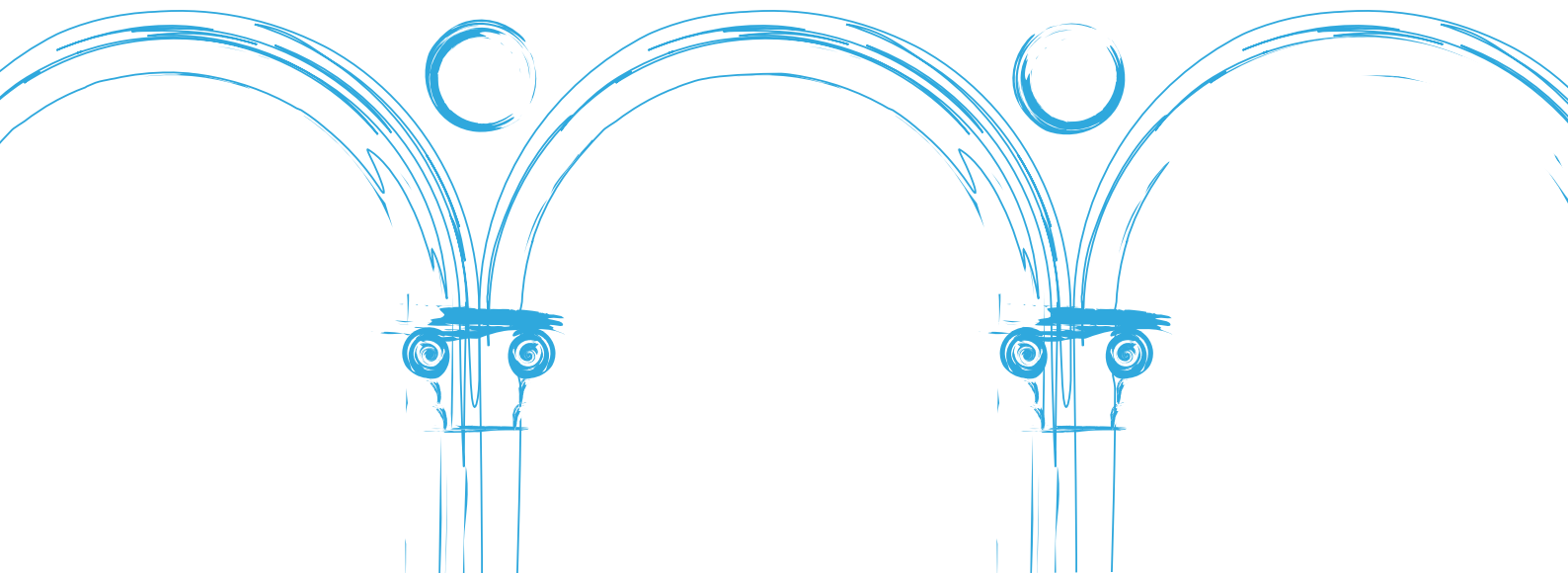


The Impact of Educational Policies and Programmes on Child Work and Child Labour in Low- and-Middle-Income Countries: A rapid evidence assessment

Study Protocol

Chuka Emezue, Cristina Pozneanscaia, Greg Sheaf, Valeria Groppo,
Shivit Bakrania and Josiah Kaplan

UNICEF Office of Research – Innocenti | October 2021



UNICEF OFFICE OF RESEARCH – INNOCENTI

The Office of Research – Innocenti is UNICEF’s dedicated research centre. It undertakes research on emerging or current issues to inform the strategic directions, policies and programmes of UNICEF and its partners, shape global debates on child rights and development, and inform the global research and policy agenda for all children, particularly the most vulnerable.

Innocenti receives financial support from the Government of Italy, while funding for specific projects is also provided by other governments, international institutions and private sources, including UNICEF National Committees. For further information and to download or order this and other publications, please visit the website at www.unicef-irc.org.

Innocenti disseminates initial research contributions within the programme of work, addressing social, economic and institutional aspects of the realization of the human rights of children. The findings, interpretations and conclusions expressed in this paper are those of the authors and do not necessarily reflect the policies or views of UNICEF.

This Innocenti Paper has been published without undergoing layout, copyediting or proofreading. It is being released to rapidly share results of our work with the wider research and practitioner communities, and to encourage discussion of methods and findings.

Emezue, C., Pozneanscaia, C., Sheaf, G., Groppo, V., Bakrania, S., Kaplan, J., *The Impact of Educational Policies and Programmes on Child Work and Child Labour in Low- and Middle-Income Countries: A rapid evidence assessment*, UNICEF Office of Research – Innocenti, Florence, 2021.

© 2021 United Nations Children’s Fund (UNICEF)

Correspondence should be addressed to:

UNICEF Office of Research – Innocenti

Via degli Alfani 58
50121 Florence, Italy
Tel: (+39) 055 20330
Fax: (+39) 055 2033 220

florence@unicef.org
www.unicef-irc.org
[@UNICEFInnocenti](https://www.instagram.com/UNICEFInnocenti)
[facebook.com/UnicefInnocenti](https://www.facebook.com/UnicefInnocenti)

THE IMPACT OF EDUCATIONAL POLICIES AND PROGRAMMES ON CHILD WORK AND CHILD LABOUR IN LOW- AND MIDDLE-INCOME COUNTRIES: A RAPID EVIDENCE ASSESSMENT

STUDY PROTOCOL

Chuka Emezue, Consultant¹
Cristina Pozneanscaia, Consultant²
Greg Sheaf, Consultant³
Valeria Groppo, UNICEF Office of Research – Innocenti
Shivit Bakrania, UNICEF Office of Research – Innocenti
Josiah Kaplan, UNICEF Office of Research – Innocenti

SUGGESTED CITATION

Emezue, C., Pozneanscaia, C., Sheaf, G., Groppo, V., Bakrania, S., Kaplan, J., *The Impact of Educational Policies and Programmes on Child Work and Child Labour in Low- and Middle-Income Countries: A rapid evidence assessment*, UNICEF Office of Research – Innocenti, Florence, 2021.

ACKNOWLEDGEMENTS

The authors and the UNICEF Office of Research – Innocenti want to extend their gratitude to everyone who contributed and provided topic and expert guidance towards this review protocol.

Internal reviewers: Ramya Subrahmanian, Chief of Child Rights and Protection at UNICEF – Innocenti, and AK Shiva Kumar, Adviser, UNICEF and Member National Advisory Council.

External reviewers: Ana Dammert, Associate Professor of Economics and International Affairs at Carleton University; Esther Gehrke, Assistant Professor in the Section Economics (Agricultural Economics and Rural Policy) at Wageningen University

¹ Rush University, College of Nursing, Chicago, IL, USA

² Sussex Community NHS Foundation Trust, United Kingdom

³ The Library of Trinity College, Dublin, Ireland

All consultants are contributing to this paper in their personal capacities and the views expressed herein do not necessarily reflect the views of their institutions.

CONTENTS

Table of Contents	3
ACRONYMS.....	4
1 INTRODUCTION.....	5
1.1 Background and rationale.....	5
1.2 Why it is important to do this review.....	6
1.3 How this REA differs from previous reviews on child labour impacts.....	7
1.4 Aims and research questions.....	8
2 THE SCOPE OF THIS REVIEW	9
2.1 Educational interventions	9
2.2 Child labour and child work outcomes.....	9
2.3 How interventions might work towards reducing child labour.....	10
3 CONCEPTUAL FRAMEWORK.....	11
4 METHODOLOGY.....	15
4.1 Eligibility criteria.....	15
4.2 Screening and data extraction	18
4.3 Data analysis and synthesis	19
4.4 Quality appraisal.....	19
4.5 Potential limitations with conducting this REA	19
5 PROPOSED TIMELINE	20
APPENDIX 1: Definitions	21
APPENDIX 2: Search strings.....	26
1. Child labour	26
2. Interventions.....	26
3. Impact assessments	26
4. LMIC.....	27
APPENDIX 3: Screening checklist	28
APPENDIX 4: Data extraction protocol	31
BIBLIOGRAPHY	32

ACRONYMS

COVID-19	Coronavirus disease
ECD	Early Childhood Development
EGM	Evidence Gap Map
FCDO	Foreign, Commonwealth and Development Office
HMIC	High- and Middle-Income countries
IDS	Institute of Development Studies
ILO	International Labour Organization
LMIC	Low- and Middle-Income countries
MoRES	UNICEF's Monitoring Results for Equity Systems
OECD	Organisation for Economic Co-operation and Development
PICO	Population, Intervention, Comparison, and Outcome
REA	Rapid Evidence Assessment
UN	United Nations
UNICEF	United Nations Children's Fund
WHO	World Health Organization

1 INTRODUCTION

1.1 Background and rationale

By 2025, the international community intends to achieve noteworthy progress towards abolishing child labour, including its worst forms. However, global progress has stalled for the first time in 20 years, reversing previous downward trends that saw child labour fall by 94 million between 2000 and 2016. In the last four years, there have been increases in the number of child labourers (8 million more children) and children in hazardous conditions (6.5 million more children), particularly in sub-Saharan Africa, where one in five children are child labourers (ILO and UNICEF, 2021). The term “child labour” is broadly defined as work that deprives children of their childhood, their potential, and their dignity, and that is harmful to physical and mental development (see definition in Appendix 1).

Based on published global estimates, 160 million children – of which 63 million are girls and 97 million are boys – were engaged in child labour globally at the start of 2020. This accounts for roughly one-tenth of all children worldwide – many of whom are in hazardous conditions (79 million children) (ILO and UNICEF, 2021). Compared to manufacturing, mining, and domestic service, economic domains such as commercial agricultural and farm work settings employ more than 70 per cent of child labourers (ILO and UNICEF, 2021). Invariably, while some Low- and Middle-income countries (LMICs) show declines in child labour disaggregated by age, gender, kind of employment, and geographical distribution, others continue to record increases in child labour, especially in expanding urban slums (Quattri and Watkins, 2019).

One in every three children involved in child labour is not in school (ILO and UNICEF, 2021). About 28 per cent of children between the ages of five and 11, and 35 per cent of adolescents between the ages of 12 and 14, are out of school (ILO and UNICEF, 2021). Early labour-force entry, economic hardship, and accompanying school dropout frequently co-occur, laying the groundwork for lifelong negative consequences for child labourers, potentially affecting the child, their family, and the human capital development of communities where child labour is prevalent.

Insufficient access to school, low school quality, discriminatory practices or equity gaps in class are critical push factors for child labour. In many contexts, school is not seen as a cost-effective and beneficial alternative to child labour. In these settings, children engage in child labour as their households cannot afford the cost of education; or because schools are not available locally or school quality is so low that time spent in school is not seen as beneficial by children and their households (Thévenon and Edmonds, 2019). Therefore, ensuring high-quality and accessible education remains a critical way to combat child labour. Evidence-based policies and programmes making education more affordable, in tandem with social protection, and supply-side interventions improving the quality of schooling, have the capacity to produce long-term, sustainable, and measurable reductions in child labour, besides improving education. Therefore, in LMICs, there is increased interest in the promise of educational policies and legislative reforms along with local and regional education-related programmatic activities to fight child labour. However, despite mounting evidence of the importance of education in the abolition of child labour, to date, only a few evidence assessments have documented the effectiveness of educational policies and programmes with respect to child labour in LMICs (exceptions include Aslam et al., 2021; Dammert et al., 2018). This is a squandered opportunity, as this information is critical for the development, deployment, and implementation of cost-effective interventions—both programmes and policies.

The UNICEF Office of Research – Innocenti (UNICEF Innocenti) has commissioned this Rapid Evidence Assessment (REA) as part of the broader research project [Evidence on Educational Strategies to Address Child Labour in South Asia](#) (*South Asia Child Labour*). The project contributes to the larger FCDO-funded Asia Regional Child Labour Programme, which supports initiatives in six countries to tackle child labour in the region involving different organizations (International Labour Organization, ILO, the Institute for Development Studies at Sussex, IDS, and the UNICEF Regional Office for South Asia).

With a focus on Bangladesh and India, the project led by UNICEF Innocenti has the following objectives:

- To consolidate and generate evidence on the prevalence of child labour and the interlinkages with education.
- To establish and generate evidence on promising and effective strategies that can strengthen the role of education in eliminating child labour.
- To promote research and knowledge uptake by policy makers, researchers, and the public by fostering collaborations with researchers in the region and channelling evidence towards public discussion and debate to inform, inspire and support policy and programme efforts.

To achieve these objectives, the following three research streams will be implemented:

- Research stream 1: Landscaping secondary data and research on the interlinkages between child labour and education and mapping educational strategies.
- Research stream 2: Primary and secondary research to identify effective and scalable educational strategies to address child labour.
- Research stream 3: Knowledge management, research dissemination and convening.

As part of Research stream 1, this REA takes stock of the evidence on effectiveness of educational policies and programmes in addressing child labour in LMICs. The REA focuses on what educational policies and programmes work to reduce child labour and considers quantitative rigorous studies (experimental or quasi-experimental), which estimate causal impacts. To the extent information is available within the considered studies, it also identifies and discusses the mechanisms associated with the success or failure of specific policies and programmes.

1.2 Why it is important to do this review

As a first step of the REA, UNICEF Innocenti conducted a preliminary ‘scoping exercise’ to understand the evidence base—including initial valuation of evidence gaps, definitions of key concepts, and collation of relevant but broadly designated studies. The scoping showed that most studies focus on the education impacts of education policies and programmes without considering their child labour impacts (consistent with educational interventions being primarily designed in relation to education objectives and seldom including child labour objectives). As a result, most systematic reviews capture studies which look at the education domain. Examples include Damon et al. (2019); Ganimian and Murnane (2014); Garcia and Saavedra (2017); Glewwe et al. (2013); Glewwe and Muralidharan (2016); Kremer et al. (2013); Krishnaratne et al. (2013); Snilstveit et al. (2016). Few literature reviews have focused on child labour outcomes (Aslam et al., 2021; Dammert et al., 2018), making this REA timely and mission critical.

The main objectives of this REA are to (i) provide a conceptual framework linking educational interventions and child labour outcomes, thus clarifying the main channels and mechanisms of impact,

(ii) identify evidence gaps and priority areas for research on the impact of educational policies and programmes on child labour, thus influencing the design and implementation of the above-described Research stream 2, and (iii) inform policy and programming decisions on effective educational strategies to prevent and eliminate the exploitation of children. The REA will focus on children in LMICs, children in hazardous labour, and other worst forms of child labour, with particular attention to gender and equity aspects.

1.3 How this REA differs from previous reviews on child labour impacts

As mentioned above, few evidence reviews have specifically considered the child labour outcomes of education policies and programmes in LMICs. These include, for instance, Aslam et al. (2021); Bouillon & Tejerina (2007); Dammert et al. (2018); de Hoop & Rosati (2014). This REA updates and expands on these reviews as follows:

1. First, in this REA, we design a socioecological **conceptual framework** specific to the impact of educational policies and programmes on child labour and related mechanisms of impact. Our conceptual framework differs from that of Dammert et al. (2018), who refer to public policy in more general terms, without an education focus. Our framework also differs from that of Aslam et al. (2021), who consider the determinants of child labour more broadly. Drawing from the well-established Bronfenbrenner's ecological systems theory (see Bronfenbrenner, 1989; Bronfenbrenner & Evans, 2000; Bronfenbrenner & Morris, 2006), we propose an in-depth conceptual framework that focuses on the child's social ecology or environment. Specifically, as part of our REA, we consider the interdependence between children and their environment, ranging from the most immediate microsystem— (e.g., family, school) to more distal macrosystem levels (e.g., community or national education systems at large). While analogous to the framework used by Snilstveit et al. (2016), where they consider social, contextual, and structural determinants of education, we focus on child labour outcomes rather than education outcomes. We also include moderating factors, such as demographic, sociocultural, legal and policy issues, as well as macro-economic factors that can influence the various stages of the causal chain linking educational interventions and child labour outcomes.
2. Our conceptual framework and analysis critically distinguish between impacts on **child labour** (i.e., detrimental forms of work), child work, household chores and other time use activities (e.g., leisure and rest).
3. We will include empirical studies not cited in previous reviews. We extend our search up to 2021, thereby incorporating new **COVID-19**-related evidence. The pandemic has exacerbated economic hardships and social adversities by widening wealth disparities, exposing the vulnerable to infections, and forcing families to make difficult decisions about putting family members, including children, in hazardous work to survive the pandemic. As a result of growing poverty caused by the pandemic, an additional 8.9 million children are projected to be engaged in child labour by the end of 2022 (ILO and UNICEF, 2021). Unlike previous reviews, this REA will attempt to cover impact evaluations of relevant interventions during the pandemic, offering a more comprehensive picture of where we are and current initiatives in the pandemic era.
4. Our goal is to synthesize comprehensive and up-to-date information to provide explicit **education-related policy recommendations** responsive to current times and trends.

1.4 Aims and research questions

Drawing on primary and secondary research studies, this REA seeks to identify, assess, and synthesize evidence on the impact of educational interventions (policies and programmes) on child labour in LMICs, drawing on an adaptive socioecological conceptual framework. A second set of objectives will explore factors that contribute or hamper the effectiveness of these programmes in addressing child labour. We also aim to potentially document specific child work/labour measures, highlighting those studies analyzing child labour for elimination.

This REA sets out to answer the following research questions:

1. How effective are **educational programmes and policies** in reducing **child labour/work** among children aged five to 17 in LMICs?
2. What **features** of educational programmes and policies contribute to their effectiveness or ineffectiveness in eradicating child labour/work in LMICs (for example, intervention specifics, population, and/or contextual factors)?

2 THE SCOPE OF THIS REVIEW

2.1 Educational interventions

High-quality education has several benefits, including improving learning outcomes, positive youth development, cognitive and socio-emotional development, increasing earnings potential, and more importantly for our REA, reducing child labour. However, few educational policies/programmes have been designed with an explicit child labour objective. So, in our REA we focus on **education policies or programmes** which have the potential to reduce child labour, including those programmes that were not specifically designed to address child labour, but impacted child labour outcomes. Necessary conditions for the programme/policy to be included is the presence of an education design component and/or an education-based objective. For example, programmes directly targeting children in school and seeking to *increase school participation* (e.g., merit-based scholarships, school feeding and school-based health, nudging and behavioral interventions in education that ease access to information on the benefits of education, increasing awareness on child rights and challenging social norms, improving soft skills including easing access to information on the benefits of education), *programmes targeting households and parents* (e.g., cash transfers and other programs focused on access to childcare and ECD), *programmes implemented at the school level* (e.g., improvement to pedagogy and lesson delivery, remedial and special education opportunities, teacher training and incentives) and *programmes/policies at the system level* such as compulsory universal education laws (see Table 1 and Figure 1 for the full list of considered interventions).

Even with the previously mentioned reviews documenting the impact of educational policies and programmes on various education outcomes, to the best of our knowledge, no review has focused exclusively on empirical impact evaluations linking educational programmes and policies to child labour in LMICs. This REA focuses on rigorous (experimental or quasi-experimental) impact evaluations of educational policies and programmes, touching on qualitative evidence to the degree that it is provided within quantitative impact assessments, as part of a mixed-methods study.

2.2 Child labour and child work outcomes

There is no singular legal child labour definition or measure, as definitions indeed, require adaptation to the national context and legislation. The latter, in turn, may be influenced by national agendas, jurisdictional politics, and local and family customs. As a result, the landscape of definitions and indicators found in the literature is varied. This limits cross-country comparability of impacts and makes it difficult to assess the effectiveness, scope, and usefulness of educational interventions to support children at risk of child labour.

However, The UN Convention on the Rights of the Child and ILO Conventions n.138 and 182 as well as related recommendations provide guidance on how to define and measure child labour.

According to international standards, **child labour** is defined as work that deprives children of their childhood, potential, and dignity. It refers to work that:

- **Is mentally, physically, socially, or morally dangerous and harmful to children;** and/or
- **Interferes with their schooling** by depriving them of the opportunity to attend school; obliging them to leave school prematurely; or requiring them to combine school attendance with excessively long and heavy work.

Child labour mostly takes the form of:

- **Work below the minimum age**
- **Hazardous work**
- **Other worst forms of child labour**, such as child trafficking, forced and bonded labour, armed conflict, prostitution and pornography, and other illicit activities (more details in Appendix 1).

Based on the above, our REA applies a clear distinction between **child labour** and broader more generic **child work** outcome. So, we will refer to contexts of child labour and child work, adjusting our search to capture both terms. We expect most studies will not report impacts on measures of child labour (e.g., detrimental forms of work), but will instead report effects on various indicators of child work (e.g., overall child participation in economic activities, number of hours worked). In all these cases, we will refer to 'child work' when describing results. A few studies will also report impacts on specific measures of child labour for elimination. We will highlight these cases, and specifically refer to child labour when describing their results.

Our search adapts to the variety of indicators used in the literature to capture child work and child labour. These include child participation in economic activities within the household (e.g., agricultural work and engagement in the non-farm household business) and outside the household (e.g., 'formal' or casual work for pay).

While these measures emphasize economic participation, many other activities performed by children are relevant and could be equally harmful if performed in hazardous conditions or for long hours. Among these, child engagement in household chores is critical as it can interfere with school participation, if performed for long hours or if they expose children to hazards such as carrying heavy loads. Carried out mostly by girls, this activity is often underreported in official statistics, making invisible the involvement of girls in domestic work—both for the home and outside the home (ILO and UNICEF, 2021). The REA will capture and discuss impacts on household chores as well. As for economic activities, our description will distinguish between generic engagement in household chores versus hazardous household chores (child labour).

Furthermore, it is important to go beyond the concepts of work hazard and risk as applied to adult workers and to expand these to include broader aspects of child development. Because their bodies and minds are still developing, children are more vulnerable than adults to workplace hazards, and the consequences of hazardous work are often more devastating and long-lasting for them. In our REA, outcomes will include indicators of child exposure to work-related hazards, such as carrying heavy loads, working with dangerous tools, exposure to dust/fumes/gases (for a comprehensive list, see Dayioğlu, 2012). Within our socioecological framework, we will explore the role of contextual factors in child wellbeing, including the role of social norms, which may perpetuate patterns of exploitation.

2.3 How interventions might work towards reducing child labour

Estimating the influence of various educational interventions on child labour/work is a complex endeavour, involving a multifactorial chain of activities. The causal pathways through which educational interventions impact child labour may even lead to unintended repercussions, when interventions were not designed to consider contextual factors that contribute to child labour. To visualize how educational interventions might work with respect to child labour outcomes, we have drafted a conceptual framework that locates interventions and child labour outcomes within a socioecological model. As recommended by Maxwell (2005), this hierarchical conceptual framework

was built using several constitutive elements, including the UNICEF-Innocenti team's expertise, a scoping review of current theories on the determinants of child labour, exploratory research questions and assumptions, and ongoing discussions with topic experts. For the purposes of this protocol, the conceptual model allows us to categorize the main types of interventions and common pathways of impact. While reviewing the studies and extracting detailed information on pathways of impacts, we will complete the conceptual framework providing a more precise representation of these mechanisms. In doing this, we aim to show how educational interventions lead to reductions in child labour and child work, which then lead to sustainable and stable impacts that outlast an intervention.

3 CONCEPTUAL FRAMEWORK

Our conceptual framework provides a visual depiction of the main types of educational policies/programmes and a narrative of potential pathways from interventions to outcomes. The elements of our framework are organized into four horizontal levels, describing *interventions*, *intermediate outcomes*, *outcomes (short to medium term)*, and *impacts (long term)*.

Interventions represent the actual and tangible components of educational policies or programmes (i.e., resources, inputs and specific activities that go into a programme/policy). Following Snilstveit et al. (2016), we categorize interventions based on the level which they directly impact. We distinguish four such levels: children, households and families, school and teacher level, community, and systems level (see Figure 1). Examples of interventions at the *child level* include merit-based scholarships to reduce the cost of schooling and building awareness on child rights, including gender equity aspects. Interventions directly impacting *households and families* may take the form of cash transfers (both conditional and unconditional), as well as sensitization programmes in which parents and caregivers are informed of the benefits of education. Interventions at the *school and teacher level* may include the provision of school infrastructure and gender-sensitive amenities, school materials, teacher training, remedial and special education opportunities (e.g., flexible schooling hours, targeted programmes for out-of-school children). Examples of *communities and systems level* educational interventions include compulsory universal education laws, removal of school fees, and public-private partnerships.

Intermediate outcomes are direct results of these interventions, i.e. effects triggered as a direct consequence of the intervention. We consider intermediate outcomes to serve as *mediators* or channels through which an intervention produces its outcomes. For example, nudging and behavioral interventions can ease access to information on the benefits of education and improve child soft skills (e.g., big five, grit, resilience, patience). These intermediate outcomes, in turn, can affect child labour.

Outcomes are the measurable effects of an intervention (what is achieved through those activities). We focus on child work/labour outcomes. **Impact** refers to long-term and stable outcomes of an intervention that may persist even after the intervention is ended.

Moderators can strengthen or weaken the association between an intervention and its outcomes, across all stages of the causal chain, from intervention to impact. They influence the extent to which an intervention affects child labour outcomes, thus altering its effectiveness in reducing child labour. Four domains of moderators are considered (prevailing macro-economic factors, sociodemographic factors, legal and policy frameworks, and socio-cultural factors). These domains were informed by UNICEF's Monitoring Results for Equity Systems (MoRES) developed in 2010 as part of UNICEF's focus on equity and social determinants in the protection and promotion of child rights. We also used the PROGRESS-Plus—Cochrane Equity framework to identify various equity-sensitive moderators that considered social differentiation based on study location, intervention beneficiaries age, race/ethnicity, gender, education

level, socioeconomic status, and disability (O'Neill et al., 2014). The literature indicates that both education and child labour outcomes are influenced by a combination of these structural and individual-level moderating factors, described more in detail as follows:

1. Macro-Economic factors (economic growth, labour migration, high/under-employment, poverty, seasonality of work, labour market outcomes, income, and awareness of conditionalities, etc.).
2. Sociodemographic elements (age, gender, race/ethnicity, caste, disability, discrimination, health status, birth order, etc.).
3. Legal and policy elements (laws and programmes, and levels of poverty and development).
4. Socio-cultural context (such as social norms, patriarchal norms, harmful traditional practices—child marriage, child labour, etc.).

This framework is necessarily a simplified representation of all relevant aspects. Notably, our conceptual framework will be a *living model* to help us understand the mechanisms of impact of the intervention, as well as a heuristic model to iteratively organize our search process, assess patterns of inequity at various levels, conduct research coding, and data syntheses at each stage of this REA. Studies found during the search process will contribute to a fully developed conceptual framework in the main working paper that follows. At the working paper stage, testable assumptions on the key mechanisms of impact will be proposed to guide future research and practice efforts aimed at reducing child labour through educational policies and programmes. The working paper will include analysis of the potential mechanisms of impact by intervention (to the extent possible based on the available evidence). The framework will also serve as a reference for structuring policy recommendations customized to the requirements of municipalities, states, and regions.

An evidence-gap map will also be included. This will be a thematic visual overview of existing evaluations of the child labour impact of educational interventions.

Figure 1. Conceptual framework

	CHILDREN	HOUSEHOLDS & FAMILIES	SCHOOLS & TEACHERS	COMMUNITIES & SYSTEMS	MODERATORS
INTERVENTIONS	<p>Merit-based scholarships</p> <p>School feeding and school-based health</p> <p>Nudging and behavioral interventions in education (e.g., easing access to information on the benefits of education, increasing awareness on child rights and challenging social norms, improving soft skills)</p>	<p>Cash or in-kind transfers</p> <p>Access to childcare and ECD</p> <p>Skills building (e.g., training on alternative livelihood opportunities)</p> <p>Nudging and behavioral interventions in education (e.g., easing access to information on the benefits of education, increasing awareness on child rights and challenging social norms)</p>	<p>School infrastructure and gender-sensitive amenities (e.g., safety measures, sanitary products, accessibility for children with disabilities)</p> <p>Early childhood education and care facilities</p> <p>Residential schools for children in remote communities</p> <p>Free transportation</p> <p>Free school and instructional material (e.g., books, uniforms)</p> <p>Technology and adaptations for distance learning</p> <p>Improvement to pedagogy and lesson delivery (e.g., teaching at the right level)</p> <p>Remedial and Special education opportunities (e.g., targeted programmes for out-of-school children, migrants, and street-connected children)</p> <p>Teacher training, hiring and incentives</p>	<p>Compulsory universal education laws</p> <p>Removal of school fees</p> <p>Full-time schooling</p> <p>School-based governance for efficient management of schools</p> <p>Public-private partnerships</p> <p>Community-based monitoring</p> <p>Shared decision-making on educational policymaking</p> <p>Child and social protection systems, including birth registration mechanisms</p>	<p><u>Macro-Economic</u></p> <p>Economic growth</p> <p>Productivity</p> <p>Labour migration</p> <p>Seasonality of work</p> <p>High/under-employment</p> <p>Access to resources</p> <p>Poverty</p> <p>Rural/urban or regional economic disparity</p> <p>Shared governance</p> <p>Level of fragility/conflict</p> <p><u>Legal and policy context</u></p> <p>Laws/policies related to child labour, wage discrimination, child marriage</p> <p>National child labour action plan</p> <p>Social policy strategy and social protection</p>
INTERMEDIATE OUTCOMES	<p>Child agency to influence school and work decision</p> <p>Child educational and occupational aspirations</p> <p>Child nutrition and health</p> <p>Child awareness of their rights, the returns to education, and the negative consequences of child labour</p>	<p>Affordability of education</p> <p>Utilization of child schooling entitlements</p> <p>Parental interaction with children around schooling and labour matters</p> <p>Parental awareness of child rights, returns to education, and the negative consequences of child labour</p> <p>Parental time use</p> <p>Availability of childcare support</p> <p>Household food and non-food consumption</p> <p>Household investment in productive assets</p> <p>Household investment in education</p> <p>Demand for child labour</p> <p>Birth registration</p>	<p>Accessibility of school infrastructure</p> <p>Affordability of indirect costs (transport, stationary and other materials)</p> <p>Availability of childcare</p> <p>Changes in discriminatory practices (inclusiveness, gender equality)</p> <p>Teaching staff quantity and quality</p> <p>Relevance of curriculum (in line with child's aspiration, and skill demand)</p>	<p>Quality of school administration and leadership</p> <p>Citizens' capacity to demand improved education services</p> <p>Accountability between education providers and users'</p> <p>Community education initiatives</p>	

Figure 1. Conceptual framework (continued)

CHILD EDUCATION & LABOUR		MODERATORS (continued)
CHILD OUTCOMES	<p><u>SCHOOL PARTICIPATION & COMPLETION</u></p> <p>Enrolment Attendance Participation in extra-curricular activities Time spent in school (e.g., regular attendance) Time spent studying / doing homework Completion of primary, secondary and higher level of schooling</p> <p><u>LEARNING</u></p> <p>Cognitive and learning outcomes (Test scores, literacy, numeracy, science and technology)</p> <p><u>SKILLS</u></p> <p>Life skills (e.g., locus of control, future-planning, aspirations, gender attitudes)</p>	<p><u>Socio-cultural context</u></p> <p>Rural vs. urban Social norms, including around work and gender Harmful traditional practices – child marriage, female genital mutilation Caste systems Patriarchal family systems</p> <p><u>Demographics</u></p> <p>Gender and age Health status Race/ethnicity Abilities/disabilities (e.g., learning difficulties) SES – other than financial Household composition and characteristics (e.g., birth order, father-headed households, number of children, parental education, household size)</p>
	<p><u>HOUSEHOLD CHORES</u></p> <p>Participation and hours in household chores (e.g., collecting water, taking care of children, cooking and cleaning, taking care of elderly or sick household members)</p> <p><u>CHILD WORK</u></p> <p>Participation and hours in economic activities for the household (e.g., agricultural work for the household, livestock herding, fishing, household non-agricultural business), economic activities outside the household (e.g., work for pay, casual work)</p> <p><u>CHILD LABOUR</u></p> <p>Work below the minimum age Exposure to work related hazards Excessive hours of work Other worst forms of child labour</p> <p><u>OTHER TIME USE</u></p> <p>Leisure & friends Play Sport Rest</p>	
IMPACT	<p>SDGs in the areas of education (SDG 4.1, 4.2, 4.3, 4.5, 4.6, 4.7) and child labour (SDG 8.7)</p> <p>Intergenerational educational and occupational mobility</p> <p>Equity</p>	

4 METHODOLOGY

This section outlines the REA methodology, including eligibility criteria, an iterative and systematic search process, data extraction protocol, the quality review process for included primary experimental and quasi-experimental impact evaluations, and data synthesis plan. It concludes by discussing potential limitations. Overall, our methodology will adhere to methodological guidelines for performing evidence synthesis products provided by UNICEF Innocenti (Bakrania, 2020).

4.1 Eligibility criteria

This review focuses on the child work/labour impacts of wide range of education interventions on children aged between five and 17 years old in LMICs (World Bank Classification). As mentioned in section 2, we focus on **education policies or programmes** with the potential to reduce child labour, including those that were not specifically designed to address child labour. Necessary conditions for the programme/policy to be included is the presence of an education design component and/or an education-based objective. **Comparison** groups are those where no intervention was delivered, or where the intervention was delivered with a relatively lower intensity. Changes in **child labour** will focus on the increase, decrease, no effect, and direct or indirect effect of interventions on various child work and labour indicators, as described in section 2. Only studies conducted in English language and published between 2000–2021 will be considered.

Table 1. Inclusion and exclusion criteria

PICO	Inclusion Criteria	Exclusion Criteria
Population	<p>Children and young people:</p> <ul style="list-style-type: none"> • Aged five to 17 • All genders, including beyond the gender binary <p>Participating in:</p> <ul style="list-style-type: none"> • Child work • Household chores • Child labour • Hazardous work and • Other worst forms of child labour 	<p>Children and young people outside of the five to 17 age range, even if in contexts of child work/labour.</p>
Education Intervention	<p>Educational programmes and/or policies that have the potential to address child labour and/or work, although they may not have an explicit child labour objective. Necessary conditions for the programme/policy to be included is the presence of an education design component and/or an education objective.</p> <p>Considered programmes/policies:</p> <p><u>Children</u></p> <ul style="list-style-type: none"> • Merit-based scholarships • School feeding and school-based health • Nudging and behavioral interventions in education (e.g., easing access to information on the benefits of education, increasing awareness on child rights, challenging social norms, improving soft skills). 	<p>Programmes and/or policies without an education design component or objective, such as health insurance, micro-credit programs, economic strengthening and family coaching, labour market programmes (e.g., job skill acquisition programmes).</p>

	<p><u><i>Families and households</i></u></p> <ul style="list-style-type: none"> • Cash or in-kind transfers • Access to childcare and ECD • Skills building (e.g., training on alternative livelihood opportunities) • Nudging and behavioral interventions in education (e.g., easing access to information on the benefits on education, increasing awareness of child rights, challenging social norms). <p><u><i>Schools and teachers</i></u></p> <ul style="list-style-type: none"> • School infrastructure and gender-sensitive amenities (e.g., safety measures, sanitary products, accessibility for children with disabilities) • Early childhood education and care facilities • Residential schools for children in remote communities • Free transportation • Free school and instructional material (e.g., books, uniforms) • Technology and adaptations for distance learning • Improvement to pedagogy and lesson delivery (e.g., teaching at the right level) • Remedial and special education opportunities (e.g., targeted programmes for out-of-school children, migrants, and street-connected children) • Teacher training, hiring, and incentives <p><u><i>Communities and systems</i></u></p> <ul style="list-style-type: none"> • Compulsory universal education laws • Removal of school fees • Full-time schooling • School-based governance for efficient management of schools • Public-private partnerships, including government and business-sector joint programs for universal education • Community-based monitoring of child labour programs linked to known community-level vulnerabilities • Shared decision-making on educational policymaking • Child and social protection systems, including birth registration mechanisms <p>Different kinds of schools will be considered (formal, non-formal, religious, government, civil society); also, pre-primary, primary, and secondary will be included.</p>	
Comparison	Studies with clear comparison group (where no intervention was delivered, or where intervention was delivered with lower intensity).	Studies without a comparison group
Outcomes	Reports rigorously identified causal impacts on child labour outcomes: decrease, increase, no effect. Considered child labour outcomes are subdivided into participation or time spent in:	Studies not reporting empirical outcomes on child work, child

	<ul style="list-style-type: none"> • Child work (participation and time spent in economic activities) • Child participation and time in household chores or services • Child labour (work below the minimum age, hazardous labour or other worst forms of child labour, including hazardous household services – see details in Appendix 1). <p>Economic activities may be captured through a variety of indicators, including work within the household (agricultural work for the household, livestock herding for the household, participation in the non-farm household business, etc.) and work outside the household (casual work or more regular work, including domestic work). Similarly, household chores may entail a range of activities such as cooking, cleaning, taking care of children, taking care of sick and elderly household members.</p>	labour, or involvement in household chores.
Context	Low or middle-income country (World Bank classification).	High-Income countries
Study design	<ul style="list-style-type: none"> • Experimental (e.g., randomized controlled trials, RCT) and quasi-experimental studies (e.g., using propensity score matching, difference-in-differences, regression discontinuity design, instrumental variables) published in peer reviewed journal articles, and working papers • Qualitative studies only if part of mixed-methods approach in combination with experimental or quasi-experimental designs • We will include systematic reviews of effects that meet all criteria above, but NOT primary/single studies on cash transfers. So, evidence of cash transfers will be reviewed only based on available reviews. 	<ul style="list-style-type: none"> • Studies that do not provide a credible counterfactual (e.g., qualitative studies, within-subject design, cross-sectional and case studies) • Conceptual and theoretical studies • Graduate theses/dissertations • Book chapters, conference papers • Other reports (e.g., design manuals, operational documents, feasibility, and acceptability studies). • Single studies focusing on the impact of cash transfers.
Language and period	Studies in English language published between 2000-2021; search finalized in September 2021	Studies in languages other than English and/or published outside the period 2000-2021.

4.2 Search strategy

The preliminary phase mentioned in section 1.2 entailed a broad range of scoping searches, including in traditional and grey literature databases. Following this, two independent consultants with expertise in evidence synthesis will first extract relevant studies from the preliminary phase and then conduct an iterative search based on the criteria spelled out above. This secondary search will be conducted between September 14th to October 5th, 2021.

This updated search will be carried out in the following traditional databases: MEDLINE (EBSCO), Web of Science (Clarivate), APA PsycINFO (EBSCO), Education Resources Information Center - ERIC (EBSCO), Academic Search online (EBSCO), and EconLIT (EBSCO), and Cochrane Systematic Reviews (EBSCO). The search will also cover four institutional databases and evidence repositories—ILO i-eval Discovery, 3ie Database of Impact Evaluations, World Bank eLibrary, and the Organisation for Economic Co-operation and Development (OECD) iLibrary. In addition to searching these databases, we will hand search the bibliographies of promising studies and systematic reviews for unique reports on completed or full impact evaluations. As part of the review process, internal and external reviewers will further suggest any relevant studies for inclusion.

An experienced Information Specialist developed the search strategy. To optimize the search process, the search strings (see Appendix 2) will comprise different arrangement of search terms, keywords, subject headings, and word combinations to fit each searched database. Simple and advanced Boolean operators will connect the search terms and narrow down search results. Truncations will be utilized to perform free and wildcard searches when appropriate. Overall, our search strategy is documented in a tailored search protocol, including database title, dates of conducted search, filters and search syntax used, and number of results retrieved (see Appendix 2).

4.2 Screening and data extraction

Retrieved studies will be imported to EPPI-Reviewer (Thomas et al., 2010), a data extraction and analysis platform which will be used for de-duplicating, title, abstract, full-text screening, quality appraisal, and creating evidence gap map. Title and abstracts—or executive summaries—will be screened for inclusion against pre-specified inclusion criteria. Full texts considered eligible will be retrieved and will form the basis of our data synthesis.

Two team members will conduct screening. For validation purposes, a coding comparison exercise will be tested on a sample of imported references (five per cent) to capture and reconcile coding differences between the two coders to achieve >80% interrater reliability. The screening checklist guiding this procedure is provided in Appendix 3.

Data from relevant impact evaluations and systematic reviews will be extracted using EPPI-Reviewer and tailored to the adopted PICO framework (see Table 1). A third team member will review the extracted data for consistency and assist in the resolution of studies deemed *unclear*. Following team debriefing, disagreements will be addressed through conversation. Overall, this REA will employ a structured methodology to search the literature and assess the quality of empirical impact assessments that provide the most rigorous evidence, making it a significant paper to inform policy and practice. A bibliographic database will be created and housed in an EndNote reference database.

4.3 Data analysis and synthesis

Impact evaluations will be analyzed and synthesized using our conceptual framework (see Figure 1) as a heuristic model. We will report evidence of educational policy and programme effectiveness in narrative form (i.e., narrative synthesis), and where available, quantitative and qualitative findings on intervention features that contribute to effectiveness. Where possible, we will extract quantitative metrics of effectiveness (e.g., effect sizes) and collate these in summary tables indicating the direction of impact (positive, neutral, or negative) to allow for cross-study comparisons.

Overall results will focus on what interventions are effective, and - to the extent the information is available - what contextual and intervention features make them so. Depending on the scope of results, we may break down findings into the effectiveness of educational programmes and provide policy implications based on clear causal attribution (i.e., effective, somewhat effective, and ineffective). We may also parse the results based on specific measures of child work/labour, and/or disaggregated by gender, age, region, rural/urban location.

The finished report will be a synthesis of findings obtained through this protocol, with plans to produce an executive summary, a full working paper, and a policy brief in plain language to directly influence policy making. We will also develop an Evidence Gap Map (EGM) or a visual and interactive depiction of the evidence, highlighting gaps in the evidence base.

4.4 Quality appraisal

We anticipate experimental and quasi-experimental reports will already include checks and balances to ensure the effects of educational interventions are reported fairly and without bias. However, to prevent biases in impact evaluation design, research quality, and reporting, we will conduct a quality appraisal of included studies using the Joanna Briggs Institute's (JBI) critical appraisal checklist tailored for randomized controlled trials, quasi-experimental studies, and systematic reviews, separately appraised for each study type (Tufanaru et al., 2020; Whiting et al., 2003). By doing this, we can reliably compare impact evaluations not only on their evidence of effectiveness, but we can identify potential biases across intervention records to assess their internal and external validity. Two team members will evaluate study quality using the JBI's (Yes/No/Unclear) coding format programmed on EPPI-Reviewer. In this way, regardless of the specific methods used in impact evaluation appraised, we can provide a uniform but flexible means of comparing reports and providing decision-making recommendations.

4.5 Potential limitations with conducting this REA

When comparing experimental and quasi-experimental research, the results might be very varied, with contradictory evidence. Quasi-experimental studies have relatively higher potential of bias. Another key limitation is that some impact evaluations may not provide information on child labour outcomes, where child labour was not the main objective of the considered programme. Thus, the REA will focus on a subset of the impact evaluations pertaining to education programmes, e.g., that subset of studies which look at child labour outcomes (in conjunction with education outcomes or in isolation). Overall, completing quality appraisal can be a complicated process, particularly for a REA (Snilstveit et al., 2016). Integrating evidence on the impact of policies on child labour across LMICs is not only an exhaustive undertaking, but also a complex one, given differences in child labour definition, measurement instruments (with the conflation of child labour with child work in some contexts), and degree to which

gender dimensions of child labour are considered in the different studies. We proceed in conducting this REA given these anticipated limitations.

5 PROPOSED TIMELINE

The REA would be conducted in 60 days within a six-month timespan. The main outputs will be reviewed by an advisory group including both UNICEF internal staff and external researchers. The key steps and review stages are planned as follows:

1. Phase One
 - a. Draft protocol & review (August-September)
 - b. Final protocol (end September)
2. Phase Two
 - a. REA conducted; draft working paper outline produced (mid November)
3. Phase Three
 - a. Draft working paper & review (mid-December)
 - b. First revised working paper (end-December)
 - c. Second revised working paper & review (January)
4. Phase Four
 - a. Final working paper including and Evidence Gap Map
 - b. Policy brief and presentation

APPENDIX 1: Definitions

Child labour - Definition

According to international standards, **child labour** is defined as work that deprives children of their childhood, their potential and their dignity, and that is harmful to physical and mental development (ILO, 2018). It refers to **work that:**

- **is mentally, physically, socially or morally dangerous and harmful to children;** and/or
- **interferes with their schooling** by depriving them of the opportunity to attend school; obliging them to leave school prematurely; or requiring them to attempt to combine school attendance with excessively long and heavy work.

Whether or not particular forms of “work” can be called “child labour” depends on the child’s age, the type and hours of work performed, and the conditions under which it is performed. Child labour legislation can also vary by country. Therefore, the precise answer may vary from country to country and among sectors within countries. At a minimum, compliance of national laws with international conventions is an important consideration. International conventions define two main forms of child labour:

1. **Work below the minimum age;** and
2. **Worst form of child labour.**

Work below the minimum age

The general minimum age for work shall be no lower than the end of compulsory education, generally 15 years of age, based on [ILO Convention 138](#), Article 2. A higher minimum age of 18 years is set for work which by the nature of the circumstances in which it is carried out is likely to jeopardise the health, safety or morale of young persons, usually referred to as *hazardous work* (Article 3). The convention includes flexibility clauses to the discretion of national authorities (for example, developing countries may specify a lower general minimum age of 14 years). Moreover, national laws may permit work by persons aged 13 to 15 years if it is not likely to be harmful to their health and does not prejudice education (*light work*). The lower age limit for light work can be 12 years for developing countries (Article 7).

Worst forms of child labour

As defined by Article 3 of ILO Convention No. 182, all of the following are considered worst forms of child labour (irrespective of age, that is up to age 18):

- (a) All forms of slavery or practices similar to slavery, such as the sale and trafficking of children, debt bondage and serfdom and forced or compulsory labour, including forced or compulsory recruitment of children for use in armed conflict;
- (b) the use, procuring or offering of a child for prostitution, for the production of pornography or for pornographic performances;
- (c) the use, procuring or offering of a child for illicit activities, in particular for the production and trafficking of drugs as defined in the relevant international treaties;
- (d) work which, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of children

Point (d) above is referred to as **hazardous child labour** or **hazardous work**. This is work in dangerous or unhealthy conditions that could result in a child being killed or injured or made ill as a consequence of poor safety and health standards and working arrangements. It can result in permanent disability, ill health and psychological damage. Often health problems caused by being engaged in child labour may not develop or show up until the child is an adult.

Because their bodies and minds are still developing, children are more vulnerable than adults to workplace hazards, and the consequences of hazardous work are often more devastating and lasting for them. Hence, it is important to go beyond the concepts of work hazard and risk as applied to adult workers and to expand them to include the developmental aspects of childhood. Because children are still growing, they have special characteristics and needs. In determining workplace hazards and risks, their effect on children's physical, cognitive (thought/learning) and behavioural development and emotional growth must be considered.

Guidance for governments on some hazardous work activities which should be prohibited is given by Article 3 of ILO Recommendation No. 190:

- work which exposes children to **physical, psychological or sexual abuse**;
- work **underground**, under water, at **dangerous heights** or in **confined spaces**;
- work with **dangerous machinery, equipment, and tools**, or which involves the manual handling or transport of heavy loads;
- work in an unhealthy environment which may, for example, expose children to **hazardous substances**, agents or processes, or to temperatures, noise levels, or vibrations damaging to their health;
- work under particularly difficult conditions such as **work for long hours or during the night** or work where the child is unreasonably confined to the premises of the employer.

Figure 1 summarizes the above definitions, differentiating between permissible forms of work and child labour, which is further decomposed in its possible forms: work below the minimum age, excessive work hours based on age-specific thresholds, and unacceptable work (hazardous/ hazardous/WFCL) at any age.

Figure 1. Child labour as defined by international legal standards

Age group		Children's work				
		Work not designated as hazardous		Worst Forms of Child Labour (WFCL)		
		Forms of work excluded under Convention 138 flexibility clauses	Light work	Excessively long hours	Hazardous work, other than excessive hours	WFCL other than hazardous work
Children at or above the general minimum working age	Age 15–17			WFCL		
Children within the age range specified for light work	Age 12–14					
Children below minimum age specified for light work	Age 5–11		Work below minimum age			

Source: adapted from Table 6.1 in ILO (2008).

Child labour – Measurement: How definitions are operationalized

Based on the UN System of National Accounts (SNA), children's activities are classified as follows:

- *Productive activities.* All activities falling within the *general production boundary*, that is any human controlled activity resulting in an output capable of being exchanged. These are disaggregated in:
 - *Economic production*, including all market production and certain types of non-market production. It includes both formal and informal production, as well as activities inside and outside the household.
 - *Non-economic production*, including unpaid household services, also referred to as 'household chores' (domestic and personal services by a household member for

consumption within the household, such as preparing meals and taking care of other household members).

- *Non-productive activities.* Those which do not fall into the above categories. These include education, leisure and rest, among others.

Child labour is commonly measured considering economic production only. However, as mentioned in the previous section, even non-economic production might harm children's health and should be considered. For example, unpaid household services may become hazardous if they absorb an excessive amount of children's time, thus interfering with their education and leisure. Moreover, because girls are typically more involved than boys in household chores, neglecting household chores may lead to gender biases in child labour estimates (Dayioğlu, 2013). Therefore, it is recommended to consider both economic and non-economic production to measure child labour.

Both participation (extensive margin) and hours (intensive margin) in productive activities should be collected separately for boys and girls to measure child labour accurately. Activities may be measured using a one-week or a 12-month reference period, to account for the seasonal nature of many forms of child work.

ILO and UNICEF classify as **child labour** the following (ILO, 2008):

- Long hours in economic activities
 - Age 5–11 (below the minimum age specified for light work): 1 hour or more per week (the only exceptions may be so called 'excluded forms of work', based on national legislation);
 - Age 12–14 (age range specified for light work): 14 hours or more per week;
 - Age 15–17 (at or above the general minimum working age): 43 hours or more per week;
- Long hours in household chores
 - Age 5–11 and age 12–14: 21 hours or more per week (in other instances a higher threshold of 28 hours is used, e.g., UNICEF 2006);
- Exposure to hazards
 - Age 5–17: work in industries and occupations designated as *hazardous*, based on national legislation, or worst forms of child labour other than hazardous work.

Experimental studies (also called "randomized evaluations" or "randomized controlled trials", RCTs) involve the comparison of randomly assigned groups into an intervention and a control group. Experimental studies typically have a manipulated independent variable(s), that leads to changes in a dependent or outcome variable(s). Such studies establish causation by comparing differences in pre- and post-intervention outcomes measures between treatment and control groups.

Impact evaluations, as used here, provide information about the impacts produced by an intervention. This goes beyond only looking at goals and objectives to also examine unintended impacts (Rogers, 2014). Impacts refer to "positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended." (OECD-DAC, 2010).

Quasi-experimental research typically estimates the causal influence (not causation) of an intervention in the absence of random assignment. This type of research is used where it is infeasible or unethical to truly randomize participants into control and intervention groups, due to the nature of the issue being addressed. Instead, naturally occurring characteristics of the

participants are used to establish differences that are tested and compared using several methods such as regression discontinuity design (RDD), propensity score matching (PSM), case-control design, or differences-in-difference (DID) to establish a counterfactual.

Rapid Evidence Assessment involves a more 'rapid' synthesis of evidence to answer a more specific research question, drawing on and re-analysing existing systematic reviews using an abridged study searching and data analysis method.

APPENDIX 2: Search strings

For MEDLINE(EBSCO), Web of Science (Clarivate), APA PsycINFO (EBSCO), ERIC (EBSCO), Academic Search online (EBSCO), EconLIT (EBSCO), and Cochrane Systematic Reviews (EBSCO) the study question was analyzed using four key concepts ('child labour', 'educational interventions', 'LMIC' and study type) transformed into search criteria described in detail in the sections below. Our broad search will involve serial searches using the following structure: [Child Labour] AND [Educational Intervention] AND [Study Type] AND [LMIC] and using title (TI), abstract (AB) and subject heading (SU) searching for each domain as follows: (TI1 OR AB1 OR SU1) AND (TI2 OR AB2 OR SU2) AND (TI3 OR AB3 OR SU3) AND (TI4 OR AB4 OR SU4).

Limiters used will include Publication Type: Peer Reviewed publications, Systematic Reviews, Impact Evaluations; Language: English; Year: 2000-2021; Location: [LMIC]

For institutional repositories - International Labour Organization (ILO), 3ie Database of Impact Evaluations, World Bank eLibrary, and the OECD iLibrary, various keywords and free-text combinations will be used as well as filters based on each unique database. We will rely on the 'advanced search' function where available in institutional databases.

A sample search conducted in Web of Science (Clarivate) will be as follows:

Search is 1 AND 2 AND 3 AND 4, limit to 2000-2021, English	
1.	Child labour
TS= ((Child OR children* OR girl* OR schoolgirl* OR boy OR boys OR schoolboy* OR youth* OR adolescen* OR minor* OR kid OR kids OR orphan* OR runaway*) NEAR/5 (work* OR labor OR laborer* OR labour OR labourer* OR employ* OR chore*))	
2.	Interventions
TS= (educat* OR teach* OR academ* OR schol* OR school* OR class OR classes OR classroom* OR pedagog* OR learn* OR lesson* OR curricul* OR tuition OR tutor* OR train* OR mentor* OR mentee* OR volunteer* OR "role model*" OR reading OR writing OR vocabulary OR instruct* OR subvention* OR subsid* OR stipend* OR grant* OR donat* OR bursar* OR aid OR award* OR voucher* OR credit* OR charg* OR payment* OR fee* OR pension* OR CCT OR UCT OR "Familias en Acción" OR Oportunidades OR PROGRESA OR "Bolsa familia" OR "Bolsa escola" OR "familias en accion" OR "escuela nueva" OR ((cash OR asset* OR monetary OR money OR economic OR pecuniary OR capital OR income) NEAR/3 (pay* OR transfer* OR incentiv* OR "hand out*" OR handout* OR grant* OR aid OR assistance OR benefit* OR help OR subsid* OR replace*)) OR ("child support" OR welfare) NEAR/3 grant*) OR "social safety" OR "social protection" OR (transfer NEAR/2 ("poverty alleviation" OR payment* OR program*)))	
3.	Impact assessments
TS= ((random* OR control* OR clinical OR comparison) NEAR/2 (trial* OR allocat* OR sampl* OR group*)) OR ((systematic OR rapid OR impact) NEAR/2 (review* OR assessment* OR stud*)) OR CCT OR RCT OR "propensity score matching" OR PSM OR "regression discontinuity design" OR RDD OR "difference* in difference*" OR "time series" OR "instrumental variable*" OR experiment* OR quasiexperiment* OR "case control" OR matching OR "between groups design" OR "time series" OR counterfactual OR "counter factual" OR "meta analy*" OR metaanaly* OR "research synthes*" OR evaluat*)	

4. LMIC

TS=(((less* OR low* OR middle) **NEAR/2** (income* OR resource*)) OR LAMI OR "less* developed" OR "under developed" OR underdeveloped OR "under served" OR underserved OR deprived OR poor* OR developing OR transitioning OR emerging) **NEAR/2** (countr* OR nation* OR population* OR econom*) OR (low* **NEAR/2** (GDP OR GNP OR "gross domestic" OR "gross national")) OR "LMIC" OR "LMICs" OR "third world" OR "central asia" OR "north asia" OR "northern asia" OR "southeastern asia" OR "south eastern asia" OR "southeast asia" OR "south east asia" OR "western asia" OR "east europe" OR "eastern europe" OR africa OR caribbean OR "west indies" OR "south america" OR "latin america" OR "central america" OR "global south" OR "middle east" OR "south pacific" OR afghanistan OR albania OR algeria OR angola OR antigua OR barbuda OR argentina OR armenia OR armenian OR aruba OR azerbaijan OR bahrain OR bangladesh OR barbados OR belarus OR byelarus OR belorussia OR byelorussian OR belize OR "british honduras" OR benin OR dahomey OR bhutan OR bolivia OR bosnia OR herzegovina OR botswana OR bechuanaland OR brazil OR brasil OR bulgaria OR "burkina faso" OR "burkina fasso" OR "upper volta" OR burundi OR urundi OR "cabo verde" OR "cape verde" OR cambodia OR kampuchea OR "khmer republic" OR cameroon OR cameron OR cameroun OR "central african republic" OR "ubangi shari" OR chad OR chile OR china OR colombia OR comoros OR "comoro islands" OR mayotte OR congo OR zaire OR "costa rica" OR "cote d'ivoire" OR "cote d'ivoire" OR "cote d'ivoire" OR "ivory coast" OR croatia OR cuba OR Cyprus OR "czech republic" OR czechoslovakia OR djibouti OR "french somaliland" OR dominica OR "dominican republic" OR ecuador OR egypt OR "united arab republic" OR "el salvador" OR "equatorial guinea" OR "spanish guinea" OR eritrea OR Estonia OR eswatini OR swaziland OR ethiopia OR fiji OR gabon OR "gabonese republic" OR gambia OR georgia OR Georgian OR ghana OR "gold coast" OR gibraltar OR greece OR grenada OR guam OR guatemala OR guinea OR guyana OR guiana OR haiti OR hispaniola OR honduras OR hungary OR india OR indonesia OR timor OR iran OR iraq OR "isle of man" OR jamaica OR jordan OR kazakhstan OR kazakh OR kenya OR korea OR kosovo OR kyrgyzstan OR kirghizia OR kirgizstan OR "kyrgyz republic" OR kirghiz OR laos OR "lao pdr" OR "lao people's democratic republic" OR latvia OR lebanon OR lesotho OR basutoland OR liberia OR libya OR "libyan arab OR jamahiriya" OR lithuania OR macau OR macao OR macedonia OR madagascar OR "malagasy republic" OR malawi OR nyasaland OR malaysia OR maldives OR "indian ocean" OR mali OR malta OR micronesia OR kiribati OR "marshall islands" OR nauru OR "northern mariana islands" OR palau OR tuvalu OR mauritania OR mauritius OR mexico OR moldova OR moldovian OR mongolia OR montenegro OR morocco OR ifni OR mozambique OR "portuguese east africa" OR myanmar OR burma OR namibia OR nepal OR "netherlands antilles" OR nicaragua OR niger OR nigeria OR oman OR muscat OR pakistan OR panama OR "papua new guinea" OR paraguay OR peru OR philippines OR philipines OR phillipines OR philippines OR poland OR "polish people's republic" OR portugal OR "portuguese republic" OR "puerto rico" OR romania OR russia OR "russian federation" OR USSR OR "soviet union" OR "union of soviet socialist republics" OR rwanda OR ruanda OR samoa OR "pacific islands" OR polynesia OR "samoan islands" OR "sao tome" OR "saudi arabia" OR senegal OR serbia OR seychelles OR "sierra leone" OR slovakia OR "slovak republic" OR slovenia OR melanesia OR "solomon island" OR "solomon islands" OR "norfolk island" OR somalia OR "south africa" OR "south sudan" OR "sri lanka" OR ceylon OR "saint kitts" OR nevis OR "st kitts" OR nevis OR "saint lucia" OR "st lucia" OR "saint vincent" OR "st vincent" OR grenadines OR sudan OR suriname OR surinam OR syria OR "syrian arab republic" OR tajikistan OR tadjikistan OR tadzhikistan OR tadzhik OR tanzania OR tanganyika OR thailand OR siam OR "timor leste" OR "east timor" OR togo OR "togolese republic" OR tonga OR trinidad OR tobago OR tunisia OR turkey OR turkmenistan OR turkmen OR uganda OR ukraine OR uruguay OR Uzbekistan OR uzbek OR vanuatu OR "new hebrides" OR venezuela OR vietnam OR "vietname" OR "west bank" OR gaza OR palestine OR yemen OR yugoslavia OR zambia OR zimbabwe OR rhodesia OR magreb OR maghrib OR sahara*)

APPENDIX 3: Screening checklist

Screening Question	No (Exclude)	Yes (Include)	Unclear (Consider for full text screening)
1. Title-Abstract- and Full-text Screening: <i>Exclude using the following set criteria. If unclear, retain for team deliberation. Second opinion mandatory.</i>			
2. Date: Published between 2000 to 2021?			
3. Language: Is the study in English?			
4. Population: Does the study report results for children and adolescents aged 5-17 years? Pay particular attention to all forms of child labour, including worst affected children, children in hazardous labour, and the worst forms of child labour (including slavery or servitude, child trafficking, forced conscription into armed conflict, prostitution and pornography, drug production and trafficking, all illegal acts, debt bondage, or any hazardous work that can cause physical, social, mental, or moral harm). <i>EXCLUDE all studies reporting outcomes on children younger than 5 years old and people 18 years or above.</i>			
5. Interventions of Interest: Does the intervention focus on the impacts of education intervention(s)—policies and programmes—on study outcomes? <u>Children</u> <ul style="list-style-type: none"> • Merit-based scholarships • School feeding and school-based health • Nudging and behavioral interventions in education (e.g., easing access to information on the benefits of education, increasing awareness on child rights, challenging social norms, improving soft skills). <u>Families and households</u> <ul style="list-style-type: none"> • Cash or in-kind transfers • Access to childcare and ECD • Skills building (e.g., training on alternative livelihood opportunities) • Nudging and behavioral interventions in education (e.g., easing access to information on the benefits on education, increasing awareness of child rights, challenging social norms). <u>Schools and teachers</u> <ul style="list-style-type: none"> • School infrastructure and gender-sensitive amenities (e.g., safety measures, sanitary products, accessibility for children with disabilities) 			

<ul style="list-style-type: none"> • Early childhood education and care facilities • Residential schools for children in remote communities • Free transportation • Free school and instructional material (e.g., books, uniforms) • Technology and adaptations for distance learning • Improvement to pedagogy and lesson delivery (e.g., teaching at the right level) • Remedial and special education opportunities (e.g., targeted programmes for out-of-school children, migrants, and street-connected children) • Teacher training, hiring, and incentives <p><i>Communities and systems</i></p> <ul style="list-style-type: none"> • Compulsory universal education laws • Removal of school fees • Full-time schooling • School-based governance for efficient management of schools • Public-private partnerships, including government and business-sector joint programs for universal education • Community-based monitoring of child labour programs linked to known community-level vulnerabilities • Shared decision-making on educational policymaking • Child and social protection systems, including birth registration mechanisms <p>Different kinds of schools will be considered (formal, non-formal, religious, government, civil society); also, pre-primary, primary, and secondary will be included.</p>			
<p>6. Outcomes of interest:</p> <p>Does the study look at the impacts of an educational intervention (programme or policy) on the following?</p> <ul style="list-style-type: none"> • Child work (participation and time spent in economic activities) • Child participation and time in household chores or services • Child labour (work below the minimum age, hazardous labour, or other worst forms of child labour, including hazardous household services – see details in Appendix 1). <p>Economic activities may be captured through a variety of indicators, including work within the household (agricultural work for the household, livestock herding for the household, participation in the non-farm household business, etc.) and work outside the household (casual work or more regular work, including domestic work).</p> <p>Similarly, household chores may entail a range of activities such as cooking, cleaning, and taking care of children, taking care of sick and elderly household members.</p>			

<p><i>EXCLUDE: "light or decent work" (a) not likely to be harmful to their health or development; and (b) does not prejudice attendance at school, participation in vocational orientation or training . . . or their capacity to benefit from the education received (ILO, 1973a).</i></p>			
<p>7. Study design:</p> <p>Is the study either an experimental or quasi-experimental impact evaluation or (systematic review focused on cash transfers)?</p> <p><i>EXCLUDE all theoretical or conceptual studies, Qualitative studies, within-subject design, cross-sectional and case studies, conceptual and theoretical studies, graduate theses/dissertations, systematic reviews, book chapters, conference papers, grey literature, others (e.g., design manuals, operational documents, feasibility, and acceptability studies). Preserve interesting studies for the background, discussion, or reporting in full syntheses.</i></p>			
<p>Is the methodology clearly reported?</p> <p><i>Immediately EXCLUDE if there is not description of the methodology</i></p>			
<p>Next: Use data extraction matrix, to extract information from full-text report.</p>			

APPENDIX 4: Data extraction protocol

Coding category	Options/Data
Bibliographic data	Authors Date of study Commissioning Agency/Funding information (if funded) Title/Abstract (if available)
Geographic coverage	Specific country(ies) in LMIC contexts
Study design (Primary)	Impact evaluation, experimental and quasi-experimental Systematic review data on cash transfers only Qualitative analysis, if part of mixed methods quantitative report; we will also collate study aims, research questions, sampling strategies, and brief information on data analysis method
Study population characteristics	N (if available), Age range (min and max) Gender Residence area (urban/rural) Race/ethnicity/culture/language Disability Family socioeconomic status Education (e.g., enrolled/not enrolled in school at the time of intervention)
Intervention characteristics	Type of education-specific intervention (with education design component or objective); other indicators considered include intervention duration, description of comparison or control group, any other unique intervention descriptors
Outcome(s) assessed	<ul style="list-style-type: none"> • Child work (participation and time spent in economic activities) • Child participation and time in household chores or services • Child labour (work below the minimum age, hazardous labour or other worst forms of child labour, including hazardous household services). • Description of any secondary outcome(s)
Measurement of effect	Measure of change (% or % Change, Z-score, effect sizes), measure of effectiveness: positive, neutral, or negative effect of intervention, conclusion summary
Quality appraisal and risk of bias measures	Assessed as recommended by the Joanna Briggs Institute (JBI) checklist
Moderators	Inductive coding/free text of moderators based on the conceptual framework

BIBLIOGRAPHY

- Aslam, M., Rawal, S., Morrow, V., and Sarfraz, S. (2021). The state of the evidence on child labour and education: school attendance, learning and child well-being. A Rigorous Review of the Evidence.
- Bakrania, S. (2020). Methodological Briefs on Evidence Synthesis. Brief 2: Introduction, *Innocenti Research Briefs* no. 2020-02, UNICEF Office of Research - Innocenti, Florence
- Beegle, K., Dehejia, R., & Gatti, R. (2009). Why should we care about child labor? The education, labor market, and health consequences of child labor, *Journal of Human Resources*, 44(4), 871-889.
- Bouillon, C. P., & Tejerina, L. R. (2007). Do we know what works? A systematic review of impact evaluations of social programs in Latin America and the Caribbean, June 2007.
- Bronfenbrenner, U. (1989). Ecological systems theory. In R. Vasta (Ed.), *Annals of child development*, Vol. 6. Six theories of child development: Revised reformulations and current issues.
- Bronfenbrenner, U., & Evans, G. W. (2000). *Developmental science in the 21st Century: Emerging questions, theoretical models, research designs and empirical findings*. Oxford: Blackwell Publishers.
- Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In R. M. Lerner & W. Damon (Eds.), *Handbook of child psychology: Theoretical models of human development*, 793-828. Hoboken, NJ: John Wiley.
- Dammert, A. C., De Hoop, J., Mvukiyehe, E., & Rosati, F. C. (2018). Effects of public policy on child labor: Current knowledge, gaps, and implications for program design. *World development*, 110, 104-123.
- Damon, A., Glewwe, P., Wisniewski, S., & Sun, B. (2019). What education policies and programmes affect learning and time in school in developing countries? A review of evaluations from 1990 to 2014. *Review of Education*, 7(2), 295-387.
- Dayioğlu M. (2012), *How sensitive are estimates of working children and child labour to definitions? A comparative analysis*, MICS Methodological Papers, No. 1, Statistics and Monitoring Section, Division of Policy and Strategy, UNICEF New York. Available at: https://data.unicef.org/wp-content/uploads/2015/12/Child_Labour_Paper_No.1_FINAL_162.pdf, accessed September 13, 2021.
- Dayioğlu, M. (2013). *Impact of Unpaid Household Services on the Measurement of Child Labour*, MICS Methodological Papers, No. 2, Statistics and Monitoring Section, Division of Policy and Strategy, UNICEF New York. Available at: <https://data.unicef.org/resources/impact-unpaid-household-services-measurement-child-labour/>, accessed September 18, 2021.
- De Hoop, J., & Rosati, F. C. (2014). Cash transfers and child labor. *The World Bank Research Observer*, 29(2), 202-234.
- Ganimian, A. J., & Murnane, R. J. (2016). Improving education in developing countries: Lessons from rigorous impact evaluations. *Review of Educational Research*, 86(3), 719–755.
- Garcia, S. & Saavedra, J.E. (2017). Educational impacts and cost-effectiveness of conditional cash transfer programs in developing countries: A meta-analysis. *Review of Educational Research*, 87(5), pp.921–965.
- Glewwe, P. (Ed.). (2013). *Education policy in developing countries*. University of Chicago Press.
- Glewwe, P., & Muralidharan, K. (2016). Improving education outcomes in developing countries: Evidence, knowledge gaps, and policy implications. In *Handbook of the Economics of Education* (Vol. 5, pp. 653–743). Elsevier, ILO (2008). Report III: Child Labour Statistics. Report No.

- ICLS/18/2008/III, ILO, Geneva. Available at: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/meetingdocument/wcms_099577.pdf, accessed September 11, 2021.
- ILO (2018). Resolution IV: Resolution to amend the 18th ICLS Resolution concerning statistics of child labour No. ICLS/20/2018/Resolution IV, ILO, Geneva. Available at: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/meetingdocument/wcms_647347.pdf, accessed September 3, 2021
- ILO & UNICEF (2021). Child Labour: Global estimates 2020, trends and the road forward, ILO and UNICEF, New York, 2021.
- Kremer, M., Brannen, C., & Glennerster, R. (2013). The challenge of education and learning in the developing world. *Science*, 340, 297–300.
- Krishnaratne, S., & White, H. (2013). *Quality education for all children? What works in education in developing countries* (No. 0000-0). International Initiative for Impact Evaluation (3ie).
- Maxwell, J. A. 2005. *Qualitative Research Design: An Interactive Approach*, 2nd ed. Thousand Oaks, CA: Sage Publications.
- Murnane, R. J., & Ganimian, A. (2014). Improving educational outcomes in developing countries: Lessons from rigorous impact evaluations. *NBER Working Paper*, (w20284).
- O’Neill J, Tabish H, Welch V, et al. Applying an equity lens to interventions: using progress ensures consideration of socially stratifying factors to illuminate inequities in health. *J Clin Epidemiol* 2014;67:56–64 .
- OECD-DAC (2020). *Glossary of Key Terms in Evaluation and Results Based Management*, OEDC, Paris. Available at: <https://www.oecd.org/development/peer-reviews/2754804.pdf>, accessed September 13, 2021.
- Ohly, H., White, M. P., Wheeler, B. W., Bethel, A., Ukoumunne, O. C., Nikolaou, V., & Garside, R. (2016). Attention restoration theory: A systematic review of the attention restoration potential of exposure to natural environments. *Journal of Toxicology and Environmental Health, Part B: Critical Reviews*, 19, 305–343.
- Quattri, M., & Watkins, K. (2019). Child labour and education—A survey of slum settlements in Dhaka (Bangladesh). *World Development Perspectives*, 13, 50–66.
- Rogers, P. (2014). Overview of Impact Evaluation, Methodological Briefs: Impact Evaluation 1, UNICEF Office of Research, Florence. Available at: https://www.unicef-irc.org/publications/pdf/brief_1_overview_eng.pdf, accessed September 13, 2021.
- Snilstveit, B., Stevenson, J., Menon, R., Phillips, D., Gallagher, E., Geleen, M., Jobse, H., Schmidt, T. & Jimenez, E. (2016). The impact of education programmes on learning and school participation in low- and middle-income countries: a systematic review summary report, 3ie Systematic Review Summary 7. Available at: <https://www.3ieimpact.org/evidence-hub/publications/systematic-review-summaries/impact-education-programmes-learning-school-participation-low-and-middle-income-countries>, accessed September 13, 2021.
- Thévenon, O., & Edmonds, E. (2019). *Child labour: Causes, consequences and policies to tackle it*, OECD Social, Employment and Migration Working Papers, No. 235, OECD Publishing, Paris. Available at: <https://doi.org/10.1787/f6883e26-en>, accessed September 13, 2021.
- Thomas J, Brunton J, Graziosi S (2010) EPPI-Reviewer 4: software for research synthesis. EPPI-Centre Software. London: Social Science Research Unit, UCL Institute of Education.

- Tufanaru C, Munn Z, Aromataris E, Campbell J, Hopp L. Chapter 3: Systematic reviews of effectiveness. In: Aromataris E, Munn Z (Editors). *JB I Manual for Evidence Synthesis*. JBI, 2020. Available from <https://synthesismanual.jbi.global>
- UNICEF (2006). *The state of the world's children 2007: women and children: the double dividend of gender equality*, Vol. 7, United Nations Publications, 2006, available at: https://www.unicef.org/publications/files/The_State_of_the_Worlds_Children_2007_e.pdf, accessed September 13, 2021.
- Whiting P., Rutjes A.W.S., Reitsma J.B., Bossuyt P.M., Kleijnen J. (2003). The development of QUADAS: a tool for the quality assessment of studies of diagnostic accuracy included in systematic reviews. *BMC Medical Research Methodology*, 3 (1), 1–13.