since 2015?
- Is the population of the study relevant?
- Is the intervention of the study education-related?
- Is this a research study?
- Is any outcome of the study relevant?

During the title and abstract reviews, reviewers selected “yes,” “no,” or “unclear” on an Excel spreadsheet for each of the inclusion criteria. If a reviewer marked “yes” for any of the five criteria, the reviewer continued onto the next criterion on the coding sheet. If the reviewer marked “yes” to all of the inclusion criteria, then they were required to fill in the remaining indicators outlined. If a reviewer marked “no” for any of the five criteria, that person stopped because the study did not meet the criteria for further review. If a reviewer marked “unclear” for any of the five criteria, the study was tagged for review by a senior reviewer.

Reviewers then used the same Excel spreadsheet to record key indicators for literature that met all five inclusion criteria. To record key indicators, the team used a tracking format we developed and used for a similar review (Stone, de Hoop, Coombes, & Nakamura, 2016). The tracking format included inclusion criteria: the way the document was located, the country of focus, region, World Bank income level of the country of focus, the target group, whether the study reports cost data, whether the study is an experimental or quasi-experimental study, and the reviewer(s).
# ANNEX E. QUANTITATIVE RISK OF BIAS ASSESSMENT TOOL AND RISK OF BIAS ASSESSMENT FOR INCLUDED QUANTITATIVE STUDIES

<table>
<thead>
<tr>
<th>Study Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost data available?</td>
</tr>
</tbody>
</table>

## Evaluation Design

### Ask these questions for all quantitative studies

- Which outcomes that are relevant for the review are measured in the study?
- Provide the authors definition of each included outcome that is relevant for the review
- Describe methods of data collection
- What is the frequency of outcome data collection?
- At which level was assignment to treatment and control/comparison group conducted?
- Does the study show baseline values of the outcomes of interest for treatment and control?
- If baseline values of the outcome of interest are not available, does the study show baseline values of characteristics of beneficiaries and non-beneficiaries that are not likely to be affected by the intervention?
- Are the mean values or the distributions of the covariates at baseline statistically different for beneficiaries and non-beneficiaries (p<0.05)

### Confounding and selection bias (ask questions for all quantitative studies)

- Does the study use a comparison/control group without access to the program?
- Does the study use a comparison/control group with access to the program but that chose not to participate?
- Is difference-in-difference estimation used?
If the study is quasi-experimental and uses difference-in-difference estimation do the authors assess the parallel trends assumption?

If the study does not use difference-in-difference, does the study control for baseline values of the outcome of interest (ANCOVA)?

Does the study report the table with the results of the outcome equation (including covariates)?

**Attrition (ask questions for all quantitative studies)**

For studies including baseline data, does the study report attrition (dropout) from the study?

Is the attrition rate from the study below 10%?

Does the study assess whether study dropouts are random draws from the sample (e.g., by examining correlation with determinants of outcomes, in both treatment comparison group)?

**Spillovers and contamination (ask questions for all quantitative studies)**

Spillovers: are comparisons sufficiently isolated from the intervention (e.g., participants and non-participants are sufficiently geographically or socially separated) or are spillovers estimated by comparing non-beneficiaries with access to the intervention to non-beneficiaries without access to the intervention and/or through social network analysis?

Spillovers; if spillovers are not estimated, is the study likely to over or underestimate impact?

Contamination: does the study assess whether the control group receives the intervention?

Contamination: if the control group receives the intervention have they received the intervention sufficiently long to argue that they have benefited from the intervention

**Confidence Intervals (ask questions for all quantitative studies)**

Does the study account for lack of independence between observations within assignment clusters if the outcome variables are clustered?

Do the authors control for heteroskedasticity and/or use robust standard errors?

**Ask questions below only for studies that apply randomization**

Does the study apply randomized assignment?

Does the study use a unit of allocation with a sufficiently large sample size to ensure equivalence between the treatment and the control group
### Ask questions below only for studies that apply regression discontinuity designs

Is the allocation of the program based on a pre-determined continuity on a continuous variable and blinded to the beneficiaries or if not blinded, individuals cannot reasonably affect the assignment variable in response to knowledge of the participation rule?

Is the sample size immediately at both sides of the cut-off point sufficiently large to equate groups on average?

### Ask questions below only for studies that apply matching (Quality of matching (PSM, covariate matching))

Are beneficiaries and non-beneficiaries matched on all relevant characteristics?

Does the study report results of the matching function (e.g., logit or probit for PSM)?

Does the study report the matching method?

Does the study exclude observations outside the common support?

Does the study report the mean or distribution for the covariates of the treatment and control groups after matching?

### Ask questions below only for studies that apply instrumental variable estimation

Does the study clearly describe the instrumental variable(s)/identifier used?

Are the results of the participation equation reported?

Are the instruments jointly significant at the level of $F \geq 10$? If an $F$ test is not reported, does the author report and assess whether the R-squared of the instrumenting equation is large enough for appropriate identification ($R$-sq > 0.5?)

For IV, if more than one instrument is used in the procedure, does the study include and report an overidentifying test ($p \leq 0.05$ is required to reject the null hypothesis)?

### Ask questions below only for studies with censored outcome variables

Do the authors use appropriate methods (e.g. Heckman selection models, tobit models, duration models) to account for the censoring of the data?

Risk of Selection Bias

Risk of Performance Bias
# Annex F. Qualitative Quality Review Protocol

*Asterisk indicates priority question to assess overall article quality

<table>
<thead>
<tr>
<th>Number</th>
<th>Main Question</th>
<th>Sub-questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Clear statement of research.</td>
<td>a. Research goal clearly stated*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Why research is important</td>
</tr>
<tr>
<td>2</td>
<td>Appropriateness of qualitative methodology</td>
<td>a. Research interprets or illuminates the actions and/or subjective experiences of research participants</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Is qualitative research the right methodology for addressing the research goal?*</td>
</tr>
<tr>
<td>3</td>
<td>Research design addresses the aims of the research</td>
<td>a. Research is guided by research questions or hypotheses*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Researcher convincingly justified the overall design (e.g., methods, approach, locations, timing)*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. Researcher constructs or uses a conceptual framework</td>
</tr>
<tr>
<td></td>
<td></td>
<td>d. Instruments were piloted</td>
</tr>
<tr>
<td>4</td>
<td>Recruitment strategy</td>
<td>a. Participant selection process is explained*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Explanation of why selected participants were the most appropriate to provide relevant knowledge</td>
</tr>
<tr>
<td>5</td>
<td>Was the data collected in a way that addressed the research issue?</td>
<td>a. Setting for data collection was justified</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Clear how data were collected (e.g. focus group, semistructured interview)*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. Methods are explicit (e.g., indication of how interviews were conducted, topic guide)*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>d. Paper explains how and why methods were modified (if applicable)</td>
</tr>
<tr>
<td>Number</td>
<td>Main Question</td>
<td>Sub-questions</td>
</tr>
<tr>
<td>--------</td>
<td>---------------</td>
<td>---------------</td>
</tr>
</tbody>
</table>
| 5      | Was the data collected in a way that addressed the research issue? | e. Form of data is clear (e.g., tape recordings, video material, notes etc.)  
   f. Researcher discussed data saturation |
| 6      | Has the relationship between researcher and participants been adequately considered? | a. Consider if the researcher critically examined their own role and potential bias and influence during  
   a. Formulation of research questions and research instruments (e.g., asking leading questions);  
   b. Data collection, including sample recruitment and location  
   b. Study declares sources of support/funding |
| 7      | Have ethical issues been taken into consideration? | a. Details of how the research was explained to participants to show how researcher maintained ethical standards  
   b. Researcher discussed how study handled sensitive issues (e.g., informed consent, confidentiality, how they handled the effects of the material on participants during and after the study)  
   c. Indication that approval was sought from an ethics committee |
| 8      | Was the data analysis sufficiently rigorous? | a. Thorough description of the analysis process*  
   b. Clear how categories/themes were determined for thematic analysis (i.e., deductive and/or inductive processes were clearly explained).  
   c. Researcher explains how the data presented were selected from the sample to illustrate a finding (e.g., prevalence, deviance)  
   d. Sufficient data are presented to support findings*  
   e. Extent to which contradictory data are taken into account  
   f. Researcher examined their own role, potential bias, and influence during analysis and selection of data for presentation |
<table>
<thead>
<tr>
<th>Number</th>
<th>Main Question</th>
<th>Sub-questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Was the data analysis sufficiently rigorous?</td>
<td>g. Researcher considered contextual factors which may have influenced the research results (e.g., urban, rural, country context)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>h. Research clearly includes study limitations</td>
</tr>
<tr>
<td>9</td>
<td>Is there a clear statement of findings?</td>
<td>a. Findings are explicit*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Adequate discussion of the evidence both for and against the researcher’s interpretations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. Researcher discussed the credibility of their findings (e.g., triangulation, respondent validation, more than one analyst)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>d. Findings are discussed in relation to original research questions*</td>
</tr>
<tr>
<td>10</td>
<td>How valuable is the research?</td>
<td>a. Researcher discusses the contribution the study makes to existing knowledge or understanding (e.g., consider findings in relation to current policy or relevant literature)*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Identifies new areas where research is necessary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. Researchers discuss whether or how findings can be transferred to other populations or used in other ways</td>
</tr>
</tbody>
</table>
To the extent that the cost data allow, we took the following steps in our costing and cost-effectiveness approach after the collection of data:

**Report the costs per student for each program**
- In most cases we reported the costs per student based on available information from the papers. We were only able to include ingredient costs for some of the studies. Analyzing costs for each ingredient can help determine how overall program costs will change as a result of changes in any element of the program (Dhaliwal et al., 2011), but ingredient costs were unavailable in most studies that reported on costs.

**Create outcomes and effects database for studies that reported costs and effect sizes**
- To perform a meaningful economic analysis, we created databases that included estimates of costs and effects for those studies that reported impact and cost estimates.

**Combine costs and effects to a conduct cost-effectiveness analysis**
- We combined the benefits estimated in our impact analyses with the costs obtained through the information reported in the papers. We computed the ratio of the effect produced by a program to the costs incurred for each outcome.
## Annex H. Effect Sizes

### Exhibit H–1. Summary of Effects of Early Childhood Education Interventions

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Effect on Mathematics Outcomes</th>
<th>Effect on Language Outcomes</th>
<th>Effect on Cognitive Skills Outcomes</th>
<th>Effects of Motor skills Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Childhood Development (ECD) Kit</td>
<td>0.20* (0.1)</td>
<td>-0.065 (0.19)</td>
<td>0.0143 (0.1)</td>
<td>0.15* (0.08)</td>
</tr>
</tbody>
</table>

Notes. Effects are standardized mean differences with standard errors in brackets. *statistically significant at 90 percent level, **statistically significant at 95 percent level, ***statistically significant at 99 percent level.

### Exhibit H–2. Summary of Effects of Higher Education Programs

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Weighted Average Effect on Learning Outcomes</th>
<th>Effect on Literacy Outcomes</th>
<th>Effect on Mathematics Outcomes</th>
<th>Effect on critical thinking outcomes</th>
<th>Effect on computer literacy outcomes</th>
<th>Effect on Psychosocial Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invest</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>Na</td>
<td>Na</td>
<td>0.083 (0.13)</td>
</tr>
<tr>
<td>Kepler</td>
<td>0.341* (0.23)</td>
<td>0.280* (0.13)</td>
<td>0.172 (0.16)</td>
<td>0.060 (0.13)</td>
<td>0.819** (0.14)</td>
<td>Na</td>
</tr>
</tbody>
</table>

Notes. Effects are standardized mean differences with standard errors in brackets. *statistically significant at 90 percent level, **statistically significant at 95 percent level, ***statistically significant at 99 percent level.
<table>
<thead>
<tr>
<th>Program Name</th>
<th>Effect on Learning Outcomes</th>
<th>Effect on Learning Outcomes KCPE</th>
<th>Effect on Learning Outcomes UWEZO</th>
<th>Effect on School Enrollment</th>
<th>Effect on School Attendance</th>
<th>Effect on School Dropouts</th>
</tr>
</thead>
<tbody>
<tr>
<td>WUSC’s remedial education program Kakuma</td>
<td>-0.03 (0.08)</td>
<td>0.00 (.09)</td>
<td>-0.06 (.06)</td>
<td>NA</td>
<td>0.007 (.06)</td>
<td>NA</td>
</tr>
<tr>
<td>WUSC’s remedial education program Dadaab</td>
<td>NA</td>
<td>-0.04 (0.16)</td>
<td>0.012 (0.09)</td>
<td>NA</td>
<td>0.017 (.09)</td>
<td>NA</td>
</tr>
<tr>
<td>Partnership for Advancing Community Education</td>
<td>0.14*** (0.03)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>0.27*** (.03)</td>
<td>NA</td>
</tr>
<tr>
<td>Partnership for Advancing Community Education with Qualifications Constraint</td>
<td>0.380 (0.029)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>0.197 (0.025)</td>
<td>NA</td>
</tr>
<tr>
<td>Partnership for Advancing Community Education with Community-Based Enhancement</td>
<td>0.22 (0.029)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>0.14 (0.025)</td>
<td>NA</td>
</tr>
</tbody>
</table>

Notes. Effects are standardized mean differences with standard errors in brackets. *statistically significant at 90 percent level, **statistically significant at 95 percent level, ***statistically significant at 99 percent level.
### EXHIBIT H-4. SUMMARY OF EFFECTS OF TECHNOLOGY IN EDUCATION PROGRAMS

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Weighted Average Effect on Learning Outcomes</th>
<th>Effect on Literacy Outcomes</th>
<th>Effect on Mathematics Outcomes</th>
<th>Weighted Average Effect on Psychosocial Outcomes</th>
<th>Effect on School Enrollment</th>
<th>Effect on School Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feed the Monster</td>
<td>NA</td>
<td>0.20** (0.10)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Antura and the Letters</td>
<td>NA</td>
<td>0.05 (0.03)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Can’t Wait to Learn Jordan</td>
<td>0.01 (0.08)</td>
<td>0.052 (0.08)</td>
<td>-0.023 (0.08)</td>
<td>0.07 (0.09)</td>
<td>NA</td>
<td>-0.11 (0.10)</td>
</tr>
<tr>
<td>Can’t Wait to Learn Sudan</td>
<td>0.95*** (0.15)</td>
<td>0.99*** (0.15)</td>
<td>0.91*** (0.15)</td>
<td>0.02 (0.15)</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Evoke</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>0.38** (0.12)</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>E-Learning Sudan</td>
<td>NA</td>
<td>NA</td>
<td>2.40</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Ideas Box Burundi</td>
<td>Unclear</td>
<td>Unclear</td>
<td>Unclear</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Ideas Box Jordan</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>-0.34*** (0.06)</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

Notes. Effects are standardized mean differences with standard errors in brackets. *statistically significant at 90 percent level, **statistically significant at 95 percent level, ***statistically significant at 99 percent level.
### EXHIBIT H–5. SUMMARY OF EFFECTS OF SCHOOL MANAGEMENT INTERVENTIONS

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Effect on School Enrollment</th>
<th>Effect on Learning Outcomes</th>
<th>Effect on School Attendance</th>
<th>Effect on School Dropouts</th>
</tr>
</thead>
<tbody>
<tr>
<td>COGES School Committees</td>
<td>0.107 (0.06)</td>
<td>NA</td>
<td>NA</td>
<td>-0.085 (0.06)</td>
</tr>
</tbody>
</table>

Notes. Effects are standardized mean differences with standard errors in brackets. *statistically significant at 90 percent level, **statistically significant at 95 percent level, ***statistically significant at 99 percent level.

### EXHIBIT H–6. SUMMARY OF EFFECTS OF TEACHER TRAINING PROGRAMS

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Effects on Quality School Interactions Outcomes</th>
<th>Effect on Student Well-being Outcomes</th>
<th>Effect on Literacy Outcomes</th>
<th>Effect on Mathematics Outcomes</th>
<th>Effect on gender practices outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender Socialization in Schools</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>0.115 (0.088)</td>
</tr>
<tr>
<td>Learning to Read in a Healing Classroom</td>
<td>0.018* (0.032)</td>
<td>NA</td>
<td>0.187* (0.032)</td>
<td>0.147 (0.032)</td>
<td>NA</td>
</tr>
</tbody>
</table>

Notes. Effects are standardized mean differences with standard errors in brackets. *statistically significant at 90 percent level, **statistically significant at 95 percent level, ***statistically significant at 99 percent level.
### EXHIBIT H–7. SUMMARY OF EFFECTS OF SOCIO-EMOTIONAL LEARNING PROGRAMS

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Effect on Beliefs</th>
<th>Effect on Depression</th>
<th>Effect on PTSD</th>
<th>Effect on Child Functional Impairment</th>
<th>Effect on Prosocial behavior</th>
<th>Effect on Psychosocial Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education Reintegration Package</td>
<td>NA</td>
<td>-0.130 (0.156)</td>
<td>0.129 (0.156)</td>
<td>0.225 (0.156)</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Teaching Recovery Techniques</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Pathways into Reconciliation</td>
<td>-1.146 (0.107)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Classroom based intervention</td>
<td>NA</td>
<td>-0.613** (0.113)</td>
<td>0.013 (0.110)</td>
<td>-0.773** (0.115)</td>
<td>0.586** (0.113)</td>
<td>NA</td>
</tr>
<tr>
<td>Psychosocial intervention</td>
<td>NA</td>
<td>-0.163 (0.232)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>MindUp Programme</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>School Mediation Intervention</td>
<td>NA</td>
<td>-0.797 (0.143)</td>
<td>0.925** (0.145)</td>
<td>NA</td>
<td>1.219* (0.149)</td>
<td>NA</td>
</tr>
<tr>
<td>Child Friendly Spaces</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>0.35 (0.09)</td>
</tr>
<tr>
<td>Creating Opportunities through Mentoring, Parental Involvement and Safe Spaces</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

Notes. Effects are standardized mean differences with standard errors in brackets. *statistically significant at 90 percent level, **statistically significant at 95 percent level, ***statistically significant at 99 percent level.
### EXHIBIT H–8. SUMMARY OF EFFECTS OF PROGRAMS FOCUSED ON SOCIAL AND EMOTIONAL LEARNING

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Weighted average of effects on emotions</th>
<th>Effect on PTSD</th>
<th>Effect on Child Functional Impairment</th>
<th>Effect on Prosocial behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education Reintegration Package</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Teaching Recovery Techniques</td>
<td>0.316 (0.1)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Pathways into Reconciliation</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Classroom based intervention</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Psychosocial intervention</td>
<td>NA</td>
<td>-0.336 (0.232)</td>
<td>-0.290 (0.233)</td>
<td>NA</td>
</tr>
<tr>
<td>MindUp Programme</td>
<td>-0.001 (0.234)</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>School Mediation Intervention</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Child Friendly Spaces</td>
<td>NA</td>
<td>NA</td>
<td>0.23 (0.09)</td>
<td>NA</td>
</tr>
<tr>
<td>Creating Opportunities through Mentoring, Parental Involvement and Safe Spaces</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>0.14 (0.07)</td>
</tr>
</tbody>
</table>

Notes. Effects are standardized mean differences with standard errors in brackets. *statistically significant at 90 percent level, **statistically significant at 95 percent level, ***statistically significant at 99 percent level.

### EXHIBIT H–9. SUMMARY OF EFFECTS OF EARLY CHILDHOOD EDUCATION INTERVENTIONS

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Effect on School Enrollment</th>
<th>Effect on Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Lost Generation Midline</td>
<td>0.04 (0.04)</td>
<td>0.19 ** (0.06)</td>
</tr>
<tr>
<td>No Lost Generation Endline</td>
<td>0.066 (0.04)</td>
<td>0.045 (0.07)</td>
</tr>
</tbody>
</table>

Notes. Effects are standardized mean differences with standard errors in brackets. *statistically significant at 90 percent level, **statistically significant at 95 percent level, ***statistically significant at 99 percent level.
### Exhibit H–10. Summary of Effects of School Feeding Programs

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Effect on Attainment</th>
<th>Effect on School Enrollment</th>
<th>Effect on School Absenteeism</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Feeding Program</td>
<td>0.048 (0.04)</td>
<td>0.034 (0.04)</td>
<td>-0.003 (0.04)</td>
</tr>
</tbody>
</table>

Notes. Effects are standardized mean differences with standard errors in brackets. *statistically significant at 90 percent level, **statistically significant at 95 percent level, ***statistically significant at 99 percent level.

### Exhibit H–11. Summary of Effects of Water and Sanitation Programs

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Effect on School Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dubai Cares WASH in Schools Initiative in Mali: Impact Evaluation Report</td>
<td>-0.04 (0.02)</td>
</tr>
</tbody>
</table>

Notes. Effects are standardized mean differences with standard errors in brackets. *statistically significant at 90 percent level, **statistically significant at 95 percent level, ***statistically significant at 99 percent level.

### Exhibit H–12. Summary of Effects of Disaster Risk Reduction Programs

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Effect on School Attainment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typhoon-resistant secondary schools</td>
<td>0.04** (0.01)</td>
</tr>
</tbody>
</table>

Notes. Effects are standardized mean differences with standard errors in brackets. *statistically significant at 90 percent level, **statistically significant at 95 percent level, ***statistically significant at 99 percent level.