



Landscape Analysis of Early Childhood Education Costing Tools

ECDAN Knowledge Fellows
program project

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Abbreviations

BE ²	Building Evidence in Education
C3	Childhood Cost Calculator
ECCE	early childhood care and education
ECD	early childhood development
ECDAN	Early Childhood Development Action Network
ECE	early childhood education
EiE	education in emergencies
ESP	Education Sector Plan
IIEP	International Institute for Educational Planning
ILO	International Labour Organization
IRC	International Rescue Committee
J-PAL	Abdul Latif Jameel Poverty Action Lab
NGO	nongovernmental organization
SDG	Sustainable Development Goal
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children’s Fund
USAID	US Agency for International Development



INTRODUCTION

Education is recognized as a driver of other development goals and one of the leading paths to sustainable development. Early childhood education (ECE) in this regard provides a multifaceted benefit, and if done well, it is one of the smartest investments for addressing poverty. The benefits range from creating job opportunities for service providers, enabling parents to pursue careers, and helping children reach their potential by setting the foundation for later learning and skill development, promoting children's school readiness,¹ providing additional spillover benefits, such as higher educational attainment and adult earnings,² and reducing special education placement and repetition, which in turn is highly associated with economic costs. Benefits from ECE are more pronounced for children from low-income backgrounds. Evidence from a study that examined the impact of preschool programs targeted at children from low-income families over the life cycle and across generations showcased a lasting benefit of access to preschool on adult educational attainment, earnings, and survival beyond age 65.³ Notwithstanding the growing evidence base on the advantages of ECE and a growing commitment across many global-level actors and low- and middle-income countries to the ECE issue,⁴ the sector still struggles with being a low policy priority,⁵ with insufficient financing limiting its expansion.⁶

Sustainable Development Goal (SDG) 4 specifically focuses on education, with goal 4.2 outlining commitment by 2030 to “ensure that all girls and boys have access to quality early childhood development [ECD], care and pre-primary education so that they are ready for primary education.”⁷ Enormous progress has been made in improving education outcomes in the past couple of decades. Reports indicate that access, literacy, learning, and financing gaps (particularly in ECE) remain a challenge of the sector, while progress on SDG 4 has dwindled in recent years, even before COVID-19 exacerbated the learning crisis.⁸ While advocacy efforts continue to increase investment in education, improving the effectiveness of developmental financing has equivalent importance for achieving results in high-quality education at global and national levels. As such, costing and financing initiatives are growing in their relevance to enhancing the efficiency and effectiveness of education finance. Also, providing key information on costing/financing options supports national and international stakeholders in their education policymaking decisions.

There is a lack of systematic characterization and synthesis of the ECD costing tools and templates. Given the above context, this Early Childhood Development Action Network (ECDAN) Knowledge Fellow project to conduct a landscape analysis of education costing tools has been carried out with the following specific objectives that framed the deliverable:

- Identify the various costing tools, guides, and initiatives promoted by different development actors in promoting early childhood space and education in general.
- Map out the distinct features of the different tools.
- Identify emerging key themes and trends in education costing broadly and particularly in ECE.

ANALYSIS OF ECE COSTING TOOLS

1. Methodology

1.1 Approach

The landscaping analysis followed a qualitative approach that primarily involved a desk review of relevant resources. The study took the different costing tools, guides, and initiatives promoted by various development agencies in the ECD and education arena.

A predominantly gray literature review of the resources developed by prominent organizations working on ECD costing and education space was conducted. The gray literature was mainly used to map different stakeholders, the ECD costing initiatives they are implementing, and their distinctive features. The review was done in two steps: The first comprised a desk literature review using the snowball method to identify relevant tools, guides, and initiatives for deeper review and inclusion for mapping (inclusion criteria will be set) and included flagship guides, tools, and initiatives recommended by the mentor or during crowdsourcing (see below). This first-stage review helped to define resources for deeper examination. The second step comprised a detailed literature review on the initiatives selected for the mapping. Key words/phrases (e.g., costing in education, ECD costing, costing tools for ECE, and costing method for ECE programs) were used as the key search string words. In addition to the mainstream Google and Google Scholar search engines, the US Agency for International Development (USAID); United Nations Educational, Scientific and Cultural Organization (UNESCO); World Bank; UNICEF; Global Partnership for Education; International Labour Organization (ILO); ECDAN; and Brookings Institute's research repositories were explored as main sources of the reviewed resources.

1.2 Survey/crowdsourcing

A survey questionnaire was sent out to ECD stakeholders to gather information on costing tools and approaches being used (if any), the type of interventions for which the costing resources are being used, and any lessons learned. Yet, the survey response rate was low (less than 3 percent). To further explore whether there are any more resources out there being used by stakeholders besides the costing tools and guides identified through the literature, the landscape analysis included a crowdsourcing request in the social and professional media platforms Twitter and LinkedIn, respectively. Using the account of an ECDAN executive (and mentor) helped the author to ensure the request reached a wider audience in the ECD space. There were no new ECD costing tools and resources identified through the crowdsourcing exercise that were not initially identified through the desk review. However, it helped to confirm the diverse set of stakeholders who are interested and working in the ECD space and validated the list of resources pooled for review under this assignment.

1.3 Analysis

Results from the various sources were analyzed in accordance with the set objectives and profiles of initiatives and their key program design notion. A set of indicators were developed

to conduct a topology of the resources reviewed, and this information is presented in this report, along with the description of each resource (as an ECD costing tool or guide) that is included in the review. Additionally, the resource is published as a public good on the ECDAN webpage. Finally, a short brief annotating the costing, guides, initiatives, and tools will be developed.

2. Costing tools and guides

2.1 Cost tools

2.1.1 Brookings Institute Education Development Costing Tool

The [Education Development Costing Tool](#) from the Center for Universal Education at Brookings Institute is an online, publicly available, newer, more advanced, and user-friendly version of the previous Standardized ECD Costing Tool. The Education Development Costing Tool aims at facilitating costing analysis and providing methodological consistency to costing a range of ECD interventions across a diversity of contexts. The tool leverages years of research at the Center for Universal Education that focused on how the collection, analysis, and use of various types of data can contribute to the improvement of learning outcomes in education and ECD, as well as the lessons from the piloting of the Standardized ECD Costing Tool in five countries (Bangladesh, Malawi, Mali, Mexico, and Mozambique), alongside the World Bank's Strategic Impact Evaluation Fund. In addition to many improvements to the tool's use related to ECD, the new Education Development Costing Tool can be used with primary and secondary education.

Using built-in RTI International Tangerine® software, the Education Development Costing Tool allows the user to enter cost-related data online in a straightforward survey form. Users can perform a range of cost calculations, estimates, and simulations. As such, the tool can be used by users such as policymakers, funders, researchers, or anyone seeking to answer the following questions:ⁱ

- What resources are needed to deliver an intervention?
- Is the project feasible within a given budget?
- What are the cost implications of a programmatic change, such as in dosage?
- What would be the cost of scaling up a program or intervention?
- How do the costs of intervention A compare to those of intervention B?
- What are the cost drivers of an intervention?
- What is the cost per beneficiary [unit cost] of an intervention or program?
- How are costs distributed across cost categories for an intervention or program?
- How are the costs distributed across resource categories for an intervention or program?
- How are the costs distributed between one-time costs and recurring costs?

The Education Development Costing Tool also can contribute, but not directly answer, further questions, such as a comparison of the costs of an intervention to the monetary value of all

ⁱ See also: <https://www.brookings.edu/blog/education-plus-development/2021/12/23/getting-both-costs-and-effectiveness-right-to-improve-decisionmaking-in-education/>.

the benefits created by this intervention, or a cost-benefit analysis. The cost data that is produced by the tool can also be used in a cost-effectiveness analysis in conjunction with impact data to examine the cost of the intervention per outcome delivered. This data can also be used to examine how the cost per outcome compares to other interventions that produce the same outcome. Functionalities such as currency conversions and provision of results as automatic data visualizations of aggregated data and disaggregated data in a downloadable CSV format are included in the tool.

Going forward, as more programs undertake costing exercises with the Education Development Costing Tool, an interactive, searchable database of aggregated childhood cost data will be populated. As such, the Cost Data Explorer, an interactive database available on the website where tool is housed, will increase global cost data transparency, allowing stakeholders to compare, consider, and understand investments across intervention types and geography.

2.1.2 ILO Care Policy Investment Simulator

The [ILO Care Policy Investment Simulator](#) is a web-based policy modeling tool developed by ILO. The tool can be used to simulate and calculate the investment requirements in four care policy areas: (1) childcare-related paid leave (maternity, paternity, and individual parental leave for mothers and fathers), (2) paid breastfeeding breaks, (3) early childhood care and education (ECCE) services, and (4) long-term care services and related employment and gender-equality benefits for 82 countries. It builds on over 180 statistical indicators.

Using the simulator is free, easy, and straightforward. Users are required to sign up with a valid email address and might have to wait for a few minutes to receive approval from the system managers to proceed with using the tool. Once in the system, users can select a series of policy parameters for each of the four care policy areas. Customization is allowed to some extent in that users can choose from a set of already built-in data. Upon entering the system, the user will see the default policy parameters set by ILO and can modify each parameter within a list of predetermined options. Once the policy parameters are selected, the tool calculates the annual public investment required for each policy and the resulting employment, earnings, and fiscal effects.

This tool enables users to carry out a cost-benefit analysis for planning, budgeting, and policy and legal reforms. The benefits modeled are the investment's short-term employment and earning effects, especially in terms of closing gender employment and wage gaps, and the resulting annual fiscal revenue. The increase in employment stems from direct job increases in the care service industries where the investment takes place, indirect increases in the industries that supply the care sector, and consumption-induced increases in the economy in general, since households of the newly employed would spend part of their increased earnings. For some policies, the tool also estimates a long-term return on investment, which is the increase in GDP (measured in US\$) per dollar spent on ECCE and paid childcare-related leave (see Figure 2).

Figures 1 and 2 are snapshots of the simulation tool interface for ECCE.

Figure 1. Snapshot of the ECCE policy indicators in the ILO Care Policy Investment Simulator user interface.

Early childhood care and education (ECCE)		
	Ethiopia in 2019	Your scenario
% children in ECCE	-	50%
% children in pre-primary	29%	90%
Hours per week per child in ECCE	-	40
Hours per week per child in pre-primary	-	40
Child/staff ratio (ECCE)	-	5.0
Child/staff ratio (pre-primary)	-	15.0
Pay level of early childhood educators (% primary teachers' wage)	-	100%
Pay level of early childhood assistant educators (% minimum wage)	-	120%
Share of early childhood educators in ECCE	-	40%
Share of early childhood educators in pre-primary	-	75%
Other staff (in % of children)	-	4%

Figure 2. Snapshot of the ECCE results section in the ILO Care Policy Investment Simulator user interface.

Results			
Scenario 1 - ETH 2030	Required gross additional annual investment - All care policies (% GDP)	Net total employment generated - ECCE and LTC (without induced effects)	ROI (ECCE and Leave): US\$ GDP increase per US\$ spent
	6.42%	5,824,097	1.68

Key results		
	Ethiopia in 2019	Scenario 1
Required gross additional annual investment - All care policies (% GDP)	-	6.42%
Net total employment generated - ECCE and LTC (without induced effects)	-	5,824,097
% point change in gender employment gap (without induced effects)	-	-8.9
% point change in gender gap in monthly wages (without induced effects)	-	-12.1
ROI (ECCE and Leave): US\$ GDP increase per US\$ spent	-	1.68

Data availability on some of the policy indicators varies across countries. For example, data on opening hours and child:staff ratios that count both teachers and assistants are only available for Eurostat countries.

The simulator is now accompanied by a step-by-step [ILO Care Policy Investment Simulator: Technical Note](#), published in March 2023 and available in English, French, and Spanish (contact: carepolicy@ilo.org).

2.1.3 UNICEF ECE Accelerator Simulation Model

UNICEF’s [ECE Accelerator Simulation Model](#) is a modeling and costing tool, downloadable in an Excel-based platform. It helps countries estimate national needs to promote universal access to pre-primary education (per SDG 4.2). The tool provides a detailed projection of the human, infrastructural, and financial resources needed to meet national ECE targets, as defined by national Education Sector Plans (ESPs). The projection period spans ten years, from 2021 (baseline) through 2030. However, this can be changed to any subsequent value in the upcoming years.

Seven “basic datasets will be required for the simulation model to work effectively:

1. Population data for nationals and refugees’ populations
2. Enrolment data for public, private, community, and public-private schools
3. Dropout and repetition rates for the baseline year
4. Teachers and caregivers’ data for personnel engaged in ECE and the existing gap
5. Infrastructure available for ECE and the existing gap
6. Unit costs of basic infrastructure and human resource inputs
7. Trends of ECE budgets over the last ten years”⁹

All data for the model will be added to the “inputs” sheet. All the other sheets will be automatically populated based on that data. The model in its current form looks at three years of pre-primary education, with the biological ages of 3 to 5 years. Countries prioritizing one year of pre-primary education before going for the full three-year program can make use of the same model. The tool can show annual enrollment and resource projections that are inclusive of considerations for children with special needs. It can be adaptable to various subsector strategies and applicable to national and subnational levels.

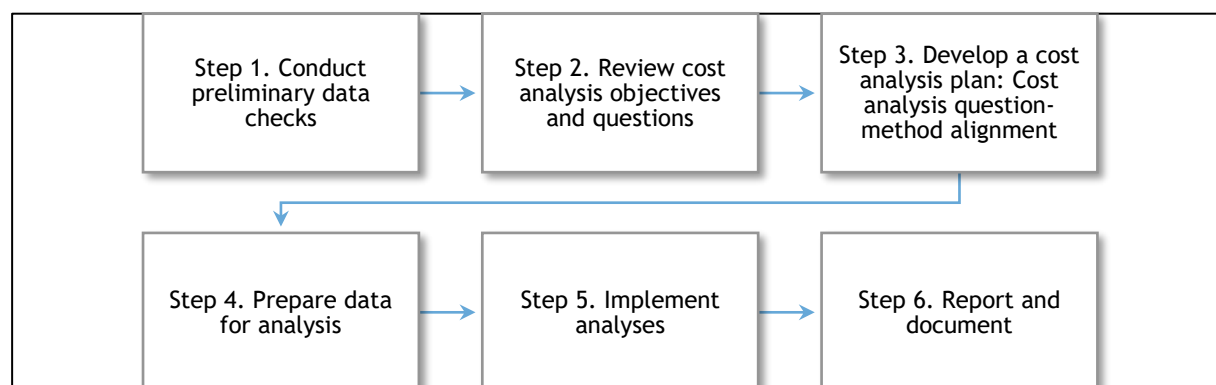
The tool is accompanied by a detailed step-by-step [Early Childhood Education Accelerator Simulation Model: User Guide](#) (for more information, contact abalam@unicef.org).

2.1.4 USAID Cost Analysis Guidance Tools and Templates

USAID’s Bureau for Development, Democracy and Innovation / Center for Education provides an Excel-based tool, [Cost Analysis Guidance Tools and Templates](#), that facilitates the establishment of systems and processes for capturing and analyzing the costs of education intervention, increasing transparency to allow for the linkage of costs to outcomes, and enabling value-for-money analysis, thus providing a pathway toward resource optimization across programs and contexts.

The tool is accompanied by a detailed [Cost Analysis Guidance for USAID-Funded Education Activities](#) and follows a theory of change framework from inputs/activities to outcomes. The sections of the tool are organized following what the cost analysis guidelines outlined as “six steps needed to successfully perform analysis of cost data sets..., from the perspective of a cost analyst. While some of them could be (and should be) implemented by people other than a cost analyst, the analyst will need to ensure that all six steps are completed when managing a cost study”¹⁰ (Figure 3).

Figure 3. Six essential steps for cost data analysis.



Adapted from: Walls et al, 2021¹ (see also <https://www.edu-links.org/resources/usaaid-cost-measurement>).

The Excel tool covers the first four steps and can assist in conducting retrospective (cost economy, cost efficiency, and cost-effectiveness) and prospective (scale-up, replication, and transfer) cost analyses.

USAID’s *Cost Reporting Guidance for USAID-Funded Education Activities* lays the foundation for the cost analysis. Per the *Cost Analysis Guidance*, analysts “can use alternative tools and templates as long as they adhere to the key elements of USAID/Education Cost Analysis...:

1. Analysis uses cost data collected in real-time (not budgets)
2. Analysis follows the six steps outlined in this guidance
3. Analysis adheres to the methodological elements of USAID/Education approach
4. Analysis uses World Bank Development Indicators in currency and inflation adjustments
5. Discount rates for costs as well as benefits are set at zero
6. The presentation of findings is transparent and lists assumptions and limitations.”¹¹

Additional costing resources can be found in the USAID education cost measurement tools page.

2.1.5 UNESCO Simulation for Education (SimuED)

UNESCO’s downloadable Excel-based education sector-wide simulation model, *SimuED*, allows users to project key indicators for SDG 4 to facilitate national planning. The model has several versions, with the latest update, 4.0, coming out in 2022. The first model was launched in 2019 (*SimuED* 2.0), and it was further revised in 2020 (*SimuED* 2.1). *SimuED* provides users with more than 100 options for built-in modules, without having to deal with complicated formulas. The tool allows users to customize the model according to a particular country context by creating their own add-on modules to augment the generic core model.

In the more efficient and user-friendly 4.0 version, the built-in help function explains each module thoroughly, and the module filling operation is simplified. The tool supports the estimation of resource requirements and so can be used to project education indicators to facilitate policy and planning processes.

UNESCO anticipates that video tutorials will be available soon, and users can consult UNESCO should the need for further help or information/support arise (contact: Ms. Satoko Yano,

s.yano@unesco.org). Additionally, examples are provided upon request. The tool and help files, as well as the two-page [installation guide](#), can be downloaded from the website.

2.1.6 EiE [Education in Emergencies] Cost Capture Template

The [EiE Cost Capture Template](#) is an Excel-based tool from the United Nations Girls' Education Initiative that guides education-specific gender-responsive cost tracking for emergency interventions, as well as provides flexible support for tracking program costs before, during, and after implementation. The template is developed based on an ingredient costing approach and allows for inflation and currency adjustments. Users can perform cost-economy and cost-efficiency analysis. The last sheet of the tool provides a space to document questions that arise during costing and the response provided (if any), and by whom.

Section 3 of the [EiE-GenKit](#) provides tools to guide planning and program design for gender-responsive interventions, and Section 3.3 (“Gender-Responsive EiE Costing, Cost Tracking and Cost Analysis”) in particular provides guidance and tools for EiE costing. Section 3.3 aims to facilitate understanding around gender-responsive EiE intervention costs in several areas: considerations of both costs per person and total costs of parts of an activity; why and how to track such costs; and why, when, and how to conduct a “rapid cost analysis” on such costs to adapt to context-specific interventions.

The primary intended users of the tool and GenKit are national/regional EiE managers and personnel involved in proposal design, budget development and monitoring, and financial reporting (i.e., finance managers), as well as cluster coordinators involved in setting costing standards/guidelines as part of the cluster strategy process. The tool was published and field tested in 2021. It will be continually updated, along with additional user guidance as needed in the future.

2.1.7 Abdul Latif Jameel Poverty Action Lab (J-PAL) Costing Templates

There are two downloadable Excel-based costing template resources from J-PAL, the [J-PAL Costing Template](#) and [Basic J-PAL Costing Template](#). The detailed J-PAL Costing Template helps users generate estimates of total program costs by providing a comprehensive list of the various cost categories/elements that may be included in a program and prompting users to input various details about cost data within each category (i.e., unit cost, number of units, currency, year, etc.). However, gathering very detailed cost data is not always possible. If these data are unavailable, then users can utilize the Basic J-PAL Costing Template to generate a rough estimate of program costs by breaking costs into main or general categories/elements.

The templates are accompanied by the [J-PAL Costing Guidelines](#).

2.2 Costing guidelines

2.2.1 USAID Cost Analysis Guidance

The guidance notes by USAID’s Development, Democracy and Innovation / Center for Education put forward a common framework for analyzing costs of USAID-funded education interventions. [Cost Analysis Guidance for USAID-Funded Education Activities](#) (2021) is produced for USAID evaluation partners, implementing partners, and USAID Missions commissioning cost studies. It builds on and is complemented by the [Cost Reporting Guidance for USAID-Funded Education Activities](#) (2018). The cost analysis approach presented in the

2021 document is designed to be applicable to the cost data collected per the 2018 one. Both guidance notes build on existing systems and best practices for the collection and analysis of cost data. The newer guidance is designed to help establish the process and procedures for how evaluators and cost analysts examine cost data in the education sector and set standards for reporting on findings. In the 2021 document, USAID suggests that “adherence to this guidance will ensure comparability and transparency of cost analysis results and lay a strong foundation for continuous learning and improvement in the cost-efficiency and cost-effectiveness of USAID-funded education interventions.”¹²

The costing approach adopted in the *Cost Analysis Guidance* analyzes actual expenditures incurred from interventions and adjusts for currency and inflation. Amortization or depreciation is not applied, and costs and benefits are not discounted over time. Also, costs toward the intervention are counted for all stakeholders, including donors, implementing and governmental partners, nongovernmental organizations (NGOs), the private sector, and individuals. Regarding inflation and currency conversion, the guide recommends that the standard order of operations is currency conversion first and inflation adjustments second to help maintain methodological consistency across the portfolio.

The *Cost Analysis Guidance* is organized into two main parts: “The opening part outlines common cost questions that USAID staff and implementing partners, partner governments, research organizations, academics, and other stakeholders may be asking, and presents an overview of analytical methods suited to answering these different questions [e.g., Why invest in cost measurement?]. It also describes typical cases of cost analysis results utilization and broader applicability of findings. USAID staff, partner governments, and commissioners of cost analyses will find this part useful. The second part of [the] document contains a practical guide to implementing cost data analyses, with templates and resources. This part is designed for researchers, evaluators, and cost analysts. [The] guide is designed to be applicable to all types of cost and expenditure analysis, with and without impact evaluation data.”¹²

2.2.2 Additional tools from ECE Accelerator toolkit

[Section 3](#) of the UNICEF ECE Accelerator toolkit focuses on establishing a vision to inform ESPs and offers a set of tools to support the planning process, including [Tool 3.3: Tips, Checklist and Examples](#) of ECE Accelerator Simulation Models. Simulation models are typically developed after the Education Sector Analysis when determining policy priorities during ESP preparation and the ECE components of that ESP. A simulation model is helpful in “testing” the impact of various policy options to explore their relative feasibility, scalability, and sustainability, supporting the “iterative process” of adjusting proposed priorities, strategies, activities, targets and costs for inclusion in the ESP.

Sections, templates, and tools on the ECE toolkit build on and feed into one another; however, Tool 3.3 can be used independently, depending on the need of the user. The tools can be relevant and applicable in the context of developing ECE plans in general—for example, they may be used to support formulation of an ECE plan for a funding/grant opportunity or for guiding subsector reform.

The two types of projections indicated in the ECE simulation model examples are need-based and intervention-based models:

- Need-based projections are driven by a target in terms of participation (e.g., in the case of ECE, the Net Enrollment Rate or percentage of first-grade students with preschool

experience). All financial projections are based on this target and resulting enrollment, as well as the costs associated with providing services for them (e.g., [Sao Tome and Principe simulation model](#)). These models are commonly prepared as part of ESPs and are based on a comprehensive picture of education and ECE costs.

- Intervention-based projections, less commonly used than need-based projections, assume an increase in the capacity to provide ECE services and/or demand for them from the ESP interventions (e.g., by building new schools/classrooms or reducing fees or other costs for families). The number of children enrolled will be derived from this increase in capacity or demand. Because they are driven by interventions and often ignore existing core functions of ministries of education, these models are generally not all-inclusive but, rather, project costs that would be additional to the current education budget. In this way, they are generally more detailed and less comprehensive than need-based projection models (e.g., [Lesotho simulation tool](#)).

2.2.3 J-PAL Costing Guidelines

The [J-PAL Costing Guidelines](#) provide an outline on how to approach the collection of cost information, what costs to include and exclude, and how detailed cost data should be.

2.2.4 International Rescue Committee (IRC) cost analyses

The IRC is adopting consistent [cost analysis methodology](#) to analyze whether key interventions are cost-efficient (e.g., [teacher professional development](#), [malnutrition treatment](#)) or cost-effective (e.g., [parental coaching programs](#)) to use in programming decisions and advocacy work. IRC costing resources include the following:

- The [Cost analysis methodology at the IRC](#) report documents the methodology used by the IRC in conducting cost-efficiency and cost-effectiveness analyses. The report covers costing methodological issues, such as identification of program ingredients, discounting, exchange rates, inflation, cash/in-kind transfers, volunteer or beneficiary time, and public presentation of cost data.
- The [Systematic Cost Analysis \(SCAN\) tool](#) is a web-based software designed to allow rigorous, rapid analysis of the cost-efficiency of programs through reuse of existing accounting and monitoring data. The tool was developed by the IRC, but a handful of NGOs—including Accion Contra el Hambre, CARE, Mercy Corps, and Save the Children—came together in 2018 to build a [new version](#) of the tool that is compatible with any financial system and stores data from different NGOs separately and securely.

For more information, contact Caitlin Tulloch, caitlin.tulloch@rescue.org.

2.2.5 Building Evidence in Education (BE²) Cost Measurement Guidance Note

This [Cost Measurement Guidance Note](#) from the BE² working group is a tool for facilitating the adoption of robust cost measurement practices, hopefully resulting in more effective global investments in education development. It includes recommended steps for instituting cost measurement practices in an international donor agency.

Providing a common framework for cost measurement will allow comparisons of cost-efficiency and cost-effectiveness across global donor-funded interventions in education, and adopting clear standards for cost studies would promote and expand a knowledge base and, ultimately, the efficiency and effectiveness of international education investments.



This guidance can be useful to those who are commissioned to produce research, independent researchers and academics, and implementation partners of multilateral donors, as well as national governments.

2.2.6. UNESCO International Institute for Educational Planning (IIEP) costs and financing of education

The IIEP's [costs and financing of education](#) resource supports UNESCO Member States in the costing and planning their education development plans by providing four mechanisms: (1) education sector analysis, (2) National Education Accounts, (3) a cost simulation model, and (4) a link between education planning and budgeting.

IIEP participated in the production of [Education Sector Analysis Methodological Guidelines](#), which allows readers to become familiar with the method of analyzing costs and financing used in the context of the education sector analysis.

IIEP also offers a specialized course on projection methods and techniques and simulation models with the objective of providing participants with the foundation needed to develop a simulation model autonomously. The priority target audience is the staff of ministries responsible for education and training who wish to broaden their skills to strengthen the “costs and financing” phase of sectoral planning. (More information can be found [here](#).)

3. Common themes and trends

The number and type of costing tools and guidelines are diverse and growing. Although there is some kind of standardization among a few of the guidelines, particularly those coordinated under BE², they take different approaches. Resources can be hard to find or select, limiting use of the tools by those who need them the most. In this regard, ECDAN's knowledge repository of costing tools takes one large step toward resolving that issue by compiling the resources in one place. Not enough is known about the take-up rate of these tools and guidelines in various countries and what, if any, change they are resulting in at the country or program level.

4. Takeaways and next steps

It is vital to learn more from stakeholders about use of the ECE costing guidelines and tools—particularly, who is using them, what is working or not working, and what is the value addition of each in relation to existing resources. Additionally, a plan should be made to promote use of the available ECE costing tools.



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- ⁹ UNICEF. *Early Childhood Education Accelerator Simulation Model: User Guide*. New York, NY: UNICEF; 2022: 5. https://www.ece-accelerator.org/sites/default/files/2022-09/Guide%20for%20Using%20ECE%20Accelerator%20Simulation%20Model_FV_0.pdf#page=5.
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APPENDIX: COMPARISON TABLE

	Education Development Costing Tool	Care Policy Investment Simulator	Early Childhood Education (ECE) Accelerator Simulation Model	Education Cost Analysis Approach	Simulation for Education (SimuED)	Education in Emergencies (EiE) Cost Capture Template	Costing Template (detailed)
Developer	Brookings Institute Center for Universal Education	International Labour Organization (ILO)	UNICEF	US Agency for International Development (USAID) Center for Education	United Nations Educational, Scientific and Cultural Organization (UNESCO)	United Nations Girls' Education Initiative	Abdul Latif Jameel Poverty Action Lab (J-PAL)
Purpose	To facilitate the costing of past, current or future (potential) programs to determine cost per beneficiary and total (resources needed), To compare costs between initiatives, understand cost distribution, and costs of scaling	To present how to close the care policy gaps through investments in the country-specific gender-transformative care policy packages and assess the multiple benefits of investing in the care economy	To estimate the resources required for achieving Sustainable Development Goal (SDG) 4.2 targets, as well as material, human, and financial resources required for creating an Education Sector Plan and ECE subsector plan	To improve sustainability and overall value for money of USAID education programming through a better understanding of cost structures, cost-efficiency, and cost-effectiveness of interventions	To project selected SDG4 indicators and determine their impact on national budgeting	To understand gender-responsive unit cost (costs per person) and ingredient cost (total costs of parts of an activity) considerations across common EiE intervention types	To collect costs for all ingredients needed to implement a program or intervention (excluding the costs of evaluating the impact of that program) to help nongovernmental organizations, governments, and other policymakers determine how much replicating or scaling up a program will cost
Costing Approach	Micro-costing / ingredients-based costing	Macro-simulation	Macro-simulation	Micro-costing / ingredients-based costing	Macro-simulation	Ingredients-based costing	Ingredient costing
Type of Analysis	Retrospective and prospective	Prospective	Prospective	Retrospective and prospective	Prospective	Retrospective and prospective	Retrospective and prospective
Focus of Application (what questions does it answer?)				Projections for enrollment, net enrollment rate, human resources, infrastructure, and financial resources required through 2030	Estimation of resource requirements, which can be used to project selected SDG 4/ education indicators to facilitate policy and planning processes		Estimate of a program's impact (i.e., how much will replicating or scaling up a program cost?), which can be used to get a back-of-the-envelope calculation of the program's cost per unit of impact
Cost economy analysis?	Yes			Yes			Yes

	Education Development Costing Tool	Care Policy Investment Simulator	Early Childhood Education (ECE) Accelerator Simulation Model	Education Cost Analysis Approach	Simulation for Education (SimuED)	Education in Emergencies (EiE) Cost Capture Template	Costing Template (detailed)
Cost-efficiency analysis?	Yes			Yes			Yes
Planning, budgeting, scaling?	Yes	Yes, including legal reforms	Yes	Yes	Yes	Yes	Yes
Cost-effectiveness?	Yes, coupled with impact evaluation			Yes			
Cost-benefit analysis?	Yes, but indirectly	Yes, for planning					
Platform and Format	Web-based	Web-based	Excel-based (downloadable)	Excel-based (downloadable)	Excel-based (downloadable)	Excel-based (downloadable)	Excel-based (downloadable)
Applicable Sectors		<ul style="list-style-type: none"> - Parental leave - Breastfeeding breaks - Childcare and long-term care - Services with high-quality care jobs 		Mainly for education	All education subsectors		Education, health, nutrition, water & sanitation, social protection, governance (related to any priority sector in the early childhood development area)
Additional built features (e.g., currency conversion, amortization?)	Yes			<ul style="list-style-type: none"> - No for amortization or depreciation - Yes for inflation and currency conversion adjustments 			Only currency conversion
Provision for customization by user?			Yes, for country contextualization using the semantics sheet		Yes		Yes
Instructions on how to use the tool / supporting materials or guidelines / templates		ILO care policy investment simulator: Technical note	User Guide for ECE Accelerator Simulation Model	Multiple guidelines and templates available on the USAID Cost Measurement web page, including: <ul style="list-style-type: none"> - Cost Analysis Guidance - Cost Reporting Guidance - Cost Reporting Field Implementation Guidance 			<ul style="list-style-type: none"> - J-PAL Costing Guidelines - Comparative Cost-Effectiveness Analysis to Inform Policy in Developing Countries: A General Framework with Applications for Education. (2012)

	Education Development Costing Tool	Care Policy Investment Simulator	Early Childhood Education (ECE) Accelerator Simulation Model	Education Cost Analysis Approach	Simulation for Education (SimuED)	Education in Emergencies (EiE) Cost Capture Template	Costing Template (detailed)
				<ul style="list-style-type: none"> - Contributions and Dosage Reporting Template - Cost Reporting Manual Template - Implementing Partner Special Interest Group 			
Intended Users				<p>Primarily USAID evaluation partners, implementing partners, and Missions commissioning cost studies (for analyzing the costs of USAID-funded education interventions), with potential application for similar interventions, particularly if they also followed the Cost Reporting Guidance that complements the cost analysis resources.</p>		<p>Primary users including:</p> <ul style="list-style-type: none"> • National/regional EiE managers and personnel involved in proposal design, budget development and monitoring, and financial reporting (i.e., finance managers) • Cluster coordinators, who set costing standards and guidelines, and education planners • Stakeholders applying pooled funding criteria and standardized unit costs for response frameworks or strategies and/or joint proposals • Institutions' regional education advisors and/or other regional staff who support planning and budgeting 	



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