



# Foundational Learning: Debates and Praxes

## About NSI

NORRAG Special issue (NSI) is an open-source periodical. It seeks to give prominence to authors from different countries and with diverse perspectives. Each issue is dedicated to a special topic of global education policy and international cooperation in education. NSI includes a number of concise articles from diverse perspectives and actors with the aim to bridge the gap between theory and practice as well as advocacy and policy in international education development. The content and perspectives presented in the articles are those of the individual authors and do not represent views of any of these organizations. In addition, note that throughout the issue, the style of English (British, American), may vary to respect the original language of the submitted articles.

## About NORRAG

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NORRAG



Chemin Eugène-Rigot, 2  
1202 Geneva, Switzerland  
+41 (0) 22 908 45 47  
[norrag@graduateinstitute.ch](mailto:norrag@graduateinstitute.ch)

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### Coordination and Design Concept

Anouk Pasquier Di Dio

### Production

Alexandru Crețu

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# Foundational Learning: Debates and Praxes

**Guest editor**

Hugh McLean

NORRAG, Senior Advisor

# Foreword

While the term “foundational learning” has garnered attention in recent years within the global education discourse, questions about what constitutes foundational knowledge and skills, and how to teach and learn have defined educational investigations and discussions throughout history. What should be considered foundational in education? How can foundational learning be best taught, cultivated, or facilitated? How can foundational learning be assessed and measured? What strategies can be employed to ensure equitable access to foundational education? How can foundational learning be understood differently across cultural, social, political, economic, and educational contexts? Is there a gap between global, national, and local focuses on foundational learning and to what extent? How can technology be utilised to promote foundational learning? There is not, and should not be, a single definitive answer to these questions. However, what should be placed at the centre of the discussion regardless is what knowledge and skills are needed the most for everyone to reach their fullest potential, respectfully interact with each other, and meaningfully engage with the world.

In navigating this intricate topic of foundational learning, our guest editor, Hugh McLean, has compiled 28 contributions from 78 authors across the world. These analytical, critical, and reflective contributions shed light on the processes,

challenges, and understandings of foundational learning. They paint a diverse picture of foundational learning across various educational contexts, often stretching beyond conventional interpretations of basic education or operating outside existing education systems while compellingly illustrating their importance and role in the present and the future.

NSI 09 is divided into five parts. **The first part** delves into the narratives and debates surrounding foundational learning. **The second part** explores the impact of metrics and measurement approaches on what is considered foundational learning. **The third part** highlights non-mainstream approaches to foundational learning, and **the fourth part** showcases mainstream programmes and orientations that operate within national education systems but extend beyond the limited scope of literacy and numeracy. Finally, **the fifth part** scrutinises crucial issues and debates related to foundational learning, which are not only pertinent to the present but also have lasting relevance for the future.

Drawing from the insights from these contributions, the guest editor introduces three modes of foundational learning. Foundational learning I represents “an intrinsic, essentially unstructured, often intuitive manner in which learning occurs”. Foundational learning II represents “an extrinsic,

essentially structured, often non-intuitive way in which most cognitive competencies are learned.” Foundational learning III “refers to the attainment of further or “higher” competencies through iterative, dialogical, and cumulative processes that build on the intrinsic and extrinsic competencies that are developed in Foundation Learning I and II” (p. 14). This multifaceted conceptualisation helps us break through the polarised debate on foundational learning—either limited to basic literacy and numeracy or encompassing a broader spectrum, including social and emotional skills, civic values, compassion, and resilience. Furthermore, this conceptualisation allows us to focus on discussing the context-specific meaning of foundational learning and its implications for education policy and practice.

**Chanwoong Baek**

NORRAG Academic Director  
Assistant Professor  
Geneva Graduate Institute

We sincerely thank the guest editor, authors, reviewers, and publication team for dedicating their expertise and time to this important and timely publication. As you embark on the explorative journey of foundational learning through the contributions included in this NORRAG Special Issue, we invite you to reflect on and challenge your own assumptions, beliefs, and understandings. We hope that this Special Issue stimulates deeper and more critical discussions about foundational learning among educators, learners, policymakers, researchers, and practitioners, contributing to the foundation for a brighter and promising future for all.

**Moira V. Faul**

NORRAG Executive Director  
Senior Lecturer  
Geneva Graduate Institute

NORRAG Special Issue (NSI) was launched in 2018 with the ambition to be an open-source periodical giving prominence to authors from various countries and with diverse perspectives. In line with NORRAG’s strategy and seeking to bridge the gap between theory and practice, each issue focuses on the current debates that frame global education policy and international cooperation in education. The first NSI focused on the Right to Education Movements and Policies: Promises and Realities; the second edition examined Data Collection and Evidence Building to Support Education in Emergencies; the third edition addressed the question Global Monitoring of National Educational Development: Coercive or Constructive?; and the fourth edition examined New Philanthropy and the Disruption of Global Education. NSI 05 addressed Domestic Financing: Tax and Education, NSI 06 considered States of Emergency: Education in the Time of COVID-19, NSI 07 studied Education in Times of Climate Change, and the most recent, NSI 08 examined the Education-Training-Work Continuums.

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# Foundational Learning: Debates and Praxes

 **Hugh McLean**, NORRAG, Senior Advisor, Kazakhstan

 [Hugh.mclean@graduateinstitute.ch](mailto:Hugh.mclean@graduateinstitute.ch)

NORRAG Special Issue No. 9 (NSI-09), Foundational Learning: Debates and Praxes, is written primarily by and for NORRAG members and friends who are also our first audience. NORRAG Special Issues serve as the space for discussions around our dinner table and a number of the contributions convey this more personal mode of communication. They inevitably also reach broader readerships and our guests are always welcome. We trust that you will find our conversations engaging and your contributions to the NORRAG blog are warmly encouraged.

The authors' contributions to the debates and praxes of foundational learning examine its themes in ways that are random but that appear organically linked. They include analyses, case studies, reports, and reviews that are more research pieces; and argumentative, compare and contrast, descriptive, expository, narrative pieces, and personal stories that are more like essays. Several combine these elements. Three are interviews. The discussants and writers are academics, activists, government officials, independent researchers, NGO workers, students, and teachers. Some are established and well-regarded authors while others are writing for the first time. They hail from south of the Amazon to north of the Zambezi, lingering in the Americas, Europe, South Asia, the Philippines, East and Southern Africa along the way. All of them have something profound to say about foundational learning and what it means for pedagogy and the conundrums these insights present for systemic scale-up.

This special issue is divided into five parts, each which explores a distinct entry point for thinking about foundational learning. The authors' contributions inevitably reveal how intricately interlinked everything is. Their contributions are assembled, much like the tesserae in a mosaic, to reveal the larger picture of contemporary debates and praxes of foundational learning. A brief note on the authors' contributions is included in the introduction to each part.

## **Part One: Excavating Narratives**

Locates the unfolding narratives and debates on foundational learning described in this introductory essay in various country, historical, pedagogical, and policy contexts.

## **Part Two: Value in Numbers**

Explores the centrality of metrics and ways of measuring in informing the debates and praxes of foundational learning.

## **Part Three: Non-mainstream Approaches**

Provides examples of foundational learning praxes that are either not formally part of but are supplementary to national education systems, or that have “autonomous status.”

## **Part Four: System Anomalies**

Describes examples of foundational learning praxes that operate within the national education system but are not “typical” or necessarily “mainstreamed.”

## **Part Five: Pre-thinking Futures**

Considers debates and praxes on foundational learning in view of the ideas and discussions percolating around education futures.

The contemporary foundational learning “divide” is unproductive; it distracts from what we should be talking about. The articles in this special issue skirt around it, wander in its labyrinths, and ram against its walls. The question they all seek to answer—the question that matters for educators—is how to make the conversation a more productive one.

This introductory essay introduces a discussion of this question. The first section uncovers the short history of this “relatively recent” term; the second sifts through the contributions to this special issue for the variety of ways in which foundational learning is presently understood and implemented; the final section contemplates desirable anti-crisis<sup>1</sup> futures for foundational learning debates and praxes. The three sections attempt to re-situate these futures with the present and past—inverting the task Aditi Desai sets herself in her contribution to this special issue (see Desai's *Situating The Present Within The Past And Future* in Part One).

## **The Short History of a Long Question<sup>2</sup>**

In the global education discourse, the term “foundational learning” seems to have entirely replaced “basic education,”

which has received little attention at the level of global education governance since the 2015 target date for achieving the six Education for All (EFA) Millennium Development Goals (MDGs) passed. References to adult basic education (ABE) and universal primary education (UPE) have also been muted since the end of the MDGs, at least in the English education policy sphere. In their story of the *Maria Venâncio Indigenous School* (Part Four), Rita Potyguara and Renata Montechiare refer to basic education rather than foundational learning, as is more common in Brazil. Basic education (or its equivalents, *educación básica*, in Spanish, and *éducation de base*, in French) is still utilised in around two-thirds of countries around the world to denote primary and lower-secondary education (the first 8–9 years of schooling).<sup>3</sup> Apart from this formal structural usage to describe particular stages of school,<sup>4</sup> basic education has an intriguingly bifurcated history that is worth noting because it has something to say about the different ways in which the term “foundational learning” is currently employed.

In his short history of basic education, Gerald Gutek (1981) identified what he called a “pervasive education mood” in the US, which was captured in the slogan “Let’s get back to the basics” (p. 7). He traced its emergence as essentialism in the 1930s, its critique of Life Adjustment Education<sup>5</sup> in the 1950s, and its “return” in the mid-1970s, replete with “new terminology that included words such as accountability, competency-based curriculum, and minimal competency testing” (p. 35). This mood echoes William Curtis’ earlier and infamous “Reading, ‘riting and ‘rithmetic” blunder from 1795,<sup>6</sup> so it has been around a long while. Its reappearance is worryingly “déjà vu all over again,” as Yogi Berra famously put it.

Basic education’s other traditions are reflected in examples such as Ghandi’s *Wardha Scheme*<sup>7</sup> (Jena, 2020), which advocated for free and compulsory education, mother tongue instruction, letting the child develop at her own pace, and activity-based approaches that incorporate traditional handicrafts (see Patel and Berggreen-Clausen’s *Learning to be Whole Again* in Part One of this NSI). Paulo Freire’s ideas infused *educação básica* with the democratic ideals of *educação popular* (peoples’ education), fundamentally challenging the traditional division of education into formal, informal, and non-formal—the categories preferred by the Brazilian dictatorship (see Gibbs’s *The Creative Literacies of Antonio Leal* in Part One). Freire’s ideas on people’s education and conscientisation influenced traditions of ABE, which embrace the “teaching of democratic ideas and the shaping of democratic behaviour,” and have inspired the CONFINTEA movement for 70 years (Ireland & Spezia, 2014, p. 188). They also undergird the vision for basic education that animated the EFA movement launched in Jomtien in 1990<sup>8</sup> and furthered in the EFA goals that were closely linked to the MDG agenda from 2000 to 2015.

Despite the unequivocal commitments to quality basic education in the [Jomtien Declaration on Education for](#)

[All and Framework for Action to Meet Basic Education needs](#) (quality is mentioned 11 times), as well as in the [Dakar Framework for Action](#) in 2000 (quality is mentioned 178 times), which outlined the commitments for meeting the EFA goals, a critique began to take shape around the notion that these frameworks focused entirely on achieving UPE to the detriment of education quality. Filmer et al. (2006) proposed a Millennium Learning Goal to monitor learning outcomes—the desire for internationally comparative learning metrics emerged as yet another “pervasive education mood” not entirely unrelated to the first, as we shall later see. The desire for comparative international education statistics emerged with the formation of the International Association for the Evaluation of Educational Achievement (IEA) as early as 1958. However, Filmer et al.’s (2006) proposal was possibly the first clear call to quantify learning linked to a global development goal; this mood remains pervasive. The contributions in Part Two address some of the challenges of foundational learning metrics. Ivona Feldmárová and Catharine Gress-Wright’s *Laying Foundations* (Part Two) reveals how the OECD’s Survey on Social and Emotional Skills (SESS) extends the possibilities in the comparative assessment of non-academic skills, while Melis Cin et al.’s *Lost in PISA-lation* (Part Two) points out the difficulties inherent in international large-scale assessments (ILSAs) in providing sufficient information to inform meaningful remedial action.

Barrett and others emphasized at the time that education is as much a process as it is an outcome (Barrett, 2009). Barrett (2011, p. 119) warned that a global learning goal would be “detrimental to the achievement of goals that are not readily measurable and hence to the relevance of education.” A separate critique argued that EFA was a retreat from Jomtien’s broader vision, as EFA committed only to achieving UPE and not basic education (which includes lower secondary). The focus on poverty and girls’ education risked a further reduction of EFA to educating the poorest girls only—no longer Education for All.<sup>9</sup>

Nonetheless, in the years leading up to the formulation of the 2015 Sustainable Development Goals, there was growing momentum, at least within international development agency circles, around the idea that a “shift” was urgently needed. This was to be from access “only” to “access plus learning,” as the Brookings Institution termed it (2014)—what Sayed and Moriarty (2020) later described as the “quality turn” in the SDGs. However, apart from critiques of the “quality of the quality emphasis” in EFA from Jomtien, there was a widespread misperception that the EFA movement—Jomtien, the MDGs, and the six EFA goals included—lacked a focus on education quality.<sup>10</sup>

As quality here elides with learning, the readily prepared answer to this readily prepared problem was, naturally, the measurement of learning.<sup>11</sup> As much as it was presented as a global indicator for quality education, what emerged instead was a global standard for measuring early-grade reading.

In the pursuit of measuring said “learning,” USAID funded the development of the Early Grade Reading Assessment (EGRA) in 2006 and the Early Grade Mathematics Assessment (EGMA) in 2008, through a grant to Research Triangle Institute International. These assessments have been taken up by over 30 organizations across more than 70 countries and have been adapted for use in over 120 different languages.<sup>12</sup>

The Learning Metrics Taskforce (LMTF) was convened by Brookings in 2012. It was subtitled “Access Plus Learning” and funded by the Hewlett and Gates Foundations. To its credit, the two iterations of the LMTF conceptualised “foundational learning” very broadly through seven domains: culture and the arts, learning approaches and cognition, literacy and communication, numeracy and mathematics, physical well-being, science and technology, and social and emotional skills. In her conclusion to the final report on the LMTF (CUE, 2016, p. 53), Winthrop responded to criticisms that the conceptualisation of foundational learning across such a “broad array of skills [was] overly ambitious” by warning that “a global focus on the lowest common denominator is a recipe for sustained inequality.” Unfortunately, this is not the sentiment that won the day.

In the light of this short history, the World Bank’s (and the UNESCO Institute of Statistics) “adoption” in 2019 of a Learning Poverty Target to halve learning poverty by 2030, and defining “learning poverty” as “the percentage of ten-year-olds who cannot read and understand a simple story,” tells a story that is itself simple to read and understand. This is what the World Bank and its fellow travellers wanted all along: to establish legitimacy for and a heightened sense of urgency around an “attainable global learning” target. This is described comfortingly as foundational learning, but what it offers is only early literacy, a crucial but nevertheless reduced and insufficient proxy for a wider set of holistic competencies.

The long question remains, “What is foundational learning, and how best do we teach it?” This question sits at the core of pedagogy; asking it is like rubbing Aladdin’s lamp. Once the genie is out, there’s no going back, for there is no short answer: there are as many answers as there are teachers, as many teachers as there are contexts, and as many contexts as there are kids.

### The Genie Out of the Bottle

While the debates about foundational learning tend to polarise unhelpfully around those who believe foundational learning involves only literacy and numeracy (FLN) on one side and those who insist that developing a broad range of foundational skills is essential on the other, we might ask if praxes provide common ground?

Michele Schweisfurth’s *Classroom Time as a Zero-Sum Game* (Part Four) lays down a gauntlet. She reminds us that classroom time is limited, teachers face a lot of pressure to cover prescribed

material and they need to make choices. In *Integrating Whole Child Development into Teacher and School Leader Training* (Part Four), Rita Heller-Crespo et al. indicate that while choices to engage more holistic and relevant approaches and content can be enabled at the school management level, sustainable shifts in pedagogy require deeper systemic transformations. Both the Amazonian Indigenous school that Potyguara and Montechiare describe in *The Maria Venâncio Indigenous School* (Part Four) and the Escola Paula Brito in Rio de Janeiro’s Rocinha favela that Alexis Gibbs speaks about in *The Creative Literacies of Antonio Leal* (Part One) reveal anomalous spaces that had to be chiseled out within education systems to create more bespoke foundational learning pedagogies. Deborah Bailey’s *Mental Landscapes* (Part Four), however, describes a just-outside-Zürich example of “outdoor forest kindergartens” that are linked to local public schools and that provide a select but system-supported option for developing a set of foundational competencies impossible to achieve in indoor environments.

To address policy considerations that could enable broader approaches to foundational skills, Feldmárová and Gress-Wright, in *Laying Foundations* (Part Two), open an internal window on the strategic and theoretical thinking behind the OECD’s Survey on Social and Emotional Skills (SESS). They argue that, as an ILSA, SESS can drive better-informed policy decisions to support the implementation of essential social and emotional skills. Yet, Cin et al.’s critique, *Lost in PISA-lation* (Part Two), provides a contrary perspective from Türkiye on PISA’s reading literacy test. It questions whether ILSAs provide adequate information for nuanced policies that must promote meaningful transformations in relation to poverty and gender.

In *Holistic Learning* (Part One), Eileen O’Malley and Ryan Burgess point out that despite the growing evidence in support of holistic approaches to foundational learning, supportive policy for “the wider embedding of holistic practices within education systems remains the exception rather than the rule.” Two contributions by members of the Whole Child Development (WCD) Learning Community, coordinated by Utrecht University, address strategies for system engagement and scale-up. In *Integrating WCD Development into Teacher and School Leader Training* (Part Four), Heller-Crespo et al. emphasise the importance of support for pedagogy. *Integrating WCD Measurement Into Education Systems* (Part Two) by Paul Schöpfer et al. presents various approaches that demonstrate how WCD outcomes for foundational learning may be measured to inform more enabling policies. Of the 20 initiatives discussed in the two papers, 18 operate either as part of education systems, are given school time to “do their thing,” or are encouraged supplementary programs operating outside school time. This in no way disparages the two remaining programs that are not (yet?) systems-engaged.

Three contributions to NSI-09 highlight interventions that aim to support system transformations to strengthen foundational learning. *Partnerships for Transformation* (Part Five) by Ramya Vivekanandan and Raphaelle Martinez outlines the Global Partnership for Education's (GPE's) approach to building policy and partnerships. In *Bayanihan in Early Childhood Education* (Part Four), Katrina Reyes describes the programs and partnerships that, with support from the Philippine government, offered direct and distance-learning assistance to young children and their caregivers during the COVID-19 lockdowns—some of which have continued post-pandemic. Purabi Pattanayak and Rashi Sharma's *Foundational Learning Study (FLS)* (Part Two) details how the FLS adapted international testing instruments to India's multiple-language context, informing the government's policy on foundational learning embodied as NIPUN Bharat.

India's NIPUN Bharat is the largest-scale national initiative to support FLN on the planet. Nevertheless, Aditi Desai, in *Foundational Literacy and Numeracy in India* (Part One), worries that the laser focus on FLN detracts from a much-needed systemic strengthening of Indian education. Anurag Shukla and Surya Pratap Deka, in *Reimagining Foundational Learning in India* (Part One), bring attention to the unintended consequences of NIPUN Bharat, including its neglect of out-of-school and hard-to-reach children and its tendency to “replace” well-functioning pre-schools. Together, these three studies on India—along with Aanchal Gidra's *The Effect-sizes of TaRL Interventions in India* (Part Two), Jwalin Patel and Maya Berggreen-Classen's *Learning to be Whole Again* (Part Three), and Kusha Anand and Laraib Niaz's *Towards Two Literate Nations* (Part Four)—render an interspersed collective case study<sup>13</sup> that offers an exploration of aspects of foundational learning in India. This is serendipitous because even before the government's NIPUN Bharat, India had emerged as a poster child for early literacy interventions by the World Bank, Gates Foundation, Central Square Foundation, and the large INGO Pratham.

Many innovative supplementary approaches to foundational learning do not aim for system transformation; most would seem to be happy to influence or graft on to education systems provided they retain their autonomy. These include Dorcas Wepukhulu and Judith Baker's *Decolonising Foundational Literacy for Africa* (Part Three), which describes how the African Story Book introduces material to support reading that features local stories, languages, and customs. Anand and Laraib compare the contributions of Mission Buniyaad in India and Closing the Gap in *Pakistan in Towards Two Literate Nations* (Part Four). Rajib Timalsina and Deviram Acharya's *Transparent Metrics* (Part Five) provides a refreshing, formative, insider critique of ASER Nepal, suggesting how it may be strengthened. *A View From South Africa* (Part One) by Brahm Fleisch describes a range of foundational literacy initiatives that, despite their effectiveness, remain supplementary and have not been taken up systemically. In *Learning to be Whole Again* (Part Three), Jwalin

Patel and Maya Berggreen-Classen describe several foundational learning programs in India that provide intentional alternatives to state systems (within India), which they regard as overly centralised, instrumentalised and insufficiently decolonialised.

Six contributions challenge conventional understandings of foundational learning as being pertinent to young children only. Radhika Iyengar's article, *Learning to be a Conscious Person* (Part Five), tells the story of her lifelong learning mission to learn about climate and environmental justice. Both Iyengar and Christina Kwauk's *Climate Action and Climate Justice* (Part Five) see ecoliteracy as a foundational learning need for every age group. Adam Roberti makes the same point in *Socially Engaged Art* (Part Three), emphasizing the education urgency for aesthetic gestalt in a climate-changed and significantly imperilled world. Andy West, in our discussion about *Teaching Philosophy in Prison* (Part Three), stresses the importance of finding reentry points into education for adults who have become estranged from learning. We talk about how these “re-entries” are foundational. Similarly, Hammed Alabi's personal essay, *My Foundation Starts Here* (Part Three), rethinks foundational learning for young migrants and asylum seekers in the UK who may have had no schooling at all. Finally, Jennifer Allsopp et al.'s review of *Critical Rights Literacy* (Part Three) for Indigenous migrant populations also discusses what knowledge can be foundational and relevant for adults and communities on the move.

Aanchal Gidra's study, *The Effect Sizes of TaRL Interventions in India* (Part Two), provides insight into how difficult it is to demonstrate the effectiveness of interventions, why they should be approached with caution, and how their impact is likely to diminish over time. In *Learning From Our Interventions* (Part Five), Crain Soudien underscores the necessity of government support if interventions are to succeed in their close objectives and have a chance of successful scale-up. He echoes Schweisfurth's sobering observation that *Classroom Time [is] a Zero-Sum Game* (Part Four), pointing out that the same observation is relevant for large-scale interventions too: they may succeed in achieving their specific targets but in doing so miss the core purpose of education: enabling individuals and communities to flourish.

The contributions to NSI-09 convincingly demonstrate that this genie is not going back in the bottle. Foundational learning is out and about; it will not be confined to foundational literacy and numeracy, nor will it be contained by early literacy. It has a life of its own. What we need to do now is learn how it is understood and used in the field and work out what this means for pedagogy and policy.

### Anti-Future Crises and Anti-Crisis Futures

Janet Roitman (2012, para. 8) asserts that the notion of “crisis evokes a moral demand for a difference between the past and the future.” Aaron Benavot and William Smith (2020, p. 244) note that global education discourses, at least from the 1960s, frequently

employ terms such as “crisis” and “shock.” The policy discourse in the last few years has certainly “turned up the volume” in this respect: we are told there is a “learning data crisis,”<sup>14</sup> that learning poverty is “the leading edge of a learning crisis,”<sup>15</sup> that the COVID-19 pandemic and school closures were the “harshest crisis in a century,”<sup>16</sup> and that COVID-19 led to an “unprecedented crisis within an already existing global crisis.”<sup>17</sup> Roitman insists that “what we designate a crisis” is a political choice, one that negatively frames our forecasts and “apprehensions of history”—our ideas of the future and the past—and that persistent crises-centric perspectives limit thinking and constrain options.

In a background paper for UNESCO’s Futures of Education Initiative, Keri Facer (2020, p. 21) points out that “Thinking about the future in education . . . is not without consequence.” Facer’s concern is not so much about how we may or may not shape the future but how this affects how we think and act in the present. She urges us “to approach futures with caution and an ethics of care in education” (Facer, 2020, p. 19).

Facer outlines five orientations to the future. Roitman’s observations draw me to Facer’s (2020, p. 2) “Orientation IV: Liberating education from the future;” although, the idea of Reparative Futures, her Orientation V, if we must entertain one at all, anticipates the justice and reparations we yearn for with comforting reassurance. One of the young asylum seekers in Alabi’s essay, *My Foundation Starts Here* (Part Three), remarks that “foundational learning should help one visualise a future,” and the full title of Iyengar’s contribution is *Learning to be a conscious person: Bridging The Gap Between Foundational Learning and SDG 4.7* (Part Five). The testimonies of these two personal stories reveal the purpose and power of realisations in the present that lead to hope for the future. Hope, after all, is the only thing Pandora keeps in her box after she has released all of its terrors on the world, as Andy West reminds us in *Teaching Philosophy in Prison* (Part One).

Can we be liberated from, at least, the shorter-term education future that has reduced the promise of SDG.4—“Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”—to one indicator for goal one?<sup>18</sup> Our deliberations will not disrupt the determination of the key protagonists of this narrow focus or the significant financing that drives it. Nor will they avert the opportunity costs that are sure to accrue if we continue to neglect strengthening education systems. We wish only for success in efforts to promote foundational literacy but why not embrace the energy and new thinking that the Foundational Learning Genie has granted us? After all, doing so provides a rich discussion of how foundational learning can be rethought in the present.

The contributions to this special issue suggest two starting points that I outline briefly below: this first addresses how

we may come to grips with what foundational learning really means for pedagogy, the second jettisons the prevailing orthodoxy on learning outcomes with respect to how it recasts and contains understandings of education quality.

i) First, the contributions to this special issue illustrate three “modes” of foundational learning. I refer to them as Foundational Learning I, II, and III.

**Foundational Learning I** is the intrinsic, essentially unstructured, and often intuitive manner in which learning occurs. Learning takes place through games, vicarious observation, and relationships, as well as through experiences of trauma, deprivation, and joy. Although particularly pronounced in early childhood, we retain these abilities throughout our lives. Despite its unstructured nature, this mode of learning is commonplace in classrooms and schools; as such, it deserves recognition as a pivotal component of pedagogy, not only pertaining to what is sometimes recognised as a “hidden curriculum” but so much else.

Interestingly, each of the three interviews in this special issue touches on intrinsic learning and how it intersects with structured learning—consider the “prison walls” in West’s *Teaching Philosophy in Prison* (Part Three), the forest spaces in *Mental Landscapes* (Part Four) by Deborah Bailey, and the culture of the favelas that the children bring with them to school in Gibbs’s *Creative Literacies of Antonio Leal* (Part One). Potyguara and Montechiare’s *Maria Venâncio Indigenous School* (Part Four) is profound on how cultural identity is nurtured before schooling and how the Indigenous Tremembé want to make the school in their image rather than be moulded by it. In *Holistic Learning* (Part One), O’Malley and Burgess provide insights into what neuroscience is starting to reveal about intrinsic learning.<sup>19</sup>

**Foundational Learning II** is the extrinsic, essentially structured, often non-intuitive way in which most cognitive (but also more advanced physical and aesthetic) competencies are learned. We develop these competencies best with guidance from experienced teachers who are able to draw from and adapt canons of shared knowledge to enable both individual and collaborative learning. Foundational Learning II is common for all areas of skill and knowledge, from basic mathematics to weaving a fishing net, pole vault, playing the piano, and reading and writing. It includes all areas of structured learning: formal, informal, non-formal, and social learning.<sup>20</sup> Since, as we might expect, all of the contributions to this special issue address this mode of foundational learning in some way, I do not direct the reader to particular articles.

**Foundational Learning III** refers to the attainment of further or “higher” competencies through iterative, dialogical, and cumulative processes that build on the intrinsic and extrinsic competencies developed in Foundation Learning I and II.



Consider, for example, the basic mathematical skills that are foundational for algebra, that become the basic algebraic skills that are foundational for calculus, and so on. Consider the basic reading skills needed for a simple story. How do these serve as foundational for engaging with literature? In what ways is extensive reading foundational for crafting plays? To illustrate with a music example: What foundational skills must a beginner pianist have to be able to tackle more technically advanced pieces? Then, what foundational skills should a more advanced player possess to perform with an orchestra?

The articles that explore Foundational Learning I also, unsurprisingly perhaps, offer insight into Foundational Learning III. Notably, the contributions that address climate action explore the intersections between intuition, applied learning, the development of consciousness, and commitments to action. These include Iyengar's *Learning to be a Conscious Person* (Part Five), Kwauk's *Climate Action and Climate Justice* (Part Five), and Roberti's *Socially Engaged Art* (Part Three). The examples of holistic foundational learning in India that Patel and Berggreen-Classen describe in *Learning to be Whole Again* (Part Three) effectively "leverage" pedagogical methods to reclaim decolonised Indigenous knowledges and ideals, directly engaging this mode of foundational learning. Similarly, Wepukhulu and Baker's *Decolonising Foundational Literacy for Africa* (Part Three) discusses exactly what is suggested in the title. Fergal Turner et al.'s *Testing the Strength of Our Foundations* (Part One) offers a scientific argument for "how skills build on one another." Such learning processes are profoundly foundational in many respects, yet distinct from Foundational Learning I or II.

It follows that "what is foundational?" remains a central consideration in all pedagogy, revealing itself to be the true substance of all subsequent learning. A teacher needs to know what a student genuinely knows to provide a foundation for the next level of learning. This seems to involve a process whereby extrinsic knowledge becomes intrinsic, wherein intuition and skill combine and can be intentionally employed, wherefrom competencies are better described as capabilities. Melis Cin et al. offer some helpful observations on Sen and Nussbaum's ideas on capabilities in *Lost in PISA-lation* (Part Two). These accumulated competencies are foundational for mastery in any field—be it cardiology, chess, cooking, or curling—as well as for enjoying it profoundly.

**ii)** The second starting point for rethinking foundational learning involves the ways in which understandings of foundational learning are reflected in the examples of praxis in this special issue. These illustrate how fundamentally dependent quality education is on what would be considered "inputs" and not on pre-determined learning outcomes. While they do not deny the value of judging quality in education in terms of learning outcomes—"what is learned," rather than simply "what is taught," "how it's taught," or "where it's taught"—

they highlight a range of inputs for education quality that include good teaching, relevant content, enabling learning environments, and well-run programs and schools.

Among these are Heller-Crespo et al.'s *Integrating Whole Child Development into Teacher and School Leader Training* (Part Four) and Gibb's *Creative Literacies of Antonio Leal* (Part One). Both contributions address the importance of great teaching and support for teaching. However, in the latter article, it is more a case of allowing space for a talented teacher to innovate intuitively. Wepukhulu and Baker's *Decolonising Foundational Literacy for Africa* (Part Three) describes the central contribution made by the African Story Book's Indigenous material to enhance quality and decolonise curricula. The examples described by Patel and Berggreen-Classen in *Learning to be Whole Again* (Part Four) draw similarly on traditional thinking, methods, and crafts to remake decolonised minds.

Outcomes-based education (OBE) was very influential in education policy thinking from the late 1980s to the early 2000s. It failed in many respects as a strategy for reforming general education systems, largely because of its complexity and the difficulties it presented for "successfully supporting teachers in their work" (Donnelly, 2007, para. 2). Nevertheless, OBE remains an influential framework for thinking about education policy, pedagogy, and curriculum, largely because it bequeathed, or possibly simply confirmed, many ideas that educators endorse. These ideas include learner-centeredness, the relevance of content, ways of organizing content and learning, the focus on competencies and skills, and the understanding that education outcomes reflect the quality of the education process.

The emerging emphasis on learning outcomes in the 1990s certainly prepared the grounds for the driving force that comparative international education outcomes metrics orientation has become today. Although not all ILSAs are necessarily narrowly targeted, international comparative metrics for foundational learning have altogether abandoned the breadth offered in ECD's developmental domains for a narrow focus on early literacy.

This reification of education quality into a global learning metric for foundational learning requires the elisions and reductions we have observed in global education policy discussions over the last 20 years: basic education becomes foundational learning, quality becomes learning, and learning becomes foundational literacy, which ultimately becomes  $LP = SD + [(1 - SD) \times LD]$ <sup>21</sup>—the formula for the Learning Poverty Indicator, as Desai observes in *Situating the Present Within the Past and Future* (Part One).

The contributions in this special issue prompt a reconsideration of the prevailing prominent assumptions about learning outcomes in order to confirm their meanings for pedagogy rather than for economics:

- Learning outcomes are generative rather than static, more of a movie than a photograph, a process rather than a destination. They are about how we engage with what we do not know, rather than simply how much we do know. See particularly West's *Teaching Philosophy in Prison* (Part One) and Alabi's *My Foundation Starts Here* (Part One).
- Learning outcomes are internalised and durable competencies, not information that may be learned and then forgotten without consequence. See particularly O'Malley and Burgess's *Holistic Learning* (Part One) and Potyguara and Montechiare's *The Maria Venâncio Indigenous School* (Part Three).
- Learning outcomes involve collaborative and shared knowledge, not only individual knowledge, and perhaps the desire to compete with or prove oneself better than anyone else. See particularly Bailey's *Mental Landscapes* (Part Four) and Gibbs's *Creative Literacies of Antonio Leal* (Part One).<sup>22</sup>
- Learning outcomes involve competencies that are continuous and interlinked more than those that are discrete and unrelated. See particularly Feldmárová and Gress-Wright's *Laying Foundations* (Part Two) and Patel and Berggreen-Classen's *Learning to be Whole Again* (Part Three).
- Learning outcomes are as much about affect, aesthetics, dispositions, and ethics as they are about technical proficiencies and technical competencies. See particularly Roberti's *Socially Engaged Art* (Part Five) and Iyengar's *Learning to Be a Conscious Person* (Part Five).

These insights, as they appear here, may seem self-evident to educators. However, if they do not call into question the validity of internationally comparative metrics, they require at least a fundamental rethinking of the current assumptions of comparative international education-outcomes metrics for foundational learning. Schöpfer et al.'s *Integrating WCD Measurement* (Part Two) and Feldmárová and Gress-Wright's *Laying Foundations* (Part Two) offer helpful ways forward for this important task.

In concluding this introductory essay, it is important to draw attention to aspects of foundational learning that are not addressed in this special issue. Adult literacy and ABE remain as sadly neglected as they are in the global education discourse. Further, apart from the contributions of Bailey in *Mental Landscapes* (Part Four) and Reyes in *Bayanihan in Early Childhood Education* (Part Four), not nearly enough attention is paid to the important contribution of the early childhood development (ECD) sector to foundational learning, particularly for its emphasis on an array of learning domains and its insights into Foundational Learning I. The potential erosion of the

ECD sector under well-meaning government initiatives, such as the NIPUN Bharat, is also a cause for concern.

Foundational coding and computational thinking are being introduced into early education curricula in a growing number of countries. I generated a ChatGPT "contribution" on foundational coding in South Korea for this special issue, but it never made the grade—sorry, ChatGPT. However, the growing importance of foundational digital literacies is yet another neglected area in this special issue.

There are few mentions of the importance of the aesthetic domain for foundational learning in this special issue. Adam Roberti, in *Socially Engaged Art* (Part Three), provides a welcome section on "The Aesthetics of Foundational Ecoliteracy." He footnotes a remark by Paulo Freire in an interview Freire did with Language Arts: "Education is simultaneously an act of knowing, a political act, and an artistic event." (Freire, 1985, p. 17). Tellingly, Freire is responding to the question, "What do you hope education will do for the growth of young children?" (Freire, 1985, p. 17). In my discussion with Deborah Bailey in *Mental Landscapes* (Part Four), we touch only briefly on David Orr's ideas about aesthetics and their significance for ecoliteracy. This dimension of foundational learning requires more attention in policy and pedagogy.

Lastly, although it is mentioned by a few of the contributors, numeracy "does not count" in this special addition. Crain Soudien's *Learning from Our Interventions* (Part Five) is about numeracy interventions rather than about pedagogy; nevertheless, he reminds us of the most vital and possibly most overlooked aspect of foundational learning futures: learning from past interventions.

It is fitting to end here, reflecting on what NSI-09 does not cover—on its reluctance to engage foundational learning futures, on the need for, but also the promise of, pedagogies of the present that make and remake foundational learning, and on the past vision for quality education that was EFA, now more a mirage on the horizon on the summer of 2023, the hottest summer ever recorded in human history.

## Endnotes

1. Janet Roitman observes that “crisis evokes a moral demand for a difference between the past and the future such that prognosis and the very apprehension of history are defined by the negative occupation of an immanent world: what went wrong? a primary enabling blind spot for the production of knowledge.” <https://www.politicalconcepts.org/roitman-crisis/>
2. In tribute to Girin Beharry’s A short and incomplete history of tall and unfulfilled aspirations in The Pathway to Progress on SDG 4: A Symposium. Retrieved from <https://pubs.cgdev.org/pathway-to-progress-on-sdg-4/1/index.html>
3. Amadio and Truong’s analysis of 2003, world data on education (Geneva, UNESCO-IBE) puts this figure at 63%. There is no reason to expect this would have changed too much in twenty years.  
Amadio, A. & Truong, N. (2007) Worldwide tendencies in the use of the term ‘basic education’ in K-12 educational programmes at the start of the twenty-first century. Background paper for UNESCO - GEMR.
4. UNESCO’s International Standard Classification of Education (ISCED) is a statistical framework for organizing information on education that was established in the early 1970s.
5. “In many ways, life adjustment education was an attempt to adjust to the stress of coping with the pervasive social and economic changes that swept the U.S. in the postwar decade. In other ways, it tended to fill the vacuum created by the decline of progressive education.” (Gultek, 1981, p. 22)
6. Three “Rs,” supposedly from a toast given by Sir William Curtis at a dinner that was being held for the Board of Education in 1795. Curious Histories offers an entertaining but informative history of “Sir Billy Biscuit”; see <https://curioushistorian.com/sir-william-curtis-reading-writing-and-arithmetic#:~:text=The%20phrase%20%E2%80%9CReading%2C%20'Riting,Board%20of%20Education%20in%201795.>
7. See @jhasangeeta1806’s helpful note in Geeks for Geeks for quick reference, <https://www.geeksforgeeks.org/wardha-scheme-of-basic-education-1937/>
8. The World Declaration on Education for All and a Framework for Action to Meet Basic Learning Needs (Inter-Agency Commission 1990) “importance of education for personal and social improvement”
9. Best expressed in a blogpost by Torres, R. M. (2000). Education for Everyone. Worldwide. Lifelong. Retrieved from <https://www.dvv-international.de/en/adult-education-and-development/editions/aed-552000/dakar-education-for-all/one-decade-of-education-for-all-the-challenge-ahead>
10. See for example, remarks by Carol Bellamy (who was GPE Chair from 2010-2013) at the 7th Education Fast Forward Debate: “Over the past two decades, emerging economies and poor countries were focusing mostly on bringing the large number of children out of school in class. The international community also focused on access: declarations at Jomtien, Dakar and the New York Millennium Summit focused on access. Millennium Development Goal 2 says that ‘children everywhere, boys and girls alike, will be able to complete a full course of primary schooling by 2015’. **No mention of quality.**” [emphasis added] Retrieved from <https://www.globalpartnership.org/blog/education-access-or-quality-we-don%E2%80%99t-have-choose>
11. See also Benavot and Smith (2020) for a detailed account.
12. See [https://gaml.uis.unesco.org/wp-content/uploads/sites/2/2018/08/4\\_USAID\\_20160511.pdf](https://gaml.uis.unesco.org/wp-content/uploads/sites/2/2018/08/4_USAID_20160511.pdf)
13. Robert Stake would likely disagree, as his empirical-research orientation regards a collective case study as a multiple-case design that explores differences within and between cases, trying to replicate findings across them; “interspersing” a collective case would be further sacrilege. See Stake, R. (1995). The art of case study research. Thousand Oaks, CA: Sage
14. Retrieved from <https://www.worldbank.org/en/news/factsheet/2021/06/30/learning-data-compact-unesco-unicef-and-the-world-bank-unite-to-end-the-learning-data-crisis>
15. Retrieved from [https://www.worldbank.org/en/topic/education/brief/ending-learning-poverty#:~:text=Even%20though%20the%20majority%20of,Sustainable%20Development%20Goals%20\(SDGs\).](https://www.worldbank.org/en/topic/education/brief/ending-learning-poverty#:~:text=Even%20though%20the%20majority%20of,Sustainable%20Development%20Goals%20(SDGs).)
16. Retrieved from <https://www.worldbank.org/en/news/feature/2020/11/20/world-bank-launches-accelerator-countries-program-to-improve-global-foundational-learning>
17. Retrieved from <https://uis.unesco.org/en/blog/how-sdg-4-1-1-framework-and-learning-poverty-can-help-countries-focus-their-education-policy>
18. This is indicator 4.1.1(b)i, which focuses solely on the “proportion of children ... (b) at the end of primary ... achieving at least a minimum proficiency in (i) reading ...”?
19. See also a recent article by Linda Darling-Hammond et al., which gives a helpful overview. Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2019). Implications for educational practice of the science of learning and development. *Applied Developmental Science*, 24(2), 97-140. Retrieved from <https://www.tandfonline.com/doi/full/10.1080/10888691.2018.1537791>
20. Machado (2011, p. 11) in discussing Freire’s People’s Education in the time of Brazil’s military dictatorship, distinguished “social pedagogy” as a new area in education separate from the traditional divisions of formal, informal and non-formal; science, or any subject, therefore has “school pedagogy” and “social pedagogy” dimensions.
21. World Bank. (2021, April 28). What is Learning Poverty? Retrieved from <https://www.worldbank.org/en/topic/education/brief/what-is-learning-poverty>
22. In their contribution to the NORRAG Blog, Covid-19, Climate, and Culture: Facing the Crisis of (Neo)Liberal Individualism, Silova et al (2021) develop this idea extensively.



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# Part 1

## Excavating Narratives

In the narratives explored in this first part, the idea of foundational learning appears shaped variously, not only by insights from cognitive development, psychology, and pedagogy but also by notions of an ontology of metrics, the shifting priorities of donors, the demands of the economy, and even the processes of (re)shaping national identity. Aditi Desai's *Foundational Literacy and Numeracy in India* examines the global pivot to foundational literacy and numeracy (FLN) midway to achieving the national targets set for the SDGs by 2030. Desai highlights the significant budgetary allocation for NIPUN Bharat, the government's national mission to achieve FLN. This mission receives significant funding from the national education budget, making it possibly the largest such program worldwide. She burrows into the implications of this narrow focus on FLN in a context as diverse as India and concludes that it diverts attention from the more pressing need to develop a well-resourced and adequately-staffed public education system. *Reimagining Foundational Learning in India* by Anurag Shukla and Surya Pratap Deka submits a thoughtful critique of India's National Education Policy (NEP-2020), arguing that it "hollows out education quality" and creates "non-inclusive, inequitable learning environments." The authors point out that NIPUN Bharat excludes children in private primary schools (approximately 32% and 49% in rural and urban schools, respectively, as of 2014/15). Moreover, the program fails to include internal migrant children and the children of seasonal workers while also "replacing" several successful early childhood initiatives.

In *Holistic Learning*, Eileen O'Malley and Ryan Burgess offer a comprehensively sourced, state-of-the-art examination of the burgeoning science and evidence supporting the effectiveness of holistic approaches in education. They explore the potential for these approaches at the systems

level, opening a window on the intentional thinking of the Porticus, Lego and Jacobs Foundations to bolster whole child development (WCD) approaches in education. They suggest that the narrow policy focus on FLN narrows the space for the take-up of policy on holistic learning. These ideas are echoed in two articles within this special issue: *Investigation of the Key Ingredients to Foster WCD* by Paul Schöpfer et al. and *Integrating WCD into Teacher and School Leader Training* by Rita Heller-Crespo et al. In my conversation with Alexis Gibbs about *The Creative Literacies of Antonio Leal*, we talk about how the book immerses the reader in a deep and almost magical account of the intuitive, anarchic, hugely humane holistic pedagogy Leal must develop to connect with his class of "unteachables"—a group of anti-literate, alienated children in Rio de Janeiro's Rocinha favela, one of the largest in South America.

In *A View From South Africa*, Brahm Fleisch shows how the emphasis on the highly inequitable and uneven distribution of poor learning outcomes emerged well over a decade before learning quality or foundational learning became central in the global education discussion. He explores the reasons why so few advances have been made in achieving equitable quality in education in practically a quarter of a century. In *Testing the Strength of Our Foundations*, Fergal Turner et al. highlight the impact of ILSAs on policy to improve FLN but note that this "is misaligned with the increasing focus on the broader foundations for education." The article makes three compelling arguments for broadening the metrics so that a broader understanding of foundational learning may be reflected in and supported by policy. These outline historical, scientific, and political framings for what matters in education measurement, providing a perfect segue into Part Two of this special issue.

# Foundational Literacy and Numeracy in India: Situating the Present within the Past and Future

 Aditi Desai, Independent Researcher, India

 aditi611@gmail.com

## Summary

India's New Education Policy 2020 (NEP 2020) highlights ensuring that “all children in India attain foundational numeracy and literacy by the end of Grade 3” by 2026-27 as an “urgent national mission”. This article reflects on evidence from past education reforms and examines the implications of prioritising such a singular national education goal in a context as diverse as India.

## Keywords

Education systems  
Foundational learning  
India  
NIPUN Bharat

The global education community's pivot to foundational literacy and numeracy (FLN) as a key education policy priority manifested on the back of an ostensible “learning crisis”. This narrative was promulgated by influential education actors at global, regional, and national levels and further reinforced by various reports, studies, and data, such as the Learning Poverty Indicator<sup>1</sup> developed by the World Bank, in conjunction with the UNESCO Institute of Statistics, at the global level and studies such as the Annual Status of Education Reports (ASER) at the national level in countries such as India.

At this critical juncture midway through Agenda 2030, this narrative is accompanied by a push towards “reorienting global aid for education around promoting foundational literacy and numeracy” purportedly to accelerate progress towards achieving Sustainable Development Goal 4 (The Pathway to Progress on SDG 4: A Symposium, 2021). The idea that prioritising FLN can address the “learning crisis” has subsequently gained significant traction with countries across the world; for example, ministers of education from Cote d'Ivoire, the Gambia, Ghana, Liberia, Nigeria (as well as Edo State), Malawi, and Rwanda recently endorsed the World Bank's [Commitment to Action on Foundational Learning](#) at a high-level event, the Foundational Learning Exchange in Sierra Leone (Sengeh, 2023).

India's response to poor learning outcomes is to redouble its focus on its “urgent national mission” to achieve FLN by 2026–27, as outlined in its New Education Policy 2020. NIPUN Bharat, which was launched in July 2021, is the vehicle for ensuring that all children in the country reach this goal by the end of Grade 3. It is funded as part of the overall Samagra Shiksha Scheme, an integrated scheme for school education in India covering preschool to the senior secondary level, whose budget allocation of INR 374.53 (\$4.6 billion) accounts for 33% of the overall education ministry budget for the 2023-24 financial year (Sharma & Chauhan, 2023). An analysis of the budgetary allocations over the past two years shows that the Government of India has allocated a significant percentage under Samagra Shiksha towards NIPUN Bharat/FLN (Sharma & Chauhan, 2023).

In this article, I argue that “mission-mode” reform trends, such as FLN, which are adopted without adequately identifying the limitations of existing reforms or addressing deep-rooted structural challenges, are likely to have limited impact. I propose that this mode of top-down policymaking by the central government, in the case of a federal state such as India, is problematic at multiple levels and unlikely to deliver on any of education’s goals. Finally, I ponder the implications of imposing such a single national goal for the future of children in a context as diverse as India.

### The Past and the Present

Since the 1980s, large-scale, centrally driven programmes have been the preferred mode of driving reform in elementary education in India (Mukhopadhyay and Sarangapani, 2018). Starting from the District Primary Education Programme (DPEP), which ran from 1994–2003, wherein aid from the World Bank was brought into education in India for the first time, key education reforms continued to adopt approaches that create parallel processes and structures, including the imposition of new curricula, teacher training approaches, and assessment and monitoring metrics onto existing systems at short notice. The DPEP, with its primary goal of rapidly increasing access to address the high rates of illiteracy in the country, was launched under the Education for All rubric on the back of the 1990 Jomtien Conference in Thailand. Structural Adjustment Program conditionalities were being imposed on the country by the International Monetary Fund at the same time.

Accompanied by the changing and reducing role of the state with respect to the provision of social services, these parallel processes have been reinforced by the accordance of increasingly pivotal roles to non-state actors over time. For example, the Central Square Foundation (CSF), headquartered out of Delhi, supported the Ministry of Education in designing and launching NIPUN Bharat. CSF is subsequently supporting 12 states to design, launch, and implement FLN programmes (CSF, n.d.) Although the implementation guidelines for NIPUN Bharat claim that the FLN programme will be implemented through strengthening existing state structures, it is unclear whether this will indeed be the case in the long run.

The implementation guidelines for NIPUN Bharat list various stakeholders in its mission: these include the Department of School Education and Literacy (as lead implementer and funder), states and union territories, National and State Councils of Educational Research and Training, institutes of teacher training, education officers and resource persons at various levels, headteachers and teachers, NGOs, civil society, community and parents, volunteers, and private schools, amongst others. In other words, the entire education ecosystem in India is listed as crucial to realising FLN goals,

although it is important to note that most stakeholders’ roles are listed as passive implementers, transmitters, and beneficiaries of the centrally developed FLN goal.

In the late 1980s, one of the main reasons for the success of the first phase of the Kerala Total Literacy Programme was that it was a social movement of unprecedented fervour. It was characterised by a total integration of government and the people, instructor training that instilled an ethics of equity and distributional justice, and extensive efforts to ensure people’s participation; these efforts included posters, banners, newspapers, processions, folk festivals, and exhibitions. In its second phase, however, the programme degenerated into a regular government-led programme, and due to a lack of popular participation, huge gaps emerged between expectations and achievements (Kumar, 1993).

At present, the NIPUN Bharat guidelines mention the importance of ensuring stakeholder ownership, particularly that of communities and parents, and that this should be realised through active collaboration with NGOs and civil society organisations. However, whether such ownership can be realised via top-down “mission mode” and not through genuine, sustained mobilisation of communities and parents remains to be seen.

FLN-related documents make no attempt to analyse why children in India are demonstrating such poor learning outcomes. This is consistent with the lack of a coherent perspective on how to achieve quality and equitable public education in NEP 2020 (Batra, 2020). This is particularly salient in the current context of erratic and insufficient teacher recruitment, a high number of teacher vacancies, inadequate financing of public education, and increased implicit and explicit privatisation in the education sector.

At this juncture in global and national education policy, we can all agree that there are no silver bullets in education. Therefore, without analysing and addressing the deeper issues plaguing not just the education system but the social sector in general, such a narrow focus on FLN is unlikely to have the desired impact, notwithstanding its good intentions.

### The Present and the Future

Let us explore the implications of prioritising a narrowly focused education policy goal, such as FLN, in a context as diverse as India, especially given the context of the New Education Policy 2020, which already shifts focus to what Rampal (2020) calls a minimalist curriculum. For context, the NEP 2020 envisions a new FLN stage (3–8 years), which integrates three years of early childhood care and education (3–6 years) and Grades 1 and 2 from primary schools; the new FLN curriculum is targeted towards this integrated group.

This shift, which can be seen as a response to the financial pressure to reduce curriculum mechanically, is now being institutionalised through NEP 2020's focus on basic literacy and numeracy and through the NIPUN Bharat mission (Trivedi, 2022). Further, it also deflects attention from the state's abrogation of its obligation to fulfil the right to education for all children in India by acting as a smokescreen, protecting it from real scrutiny, as was the case with the earlier DPEP (Kumar et al., 2001).

The FLN goal in India is seemingly formulated in response to surveys and assessments that demonstrate poor literacy and numeracy outcomes at the Grade 3 level. If we analyse this data, it is evident that the "most marginalised children" are considered to be those who are not learning despite being in school; this is the group of children primarily targeted by NIPUN Bharat. Despite being intended for all children in India, the narrow focus on FLN risks further marginalising the most marginalised by replicating age-old inequities and failing to equip them to be equal social agents in both the present and the future (Haus & Ghosh, 2022; Uprichard, 2008). For example, Rangarajan et al.'s (2023) study of a rural government school in the hilly Uttarakhand state showed that school experiences for rural children encompass more than FLN. Surely, we must avoid asserting a narrow goal that would narrow the education experience of children already on the margins of the Indian nation-state, of which there are many: rural children, tribal children, children of migrant labourers, and children of pastoralists, among others.

Instead, the focus should be on providing transformative education that develops diverse capabilities in ways that especially respond to these social contexts.

## A New Social Compact for Education

Foundational learning is not synonymous with foundational literacy and numeracy. While I cannot disagree with the importance of foundational learning, for the broadness that it implies, NIPUN Bharat's narrow focus on FLN is not adequate for meeting people's needs and aspirations to live fulfilled lives. There is a lack of alignment that limits the possibilities for mobilising people to achieve the mission's goals in any meaningful way. Furthermore, past evidence suggests that a top-down mode of implementation is bound to have a limited impact.

At this point, I can only reiterate what many others have said—there are no alternatives to developing well-resourced public education systems that are adequately staffed by qualified teachers to meet the goal of a high-quality education for all children. A new social compact for education that is grounded in people's needs, aspirations, and the demands of their livelihoods is therefore crucial. Only a genuine political movement that brings together teachers, parents, bureaucrats, and civil society can hold the state accountable for fulfilling the right to quality education. Achieving this will require simultaneously generating sufficient momentum to push back against the existing, ever-intensifying neoliberal policy logic in Indian education.

To conclude, the heart of any education reform in a country such as India must be social justice—the current narrow focus on FLN falls short on this principle.


## Endnote

1. The Learning Poverty Indicator is calculated as follows:  $LP = SD + [(1-SD) \times LD]$   
LP = Learning poverty (unable to read and understand a simple text by age 10);  
LD = Learning deprivation (the share of children at the end of primary who read at below the minimum proficiency level); SD = Schooling deprivation (the share of primary-aged children who are out of school and therefore assumed to read at below the minimum proficiency level).

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# Reimagining Foundational Learning in India: Challenges and Prospects for Equitable Implementation

 **Anurag Shukla**, Director and Co-founder Localism, and Director (Education) – Brhat Education Trust, India

 phd17anurags@iima.ac.in

 **Surya Pratap Deka**, Director, Flourishing Minds Foundation, India; Gates Cambridge PhD Researcher, University of Cambridge, UK

 spd40@cam.ac.uk

## Summary

India's NEP-2020 prioritises foundational learning for SDG 4, but overlooks broader education goals, creating inequity and limiting quality. The narrow focus on foundational literacy and numeracy (FLN) diminishes education goals, creates inequitable learning environments, and limits education quality. The NIPUN Bharat mission faces challenges in resource allocation, teacher training, and diverse contexts, and neglecting private and migrant schools complicates its effectiveness.

## Keywords

Equity in education  
Foundational learning  
Indigenous education  
NIPUN Bharat Mission  
Sustainable Development Goals (SDGs)

India's [National Education Policy \(NEP-2020\)](#) prioritises foundational learning as a crucial policy objective to address the “learning crisis” (World Bank, 2019) and meet SDG 4 (Muralidharan & Singh, 2021). [The National Curriculum Framework for Foundational Stage \(NCF-FS\)](#) and the [National Curriculum Framework for School Education \(NCF-SE\)](#), released in October 2022 and April 2023, reiterated foundational learning as one of the most crucial education objectives.

The UN Secretary-General's Transforming Education Summit (TES), held in September 2022, also identified foundational literacy and numeracy (FLN) as a global initiative. The primary assumptions behind the push for foundational learning are that it provides the essential building blocks for all other learning, knowledge, and higher-order skills. Further, FLN skills are considered to be measurable and suitable for comparison via international large-scale assessments (ILSAs). This push is further justified by the assertion that nearly six out of ten children globally cannot read and comprehend a simple text by the age of ten; this rises to seven out of ten for children in low- and middle-income countries, which was exacerbated by the COVID-19 pandemic (World Bank, 2021). In India, the ASER 2022 report showed that school children's reading comprehension in all grade levels has declined to pre-2012 levels.

Despite widespread excitement about FLN, the definition of “foundational” in FLN remains unclear, with a narrow interpretation prevailing in popular and policy discourse that focuses on decontextualised drills and minimum standards (Muhammad, 2021; Sarangapani, 2018). In the following sections, we argue that this narrow focus on FLN hollows out the quality of education, creates inequitable learning environments, and renders an education architecture that is inadequate to fulfil the SDG 4 agenda. Furthermore, the flagship programme [NIPUN Bharat](#), implementing



FLN strategies, faces challenges in achieving its intended objectives due to distorted priorities at the grassroots level.

### **A Narrow Focus on FLN Hollows Out Education Quality**

In the past three decades, education quality has been increasingly defined by students' performance against "basic" reading and writing standards, which is reductive and ineffective in driving systemic learning outcomes (ASER – multiple; Winch, 2010). Unfortunately, government schools, often labelled "schools for the poor", are frequently shaped by such limited notions of quality and hold narrowed education aims for disadvantaged children, focusing only on basic literacy and numeracy (Sarangapani, 2018). This perpetuates social inequalities in education experiences and outcomes (Pappu & Vasantha, 2010), stratifying the concept of foundational learning. Government school students may feel restricted to reading and writing offerings—the pursuit of curiosity, joy, and meaning considered too ambitious or inefficient. The false dichotomy between the "essential" and "peripheral" aspects of education has significant implications for education equity and quality.

Describing quality using standards that are inherently limited and restricted is already problematic, but this is only one part of the problem. The processes by which standards are enforced and achieved—and their corrosive long-term consequences—pose a more serious threat to the education system; this often remains overlooked (Winch, 2010). Similar to other large-scale education initiatives since the 1980s, the push for FLN in India draws on the "learning crisis" narrative to legitimise the adoption of a "mission-mode approach" (Kapur, 2020; MHRD, 2019; World Bank, 2019). A mission mode approach is, by nature, primed for efficient problem-solving that follows clearly defined objectives, timelines, and goals (GOI, 2022). Within this frame of compounded urgency, problems in education can be (mis)interpreted and solutions (mis)identified. For example, the accumulated failures of past education reforms are recast as "learning gaps" in test scores. This mistakes the symptom (low individual test scores) for the cause (a complex legacy of unexamined past failed initiatives). The system then generates a blinkered focus on "learning outcomes" that schools and teachers become responsible for achieving. Over time, compulsive action is prioritised over sustained reflection (Winship, 2021), all of which begs the question, "To what effect?"

The prescriptions for making learning holistic and joyful in the latest FLN policy document are not entirely dissimilar to ideas in earlier policy documents, such as the NCF 2005. As Beehary (2021, p. 2) remarked, our failure in prior initiatives "does not primarily reside in the quality of the ideas" but in our ability to reflect and learn from the past. What, then, in the current push for FLN ensures that lofty policy intentions will not become

empty ritual practices in the classroom, as has happened on countless occasions before? It is unlikely that the current mission mode approach would allow space for sustained reflection and course correction. Unless that happens, schools will remain recipients of old solutions regurgitated as innovative and new—what Peck and Reitzug (2014, p. 1) call "the paradoxes of historical practice promoted as new reform". Over time, schools have become unable to absorb the incoming barrage of solutions due to "implementation fatigue" (Chung et al., 2017; Kumar, 2011). Caught up in the rush to implement, teachers and schools become too depleted to experiment (Korthagen, 2017). This reproduces the popular view of schools as sites that are resistant to change (Kumar, 2011) and of teachers as demotivated, recalcitrant professionals. The typical antidote to all of this is, of course, always more training (Ramachandran et al., 2006), which, as we know, cannot be the simple solution for every problem. The relentless pressure to implement affects the ways teachers perform, encouraging empty performativity over critical, reflective practice (Kumar, 2005).<sup>1</sup>

### **The Narrow FLN Focus Creates Non-Inclusive, Inequitable Learning Environments**

The growing emphasis on a literacy-only-as-skill model is problematic. It obscures other educationally worthwhile goals inherent in literacy acquisition, such as the pursuits of identity, intellect, criticality, and joy (Agnihotri, 2021; Muhammad 2021). These slants in perspective draw on theories that perceive language as an individual ability that can be measured and compared across individuals in a decontextualised way, akin to a person's body weight or height (Wang et al., 2021, p. 4). Moreover, this skills-only view overemphasises the language practices of dominant groups—such as the child-directed dyadic conversations widespread in Euro-American middle-class families—positioning these as the preferred (or only) ways to acquire language and literacy. This overlooks the wide range of language-related social practices—both verbal and non-verbal—such as storytelling, riddles, jokes, teasing, and rituals—that are emphasised in other communities around the world (Carrin, 2021). It also constructs a deficit discourse of children from linguistic and cultural minority communities, one that defines them for what they do not have or cannot do (Wang, 2021, p. 2). Even the most well-intentioned systemic focus is honed on providing extra support for students to overcome the "impediments" of their minority cultural and home backgrounds (Valencia, 2010),<sup>2</sup> further pathologising them as "inferior" and "backward". This creates inequitable learning environments in schools (Kumar, 2011; Valencia, 2010). In Jharkhand, a tribal state in Eastern Central India, for example, the first official language of the state is Hindi, despite over 96% of the state population speaking a local tribal or regional language as their first (L1) or second language (L2) on a daily basis. Only 3.7% of the people speak Hindi as their first language (Paudyal & Peterson, 2020). A significant number of these are non-written

languages. The meaningful inclusion of such children in public schools remains a challenging endeavour, one that the FLN mission does not sufficiently address.

Delegitimising children's cultural life-worlds locks them out of their own life experiences and loses opportunities to benefit from the value—cultural, lingual, aspirational, navigational, social—that minority children bring to classrooms (Yosso, 2005). More spacious understandings of foundational learning make it possible to use terms such as “Indigenous knowledge” and “local knowledge” in ways that reaffirm their importance rather than invoking a nostalgic past that is of revival. Indigeneity and local customs are living traditions; they provide the meaning and context for vast numbers of children as they engage with acts of reading and writing in school (Akshara & Sarukkai, 2021). Only by genuinely engaging with local customs, pedagogies, and ontologies will state education systems ever fully realise multiculturalism as an asset rather than an obstruction to be overcome (Agnihotri, 2021). Important foundational skills, such as self-confidence and self-efficacy, will only be consolidated once “what each child brings to class” is valued and reaffirmed.

### **Implementing the NIPUN Bharat Mission: Showing Cracks Already?**

The Government of India launched the National Initiative for Proficiency in Reading with Understanding and Numeracy (NIPUN Bharat) to prioritise foundational learning, but implementation faces challenges due to bureaucratic complexities and limited resources. The Ministry of Education allocated INR 1873 crores (\$22.62 million) in 2021-22 and INR 2359 crores (\$29.49 million) in 2022-23 for NIPUN Bharat to achieve its FLN goals. However, a large portion of these allocations, 80.20% and 91.20% in 2022 and 2023, respectively, were directed towards creating teaching learning materials (TLMs), and only 11% and 2.4% of these amounts were allocated to teacher professional development. This is insufficient for training teachers in the public system in time to reach the stipulated deadlines. Additionally, UNESCO (2021) estimates that India faces a shortage of approximately 1.2 million teachers. This shortage is particularly acute in poorer states, such as Bihar, Jharkhand, and Uttar Pradesh, where there are around 120,000 single-teacher schools, predominantly located in rural areas, which hinders the achievement of FLN goals (Tilak & Bandyopadhyay, 2023).

Another consequence of NIPUN Bharat's mission mode implementation is that it “replaces” many successful early childhood initiatives (Sriprakash, 2012). This jettisons the benefits of more holistic early childhood development approaches, which encompass a wider range of learning domains, including the social, emotional, physical, cognitive, linguistic, adaptive, and aesthetic. In fact, more than 14 states in India were already implementing activity-based learning

programmes, including Nali-Kali, in which these programmes were particularly well-developed after years of investment in infrastructure and human resources (Kaul et al., 2017). It would have been far more prudent for policymakers to consider incorporating these previously successful programmes rather than disrupting them and replacing them with an entirely novel and untested mission-derived and driven initiative.

Moreover, NIPUN Bharat's policy implementation centres primarily on the public schooling system in rural areas, thus neglecting the mission's benefits for urban areas and schools. The past two decades have seen a significant increase in the number of children in private schools in India: the number of private schools rose nearly 12 times (by 96,416 schools) from 2010 to 2016 compared with an increase of only 8,337 schools in the state sector. Kingdon (2020) estimates that around 31.8% of children aged 6-10 were going to private schools in 2014-15; for urban areas, this number was 48.9%. NIPUN Bharat also excludes “hard-to-reach” and “left-out” migrant children, overlooking the impact of seasonal and forced migration on children's education and well-being (Srivastava, 2020). Hence, while the NIPUN Bharat mission holds the promise of significantly improving FLN in India, its successful implementation depends on whether it is able to address challenges related to resource allocation, teacher capacity development, programme design, and inclusivity. If it is able to incorporate successful existing programmes, address the needs of urban areas and migrant children, sufficiently improve teacher training, NIPUN Bharat will still have a chance to reach its FLN goals, lay a strong foundation for children's education journeys, and accomplish its mission.

### **Endnotes**

1. Kumar's famous phrase, ‘meek dictator,’ refers to teachers in the Indian context who are, on the one hand, powerless being at the bottom of the education hierarchy but, on the other hand, try to reclaim their power, by assuming a ‘powerful’ (dictatorial) stance within closed doors in front of children. Retrieved from <https://www.taylorfrancis.com/chapters/edit/10.4324/9781315717463-20/meek-dictator-indian-teacher-historical-perspective-krishna-kumar>
2. For instance, page 109 of the FLN mission refers to students from first-generation and tribal backgrounds as those ‘who may not have seen books, or had anyone reading to them, or have a vague concept of print, text, or meaning, and value of reading and writing activity’.

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# Holistic Learning: Education Systems Must Apply Learning Approaches Based on How Children Learn

 Eileen O'Malley, Porticus, Ireland

 e.omalley@porticus.com

 Ryan Burgess, Whole Child Advisors, US

 rburgess@wholechildadvisors.com

## Summary

All children, regardless of their backgrounds and circumstances, can learn and reach their potential. To do so, it is critical to integrate the science of learning into education, which shows that learning is holistic by nature. It also shows that holistic approaches in education are fundamental to a successful school life, academic success, and to thrive.

## Keywords

Evidence for policy

Holistic learning

Social and emotional skills

Science of learning

The presumption that children, parents, teachers, and systems must prioritise one set of skills over another is a myth. The continued framing of school systems clashing between “traditionalist or critical approaches” perpetuates the falsehood that a trade-off exists between supporting academic results and the holistic development of students. In truth, academic and holistic skills, the basis of foundational learning, are intertwined and reinforcing. A holistic approach to learning incorporates, and is deeply connected with, academic rigour. Beyond academic outcomes, holistic approaches have a compounding positive effect over the course of a person’s life. Findings from the literature consistently show that a holistic approach is a powerful driver of success and an important buffer against adversities. The evidence behind these claims is robust, consistent, and increasingly representative of diverse contexts. The body of evidence cultivated in recent years clearly shows that effective holistic approaches in education systems lead to improved outcomes for academic learning, health, income, employment, social interactions, and mental well-being. These impacts are lasting, and their effectiveness spans high- to low-income countries, and they consistently lead to [improved long-term life outcomes](#). Despite this evidence, the wider embedding of holistic practices within education systems remains the exception rather than the rule (Datnow et al., 2022); instead, there remains a continuing, disproportionate, and largely “disconnected” emphasis on improving literacy and numeracy outcomes.

## How Learning Happens

There is strong evidence that major domains of human development—social, emotional, cognitive, linguistic, academic—are deeply intertwined in the brain and behaviour.<sup>1</sup> When students’ social and emotional skills are supported through instruction and a caring and safe learning environment, student well-being is enhanced alongside

academic achievement (Durlak et al., 2011). Supporting holistic skills, including social, emotional, and cognitive development, relates positively to traditional performance measures used within education systems. These include attendance and completion rates, test scores, success in higher education and careers, more engaged citizenship, and better well-being.

All children, regardless of their backgrounds and circumstances, can learn and reach their potential. For them to do so, it is critical to integrate the science of learning into education. Learning is holistic by nature. The brain and the development of intelligences and capacities are malleable. What happens in one domain influences what happens in others. Extensive research in neuroscience, psychology, and the behavioural sciences provides evidence that academic, cognitive, social, and emotional functions are intricately interrelated (Osher et al., 2017). For example, the ability to manage one's emotions (self-regulation), such as anger or joy, can trigger or block learning. Executive functions—such as the ability to memorise, solve problems and formulate plans, and have positive relationships with adults—are also critical for learning.<sup>2</sup> These functions are influenced by children's experiences, environments, and culture;<sup>3</sup> they are also competencies that can be enabled and are critical gateways for engaging students in learning, connecting to peers and teachers, and supporting academic achievement.

### Learning in Crisis and Adversity

A holistic approach to learning is even more critical for children facing crises. During rapid and sensitive periods of human development, such as early childhood and early adolescence, extreme adversity has profound consequences. Children who experience long-term exposure to chronic crises or adversities can experience a cumulative toll on their physical and mental health. Traumatic experiences that result in toxic stress, including those in emergencies or experiencing displacement, can undermine critical skills for children and adults, such as the development of self-awareness, self-management, social awareness, relationship skills, and responsible decision-making, all of which make it difficult to learn (Osher et al., 2017). Such exposure, particularly in early childhood, can lead to lifelong impairment of learning, behaviour, and physical and mental health unless support mechanisms are put in place (Shonkoff et al., 2009). If these “cycles of adversity” are not addressed, the effects of toxic stress in one generation also affect the next (Stack, 2015).

Holistic approaches, if embedded within education systems, serve as an effective antidote to children and families facing toxic stress. This is supported heavily by research that identifies neurological links between children's emotional experiences within stressful versus supportive environments and their social and academic performance within those contexts.<sup>4</sup>

[Ongoing research at the University of Notre Dame](#) confirms that engaging children, their families, and communities (their social environment) effectively supports academic and lifelong success. A holistic approach to learning benefits all children of every background, but it disproportionately affects children facing adversity or cumulative stress factors, whether in high- or low-income countries.

### Evidence That Holistic Approaches Improve Academic Achievement and Student Well-Being

There is increasing evidence of the importance of holistic learning now that the sector is better able to assess social and emotional skills and analyse how they relate to academic grades. For example, the [OECD Study on Social and Emotional Skills \(2020\)](#) collected information on school grades in three subjects—reading, mathematics, and the arts—as well as on the results of a short cognitive ability test for participating students. The results showed that students' social and emotional skills are significant predictors of school grades across age cohorts, contexts, geographies, and subjects. Intellectual curiosity and persistence are the skills most strongly related to school grades for both 10- and 15-year-olds in all three subjects. In another wide-ranging study of more than 200 social and emotional interventions (in the US) targeting children aged 5 to 18, participating students exhibited higher academic achievement, with a gain in performance estimated at 11 percentile points (Durlak et al., 2011).

There is increasing evidence in low-income countries that provides strong examples of how holistic approaches advance academic outcomes. Studies show that students exposed to holistic pedagogy and skills excelled academically in comparison to students who were not, including those in low-income countries.<sup>5</sup> USAID's [Social and Emotional Learning Systematic Review](#) found that marginalised groups outperformed non-marginalised groups in terms of outcomes, including social and emotional skills and academic performance, when the specific needs of those children were taken into account (Aldin, 2021). Another strong example of impact is offered by [an evaluation in the Democratic Republic of Congo](#), which found that teacher professional development, when paired with a social and emotional learning curriculum, improved student perceptions of their school, which they saw as safe and supportive. This, in turn, led to improvements in their literacy and numeracy skills.

A holistic approach to learning also considers how a child's mindset and attitude affects learnings. 2018 PISA (Programme for International Student Assessment) data across more than 78 countries found that a growth mindset (defined as beliefs about the ability to develop intelligence over time versus a belief in innate limitations) can be a stronger predictor of academic performance



than socioeconomic background. For those facing greater adversities, a growth mindset can have outsized gains. This means family origin and social context does not necessarily define the future of children if a school manages to strengthen a child's mindset and mental architecture [as the OECD PISA study confirms](#). For example, students with a growth mindset performed better than those without a growth mindset across socio-economic levels. Girls tended to have a growth mindset slightly more often than boys in 39 of the 78 countries; there was no difference between girls and boys in 32 of the countries. Strengthening equality in schools, ensuring appropriate resources, and fostering a growth mindset were identified as ways to increase academic performance across socio-economic levels, especially for the most vulnerable students (OECD, 2021).

### Societal Benefits of Holistic Learning

Holistic skills have been shown to be centrally important to a person's ability to live a full life, including active participation as a family member, neighbour, and engaged citizen. Holistic skills increase trust and the probability of voting.<sup>6</sup> They also correlate with improved life satisfaction.<sup>7</sup> Several meta-analyses and longitudinal studies have also shown a strong link between low self-control and crime rates.<sup>8</sup> This research also shows that crime prevention efforts focusing on early interventions are more cost-effective and consequential in reducing crime than prevention efforts that are focused on "adult interventions", such as policing and imprisonment.

Education programmes that intentionally incorporate holistic skills also have the potential to foster inclusivity at school by removing institutional barriers such as unfair discipline, school management, and instructional practices that prevent marginalised learners from accessing or participating fully in learning opportunities. Often, these children are the cohorts least likely to be in school and most at risk of dropping out. In contexts like these, targeted support and outreach that help identify the children most at risk is critical. [A recent UNICEF study](#) on programmes for the most marginalised, such as out-of-school children, identified several key factors for successful learning. These factors include holistic approaches, relevant and appropriate learning options, flexibility, and engaging the community and caregivers.

A strong body of evidence also shows the relationship between the social and emotional development of children and their commitment to school and their academic performance, as well as other positive outcomes for individual and collective well-being relating to health, violence, and criminal behaviour.<sup>9</sup> Skills such as motivation, self-regulation, self-worth, and self-control have been shown to prevent outcomes related to adolescent pregnancy, drug and alcohol use, reducing the spread of sexually transmitted diseases (particularly HIV), and other high-risk behaviours

(Botvin et al., 2000; Heckman et al., 2006). Evidence of some of these impacts was found in Panama, Malawi, Nepal, Liberia, Uganda, the Dominican Republic, and the US (Arauz Ledezma et al., 2021; Deitz et al., 2021).

### Labour Market Demands for Holistic Learning

Governments make decisions on which industries to invest in for the socioeconomic development of a country. In education, one consideration for transforming systems is to address the high cost-benefit ratios of impactful, holistic programmes (Belfield, 2015). Employers have long held the view that graduates (secondary and tertiary) lack the skills needed in contemporary economies. [A World Economic Forum \(WEF\) report](#) identifies 16 important skills for the 21<sup>st</sup> century, 12 of which are holistic skills. [In 2022, the WEF](#) estimated that the development of these skills could add an additional \$8.3 trillion in increased productivity to the global economy by 2030. Microsoft examined over 76 million job postings with a labour market lens and found that the number of skills that students will need in order to be successful continues to grow (Anderson et al., 2016). Holistic skills, including collaboration, critical thinking, and creativity, are the most commonly sought after (Anderson et al., 2016).

From a broader development lens, investing in holistic skills also leads to greater returns in education, health, and productivity in the country. [As shown by humanitarian solidarity work](#), not investing in these skills can put children at risk of future unemployment, low wages, stigmatisation, and other social and economic disadvantages. From a health system perspective, the neurological and psychiatric disorders that occur as a result of childhood trauma, including anxiety, depression, and addiction, are manifold. Any increase in these disorders poses risks for a wide array of cardiovascular, respiratory, neuroendocrine, cognitive, and autoimmune diseases.<sup>10</sup> These disorders, in turn, result in substantial costs in terms of health care utilisation, suicidality, disability, unemployment, and absenteeism (Birnbaum et al., 2010).

### Building Momentum Towards Holistic Learning

For effective learning, knowing that social, emotional, and cognitive development are interconnected and lead to improved academic results is critical. Math, reading, and writing require the ability to manage emotions and work with others. [OECD research confirms](#) that the interconnected development of social, emotional cognitive and behavioural skills starts in early infancy and continues throughout a person's life: developing approaches to support these skills is not over-ambitious; it is already happening. Experience increasingly shows that these skills can be taught effectively. The evidence base is decisive across age ranges, socioeconomic levels, and national boundaries: children are more likely to succeed if they develop holistic skills that help them respond more readily to life's demands.

Progress towards holistic learning has increased in the past 10 years, with momentum coming from all levels of the system, from grassroots to government. Many ministries of education state in their policies a desire to ensure that students develop a variety of holistic skills, and this is permeating the education policy agenda and public debate. However, a key concern of policymakers is that literacy and numeracy outcomes will not improve if they change emphasis; the evidence should provide confidence to decision makers and parents alike that holistic approaches enhance academic outcomes. Governments, such as those of Portugal, the US (Washington, DC), and Kenya, have embraced whole child approaches; organisations such as the OECD and local organisations are essential partners for these aims. Education systems also need to build effective collaborations, as embedding holistic approaches will require strategic partnerships across the education system. There are ongoing opportunities to demonstrate what holistic learning looks like and to engage with system resources and institutional capacities to transform education for holistic learning and development. However, we should still work to build up the evidence base and continue to demonstrate scale and impact; this will embolden decision makers to prioritise the holistic development of children and ensure education systems develop the skills they need to thrive in life.

#### Endnotes

1. These interlinkages are supported by a number of sources, such as [From a nation at risk to a nation at hope – Recommendations from the National Commission on Social, Emotional & Academic Development. \(2018\)](#); [Carneiro, Crawford, & Goodman. \(2007\)](#); [Heckman, Stixrud, & Urzua. \(2006\)](#); [Almlund, M., Duckworth A.L., Heckman, J.J., & Kautz, T.D. \(2011\). Personality Psychology and Economics. NBER Working Paper 16822. National Bureau of Economic Research. Cambridge, MA](#)
2. See [Moss, E., & St-Laurent, D. \(2001\)](#); [Kraag, G., Zeegers, M.P. Kok, G.; Hosman, C., & Abu-Saad, H.H. \(2006\)](#); [Blair, C & Raver, C.C. \(2012\)](#) for further insights on the importance executive functioning, stress management, and self-regulation for academic outcomes.
3. [Osher, D., Cantor, P., Berg, J., Steyer, L., Rose, T., & Nolan, E. \(2017\). Science of learning and development: A synthesis. American Institutes for Research](#) shows how neural malleability and plasticity and the interconnectedness of children with their social and physical contexts offers learning opportunities that can influence the trajectories of children's lives.
4. This is supported by a number of resources: [Blair & Raver. \(2012\)](#); [Greenberg, Kusché, & Riggs. \(2004\)](#); [Riggs, Greenberg, Kusché, & Pentz. \(2006\)](#).
5. This study offers evidence of the effectiveness of emphasising social and emotional skills: [Ethiopia Speed School Study example](#); [Hinerman, K.M., Hull, D.M., Näslund-Hadley, E.I., & Rafe, M. M. \(2021\). Social emotional learning competencies in Belize Children: Psychometric validation through exploratory structural equation modelling. Frontiers in Psychology, 12.](#)
6. See [Heckman, J.J., Humphries, J.E., Urzua, S., & Veramendi, G. \(2010\). The effects of educational choices on labour market, health, and social outcomes \(No. 2011-002\).](#)
7. See [Hofmann, W., Luhmann, M., Fisher, R.R., Vohs, K.D., & Baumeister, R.F. \(2014\). Yes, but are they happy? Effects of trait self-control on affective well-being and life satisfaction. Journal of Personality, 82\(4\), 265–277.](#)
8. See [Gottfredson, M. \(2017\). Self-control theory and crime. Oxford Research Encyclopaedia of Criminology and Criminal Justice.](#)
9. Evidence of this relationship is supported by a vast number of sources: [Heckman & Rubinstein. \(2001\)](#); [Duckworth & Seligman \(2005\)](#); [Duckworth et al. \(2007\)](#); [Durlak, Dymnicki, Schellinger & Weissberg. \(2011\)](#); [Heckman & Kautz. \(2012\)](#); [Heckman & Kautz. \(2013\)](#); [Herrera et al. \(2015\)](#); [OECD \(2015\)](#); [Brookings \(2015\)](#); [World Economic Forum \(2016\)](#); [Case & Deaton \(2017\)](#); [Kankaras \(2017\)](#); [Chernyshenko, Kankaras, & Drasgow \(2018\).](#)
10. A number of sources explore this connection, including: [Hu, M.X., Milaneschi, Y., Lamers, F., Nolte, I.M., Snieder, H., Dolan, C.V., & de Geus, E.J. \(2019\). The association of depression and anxiety with cardiac autonomic activity: The role of confounding effects of antidepressants. Depression and Anxiety, 36\(12\), 1163-1172.](#); [Zainal, N.H., & Newman, M.G. \(2021\). Depression and worry symptoms predict future executive functioning impairment via inflammation. Psychological Medicine, 1-11](#)

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# A Conversation with Alexis Gibbs: *Alfabetização* and the Creative Literacies of Antonio Leal

 **Alexis Gibbs**, Reader, Department of Education and Childhood Studies, University of Winchester, UK

 Alexis.Gibbs@winchester.ac.uk

 **Hugh McLean**, NORRAG, Senior Advisor, Kazakhstan

 Hugh.mclean@graduateinstitute.ch

## Summary

Hugh McLean speaks to [Alexis Gibbs](#) about his 2023 book [A Voice for Maria Favela: An Adventure in Creative Literacy](#), a co-translation of Antonio Leal's little-known *Fala Maria Favela* (1983). The interview explores Leal's highly original, creative, "phonics-plus" approach to teaching literacy, rediscovering shared purpose and human solidarity, fostering self-concept, confidence, and learning to love to learn.

## Keywords

Alienation  
Critical pedagogy  
Favelas  
Foundational skills

Antonio Leal's book is about his year-long experience as a teacher in 1981 at a public school in the Rocinha *favela*, one of Rio de Janeiro and probably Latin America's largest slums. "Rocinha doesn't just speak of inequality", writes academic Inny Accioly in her forward to the book. "It screams" (Gibbs, 2023 p. xiii). Leal offers to teach a class of ten- and eleven-year-olds who have been in the school for a few years but still cannot read. Class III is considered a special needs class of "unteachables", which he describes as "restless, mischievous, rebellious, critical and at times violent" (Gibbs, 2023 p. 33). Some children are completely withdrawn; others are boisterous; on the whole, the class is noisy, very noisy. Leal writes that he "made the decision to work with them from within a state of chaos, not from a state of order" (Gibbs, 2023 p. 47). As an opponent of the dictatorship that ruled Brazil until 1985, Leal sees his task as building a new consensual order from the chaos he finds in Class III; this is exacting and exhausting. He writes:

*While immersed in this creative experience, I had to fight the schooling system—from the manuals to directors and inspectors. I had to disobey. And by doing so, I also walked towards my own liberation as an educator.*

**HM:** Alexis, how did you come across Leal's book, and why did you decide to translate it?

**AG:** When I was doing my PhD in Scotland around 2011, I met a Brazilian doing his PhD in the study of hieroglyphs. We got talking, and when he found out what my PhD was in, he mentioned a book that his dad had written in the 1980s. He gave me a copy in Portuguese, which I speak. As soon as I read it, I recognised something quite special about the book, and what it might have to offer readers in all sorts of areas—from literacy, to special education needs, to critical pedagogy and education theory more broadly. Ultimately, it ended up being a pandemic project, and I was able to work with [Diana](#)

Sousa, a former colleague from Winchester and now at the Institute of Education, UCL, to bring the book to fruition.

**HM:** Leal’s syllabary approach to teaching literacy is somewhat similar to Freire’s but not the same. Both are deeply contextual in that they situate the more technical, drill routine, “coding” aspects of the literacy method within broader political (Freire) and more emotional and psychological (Leal) contexts. In my view, they sit outside the heated “phonics or whole-language” divide we see in the field today.

**AG:** I see that tension as one between rules and play, and how both combine to transform language and the process of learning to speak and write a language into a game. Leal sees that children must come to understand how language is comprised of rules, not just in its grammatical structure but also in terms of its graphics, and that an appreciation—if not mastery—of these rules allows for participation in a community or society (such that one can change it). The learning of code, as you call it, or the rules, doesn’t have to mean conformity; you can be creative with them as well. This is why he describes literacy in the book as a game—an adventure in creativity. But where “play” is defined by spontaneity and freedom, the “game” does have to have a stated aim: in this, he takes inspiration from the 200 games of Augusto Boal.<sup>1</sup>

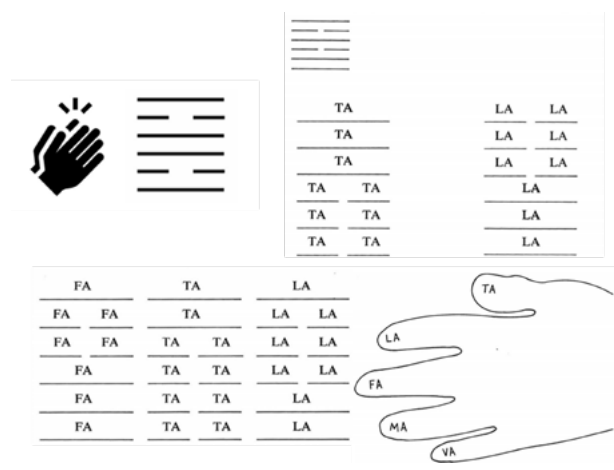
**HM:** For most areas of knowledge, there’s a basic canon of skills and ideas. The thing about skills is that they need to be developed to the point where they’re intuitive. No one wants a lack of basic skills holding them back when they move on to more advanced techniques, ideas, and higher levels of knowledge.

**AG:** When talking about basic skills, there is a necessary tension between the contextual and the universal, at least as far as the book is concerned. One of the things Leal taps into early on has to do with the child’s capacity to be a rule maker themselves. What he witnesses out in the streets of the favelas are young people constructing their own games and rules for games. Leal wants to bring this intuition for “rules”—the capacity for play, their tremendous gift for rhythm, and musicality—to bear on the process of learning to read and write. We also need to recognise the child’s disposition towards acquiring skills: if something is comprised of rules with which they can find no footing, no affinity, then they’re never going to get into it. Pedagogy is not simply a synthesis of following rules and making them fun; creativity is required to appeal to the child’s disposition to learn at the same time, awaking a curiosity for wanting to know what the rules might be.

**HM:** The prevailing school of thought judges the acquisition of a foundational skill as “being able to read ‘X’ number of words per minute with comprehension at a certain age”.

You’re suggesting that there is an underlying “foundational disposition” that needs to be developed before it is possible even to want to read?

Figure 1. Syllables, sounds, and rhythms



Source: Antonio Leal, “A Voice for Maria Favela: An adventure in creative literacy”. Alexis Gibbs & Diana Sousa (translators)

The illustrations above show how Leal used rhythm (long or short claps to match the lines in the top left), then sounds and naming fingers to get the children to practice recognising syllables and associating terms with sounds. Rudimentary preparation for reading *MARIA FALA FAVELA* (A voice for Maria Favela), the main character in *Class III’s story*, is apparent.

**AG:** Leal understands literacy as an appeal to our fundamental desire to want to communicate with one another and to do so in a voice that feels one’s own. It then becomes about identifying the tools and resources that make it possible to do that—to learn the signs and sounds that give communicable meaning to that desire. Leal is both a very special teacher, and he ensured that he had an enormous amount of licence. He sees the freedom to explore as an experiment; this involves taking risks, and there will necessarily be failures at the end. Most approaches to literacy try to minimise opportunities for failure. Leal’s process requires the teacher to see what doesn’t work and who it doesn’t work for in order to adjust and proceed with it. This is precisely what makes the book an inspirational rather than an explicatory text: he does not set up a framework for doing things; he is inviting consideration as to how they might be done.

**HM:** Leal resents ideas such as theory and methodology, but there’s a lot of implied theory and actual method in how he thinks and what he does.

**AG:** I agree, and I think that any questions of scaling up have to be approached carefully and sensitively as a result, so that we are not just extrapolating from some very specific circumstances ideas that seem to fit conveniently with

our own purpose. At the same time, there is definitely the implication that theory and method have a role to play, and that they might translate, but not quite in the way that we think. One way to think about this would be to say that the book doesn't advance a method for teaching literacy, but it points towards a method for literacy teachers to think differently about their practice. This would include both a greater awareness of the conditions that inform the child's cultural background, such that their language learning can be rooted in these, and also the development of one's own personal vocabulary (or "alphabet", as Leal calls it) for describing the processes that emerge from responding to those conditions. Policy measures could therefore allow for this balancing of contextual responsiveness with an introduction to the more formal rules of the language game. But I'm not sure we can even begin to speak of foundational skills before we consider something even more foundational than skill, which is the desire to learn—and that is where the teacher's own skill at responding to context is most important.

One of Leal's main critiques of Freire is that Freire assumes an awful lot about the psychology of an adult who is in the process of becoming literate and that therefore psychology is broadly the same from individual to individual. Whereas with a child, you can make far fewer assumptions, perhaps about what they look like, what they're capable of, or what their capabilities are. Learning can't therefore be reduced to dialectics, as the psychology of the learner doesn't have that dialectical structure to it either. In respect of the child's subconscious, we have to teach in such a way that doesn't just presuppose the sorts of binaries that a dialectical method might operate according to.

**HM:** Although Freire is talking about a political process country-wide and the struggle for power at the level of class and society. This requires a level of abstraction. With children, the psychological dimensions arguably matter more.

**AG:** This is why his account is not an empirical study; it can't be reduced to the generalising tendencies that we have; individual children disrupt the process the whole time.

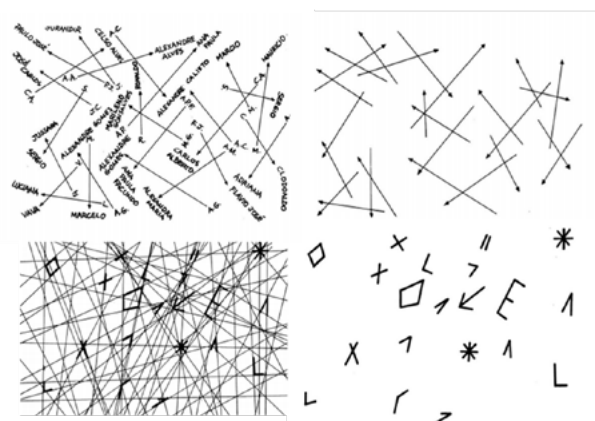
**HM:** These are also the points at which he learns, although these disruptions make him think about what he is doing wrong, and he works out where to go from there. That's method, or applied method, maybe?

**AG:** There is a method to one's own self-awareness or self-development as a teacher rather than as a method of instruction. The process of teacher self-evaluation, as it is conducted in many countries, is disappointing because it rarely invites teachers to think about how children have caused them to think differently about their teaching process. There is nothing about responding to children as

if they were agents in that process. The book describes an ongoing, lifelong process of "self-literatising"—a process of being sensitive and alert to how you engage with others, particularly through language. If we become desensitised to these things, we also rule ourselves out of the capacity to be responsive and creative in any given context.

**HM:** I was surprised that when the year started, they didn't know each other's real names, despite being in the same school. The narrower, technician approach is to teach the child to write their name—that's the whole task. Leal understands the alienation in not thinking your name matters—of being in a space that doesn't see you or hear you. For him, this is "foundational" in pedagogical terms. It is also "foundational" in political terms; he sees that, too, as would Freire, of course.

**Figure 2.** Recognising names, spaces, shapes, and letters



Source: Antonio Leal, "A Voice for Maria Favela: An adventure in creative literacy". Alexis Gibbs & Diana Sousa (translators)

*The illustrations in the upper two quadrants show how Leal got the children to remember, spatially, where their names were and who they related to. The illustrations in the lower two quadrants show how children started to identify letter shapes within lines to get them to practice identifying letters.*

**AG:** It's expressive of what I see as this valuable tension, or dialogue between the individual and community, that is at the heart of the whole exercise. The book is about how to encourage children to see themselves as meaningful individuals who can generate meaning in a world that possibly will forget about them, as well as seeing meaning as something that develops communally, and that can lead to change at the level of the communal as well.

**HM:** He uses the slang of the *favela*, pulling it into the narrative that they create together. He understands the need to validate their lives at the level at which they experience them. This seems to be a crucial "point of entry" for their education.

**AG:** Validation is a really good word that has its own political significance. Validating others' experiences in that way is a choice about the education you see yourself as providing and the kinds of opportunities that will come about as a result of that validation. He wants the children to see their surroundings as an ecosystem, with things they want to preserve, which should be validated, but also, with aspects they might want to transform. He wants to give them the skills that enable them to do both.

**HM:** His idea of building a glossary involves picking words that are not only used in the *favela* but that could be used in transformative ways, even as a way “out of” the *favela*. The words themselves become bridges.

**AG:** The process of self-development for educators is realised through self-reflection. Self-reflection is perhaps best performed through the construction or interrogation of the terminology and ideas that are currently in place, whether or not they are fit for purpose. The word he starts with, obviously, is *alfabetização*. It's such a wonderful word, with no equivalent in English. Leal wants to use the word's potential as something that could be expressive of coming into language in all sorts of different ways—not just through the alphabet as such but via a personal alphabet. A personal alphabet that is also comprised of experiences of signs and symbols, the visual, the political, etc. We are becoming literate in all sorts of different ways at any one time. The book lends itself to the idea that an educator's attentiveness to these ways is what enables a more creative approach to encouraging others to do the same.

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## Endnote

1. Pdf version available here: <https://www.deepfun.com/wp-content/uploads/2010/06/Games-for-actors-and-non-actors...Augusto-Boal.pdf>  
Augusto Boal (1931–2009), a Brazilian dramatist, pioneered the “theatre of the oppressed,” engaging spectators as performers to address societal issues. Influenced by Paulo Freire's Pedagogy of the Oppressed, he initiated Living Newspaper theatre in the late 1960s. This work challenged Brazil's military junta, leading to his arrest and torture in 1971. Forced into 15 years of exile, Boal continued his activism. He introduced three forms of activist theatre – image theatre, invisible theatre, and forum theatre – outlined in his book *Theatre of the Oppressed* (1974), emphasizing audience transformation through participation and problem-solving enactment.

# The Foundational Learning Debate: A View From South Africa

 **Brahm Fleisch**, Professor of Educational Leadership, Policy, and Skills, University of the Witwatersrand, South Africa

 Brahm.Fleisch@wits.ac.za

## Summary

This paper locates the South African experience in the context of the global debate about SDGs, quality education, and the discourse on the learning crisis. It shows that the local concern about unequal early grade learning predates the current World Bank and USAID discourse. It also points to extensive South African public–private partnerships over the past three decades, and the relatively limited success these efforts have had in reducing inequality in learning.

## Keywords

Early grade reading  
Education quality  
Learning crisis

This paper uses the South African experience to add contextual nuance to the discussion on foundational learning. Five critical insights are highlighted.

First, research and debate on the “learning crisis” or “learning quality” in South Africa predates current “global learning crisis” narratives by over a decade. The focus on the problems of early grade learning, particularly on early grade reading in both children’s home language and English as a second language, surfaced a few years after the first democratic elections in 1994. By the late 1990s, researchers and policymakers had become increasingly concerned about the persisting low overall performance of primary school learners and the unequal learning outcomes in early grade learning across South Africa (see Taylor & Vinjevold, 1999). In 2001, the national Department of Education published the results of the first systems-level evaluation, which showed exceptionally low levels of mathematics knowledge and reading and writing skill levels in South African schools. Less than a decade later, two of South Africa’s most widely cited South African education monographs—*Elusive equity: Education reform in post-apartheid South Africa* (Fiske & Ladd, 2004) and *Primary education in crisis: Why South African schoolchildren underachieve in reading and mathematics* (Fleisch, 2008)—pointed to the multifactorial nature of unequal learning. Within the government itself, the National Education Evaluation and Development Unit, a structure within the national Department of Basic Education, devoted its first report to the weaknesses of the teaching and learning of early-grade reading (Taylor, 2013). In other words, rather than being a straightforward case of “policy borrowing” (Steiner Khamsi, 2006) from international agencies and donor organisations, the South African government and local academics were acutely aware of both the overall low levels of learning in the early grades and the wide learning gap between middle-class and working-class schools, and between black and white learners. Nevertheless, awareness did not translate into a clear and directed effort to address the problem.

Second, most of the initial interventions to address unequal early learning in the past three decades, and there have

been many, have been driven by government (national and provincial) and local funders in partnership with local non-governmental agencies. In the post-apartheid era, the largest and arguably most expensive initiative to address unequal learning was the Learning for Living Project, an initiative of the READ Education Trust. The project targeted 1000 disadvantaged schools from the year 2000 and was funded by the South African Business Trust; it aimed to increase literacy levels and decrease repetition rates by providing learning materials to disadvantaged schools and training teachers. Alongside such large-scale national initiatives, there have been many smaller-scale projects and initiatives aimed at reducing learning gaps. These include the CLE literacy intervention, the Reading is FUNdamental, Family Literacy Project, Additional Bilingual Education Project, Systemic Method for Reading Success (see Fleisch, 2018), and, most recently, Funda Wande, NaliBali, and Primary School Reading Improvement Project (PSRIP). Provincial governments have also initiated and funded large-scale initiatives, such as the Gauteng Primary Literacy and Numeracy Strategy and the Western Cape Reading Strategy. (For more details of the variety of recent interventions see Spaul & Taylor, 2022.) Until recently, few of these initiatives incorporated rigorous impact evaluations.

Third, apart from government interventions in the two financially better-off provinces (Gauteng and the Western Cape), these initiatives did not lead to sustainable system-wide improvements. Although concerns have been raised in South Africa about the appropriateness of the Progress in International Reading Study (PIRLS), it remains one of the most rigorous surveys for gauging changes in early grade learning over time, particularly as Grade 4 learners are tested in all national languages. The South African PIRLS results showed a relatively large gain in Grade 4 literacy scores between 2006, the first year in which South Africa participated, and 2016. However, the average gains in the latest round (2021) reveal a decline to 2011 levels, largely due to the effects of the COVID 19 school closures. Even considering the earlier gains, the overall trend of the last two decades shows that most learners struggle to reach even the lowest international reading benchmarks (Howie et al., 2017; Mullis et al., 2023). South Africa's PIRLS 2021 results also highlight continuing inequalities in learning outcomes, with children tested in the nine official African languages scoring dramatically lower than children tested in English and Afrikaans, revealing South Africa's persisting race and class inequalities.

The recent evaluators of the largest early grade learning programmes have offered a number of explanations for why system-wide learning has not improved (Fleisch, 2021). They pointed to resource constraints, such as very large classes, the shortage of district office staff, and the fact that foundation phase heads of departments at schools are overwhelmed. It is true that the official early-grade curriculum is overloaded

and academically too demanding for many learners. The evaluators postulated that substantial learning delays as early as Grade 1 may also account for the lack of substantial progress. That is, by the beginning of Grade 2, learners were already behind and therefore could not benefit from improvement programmes as they are already pitched at a level that is too academically demanding for them (Fleisch, 2021). Only Gauteng and the Western Cape have shown evidence of improvement at particular points in time (Fleisch et al., 2018; Mourshed et al., 2010). In the case of Gauteng, the province made use of what has been referred to as the 'education triple cocktail' (Fleisch, 2018); in the Western Cape, stakeholders have effectively combined capacity building and regular external measurement of learning.

Fourth, multilateral funders and international agencies play only a relatively minor role in interventions and discussions on how to reduce unequal early learning outcomes in South Africa. Over the past decade, USAID and UNICEF have begun funding early-grade programmes in the country, but the bulk of this funding is for programmes that prioritise research rather than direct programme delivery. Early Grade Reading Studies (EGRS), a joint government–university collaboration aimed at testing best practices in large-scale reforms, is the most important of these research initiatives.<sup>1</sup> By contrast, most of the larger-scale initiatives were funded either directly by the South African government through the National Education Collaboration Trust or directly by South African private sector trusts or donors such as the Zenex or Allan Gray Orbis Foundations.

Finally, debates and discussions in the education sector, civil society, and the academy about unequal early learning and its long-term consequences for poor black and working-class children remain deep and persistent. However, the South African government's current fiscal consolidation approach compounded with policy shifts towards prioritising education and training for the labour market means that reaching the 2030 SDG 'quality' targets is unlikely (See Sachs, 2023 on public sector finances). With the high cost of debt repayment and other pressing national priorities, such as new energy generation and reducing high unemployment, the government has embarked on a strategy to stabilise spending on social services in the short to medium term. Unless substantial reprioritisation is possible within the existing education budgets, it is unlikely that any new government funding will be available for a system-wide initiative to improve early grade learning.

What does the South African experience contribute to the debate about the international narratives associated with the notions of the learning crisis/global education crisis and learning poverty? Notwithstanding the growing attention that the World Bank, USAID, and agencies such as the Gates



Foundation are giving to prioritising early grade learning, at least in the South African context, attention to the problem of unequal learning outcomes in the early years of schooling predates the current “learning crisis” and “learning poverty” discourse. Over the past two decades, local initiatives, both from within the country NGO sector and from provincial governments, have been working on the challenge of early grade learning but with only limited success. As we move forward into a period of fiscal consolidation without large external financial support, it is unlikely that substantial progress will be made to achieve SDG quality education goals.

Given the priority currently given to early grade learning in the National Development Plan, the local evidence of what may work at scale, and the recognition that the national curriculum needs to better address the unique structures of local languages and growth in interest from major international donors such as the Gates Foundation, real progress is possible in the next half decade. The key, however, is a genuine partnership at all levels, between international agencies and national departments, between the state and teachers and their unions, and within the academic community.

#### Endnote

1. For more about the Early Grade Reading Study, please consult the Department of Basic Education’s website. <https://www.education.gov.za/Programmes/EarlyGradeReadingStudy.aspx#:~:text=The%20EGRP%20was%20Launched%20in,reading%20outcomes%20in%20the%20country>

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# Testing the Strength of Our Foundations: Three Arguments for Keeping A Broad View of What Matters in Education Measurement

 **Fergal Turner**, Senior Consultant, Oxford MeasurEd, UK

 fergal.turner@oxfordmeasured.co.uk

 **John Mugo**, CEO, Zizi Afrique Foundation, Kenya

 jmugo@ziziafrique.org

 **Rachel Outhred**, Managing Director, Oxford MeasurEd, UK

 Rachel.outhred@oxfordmeasured.co.uk

 **David Alelah Otieno**, Programme Officer – Assessment, Zizi Afrique Foundation, Kenya

 dotieno@ziziafrique.org

## Summary

This paper offers three arguments that support the maintenance of broader perspectives on the ways foundational learning is captured and reflected in education metrics, specifically international large-scale assessments (ILSAs). These are historical arguments on what it means to be educated, scientific arguments on how skills build on one another, and political arguments on how evidence is used to drive reforms.

## Keywords

Education metrics  
International large-scale assessments (ILSAs)  
Policy formation

International large-scale assessments (ILSAs) have a significant impact on policy formation around the world. A recent NORRAG blogpost makes the (in the authors' own words, provocative) assertion that ILSAs, such as TIMSS and PISA, have reconfigured or colonised education policies and practices around the world (Gorur et al., 2023). Countries' participation in assessments can be driven by a desire for comparative evidence to inform system strengthening (Addey & Sellar, 2019), and these commissioning studies aim, in part, to provide [evidence to support education reform](#). Studies have found strong connections between the results of ILSAs and changes in policy related to curricula and teaching (Fischman et al., 2019; Rutkowski et al., 2020).

Recent ILSAs and other transnational initiatives have expanded the range of skills that are measured to include clusters of skills around, for example, [global citizenship](#) or [social-emotional learning](#). The potential of the latter study to provide globally comparable data on social-emotional learning is explored by Feldmárová and Gress-Wright (this volume). Despite these recent indications, the global measurement agenda has yet to shift from a central focus on literacy and numeracy.

Discussions on learning crises or learning poverty are framed exclusively in terms of these two skills. While we do not



question the central importance of these skills, we also assert that they do not represent the whole child or their learning. In the rest of this paper, we present three arguments for why measurement (particularly ILSAs considering their influence on discourse) should focus on a wider range of skills that capture broader understandings of learning.

### **The Historical Argument: What Does It Mean to Be Educated?**

Looking across cultures and historical periods, we see two co-existent framings of what it means to be educated. The first is the instrumental framing of education for a purpose. This exists historically, for example, in the civil service exams in second millennium China (Elman et al., 2013) or [in the education of scribes in ancient Egypt](#). The second is the framing of education as its own purpose. This represents education as a personal good, based on human actualisation as an “educated person”. This can be seen in cases such as Plato’s writing in ancient Greece (Losin, 1996), the Akan philosophy of Ghana (Amponsah, 2023; Okrah, 2013), and the Vedic education system in ancient India (Hatib, 2018).

In the 20<sup>th</sup> century, for writers such as John Dewey, Hannah Arendt, and Paulo Freire, the purpose of education is towards human actualisation in service of democratic values and social justice. Looking globally, the Faure report, [UNESCO’s first report on the futures of education](#) framed the purpose of education in terms of human flourishing, built on lifelong opportunities for learning, in a democratic world (Locatelli, 2022). In his reflections on the 50 years since the Faure report, Geert Biesta noted how the discourse has changed since that time towards a framing of education in which being educated is tied to the needs of the economy rather than to the potential of individuals and societies (Biesta, 2022).

Modern discourse reflects a combination of historical framings of the purpose of education. The three central purposes for education in modern discourse include: (1) supporting the development of individual capabilities, (2) developing workforce capacity to promote economic development, and (3) strengthening social cohesion (Outhred & Turner, 2023). The building of individual capacities, we note, refrains from expressing a commitment to the fullness of human flourishing.<sup>1</sup> Similarly, social cohesion reflects the importance of equity and living in relationships with others but refrains from recognising that individual flourishing is only possible in relation to communal flourishing and living in harmony with others in communities with mutuality, belongingness, mission, justice, relational growth, and trust (Lee & Mayor, 2023). Lastly, modern discourse recognises the individual’s contribution to economic development through participation in the labour market, while human flourishing holds that a good society is one in which people are able to make a decent living and to prosper (Chenyang, 2013).

Within these historical narratives are a number of points of tension. The globalisation of a vision for the purpose of education relegates rich philosophical traditions in education to be subservient to “Western” traditions of education (Amponsah, 2023). The focus on individual and human capital can come at the cost of social cohesion, as is typified by the modern trend towards international mobility for tertiary education, which enriches the life of the individual and supports the economy of the host country, potentially to the detriment of the countries of origin of students (Outhred & Turner, 2023). Lastly, history shows us that what it means to be educated is closely tied to the dominant views of the structure of society, with the dominant narrative on education currently shaped by a dominant neo-liberal perspective on the role of individuals within economies.

### **The Scientific Argument: How Do Skills Build on Each Other?**

The scientific perspective on the knowledge and skills required to meet the purposes of education is twofold: (1) children need a range of non-academic skills to build their individual capacities, work effectively and efficiently with others, and live in harmony with others; and (2) non-academic skills strengthen and support the development of academic skills.

Psychosocial attributes and non-academic skills have received increasing attention, partly in recognition of their importance within the workplace and more broadly due to how we live in relation to others in society. People need to make coherent decisions, use available information, and understand gaps in that information. They need to learn as they go and adjust their approach and attitude towards risk in light of experience and new information. People need to work well with others and understand themselves to live fulfilling lives in relationships with those around them (Hill & Outhred, 2021).

Further, the attainment of academic skills is both predicted by and predictive of better self-belief, subject interest, motivation, and need for cognition (where learners are keener to apply mental effort). Although the determination of all of these traits is complex and multifaceted, the analysis of data from multi-country studies provides valuable insights (Hill & Outhred, 2021). The relationships between psychosocial attributes, cognitive abilities, and transferable skills appear to influence each other. This suggests that psychosocial attributes are supported by academic attainment and academic attainment is supported by psychosocial attributes in a cyclical interaction, whereby confidence, interest, and motivation provide better support for learning outcomes, which, in turn, strengthen confidence, interest, and motivation, and so on.

The scientific argument suggests that a range of non-academic skills play a significant role in achieving the purposes of education and, therefore, should be measured and monitored.

### **The Political Argument: What Evidence Is Useful for Driving Reform?**

We know that what gets measured gets attention. Getting governments to pay attention to foundational literacy and numeracy followed years of producing data from large-scale assessments that demonstrated that most children were schooling but not necessarily learning. Further, many countries have begun to integrate a wider set of skills into their curricula.

For example, curricula in Kenya, Tanzania, and Uganda have embraced life skills as part of foundational learning. Competency-based curricula were adopted first in Tanzania in 2005, then in Kenya in 2016, and in Uganda in 2019. Uniform across these governments is an integrated approach in which the instruction of such competences is embedded in academic approaches. While political narratives revolved around celebrating the new approach to curriculum that was adopted, system-level data on the targeted competences were not discussed at all. This leaves three key questions unanswered: First, are the children acquiring these competences? Second, to what extent does the integrated approach work? Third, what support is provided for teachers, schools, and the system to optimally develop these competences for all children?

These questions require assessment and child-level data. The experience from the Assessment of Life Skills in East Africa (ALiVE) has demonstrated that it is possible to assess these competences on a scale using simple measures that utilise scenarios and performance tasks. In 2022, ALiVE collected data on collaboration, problem solving and self-awareness from 50,000 adolescents in Kenya, Tanzania, and Uganda. These experiences show that classroom-based formative assessments can be implemented by teachers to monitor competency acquisition for each child.

However, as the proverb goes, you cannot fatten a cow by weighing it. Assessments must be used skilfully to document the results of various interventions and to ascertain what works. Most important, however, is that political decisions must focus on holding the system, schools, and teachers to account for the development of these competences in children. Beyond rhetoric, education ministers and other policy makers must pay attention to the understanding and scaling of what works and to adopting policies that embed life skills and values as core to foundational learning.

Reflecting on this case, we see that assessment practice should be reflective of curricular priorities, as well as designed by and be useful for policy makers and practitioners. This implies a focus on more contextualised approaches that consider a broader range of skills being targeted by curricula.

### **Conclusion**

Inarguably, the results of national and international large-scale assessments have an impact on how we think about education and what skills we prioritise. Currently, these assessments are loaded heavily towards accumulating large-scale comparative data on literacy and numeracy levels, which influences policies to improve these vital skills but are misaligned with the increasing focus on broader foundations for education. This misalignment is captured in a study by the Brookings Institution (Taylor et al., 2020), which analysed 22 national curricular frameworks. The study identified more than 200 competencies covering skills, character, and meta-learning—none of which, however, were covered by national assessment programmes.

By keeping the focus of assessments on literacy and numeracy, we may unintentionally create a global version of “teaching to the test”, in which a small group of people and organisations define the purpose of education in terms of what can be comparably measured at scale rather than rooting it in a nuanced and inclusive discussion of what it means to be educated. As Schweisfurth (this volume) points out, time in school is a zero-sum game. The more focus is placed on one skill, the more attention it takes away from others. At the moment, attention is placed squarely on literacy and numeracy, driven by the perfective measurement of these skills, to the detriment of a richer understanding of the whole child. As we outline in this paper, this presents a triple risk: the risk of losing sight of the role of education in human flourishing, the risk of limiting our scientific understanding of how we learn and develop, and the risk of creating data that is poorly suited to informing meaningful policy dialogue.

### **Endnote**

1. Individual capabilities for human flourishing include happiness and life satisfaction, physical and mental health, meaning and purpose, character and virtue, and close social relationships (Lee & Mayor, 2023).

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## Part 2

# Value in Numbers

This part discusses the central, perhaps definitive, importance of metrics to the ways foundational learning is costed and promoted through policy and funded and supported by international agencies and foundations. It sheds light on how metrics determine and validate what is viable pedagogy and what is not for foundational learning.

The first two articles concern the role of international large-scale assessments (ILSAs). *Laying Foundations*, the contribution by Ivona Feldmárová and Catharina Gress-Wright opens an internal window on the strategic and theoretical thinking behind the OECD's Survey on Social and Emotional Skills (SESS). The article invites us to "revisit our definitions of foundational learning" so that we might fully embrace social and emotional skills. It argues that these skills are essential for the world we live in, can be effectively taught, and, of course, can be effectively measured and compared on a global scale. Central to the OECD's rationale is that robust and reliable data are shifting the debate on social and emotional skills and positively affecting policy. Melis Cin et al.'s *Lost in PISA-lation* proffers a critique of PISA's reading literacy test from a national perspective—that of Türkiye. They argue that while ILSAs such as PISA may effectively shift policy, they not only effect a homogenisation of education, but they also overlook the complex and inter-related dynamics of, particularly, gender and poverty; this results in a fragmented and incomplete portrayal of foundational learning.

Continuing the interspersed, collective case study of foundational learning in India in this special issue, Aanchal Gidra's study, *The Effect-sizes of TaRL interventions in India*, underscores the challenges inherent in measuring learning. Gidra emphasises that the pursuit of measuring learning is hindered by various design and analytical limitations, providing only partial and limited insights into learning and pedagogy. Her analysis reveals that findings on effect sizes for foundational learning interventions tend to overstate and should be approached with more caution than assurance. In *The Foundational Learning Study*, Purabi Pattanayak and Rashi Sharma's descriptive account of the Indian government's extensive 2022 national survey details how international literacy assessments were customized to capture India's multilingualism. The authors paint a picture of the scale and ambition of India's "mission" to ensure that all children are able to "read fluently with comprehension" by Grade 3.

Paul Schöpfer et al.'s *Integrating WCD Measurement* puts forward a collaborative case-based view of how this is being achieved in a variety of education contexts. Echoing Melis Cin et al., they conclude that national and local contexts matter if metrics are to be useful for improving pedagogy and education systems. They call for "developing an ever-more robust WCD metrics that is able to inform education policy and planning."

# Laying Foundations: Global Lessons from the OECD’s Survey on Social and Emotional Skills

 Ivona Feldmárová, OECD Directorate for Education and Skills, France

 ivona.feldmarova@gmail.com

 Catharina Gress-Wright, OECD Directorate for Education and Skills, France

 Catharina.GRESS-WRIGHT@oecd.org

## Summary

This paper discusses the OECD’s Survey on Social and Emotional Skills (SSES) as an example of International Large-Scale Assessments (ILSAs) of foundational skills beyond literacy and numeracy, emphasising the importance of reliable global measurement, SSES’s impact, and ILSAs’ value and gaps in shaping debates and praxes about foundational learning.

## Keywords

International large-scale assessments (ILSAs)  
Social and emotional skills

## Why are Social and Emotional Skills Necessary for “Foundational Learning”?

We must revisit our definitions of foundational learning. Literacy and numeracy are required to function in contemporary societies, but education stakeholders increasingly acknowledge that these alone do not equip people to handle emerging challenges or day-to-day lives. As Turner et al. reflect elsewhere in this special issue, education discourses emphasise a three-fold role for education that is economic (workforce preparation), personal (realising individual potential), and societal (nurturing social cohesion). These combine to suggest that the purpose of education is to prepare youth to thrive independently in society, for their own and society’s sake. If this is so, “foundational learning” should include all the basic skills and knowledge required.

Young people need to know how to manage themselves, their relationships, and their tasks, not just how to read and compute. Social and emotional skills are what enable this. Imagine how difficult it would be to ace that final exam without any self-control to help you study, or to stick to your workout schedule without persistence. How would your relationship with your child be if you lacked the empathy to understand their outbursts? Social and emotional skills (SE skills) provide a foundation for numerous essential outcomes. They are linked to academic success (OECD, 2021), labour market outcomes—including income, continual employment, and job performance—and to physical and mental health (Chernyshenko et al., 2018); they even outweigh cognitive ability in some areas (Heckman et al., 2006).

SE skills also enable us to meet the many societal challenges we face. Growing automation in the labour force requires people who excel at non-routine tasks and [complex social interactions that only humans can do](#). The increasing rate of change means that “what only humans can do” will also evolve quickly. The [increasing migration](#) and social

segregation (Alvaredo et al., 2018) require ever greater empathy, perspective-taking, and trust to bridge social divides and foster national cohesion. Climate change, global shocks such as COVID-19, and ongoing conflicts and wars heighten the demand for stress resistance, creativity, and cooperation, both at the local and global levels. SE skills are needed in our interactions as individuals but also in our institutions; they are crucial for developing the effective solutions that we need to address amassing problems. The good news is that SE skills can be taught. Targeted, developmentally appropriate interventions, including those that follow frameworks such as [S.A.F.E.](#),<sup>1</sup> for example, are demonstrated to improve students' social, emotional, and academic outcomes for all age groups over the short- and long-term (Durlak et al., 2011; Jones et al., 2019).

However, the growing interest in SE skills reveals two major gaps. First, as Jones et al. (2019) put it, “The terminology in this field is a mess”. There is no global agreement on definitions. Frameworks and measures tend to conflate different constructs under one term or use different terms for what is actually the same construct—the “jingle-jangle fallacy”.<sup>2</sup> Consequently, policymakers struggle to find common bases for discussion, or they rely on data from other contexts that may seem comparable to their own contexts but that actually are not. Second, there is a lack of reliable, globally comparable data. Thousands of studies assessing SE skills are mostly small-scale. They focus on particular programmes or locales and do not assess regionally or nationally representative populations.

The lack of shared terms makes discussion difficult. The lack of comparable data—or, for some countries, the lack of any representative data at all—makes evidence-based policymaking and exchange almost impossible. This is the gap that the OECD's Survey on Social and Emotional Skills (SSES) strives to fill.

### Can Social and Emotional Skills Be Measured on a Global Scale?

SSES was developed to generate evidence for meaningful exchange between education systems. With such evidence, policymakers and stakeholders can understand where their system stands, learn from others, and improve policies and practices related to SE skills. SSES is the first and largest international large-scale assessment (ILSA) of SE skills in school-age children. It pairs students' self-reports on skills with background information on their school and home environments.

Since its first round in 2019 (“Round 1”), SSES has demonstrated that reliable, comparable data on these skills can be collected. Round 1 assessed 60,000 learners aged 10 and 15 in 10 cities across North and South America, Europe,

and Asia. The results demonstrated that scores could be directly compared for gender and age cohorts. Correlations between skills and contextual factors—such as school climate and optimism, or exposure to bullying and co-operation—could also be compared between sites.<sup>3</sup>

SSES's robustness comes from its basis in the well-established Big Five personality model,<sup>4</sup> which originated in personality psychology and has strong empirical foundations. It builds upon the natural language terms that people use to describe themselves and others (John et al., 2008). In other words, the Big Five reflects how we talk about ourselves. These natural-language categories form a comprehensive overview of the traits that people deem most salient—and thus are relevant to functioning as individuals and getting along with others. Additionally, the Big Five has proven to be robust across cultures (McCrae & Terracciano, 2005; Schmitt et al., 2007). The Big Five has been adapted to assess observable SE skills, not just personality traits and not only by SSES (see National Research Council, 2012; Abrahams et al., 2019; Soto et al., 2022). The OECD's SSES model identifies 15 SE skills, including responsibility, cooperation, and curiosity,<sup>5</sup> within five broad domains that map onto the original Big Five: open-mindedness, task performance, engaging with others, collaboration, and emotional regulation.

SSES also uses the Big Five for its breadth. As an exploratory study, rather than preemptively excluding skills, the SSES framework constitutes a comprehensive range that covers all the major domains identified in the existing taxonomies of SE skills (Schoon, 2021; Cassillas et al., 2022). This breadth is crucial for establishing research starting points in skills that are both well and less studied.

### How Can Global Measurements Impact Local Policy and Practice?

SSES shows how large-scale data can galvanise conversations and shift local policies. Local governments from Round 1 sites are making use of their data. For instance, in Bogotá, Colombia, the Colombian Institute for Educational Evaluation (ICFES) organised sessions that used the SSES data to raise awareness among policy makers, teachers, parents, and caregivers of the relationship between SE skills and cognitive development. Other cities are helping schools implement change directly. In Portugal, the city of Sintra and the Gulbenkian Foundation used the survey data to work with groups of schools, empowering them to develop social and emotional learning (SEL) action plans and providing support with implementation. Finally, in Helsinki, Finland, SSES data were used in the Helsinki City Strategy 2021-2025, informing how SE skills training will be improved and expanded. The municipality is collaborating with the University of Helsinki to produce research- and experience-based tools and support for schools, teachers, and students in the city.



More subtly but palpably, SSES has helped shift the broader conversation about SE skills, drawing these skills and conceptions of “foundational learning” further to the centre of collective policy debates across the world. The second round of SSES (Round 2) in 2023, which will be reporting in 2024-25, has expanded to include 16 sites across 15 countries, including 6 at the national level. Of these, Ukraine has been exploring ways to use SSES to integrate SEL into its schools. Middle-income economies and OECD partner countries across Latin America and Asia have joined alongside OECD member states. While some sites already possess strong SEL ecosystems that motivate their participation (e.g. Helsinki and Bogotá), others, such as Ukraine and Gunma Prefecture in Japan, are keen to use SSES to initiate or amplify recent SEL debates.

### So, What Have We Learned? And What’s Next?

SSES (Round 1) demonstrated that generating internationally comparable and reliable data on these nebulous and contextually embedded skills is possible. However, it also revealed the inherent limitations to any ILSA of such skills. SSES introduced a potential common framework and language, but responses in research and from stakeholders show there is still confusion about definitions, doubts about a common framework, and questions about which skills can and should be measured.

At the data level, the strengths of SSES are also its limitations (as with all ILSAs). SSES provides a global snapshot of students’ SE skills and their environments. We can begin to consider which system-level elements may shape the development of particular skills, but we cannot demonstrate causation or evaluate the effectiveness of particular programmes. SSES data also highlight the risks of attempting direct comparisons or rankings of results between sites; measurement invariance issues prevent direct comparisons of average skills between sites.

Finally, the responses to SSES reveal some surprising misunderstandings. SSES and other ILSAs measure systems, not individuals. Although SSES can inform policy, it should not be regarded as a finished tool for assessing individual students or individual schools. Assessing a student’s SE skills requires targeted design and a bespoke choice of assessment type. Assessments that are modelled on SSES could be used in schools, but it would take thought and research to adapt them.

SSES has opened a new arena for SE skills assessment. It has helped expand shared definitions of “foundational learning”, acknowledging SEL’s role as a cornerstone of further learning and individual and societal well-being. It has helped shift education policy conversations in countries around the world. However, it underscores the need to consolidate, or at least clarify, our definitions and to support a wide range of data and studies—small and large, qualitative and quantitative. At the OECD, the commitment to provide system-level, reliable, and comparable data continues in the current Round 2 of SSES. Beyond that, OECD’s new Rethinking Assessment of Social and Emotional Skills project will complement current efforts by revisiting the SSES framework with insights from recent research and by designing innovative approaches to measurement. Together with SSES, the new project will contribute to promoting SE skills as an integral part of foundational learning.

### Endnotes

1. SAFE, an acronym for sequenced, active, focused, explicit. It advocates a coordinated, step-by-step approach, learning methods such as role-play with feedback, developing social and emotional skills regularly and with adequate time, teaching of clearly identified skills with specific learning objectives. For a useful summary of various approaches to SEL, see: [https://epi.org.uk/publications-and-research/social-and-emotional-learning/#\\_edn37](https://epi.org.uk/publications-and-research/social-and-emotional-learning/#_edn37)
2. The “Jingle Fallacy”—the wrong assumption that two different things are the same because they have the same name; the “Jangle Fallacy”—the wrong assumption that two similar things are different because they have different names.
3. Results from SSES are reported in *Beyond academic learning: First results from the Survey of Social and Emotional Skills*. Cited in bibliography.
4. The Big Five personality traits are extraversion (or extroversion), agreeableness, conscientiousness, openness, and neuroticism.
5. For a full list of the skills that are included, see *Beyond Academic Learning: First results from the Survey of Social and Emotional Skills*. Cited in references.

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# Lost in PISA-lation: The Limits of Measuring Gender and Poverty

 **F. Melis Cin**, Associate Professor, Lancaster University, UK

 m.cin@lancaster.ac.uk

 **Özgenur Korlu**, Policy Analyst, Eğitim Reformu Girişimi, Türkiye

 ozgenurkorlu@sabanciuniv.edu

 **Ali O. Ilhan**, Assistant Professor, University Cincinnati, US

 ilhanao@ucmail.uc.edu

 **Ozancan Özdemir**, PhD Candidate, Bernoulli Institute, University of Groningen, Netherlands

 ozancanozdemir@gmail.com

 **Yeliz Düşkün**, Strategy Unit Coordinator, Constructor University, Germany

 yelizduskun@gmail.com

## Summary

This paper critically examines PISA 2018 in Türkiye, emphasising how it overlooks the impacts of poverty and gender in schools in its assessment of foundational learning. The paper reveals how international large-scale assessments may create erroneous assumptions about essential learning and fail to explore salient aspects of education that extend beyond traditional quantitative measures.

## Keywords

Gender equality  
International large-scale assessments (ILSAs)  
Poverty  
PISA

## What Does PISA Do?

Functional literacy, a key concept in foundational learning and international development initiatives, focuses on training for economic growth and employment ([UNESCO, 2005](#)), but it has been criticised for its limited scope (Papen, 2005). Building on Freire's work, a more comprehensive approach to foundational learning extends beyond basic literacy and numeracy to include critical engagement with diverse information and knowledge formats. This approach fosters skills for analysing, questioning, and connecting texts with personal experiences and global challenges (Luke, 2012).

The PISA reading literacy framework, positioned between these viewpoints, emphasises the ability to find and understand information, evaluate, reflect, and read fluently. [PISA](#) defines reading literacy as the ability to comprehend, apply, assess, reflect on, and engage with texts to achieve goals, develop knowledge, and participate in society. The aim of PISA's reading literacy test is not only to increase student proficiency in engaging with texts for knowledge acquisition and societal participation but also their capacity in science and mathematics literacy. However, it distinctly overlooks the complex, relational dynamics of gender and poverty, reducing these multifaceted concepts to overly simplistic and instrumentalist measures. This reductionist approach fundamentally posits that PISA offers a constrained perspective, resulting in a fragmented and incomplete portrayal of foundational learning.

## Beyond the Gender Gap: Critiquing PISA's Approach to Assessing Literacy Skills

Across all OECD nations, including Türkiye, girls consistently outperformed boys in PISA reading scores. Understanding these gender differences, particularly the superior literacy performance of girls, is crucial. Achieving a threshold of critical literacy skills fundamentally cultivates critical thinking and analytical competencies, enabling individuals to participate effectively in societal and public deliberation (Maddox, 2008). Girls equipped with such skills can engage in reflective, analytical thinking, thereby making informed decisions and actively contributing to societal and political dialogues. Consequently, these skills extend beyond education, significantly influencing girls' broader social and political lives (Cin, 2017).

This paper aims to challenge the oversimplified approach towards gender adopted by PISA, drawing on the critical perspectives of Meier and Diefenbach (2020) and Solheim and Lundetræ (2018) while also shedding light on its reinforcement of gender dichotomies and stereotypes. Our critique centres on PISA's narrow comprehension of school-related contexts, seeking to shed light on the limitations inherent in its methodology. These contexts significantly impact the assessment of literacy skills, the cornerstone of foundational learning in Türkiye. Rooted in the capabilities approach,<sup>1</sup> a human development paradigm, our analysis echoes Elaine Unterhalter's question about immeasurable education outcomes: "What are we measuring when we try to measure the immeasurable in education and what are we not measuring?" (Unterhalter, 2017, p. 3). We examine two intangible indicators within PISA—gender equality and poverty—by reflecting on our analysis of the PISA 2018 data.

## Unmeasurable Education Metrics: Gender and Poverty Indicators

In our comprehensive examination of gender disparities in literacy skills between boys and girls, we incorporate a diverse set of socio-economic variables. These variables include those associated with education institutions, educators, students, the school environment, and school resources. Our methodological approach deploys various statistical techniques, including regression analyses, hierarchical linear modelling, and descriptive statistics. These methods allow us to explore the intricate interplay between girls' and boys' academic performance and the aforementioned factors. PISA employs a sophisticated cluster sampling strategy, assigning weights and replicating weights to the data to ensure the generation of unbiased population estimates. In addition, PISA provides between five and ten plausible values for each student proficiency estimate. This practice takes into account variations in probability distributions, thereby providing a more precise portrayal of student proficiencies. It is crucial to consider and appropriately adjust these complexities in our analyses to maintain the integrity and reliability of our findings. In addition to the sample weights, the computation of standard errors warrants careful consideration.

A critical component of this process is the implementation of repeated weights. The PISA dataset is a representative sample rather than an exhaustive population. Any computations performed on this dataset inevitably involve a certain degree of uncertainty. This is because countless possible samples exist that could be extracted from the population, each differing, to varying extents, from the others. The statistical term that quantifies the uncertainty pertaining to these differing distributions is variance. Therefore, ensuring an accurate calculation of variance is a pivotal step in the analysis of such a complex dataset.

Nevertheless, the inferential nature of PISA datasets makes it challenging, if not outright unfeasible, to ascertain causality. As such, this section highlights the pervasive distortive impacts of employing these variables for grasping or redefining certain concepts that are inherently difficult to measure. We narrow our focus to two contested aspects of education: gender and poverty, both underpinned by the intricate dynamics of relationality and power that influence the attainment of foundational skills. We contend that they are frequently oversimplified into mere numerical representations, which neglects their distinct national contexts or education systems. Furthermore, cross-national comparisons cannot be exhaustively explicated through homogeneous indicators or variables, as certain inequalities and issues related to education quality may be entrenched within education systems, evading capture by standardised assessments.

## Unmeasurable Gender Equality

The measurement of gender equality in education has often centred on achieving gender parity, focusing on closing the performance gap between girls and boys. This approach is mirrored in the policy goal of Türkiye's Ministry of National Education, which primarily emphasises tangible, measurable outcomes based on numerical equality and tangible markers of progress (Cin et al., 2020). However, this perspective primarily focuses on gender inequality in terms of the disparities in school attendance and resources between boys and girls rather than encompassing a more holistic understanding of education quality. Our critique of PISA and its limited focus on gender resonates with these concerns; our analysis provides evidence of the shortcomings in understanding the conceptual nuances of gender and the differences in achievement. For example, we found that girls who demonstrate greater resilience, enjoy reading and perceive themselves as competent readers tend to have better literacy skills and achieve higher reading scores than boys (Cin et al., 2022). However, although tests like PISA do not establish a causal relationship, PISA researchers make various assumptions in attempt to explain it: a function of socialisation (Rodríguez-Planas & Nollenberger, 2018) that leads girls to develop more positive attitudes towards reading or girls receiving more encouragement, opportunities, and support from their families for reading pursuits than boys do (Silinskas et al., 2010).<sup>2</sup>

Our study reveals a positive association between school climate variables—such as student and teacher behaviours that hinder learning—and student achievement. Essentially, factors such as bullying, lack of respect for teachers, teacher absenteeism, and inadequate lesson preparation negatively affect students' learning and reading scores. These performance-related insights are useful for guiding policy change and identifying areas for improvement in education systems (Crossley, 2014). They also prompt us to reflect on the efficiency of national systems (Moss, 2014). However, this method fails to capture the more intangible outcomes of education, particularly those that help us understand the more tacit, nuanced, and contextual forms of inequality that affect foundational skills—such as gender inequalities. It does not uncover gender-biased structures, nor does it address how gendered social forces (which shape girls and boys differently, both in the school environment and at home) may contribute to lower learning levels. Considering that gender and power dynamics significantly influence the learning process and shape the well-being and agency of boys and girls (DeJaeghere, 2018), these metrics will not fully address the concerns of policymakers and organisations that seek more nuanced understandings of gender beyond the narrow assumptions reflected in PISA.

Our data also indicate some intriguing anomalies. For instance, descriptive analyses suggest that girls feel a stronger sense of belonging at school and place greater importance on education than boys do. Regression analyses do not demonstrate any positive correlation between these feelings and reading and literacy skills, a discrepancy that prompts us to question how a sense of belonging and attaching value to schooling might be harnessed effectively to enhance learning? Consequently, PISA results offer only partial understandings of student learning and schooling experience, as they rely on an excessively limited set of variables. The data do not provide an opportunity to look into the processes, relationships, and tensions across different gendered contexts and outcomes, and these are equally crucial for improving policy within and national systems.

### Unmeasurable Poverty

The second focus of our critique is the measurement of poverty and the understanding of socio-economic status. Similar to gender equality, poverty is intrinsically linked to the temporal and fluctuating dynamics of social, economic, and political relationships across various settings. Poverty is associated with both monetary and non-monetary attributes that are necessary for an individual's capabilities and life choices. Moreover, the political, cultural, and social dimensions of poverty extend beyond material resources. PISA, like other ILSAs, conceptualises poverty in broad terms, such as socio-economic status (SES). For instance, the ESCS index (economic, social, and cultural status), used by PISA, incorporates factors such as parental education and status of occupation, and home possessions. However, Hannum et al. (2020) highlighted the limitations of using such

proxies, as household economic status may have varying effects on children's experiences of deprivation and their learning processes. Our PISA 2018 analysis shows that students with the minimum necessary resources at school and at home—these include computer, internet, books, a peaceful study space, and access to teachers at school—tend to score higher. This emphasises the need for policies and practices that provide support to pupils from low socio-economic backgrounds.

PISA does not measure how these resources are utilised and distributed or to what extent they inherently foster quality learning and fundamental skills. The key question is: How do these resources align to support quality education? Do students experience racial or gender biases in learning materials? Are textbooks perpetuating gender stereotypes? If the content of learning and teaching resources stigmatises girls or students with diverse backgrounds without adequately providing them resources to improve their achievements, how do we justify resources for foundational learning that do not contribute to the public good?

Our analysis indicates a negative correlation between the availability of ICT at home and the reading scores of both boys and girls. This relationship underscores the reality that, despite the resource availability to predict achievement, the inappropriate use of technological devices adversely affects learning experiences. The content, usage, and purpose of resources is critical, as the absence of “instructional technologies” does not invariably mean deprivation that affects learning.

Another intriguing finding from our analysis points to an interesting tension: girls from lower socio-economic backgrounds in Türkiye achieve higher scores than the national mean, and they far outperform boys. This suggests that for girls, the effects of low socio-economic status are essentially mitigated; they do not necessarily result in what the World Bank calls “learning poverty”. Our analysis does not provide insights into the precise factors that contribute to this mitigation, but Hannum et al. (2020) are essentially right: relying solely on resource-based measurements to predict education achievements potentially introduces biased results and inconsistencies.

### What Are the Key Lessons?

We offer three key suggestions. First, gender equality and poverty are descriptive, normative, and conceptually contested; they cannot be reduced to broad brush stroke indicators. They are imbued with salient aspects of education, such as agency, social relationships, well-being, and power relations, creating further tensions between what can be quantified and what cannot. Second, these tensions should not be overlooked in comparative and international education studies. While ILSA's, like PISA, are touted as effective tools for education reforms, they lead to an unwarranted homogenisation of education.

Their primary objective is to generate data and proxies for comparing diverse education policy contexts, but their metrics prioritise the numerical representation of different genders, races, and classes, obscuring the inequalities in foundational learning they seek to address. Finally, these inequalities present significant challenges for assessment through standardised tests, as the nature of intersectionalities is as contested as it is complex. It is not simple to unravel the combined interactions of gender and poverty in one location; doing so across a number of countries using standardised indicators will provide superficial, potentially misleading results. How countries interpret these inequalities also changes, often without notice,

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as evidenced by Türkiye's removal of normative gender-related inequalities from policy agendas over the last decade (Cin & Karlidağ, 2021). This leads to misunderstandings of the impact of the gendered structures and masculinities that significantly shape learning and teaching environments.

### Endnotes

1. Sen first introduced the concept of capability in his Tanner Lectures at Stanford in 1979. His lecture, Equality of What? Is available at [https://www.ophi.org.uk/wp-content/uploads/Sen-1979\\_Equality-of-What.pdf](https://www.ophi.org.uk/wp-content/uploads/Sen-1979_Equality-of-What.pdf) Martha Nussbaum and Sen collaborated in the late 1980s and early 1990s, although Nussbaum first articulates her more philosophical approach in her 1988 essay "Nature, Function, and Capability: Aristotle on Political Distribution. In Oxford Studies in Ancient Philosophy." Oxford University Press. A 1987 version is available here: <https://www.wider.unu.edu/sites/default/files/WP31.pdf>
2. See an article by Torppa, et al.'s (2018) for a discussion on why boys and girls perform differently on PISA reading tests in Finland, available at <https://psyarxiv.com/2xgnq/download?format=pdf>

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# Studying the Effect-Sizes of TaRL Interventions in India

 **Aanchal Gidra**, Graduate Student, Michigan State University, US

 gidraaan@msu.edu

## Summary

This article examines the design, conduct, and analysis of randomized controlled trials (RCTs) for the Teaching at the Right Level (TaRL) program in India. The intention is to understand the metric of effect size in RCTs through the current literature on effect-size research. The analysis focuses on the eight RCTs mentioned on the TaRL website.

## Keywords

Effect size  
Experiments  
Foundational literacy and numeracy (FLN)  
India  
Randomized controlled trials (RCTs)

For two decades, newspaper front pages in India have carried the same information almost every year: children at school are not learning. Many surveys highlight the lack of foundational skills for school-going children. A key purpose of India's schooling system is to support the development of foundational learning in the early years; addressing this challenge is central in the current National Education Policy (NEP 2020). Numerous non-governmental organizations are also actively engaged in developing innovative pedagogical and technological strategies to meet this goal.

Many randomized controlled trials (RCTs) carried out in the country focus on the lack of learning in school and the resulting poor learning outcomes (Banerjee et al., 2016). The evidence these studies produce has helped bring global attention to India's innovative pedagogies. Multiple approaches that aim to meet the foundational learning needs of children in other low- and middle-income countries have recently been evaluated (World Bank Group, 2023).

Teaching at the Right Level (TaRL) is one such approach for furthering foundational learning. This pedagogical method, developed by Pratham, has been the subject of multiple RCTs over the past two decades and is now implemented in 12 countries in Sub-Saharan Africa (TaRL, 2023).<sup>1</sup> The World Bank Group (2023) considers TaRL one of the most cost-effective methods for reducing low learning levels globally. This study analyzes eight RCTs mentioned on the TaRL website (as of June 2023) that examine the effectiveness of the approach in India (TaRL, 2023). It situates the results of these RCTs within the context of recent debates in the literature on effect size—a common metric used in education research to compare the outcomes of different interventions.<sup>2</sup>

Note that effect size should not be the sole criterion for assessing the impact of interventions aimed at improving foundational skills. Instead, researchers, governments, and policymakers should consider the broader ecosystems in which evidence is generated before concluding that any proposed intervention is a sure solution. In quantitative education research, the impact of an intervention can only be



fully understood when factors such as cost, scalability, and type of intervention are considered.

### Existing Ideas in Effect-Size Literature

Before delving into an analysis of RCTs and the effect-size-related conversations around foundational skills, I situate this article within existing research and ideas in the effect-size literature. There is broad agreement that effect size in any experimental or quasi-experimental research study is influenced by considerations such as sample size and overall research design. Kraft (2020) usefully pointed out that features such as study costs, scalability, timing, content of the measured outcomes, and student experience should be considered when analyzing the impacts of field-based interventions in education research.

Education research, especially in the realm of experimental and quasi-experimental work, often evaluates programs of different scales. A meta-analysis of 645 studies from 12 reviews of evaluations of preschool, reading, mathematics, and sciences programs around the world found that effect sizes, in evaluations that involve small-scale trials and researcher-made measures, were almost twice as large as those that involve large-scale studies and independent measures, such as standardized tests (Cheung & Slavin, 2016). This paper calls on policymakers and researchers to be mindful of research design, sample size, and even “type” of publication (i.e., whether peer reviewed and published, or not) when considering the effect size of an intervention.

A comparison between effect sizes in RCTs and quasi-experiments<sup>3</sup> reveals a mixed picture: Cheung and Slavin (2016) report that quasi-experiments lead to higher effect sizes than randomized studies. In their study of effect sizes in the international context, Evans and Yuan (2022) showed that effect sizes of RCTs and quasi-experiments are comparable—although the latter may produce a smaller effect size. The effect sizes of both RCTs and quasi-experiments are dependent on the size of the sample, with smaller samples showing higher effect sizes.

In the next section, I attempt to add much-needed nuance to the discussion on the utility of effect size as a metric to evaluate the effectiveness of RCTs, with respect to their relevance to the foundational learning of millions of school-going children around the world.

### A Closer Look at the Experiments

What gives RCTs prominence in the education literature is the precision with which these studies are thought to determine effect sizes for programmatic interventions. The table at the end of this essay illustrates the effect sizes for the eight TaRL RCTs in question. These RCTs are used as evidence for the pedagogy described on the TaRL website (TaRL, 2023). The

lowest effect size is around -0.01 (i.e., not significant<sup>4</sup>) and the highest is 0.69 (i.e., significant). While not always significant, as indicated in the table below, almost all the studies that were analyzed for this paper found “positive effects” for the treatment group in the endline tests.

### Context Setting

Comparing effect sizes should be dealt with cautiously, as every RCT is different in terms of sample size, intervention, and location. I emphasize the importance of effect size in this paper because it underscores the need for broader perspectives that consider the larger context in which RCTs are carried out and applied. This study does not engage in a mathematical comparison of the effect sizes reported by each RCT, nor does it provide a meta-analysis that has determined ways of collating results from different studies. My analysis intends to indicate that relying solely on effect size as a metric of success offers only a restricted view of what is effective.

The following three sections look at what informs the metrics of effect size in the RCTs in question.

### Testing the Right Thing

Education RCTs usually test the effectiveness of interventions through test scores. Researchers often pose the question of how effect sizes differ when researcher-made tests, rather than standardized tests, are used. A meta-analysis of 33 reading interventions (Scammacca et al., 2007) indicated that the overall mean effect for all the interventions was 0.95; however, when the mean effects of only the 11 studies that used standardized tests were calculated, the effect size was smaller, at 0.42. Multiple research studies have indicated comparatively lower effect sizes when interventions use standardized measures over researcher-made measures. None of the interventions analyzed in this paper used standardized tests to assess their effects. This could possibly have produced inflated effect sizes.

This paper does not imply that interventions focused on strengthening foundational learning should adopt standardized tests. Rather, I suggest that interventions that are closely connected to outcome measures may be easier to modify. An assessment tool designed by a researcher has a greater possibility of being closely related to an intervention than an independent, standardized assessment tool. Policymakers and practitioners should be cognizant of these nuances when implementing TaRL and similar interventions to improve foundational skills.

### Testing at the Right Time

Research indicates that the timing of the outcome measurement has an important effect on effect size. Outcomes that are assessed immediately after an intervention have larger effect sizes than if they were

measured months or years later (Kraft, 2020). As indicated in the table, each of the interventions selected for this paper conducted pre-tests and post-tests immediately before and after the intervention started and ended. For programs that lasted longer than one academic year (usually two academic years), an assessment was conducted at the end of each academic year.

Most of the interventions did not shed any light on the durability of learning outcomes beyond testing immediately after the intervention. The Balsakhi Program<sup>5</sup> had a follow-up study, which noted that the effects reported had considerably reduced and had become insignificant for most students one year post-intervention. However, for the bottom third of students, the effect was around 0.10 standard deviations for both math and language, and it remained significant. While it is encouraging to find that students who needed and participated in the program made the most gains compared to students who did not participate in the program, if the learning gains continued to decay at the same level, there would be few gains left to observe at some point in the future (Banerjee et al., 2007).

If foundational skills are meant to support the building blocks for future learning, an in-depth analysis of the durability of interventions inside and outside the classroom is certainly needed. The current literature on TaRL in India provides limited information or insights that address this concern.

### Testing at the Right Grade Level

The grade level at which assessments are conducted is an important determinant of effect size (Bloom et al., 2008). Data from seven nationally standardized achievement tests in the US (Bloom et al., 2008) show that tests tend to show the highest gains in elementary grades and decline at higher grade levels.

While any positive effects on education and learning levels are not easy to obtain, gains that are reported can be contextualized by using grade levels as a benchmark for the content covered by the assessments. For example, as illustrated in column 7 of the table below, all eight experimental studies conducted tests to evaluate basic skills up to Grade 4. These eight experiments show positive effects on learning. However, the effect of interventions based on the TaRL methodology principles could reduce if interventions are conducted at higher grade levels, as indicated by the study conducted by Bloom et al. (2008).

In addition to the grades at which tests are conducted, students tend to score differently on differently designed tests: the distribution of scores is sensitive to floor and ceiling effects, depending on whether the test was too hard or too easy.<sup>6</sup> ASER, which is a simple four-category test, is

an example of tests that could create a ceiling effect for test scores (Singh, 2015). This ceiling effect may (positively) bias the findings on the effects of the intervention.

### Conclusion

Improving the effectiveness of foundational learning in schools remains a significant global challenge. Achieving meaningful and lasting changes in learning outcomes is a formidable task, especially for maintaining progress over time. Although it is essential for students to attain basic skills, such as reading and math, it is equally important for educators and policymakers to factor in technical considerations regarding the measurement of effect size when considering evidence from experimental and non-experimental studies.

The purpose of learning is multifaceted, with diverse aspects that include personal fulfilment, civic involvement, democratic functioning, and economic mobility. The need for foundational skills is crucial, but gauging effectiveness relies heavily—in conceptualization, implementation, and evaluation—on what can be measured. As this essay elaborates, efforts to measure learning quantitatively confront multiple design and analytical limitations; they produce only partial and limited understandings of learning and pedagogy.

**Table 1.** RCTs on Teaching at the Right Level in India

Paper (1)	Location/ Grade/ Intervention (2)	Intervention Details (3)	Effect size <sup>7</sup> (4)	Endline conducted (5)	Long-term study conducted (6)	Composition of endline test (7)
Banerjee et al., 2016	Bihar: Grade 3-5 one-month summer camp	Summer camp conducted for academically weak students, Grade 1-5	0.087* in language and 0.074** in math	June 2008	No	ASER math and language tests. The children were also administered a written Hindi and Math test to test higher-level competencies.
	Bihar	Schools received materials, training for teachers and volunteer support	0.125** in language and 0.105** in math <sup>#</sup>	Endline conducted at the end of the each of the two school years (2008-2009 and 2009-2010)	No	
	Uttar Pradesh	10-day camp treatment	0.7** and 0.69** in language and math, respectively	Students were administered baseline and endline tests. (2013-2014)	No	
		20-day camp treatment	0.61** and 0.62** in language and math respectively	Students were administered baseline and endline tests. (2013-2014)	No	
	Haryana	The government made all schools add an extra hour to their curriculum, treatment schools used the time to conduct TaRL methodology while control school continued as usual.	0.15** in language and - 0.01 in math <sup>#</sup>	Baseline took place in the 2011-2012 school year and the end line took place at the end of 2012-2013 academic year.	No	
Banerjee et.al., 2007	Maharashtra and Gujarat	Balsakhi Program Year 1- Students in grade 3-4 without basic skills are given support from a community member: separate teaching for 2-3 hours	0.14 SDs in first year**	2001-2002 Academic year	Yes, the size of impact falls substantially in the post-test of 2004.	The test covered basic competencies taught in grades 1-4 and was administered in the school's language of instruction.
		Balsakhi Program Year 2	0.28 SDs in the second year**	2002-2003 Academic year		
		Computer Assisted Learning (CAL)- A computer program is offered to students in Grade 4 for two hours of shared computer time per week.	CAL increased math scores by 0.35 SDs** in first year and 0.47 SDs** in second year.	2002-2003 and continued in 2003-2004 Academic Years	After a year of administering the program, a group of students were tested in 2005, the effect of the program falls to about 0.09 SD for the sample.	The test covered basic competencies taught in grades 1-4 and was administered in the school's language of instruction.
**Significant (0%-5%), *Marginally significant (>5%-10%), # Not significant						

## Endnotes

1. See, for example, the article by Diane Ressler in this special issue.
2. Effect size is a statistical measure that quantifies the strength of the relationship between two variables in a study or experiment. It is commonly used to determine the magnitude of the difference between two groups, such as an intervention group and a control group.
3. RCTs require a random assignment of participants to treatment and control groups, which allows for a high level of control by minimizing confounding variables; they are considered the gold standard for establishing causality. A quasi-experimental research design does not involve random assignment but instead assigns participants based on existing characteristics or self-selection. Quasi-experimental designs have less control over confounding variables and are weaker in establishing causality but they can provide valuable insights when randomization is not feasible or ethical.
4. Statistical significance helps us claim that a set of observed data can be attributed to a specific cause and is not the result of chance. If the probability of the event occurring by chance is quite low we can say that the event is significant. In this paper, significance levels between 0%-5% have been indicated as significant, whereas significance levels between 5%-10% have been indicated as marginally significant.
5. A *balsakhi*—tutor, is typically usually a young woman recruited from the local community and is paid a fraction of the cost of civil-service teachers.
6. This implies that the measurement instrument used in the research may not adequately capture or distinguish the full range of scores at either the lower or upper extremes, which could impact the accuracy and interpretation of the results.
7. This is the most common way of representing effect sizes, which is usually the difference between the mean of the control and treatment group, divided by the standard deviation of the control group. It is expressed in standard deviations. The significance asterisk “\*\*” provides an indication as to whether the statistic is significant or not.

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# The Foundational Learning Study: A Pathbreaking and Opportunity-Creating Initiative for India

 **Purabi Pattanayak**, Principal Chief Consultant and Researcher, Department of School Education and Literacy, Ministry of Education, India

 purabi.pattanayak@gmail.com

 **Rashi Sharma**, Deputy Director General (Establishment), Ministry of Communications, India

 rashiadg@gmail.com

## Summary

NIPUN Bharat is an Indian government initiative aimed at ensuring that every student acquires foundational literacy and numeracy skills by Grade 3. This paper explores the Foundational Learning Study (FLS), which is based on UNESCO's Global Proficiency Framework with nationally adapted benchmarks for numeracy and literacy. These involve reading with fluency and comprehension that is carefully calibrated for 20 Indian languages.

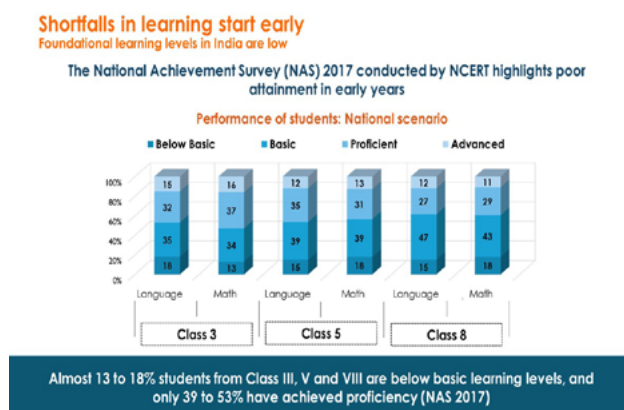
## Keywords

Foundational learning  
Lakshyas (national targets)  
NEP 2020  
NIPUN Bharat  
Proficiency benchmark

The most crucial strategy for guaranteeing that every child is equally able to learn during the primary stage of schooling is to ensure that they learn to read early and read well. Reading brings pleasure and knowledge and opens up the mysterious. It involves an intricate cognitive process that is essential for all knowledge-based societies. India's current [National Education Policy \(NEP 2020\)](#) prioritises the attainment of foundational skills as a necessary prerequisite for making subsequent learning experiences more meaningful and engaging so that they provide a foundation for lifelong learning. In response to the recommendations of NEP 2020, the Ministry of Education (MoE) and the Government of India launched the National Initiative for Proficiency in Reading with Understanding and Numeracy (NIPUN Bharat), on the 5th of July 2021. This mission is funded by the Government of India in partnership with the 36 States and Union Territories (UTs)<sup>1</sup> under the aegis of the centrally sponsored [Samagra Shiksha scheme](#). The funding under this mission provides for, inter alia, teacher capacity building, the development of high-quality and diversified teaching and learning materials, the tracking of children's progress, the assessment of learning, and innovation. Funding of 71.776 billion INR (US\$ 877.5 million) has been provided over the last three years to the states and UTs specifically for implementing various NIPUN Bharat interventions. The NIPUN Bharat mission embraces the idea that low learning achievement in the early grades affects a child's learning trajectory and therefore demands urgent attention (see Graph 1 below).

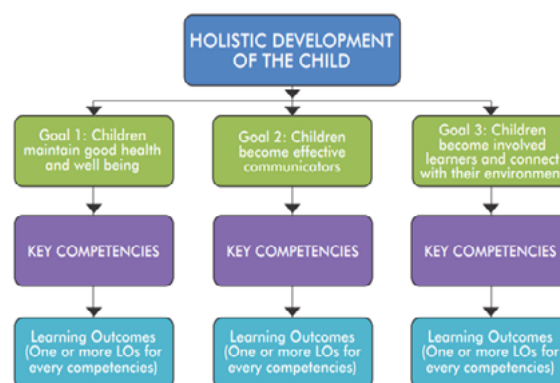
India's schooling system, which is the largest in the world,<sup>2</sup> was significantly affected by the COVID pandemic, which, at its height, saw 240 million children out of school worldwide.<sup>3</sup> Many countries developed remote learning policies and strategies to support children with their learning while schools were closed and to make up for the learning lost during the pandemic.

**Graph 1.** Findings of the National Achievement Survey, 2017



Source: National Council of Educational Research and Training, 2020

**Figure 1.** Developmental Goals of the Mission



Source: Ministry of Education, 2021

The goal of **NIPUN Bharat** is to provide learning that is holistic, integrated, inclusive, enjoyable, and engaging. The mission emphasises the holistic growth of students, which is framed in three developmental goals: (i) that children maintain good health and wellbeing, (ii) become effective communicators, and (iii) become involved learners who connect with their immediate environments. The guidelines clarify that these goals cover a wide range of interrelated and interdependent developmental domains, including physical and motor development, social and emotional development, literacy and numeracy, cognitive development, spiritual and moral development, and artistic and aesthetic development. The intention is for children to develop capabilities for life through these developmental goals. Figure 1 illustrates how these goals, competencies, and outcomes are linked.

Figure 2 below shows how each developmental goal is expressed through a key competency, which, in turn, is determined to be connected to a key outcome for each learning level. To develop the targeted competencies, learning outcomes are identified and codified for each grade to clearly lay out the expected learning progressions from one level to the next. Figure 2 shows how these are understood (and therefore codified) for the 3 years of preschool (*Balvatika*) and the first three years of school, Grade 3 (i.e. levels 1 to 6). The outcomes describe the knowledge, skills, and abilities children will have developed after completing each level. Figure 2 provides an example from the NIPUN Bharat guidelines.

**Figure 2.** Learning Outcomes, NIPUN Bharat

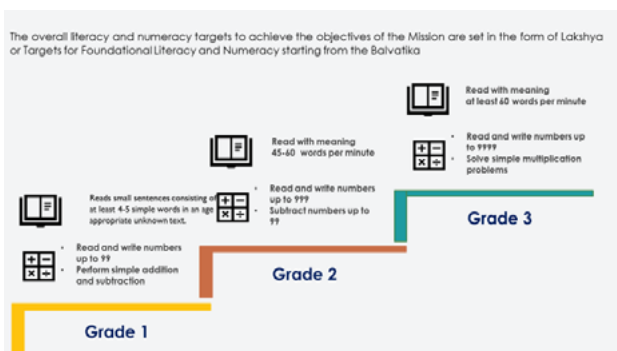
	Competency	Preschool 1	Preschool 2	Balvatika	Class 1	Class 2	Class 3
		Learning Outcomes					
<b>Goal 1</b>	<b>Demonstrates awareness of Self</b>	<b>HW1.1</b> Begins to state some physical characteristics about self	<b>HW2.1</b> Describes self in terms of physical characteristics	<b>HW3.1</b> Describes self and others in terms of physical characteristics, gender, interests, likes, dislikes	<b>HW4.1</b> Recognizes different body parts and uses various body movements	<b>HW5.1</b> Maintains correct posture, uses various body movements to participate in games and sports	<b>HW6.1</b> Participates in games and sports to strengthen and extend gross motors skills
<b>Goal 2</b>	<b>Demonstrates Phonological awareness-rhyming</b>	<b>ECL11.4 b</b> Sings/hums words/lines/parts of songs and rhymes, in own language/L2	<b>ECL12.4</b> Identifies few rhyming words	<b>ECL13.4 b</b> Enjoys and creates non-sensical rhyming words	<b>ECL14.4</b> Creates rhyming words based on the available text	<b>ECL15.4</b> Writes selective rhyming words in pair	<b>ECL16.4 b</b> Uses rhyming words for writing short sentences
<b>Goal 3</b>	<b>Compares and classifies given objects and pictures</b>	<b>IL 1.5</b> Compares two objects based on one observable property, for example-length, weight, or size	<b>IL 2.5</b> Compares and classifies objects by two factors like shape and color, size and shape etc. Describes objects using words like big/small, tall/short etc.	<b>IL 3.5</b> Compares and classifies objects by three factors like shape, color and size etc. Correctly uses position words (besides, inside, under) to describe objects	<b>IL 4.5</b> Compares and classifies objects/pictures based on multiple factors and demonstrates understanding of position	<b>IL 5.5</b> Compares and classifies objects/pictures based on multiple factors and describes them using properties	<b>IL 6.5</b> Compares and classifies objects/pictures in different categories and describes the properties used for classification

Source: Ministry of Education, 2021



The guidelines support the effective and efficient implementation of the NIPUN Bharat mission; they emphasise the crucial role of “reading fluently with comprehension”. The guidelines also describe national targets, or *lakshyas*, the *lakshyas* are a unique feature of NIPUN Bharat; they are effectively abridged versions of the learning outcomes that have been developed specifically to promote the understanding of parents, community members, and volunteers who may be tracking the learning progress of children in the early grades. Figure 3 below illustrates how the *lakshyas* stipulate the number of words per minute that students in the early grades should read with comprehension, as reading is considered the most crucial skill in the foundational stage. These targets were based on international benchmarks that were not adapted for Indian languages. Consequently, as India is such a multilingual and diverse country, the MoE decided to undertake a Foundational Learning Study (FLS) for the 20 major languages with the goal of tailoring the *lakshyas* to the unique and intrinsic features of each language.<sup>4</sup>

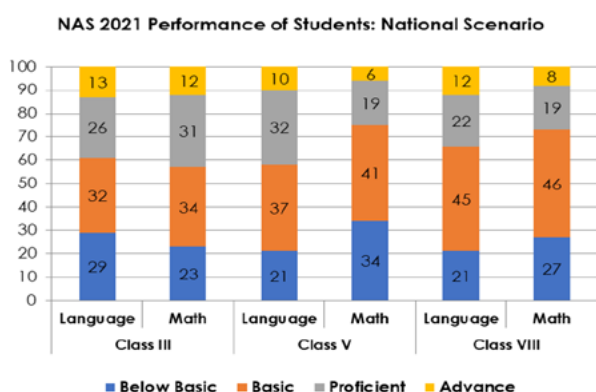
Figure 3. *Lakshyas*: Learning Goals of the Mission



Source: Ministry of Education, 2021

Graph 2 illustrates how the National Achievement Survey (NAS),<sup>5</sup> a large-scale achievement survey conducted by the MoE every three years, assesses the performance of students in Grades 3, 5, 8, and 10 as “below basic”, “basic”, “proficient”, and “advanced”. This does not reflect oral reading fluency with comprehension and therefore gives limited information.

Graph 2. Findings of the National Achievement Survey 2021



Source: National Council of Educational Research and Training, 2021

## Methodology for the Foundational Learning Study

Given that this study involved a very large sample and numerous languages, a National Steering Committee (NSC) consisting of officials from the MoE, the National Council of Educational Research and Training, and UNICEF was established to monitor its implementation. In total, 10,000 field investigators were chosen from state-level representatives and trained to carry out the study. The study was conducted nationwide from 23-26 March 2022, after a dry-run to identify potential barriers, which revealed that the one-to-one test would take far more time than expected, and that the number of observers was too few for some of the larger districts. These issues were resolved before conducting the final study.

The study was conducted as a school-based performance assessment, encompassing 10,000 [schools from all categories](#) and involving approximately 86,000 Grade 3 students. The evaluation process involved a one-on-one assessment, in which a test administrator evaluated the foundational literacy and numeracy skills of a selected sample of Grade 3 students. The details of the sub-tasks tested can be seen below in Table 1. Custom test booklets were created with a specific focus on evaluating Grade 3 children’s oral reading comprehension and fluency. To gauge their reading speed, students were timed while reading passages for one minute. Additionally, reading passages and comprehension questions were formulated to appraise the students’ understanding of the texts. This study, which has many firsts for India, also tested and set benchmarks for foundational numeracy skills across a range of sub-tasks.

Table 1. Sub-tasks of Foundational Literacy and Numeracy

Foundational Literacy – Sub-tasks	Foundational Numeracy– Sub tasks
Oral language comprehension	Number identification
Phonological awareness	Number discrimination
Decoding letters	Number operation (addition and subtraction)
Decoding words	Word problems (addition and subtraction)
Decoding non-words	Number operations (Division and Multiplication)
Picture matching	Measurement
	Fractions
	Patterns
Oral reading fluency (ORF) and comprehension	Data handling

Source: National Council of Educational Research and Training, 2022

Benchmarks established for oral reading fluency and comprehension were based on UNESCO’s [Global Proficiency Framework](#)<sup>6</sup> (GPF) for reading and mathematics, as shown in Figure 4.



Figure 4. Global Proficiency Levels (GPLs)



Source: UNESCO, UIS et al., 2020

Another key feature of this study was that a [policy-linking methodology](#) was implemented, for the first time in India, to arrive at the benchmarks for literacy and numeracy. This method involves setting benchmarks at a workshop for teachers and pedagogy experts. The teachers were to administer an oral reading fluency passage and a set of comprehension questions to nine Grade 3 students. The student selection included three low-, three medium-, and three high-performing students. At the workshop, teachers and pedagogy experts went through a range of set activities, which included, for example, checking the alignment of the assessment questions with the GPF and setting the cut scores<sup>7</sup> based on independent judgment and group decisions.

Five policy-linking regional workshops were held as well as a national workshop to finalise the benchmarks for literacy

and numeracy. Teachers and pedagogy experts from each of the 20 languages participated in the workshops. The national FLS report and separate FLS reports for each of the 36 States and UTs were released by the Minister of State on September 5, 2022—the occasion of India’s week-long annual national Teacher’s Day celebration. All [reports are available](#) on the MoE website.

### Major Findings of the Study

The study established benchmarks for oral reading fluency with comprehension in 20 different languages for Grade 3 students. As Table 2 demonstrates, the range of words expected to be read correctly and with comprehension is different for each language. Based on the results of this study, national learning targets for the NIPUN Bharat mission should be revised to include specific targets for 20 national languages. Table 2 shows student performance; only about 40% of students in each language met the desired GPF benchmarks.

Table 2. Language Benchmark (read words correctly with comprehension in one minute)

Language	Benchmark <sup>®</sup>		% of students meeting benchmark	Language	Benchmark		% of students meeting benchmark
	Meets Global Minimum Proficiency*	Exceeds Global Minimum Proficiency**			Meets Global Minimum Proficiency*	Exceeds Global Minimum Proficiency**	
Assamese	30–50	51 and above	33	Malayalam	28–50	51 and above	44
Bengali	39–55	56 and above	37	Manipuri	35–58	59 and above	46
Bodo	27–44	45 and above	31	Marathi	32–50	51 and above	44
English	35–53	54 and above	55	Mizo	43–65	66 and above	67
Garo	25–39	40 and above	38	Nepali	30–47	48 and above	38
Gujarati	33–52	53 and above	43	Odia	38–57	58 and above	41
Hindi	35–54	55 and above	47	Punjabi	32–55	56 and above	69
Kannada	30–48	49 and above	41	Tamil	28–49	50 and above	23
Khasi	45–62	63 and above	39	Telugu	27–50	51 and above	40
Konkani	30–49	50 and above	41	Urdu	32–52	53 and above	35

Source: National Council of Educational Research and Training, 2022

<sup>®</sup>correctly read words with comprehension in one minute.

\*Learners have developed sufficient knowledge and skills. As a result, they can successfully complete the most basic grade-level tasks.

\*\*Learners have developed superior knowledge and skills. As a result, they can complete complex grade-level tasks.

The benchmarks and number of correct words per minute are different for each language, as the grammar and intrinsic nature of the languages is not the same. Results should not be compared directly between various languages without considering these insights. The performance of the students in the study also suggests that learning loss during the COVID pandemic was not as much as might be expected;

the results are also fairly even across the country. These results raise questions about the narrative of the “learning poverty crisis”, which is so prominently emphasised in many reports. The study nevertheless focuses the desired attention towards improving learning at the foundational stage as an indispensable prerequisite for all future schooling.

Table 3 shows that 52% of students are meeting numeracy benchmarks across the country and that boys and girls perform equally.

The FLS study identifies learning gaps for specific states and regions, right down to the individual sub-tasks in which students performed the worst. This makes it possible to develop strategies and approaches for pedagogy and

administration to improve foundational learning outcomes at the foundational stage. The design of pedagogical interventions and location-specific action plans and interventions targeted and tailored to meet context-specific learning needs offers opportunities to maximise the available resources, strengthening the responsiveness of state education systems and greatly improving children’s learning experiences.

**Table 3.** Numeracy Benchmark

Global Proficiency Levels	Below Partially Meets Global Minimum Proficiency	Partially Meets Global Minimum Proficiency	Meets Global Minimum Proficiency	Exceeds Global Minimum Proficiency
<b>Definition</b>	Learners <b>lack the most basic</b> knowledge and skills. As a result, they generally cannot complete the most basic grade-level tasks.	Learners have <b>limited</b> knowledge and skills. As a result, they can partially complete basic grade-level tasks.	Learners have developed <b>sufficient</b> knowledge and skill. As a result, they can successfully complete the most basic grade-level tasks.	Learners have developed <b>superior</b> knowledge and skill. As a result, they can complete complex grade-level tasks.
<b>Benchmark</b>	<b>0-42</b> Score Points	<b>43-69</b> Score Points	<b>70-83</b> Score Points	<b>84</b> and above
<b>Percentage of Students meeting the standard</b>	11	37	42	10
<b>Percentage of Girls meeting the standard</b>	11	38	41	10
<b>Percentage of Boys meeting the standard</b>	11	36	43	10

Source: National Council of Educational Research and Training, 2022

As education psychologist Jean Piaget is reputed to have said, “The principal goal of education is to create men and women who are capable of doing new things, not simply repeating what other generations have done”. India has a rare

opportunity to take advantage of its demographic dividend; we need to seize the moment and significantly transform India’s education landscape. We owe it to our children.

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## Endnotes

1. There are 28 states and 8 Union territories in India. The Union Territories are administered by the President through an Administrator appointed by the President.
2. As per UDISE+ 2021-22 database, at present, the school education system in India is the largest in the world with around 1.48 million schools, 9.50 million teachers and 265.23 million students [https://www.education.gov.in/sites/upload\\_files/mhrd/files/Covid\\_Action\\_Plan.pdf](https://www.education.gov.in/sites/upload_files/mhrd/files/Covid_Action_Plan.pdf)
3. The study was undertaken by the National Council of Educational Research and Training (NCERT) under the aegis of MoE and supported by United Nations International Children's Emergency Fund (UNICEF) in 20 languages, including Assamese, Bengali, English, Gujarati, Hindi, Kannada, Malayalam, Manipuri, Marathi, Mizo, Odia, Punjabi, Tamil, Telugu, Urdu, Bodo, Garo, Khasi, Konkani, and Nepali.
4. About 3.4 million students of 0.12 million schools in 720 districts from both rural and urban areas of India have participated in NAS 2021. The National Report Card has been released and placed in the public domain on [nas.gov.in](https://nas.gov.in).
5. The Global Proficiency Framework (GPF) defines, for both reading and mathematics, the minimum proficiency levels learners are expected to obtain at the end of each of Grades 2 through 6. The GPF was developed by reading and mathematics specialists from around the globe. Global proficiency framework's main purpose is to provide a common reference or scale for global reporting and interpretation of the results of national, regional, and international reading assessments.
6. The benchmarks on an assessment determine whether a learner is classified in a performance category or level; they are also known as cut scores, cut points, thresholds, or boundaries.

# Integrating Whole Child Development (WCD) Measurement into Education Systems

 **Paul Schöpfer**, Junior Researcher, Utrecht University, the Netherlands

 p.schopfer@uu.nl

 **Maria van der Harst**, Researcher, Utrecht University, the Netherlands

 a.m.r.vanderharst1@uu.nl

 **Bjorn Wansink**, Associate Professor, Utrecht University, the Netherlands

 b.g.j.wansink@uu.nl


 **Rita Heller Crespo**, Intern, Utrecht University, the Netherlands

 r.i.hellercrespo@students.uu.nl

 **Diederik van Iwaarden**, International Partnership Advisor, Utrecht University, the Netherlands


 d.c.f.vaniwaarden@uu.nl

 **Arjun Bahadur**, Lead - Life Skills Collaborative, Sattva Consulting, India

 arjun.bahadur@sattva.co.in

 **Eveline Correa**, Regional Coordinator, Instituto Aliança, Brazil


 eveline@institutoalianca.org.br

 **Nancy Keji**, Senior Learning and Experiment Officer, Educate!, Uganda

 nancy.keji@experieneeducate.org

 **John Mugo**, Executive Director, Zizi Afrique Foundation, Kenya

 jmugo@ziziafrique.org

 **Supraja Narayanaswamy**, Director, Data and Research, Center for Whole-Child Education at Arizona State University Mary Lou Fulton Teachers College, US

 supraja.narayanaswamy@asu.edu

 **Anne W. Njine**, Head Education Specialist, Opportunity International, Kenya

 ANjine@opportunity.org

 **Prateesh Prasad**, Delivery Lead – Project Sampurna, Sattva Consulting, India

 prateesh.prasad@sattva.co.in

 **Alex Ríos**, Specialist, UNESCO, Peru

 a.rios@unesco.org

 **Nacho Sequeira**, CEO, Fundación Exit, Spain

 nachosequeira@fundacionexit.org

 **Mary E. Walsh**, Research Professor and Executive Director, Walsh Center for Thriving Children, Boston College, US

 walshhur@bc.edu

 **Joost de Laat**, Professor of Economics, Utrecht University, the Netherlands (Corresponding author)

 j.j.delaaat@uu.nl

## Summary

Based on discussions with 10 education organizations working with a variety of whole child development (WCD) approaches across the globe, this article explores what such holistic approaches to building foundational skills mean for measuring student outcomes, including at young ages, and what other indicators are necessary to support education systems that foster the thriving of children with different needs across different contexts.

## Keywords

Assessments  
Holistic education  
Measurement  
Whole child development (WCD)

The articles in this volume speak to the ongoing debates about what foundational learning comprises. As highlighted in one of the contributions (Heller Crespo et al., 2023), there is an emerging momentum for holistic approaches to education, emphasizing that foundational learning involves building a range of skills and competencies in addition to numeracy and literacy (related) skills. Such more holistic approaches are in part motivated by scientific research emphasizing the interconnectedness between cognition, metacognition, and social-emotional learning (e.g., see Duraipappah et al., 2021, for a comprehensive overview) but also by a recognition that children's development is inherently multi-dimensional as well as child- and context-specific.

Recognizing that children's development is inherently multi-dimensional, an increasing number of countries are taking a more holistic approach to their education policies and curricula (Cantor et al., 2021; Porticus & ACER et al., 2020; Slade & Griffith, 2013). For example, countries such as

Brazil, India, Kenya, Uganda, Tanzania, and Peru have been developing competency-based curricula. These curricula often aim to incorporate socio-emotional and life skills, such as career readiness, citizenship, and character education. Although the specific definitions and methods used to implement these skills vary across ages and geographies, their approaches share the overall aim of building education systems that focus on a broad set of skills and competencies, including, but not limited to, academic learning (Porticus, The Jacobs Foundation & The Lego Foundation, 2023). In the process of doing so, these education systems are also reconsidering their systems of measurement.

What does a holistic approach to building foundational skills mean for measuring student outcomes, including at young ages? What other indicators must be captured, and for what purposes can this information be used? This article reflects on these questions by taking a case-based approach following the experiences of 10 organizations working in Brazil, India, Kenya, Peru, Spain, Uganda, and the United States. These organizations are City Connects, Educate!, Fundación Exit, Instituto Aliança, Life Skills Collaborative, Opportunity International, Sattva Consulting, Turnaround for Children, UNESCO Peru, and Zizi Afrique.

Each of these organizations is part of the Global Learning Community (GLC)<sup>1</sup> for whole child development (WCD), which brings together 80 education organizations from across the world that are working on a variety of holistic approaches. A WCD approach to foundational learning focuses attention on the social, emotional, physical, mental, and cognitive development of students (Slade & Griffith, 2013). WCD values and promotes all dimensions of human development from early childhood to young adulthood, including the interconnectedness of physical, social, emotional, cognitive, spiritual, and values-based learning. WCD highlights the importance of relationships and contextual support and is based on the premise that [every child has different needs](#).

The experiences of the 10 organizations highlight that measurement systems in support of WCD foundational learning not only require timely information on a broad set of child-level human development dimensions but, importantly, also require a continuous assessment of the context, such as specific dimensions of the societal and community context, as well as the child's home environment, in order to better understand the child's needs and to provide valuable feedback for teachers, students, schools, and parents. This requires flexibility in the design of the instrument, choice of indicators, and greater integration of measurement tools into the day-to-day operations of school systems.

## WCD Measurement in Practice

### WCD Assessments of Child Development Are Multi-Dimensional and Context-Specific

WCD approaches emphasize that foundational learning involves more than just numeracy and literacy and embraces a broader set of skills and competencies, in addition to specifically focused academic targets. Most of the programs being supported by the 10 organizations, as well as other organizations in the GLC, incorporate social and emotional skills, particularly those programs that emphasize domains such as identity, social relationships, and future readiness. The importance of context in WCD approaches also means that there is no universal consensus on a list of essential skills and competencies, resulting in all WCD approaches emphasizing various domains of child development. WCD approaches seek to pay particular attention to context-specific factors and align programs with students' unique needs and developmental stages within geographical, cultural, and socio-economic contexts.

As a result, organizations supporting education systems taking a WCD approach develop assessment tools for child development that are multi-dimensional and context-specific. For example, building on CASEL and other measurement frameworks, the UNESCO [Horizontes education program](#) has developed a new survey tool that includes an assessment of children's social awareness, teamwork, and assertiveness for its program in rural Peru. Zizi Afrique has developed the [ALiVE Tool](#), which assesses three competencies (problem-solving, collaboration, self-awareness) and one value (respect) that were identified through an extensive process of consultations with parents, the local communities, and other stakeholders across Kenya, Tanzania, and Uganda.

Furthermore, age is also critical to consider when selecting and assessing skills and competencies. As individuals progress through different life stages, their needs, experiences, and abilities evolve, [so do the exact skills and competencies that are required for success](#). A prevailing understanding is that skills such as self-regulation of emotions, self-awareness, and resilience are essential prerequisites for effective learning. Once these foundational skills are in place, additional ["higher-order" skills can be developed that align with the program's objectives](#). Instituto Aliança's [InteliGENTES program](#) in Brazil, for example, focuses initially on self-knowledge skills, and the second and subsequent years of the program focus on social and perspective-taking skills appropriate to age.

### WCD Assessments Are Frequently Formative in Nature

Several organizations have emphasized the importance of reflection by children themselves and by teachers and other education stakeholders alike as an integral part of fostering socio-emotional competencies and of formative assessment systems that support reflection.

For example, the school-based program implemented by [Educate!](#) in Uganda provides students with an assessment booklet that includes various tasks and activities specifically designed to address the issue of youth unemployment. Students are, among other things, expected to exercise leadership by engaging the public to advocate for a specific cause, after which they document their experiences and develop a statement detailing their campaign efforts. These experiences are then evaluated using a formative approach. However, using formative assessments as tools for self-reflection presents an integrative challenge for education systems that rely heavily on summative evaluations. [Turnaround for Children](#), working in the United States, tackles this challenge by extending “ownership” of their measurement tools and related data to schools, supporting schools in reflecting on student progress and avoiding competitiveness between individuals and other schools. To maintain a clear focus on enhancing academic outcomes and promoting well-being at the individual level, schools are encouraged to evaluate students’ progress over time rather than making comparisons between students.

### **WCD Assessments Frequently Capture Multiple Dimensions of the Child’s Context**

WCD approaches to foundational learning emphasize a child-centered approach that pays particular attention to the child’s context, especially the school, community, and home situation of the child. To support this, organizations taking a WCD approach frequently develop instruments designed to measure and assess this context. For example, certain assessments are designed to promote supportive school environments by targeting teachers and headteachers and by focusing on assessing aspects such as school culture, management, teaching, and learning practices. Such assessments include Opportunity International’s Eduquality Program Guide: [Pathways to Excellence](#), which is used, among others, in Kenya and Uganda; the guide is geared toward improving 18 domains of school quality to create enabling environments for learning. These encompass school culture, school management, and pedagogy, with accompanying assessment tools.

Assessments are frequently also intended to support schools in examining and addressing child-specific “external drivers” of children’s well-being and behavior, including undesirable behaviors such as low attendance and high dropout rates. For example, a child-centered approach to recognizing children’s needs can be found in the [City Connects program](#) in the United States, which highlights the significance of providing community-based services. Through a comprehensive assessment including academic, socio-emotional, behavioral/health, and family domains, the program identifies and addresses the unique circumstances and needs of each child

and allows for the provision of tailored services that directly support the child’s well-being and educational development. For instance, it includes after-school programs that provide meals for children whose parents work late hours and arrange doctor’s appointments to address specific needs, such as obtaining reading glasses. By adopting this personalized approach and recognizing the importance of these services, the City Connects program seeks to establish a strong foundation for academic achievement and child well-being.

### **WCD Assessment Methodologies and Choice of Indicators Vary by Context and Purpose**

The organizations either utilize pre-existing measurement tools drawn from global frameworks, such as the [Big-5 model](#) or [CASEL framework](#), that they adapt to their contexts or they develop novel instruments tailored to their program. Some use scenario- and performance-based assessments; these may demand time and require trained evaluators, but they offer opportunities for observing skills and competencies in context. Assessments that employ Likert scales are among the most common tools for measuring student-level outcomes. These are both time-efficient and familiar, as they are regularly used in tests and exams. A downside of this method is that it depends on reading fluency, which skews the assessment, particularly of younger students (Murano et al., 2021).

Geographical and cultural differences also affect how skills and competencies are defined and measured. As the [Life Skills Collaborative](#) in India explains, walking for more than two hours a day to and from school may be considered an impressive display of “grit” in the Global North, but it is commonplace in many parts of the Global South. Consequently, relying on standardized definitions and assessment tools that are not sensitive to geographical differences may result in misinterpretation and ineffective application. Furthermore, because most of the available assessment resources are developed in the Global North, several organizations have highlighted how this limits their relevance and applicability in the Global South. Therefore, it is crucial to adapt pre-existing definitions and assessment tools for specific contextual settings or to develop new instruments that are fit for purpose.

### **Conclusion**

Many countries around the world, including Brazil, India, Kenya, Peru, Tanzania, and Uganda, are adopting more holistic WCD approaches in their curricula. The discussions with 10 education organizations from 7 countries, each taking a WCD approach, reveal how they develop complementary assessment systems designed to capture the multiple dimensions of child development and to understand the child’s varied and context-specific needs and resources.



Four main observations emerged from these discussions: (1) WCD assessments of child development are multi-dimensional and context-specific; (2) WCD assessments are frequently formative in nature; (3) WCD assessments frequently capture multiple dimensions of the child's context; and (4) WCD assessment methodologies and choice of indicators vary by context and purpose. Furthermore, to truly support children to thrive, the discussions highlighted that such holistic assessments should not only be sufficiently grounded in local contexts but also become embedded into the education system rather than being an add-on component to any prevailing approach. The discussions also revealed that contextual adaptations inevitably lead to considerable heterogeneity in what skills and what school, community, and home dimensions are measured, how, and for what purposes.

Although such heterogeneity may complicate scale-up and make carry-over to new contexts and countries more challenging, the [Life Skill Collaborative](#)'s experience working across several WCD organizations in India highlights how different definitions, measurement approaches, and skill identification for WCD can be aligned. This experience has provoked the interest and attention of key stakeholders in a number of state education systems in India and supported the incorporation of holistic components into India's National Education Policy (NEP-2020). How this carries through into classrooms in so many varying contexts is touched on elsewhere in this special issue.<sup>2</sup>

More generally, while assessment of progress toward academic skills such as literacy and numeracy remains a key focus in most countries, the WCD measurement and assessment practices documented in this paper illustrate the growing momentum around developing a robust set of WCD metrics. Such progress is important to inform the holistic approaches to education policy and planning being taken by many countries and will deepen our understanding of the interrelatedness of foundational skills, both academic and non-academic.

#### Endnotes

1. The GLC is supported by Porticus, a philanthropy, and facilitated and convened by Utrecht University. The findings in this article are based on discussions by the authors, each of whom represents one of the organizations, facilitated by the Utrecht University team.
2. See specifically the articles by Dekla & Shukla, and Pattanayak & Sarma in this collection.

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## Part 3

# Non-mainstream Approaches

This part presents a set of approaches to foundational learning that are not primarily focused on foundational literacy and numeracy (FLN). For these initiatives, scale-up is an organic consideration rather than one that is about systems transformation; the pedagogies are bespoke, innovative, supplementary, voluntary, and replicable, if not scalable. The interview with Andy West takes its departure from his book, *The Life Inside: A Memoir of Prison, Family and Philosophy* (2018), which provides a perspective on what foundational learning means for older learners “whose faith in learning is mostly lost,” but who want to find their way back to learning. In this context, foundational learning is about developing paths for re-entry, re-engagement, and believing that learning may again be possible. Foundational skills are more dialogical than literary; they involve vulnerability in conversation, the ability to change one’s mind, and the willingness to admit when an argument has lost its way. Hammed Alabi’s personal essay *My Foundation Starts Here*, also set in the UK, relates a similar reality for newly arrived young migrants and unaccompanied asylum-seekers who may have had little or no education at all. The vital foundational skills that apply are primarily psychological: dealing with trauma, coping in new environs, building confidence, and rediscovering belief in a future. These are best supported through long-term mentoring relationships, which offer consistent encouragement and advice for re-entering and remaining in formal education. Jennifer Allsopp et al.’s article on *Critical Rights Literacy* (CRL) poses three mini case studies of CRL programs for Indigenous migrant communities in Guatemala and Mexico that strive to find knowledge that is relevant for people’s needs at every stage of their journeys. This calls for a pedagogy that “reckon[s] with the dominant ideas about foundational learning and education.”

Dorcas Wepukhulu and Judith Baker’s *Decolonising Foundational Literacy for Africa* demonstrates the success

of a comprehension-based approach to literacy that centers local stories, folklore, and customs, as well as local languages, while making innovative use of accessible digital media. The article calls for the decolonization of foundational learning in Africa and the development of an approach that builds a pedagogy on the lived experiences of African learners and educators.

Adam Roberti’s *Socially Engaged Art* explores how artist Xavier Cortada’s large-scale, consciousness-raising art installations provide opportunities for “purposeful pedagogies” to drive foundational ecoliteracy. In this approach, aesthetic interactions generate the meanings and emotional connections that are prerequisite for action—a “decolonising of the mind”<sup>23</sup> that Radhika Iyengar recalls in *Learning to be a Conscious Person* and that infuses Christina Kwauk’s *Climate Action and Climate Justice*.

In *Learning to Be Whole Again*, Jwalin Patel and Maya Berggreen-Classen contribute to the interspersed, collective case study on India. They expound on Indigenous traditions of holistic education that counter centralised, instrumental colonialist approaches to education delivery. For them, the real “learning crisis” is that the education system fails to deliver equity, justice, human wellbeing, and care for the natural environment.

### Endnote

1. Although Ngugi wa’Thiongo’s famous text, *Decolonising the Mind* (1986) does not deal with environment or land, the phrase was also used by Thomas Sankara who was president of Burkina Faso from 1983-87, when he proclaimed: “we must decolonise minds.” Sankara’s idea of decolonising minds involved implementing mass education, women’s rights (including a ban on female genital mutilation), localism, infrastructure development, and the planting 10.5 million trees in 15 months in an attempt to hold back the desert sands. Sankara was “gunned down” in a coup in 1987. Blaise Compaoré, former “friend” of Sankara’s and alleged French and US intelligence asset, took over and ruled until 2014.

# Talking with Andy West: Teaching Philosophy in Prison and Insights on Foundational Learning

 **Andy West**, Senior Specialist & Training Officer, The Philosophy Foundation, UK

 andywest@philosophy-foundation.org

 **Hugh McLean**, NORRAG, Senior Advisor, Kazakhstan

 Hugh.mclean@graduateinstitute.ch

## Summary

Hugh McLean speaks to Andy West about his 2018 book, “The Life Inside: A Memoir of Prison, Family and Philosophy”, on teaching philosophy in prison and about his insights on pedagogy, trust, incarceration, and humanity. West’s methodical approach and his insights into foundational learning beyond formal education are highlighted in the interview.

## Keywords

Intrinsic foundational skills  
Non-formal education  
Philosophy  
Prison  
Teaching

Andy West spends a lot of time behind bars: he teaches philosophy to prison inmates. His very personal book deals with family history, a brother who has been in prison twelve times, and his “inherited shame” over his father being in prison. It pivots from intimate conversations with his mom and brother to his classes and conversations with prison inmates and his students. His teaching method ties to and draws from his life and thoughts, both inside and outside. The book’s chapters—Change, Madness, Home, Truth—trace the ideas that inform his pedagogy. Andy teaches as a non-formal educator; his students are youth and adults in prison whose experiences in formal schooling failed them and whose faith in learning is mostly lost; this leads his ideas on education and foundational learning into landscapes where policy seldom roams.

**HM:** Your book deals with how your family history brought you to prison work and philosophy, but it’s essentially about teaching. How did you get there?

**AW:** When I was 17, I’d failed all but two of my exams at school ... not that bad, given my starting place. Education wasn’t a logical avenue for me to be on. I was an alienated teenager, at odds with the world, who couldn’t articulate himself in a sophisticated way, due to anger, aloofness, or something ... detachment.

I got drawn into an argument with a philosophy teacher at my local college who was running a taster class about how we know reality is reality. Descartes had arguments about the dream:<sup>1</sup> how can we know if we’re dreaming or not, or living in a Matrix reality? Usually, arguing with a teacher gets you sent out of the room; in philosophy, it’s the reason you’re in the room. [Robert](#) knew how to meet that energy and channel it towards something more complex and sophisticated. I went from being completely uninterested in education to being totally fascinated by it.

**HM:** Your book reveals so much about your approach to teaching.

**AW:** Details from my life inspire the conversations I have in the classroom. A book about philosophy in prison may seem like philosophy out of its native environment; for me, it's returning to the source. Visiting my brother in prison, from as young as five or six, left me with an unresolved reality: one that becomes much more complex around questions of justice and fairness, punishment, and crime, social class ... My brother was in prison 12 times. I've only ever been in prison with a keychain on my belt, and I let myself out at the end of the day. These experiences formed me as a philosopher, so going back to prison to discuss them feels natural.

The way I frame things in the classroom has a pedagogical method. My colleague at the [Philosophy Foundation, Peter Worley](#), writes about types of questioning—as philosophical questions are not always the best questions for making people think philosophically; they're too disembodied.

My method is also survivalist: I was terrified when I first started teaching in prison. I started in a high-security prison. Even walking through security, the guards and the Alsatians, and stripping off to be searched was intimidating enough. The only way to get through it was to tell the prisoners a story about Caravaggio or Odysseus, just to get their attention for five or six minutes. "Please don't kill me. I can tell you a story!" My Shahrazad moment. I felt that if I could hold the space, whatever happened after that, I'd be okay.

**HM:** How do you know if you're getting anything across?

**AW:** This is a question in philosophy generally: How do we measure if people are becoming better philosophers? A crude indication is if someone reevaluates their idea; at least, we think someone is reevaluating their idea if they change their mind. I find *aporia* valuable, the moment in a discussion where you run aground, where you doubt—it means, literally, to be without a path. Maybe you thought you knew what justice means, or what forgiveness really is, when it should or shouldn't be given ... your argument can come undone in Socratic dialogue. With this comes hesitation and independence: you're not walking the path that's set, you have to make your own. A readiness to embrace *aporia* is not the only measure of progress, in a prison setting, it's one of the most relevant ways to measure.

**HM:** Conventional education, foundational learning in particular, is geared more towards certainties than uncertainties: it teaches and tests for "ahas", not *aporias*.

**AW:** Yes, and what foundations do we lay, and what pedagogies do we build to get one or the other?

**HM:** Well, how does this relate to foundational learning?

**AW:** If you want to attend education classes inside, you have to pass basic English and maths to level three first. These subjects are taught in the most didactic way, and measurement language, with all its soft bigotry of low expectations, is about holding people to account—the notion that people in those settings are not smart enough for anything beyond basic skills.

In reality, prisoners have a lot of life experience; with this comes wisdom and character. Life experiences don't matter for multiplication, division, or subtraction but they are relevant in philosophy. There must be inspiration. I'm more interested in teaching fascination and how you motivate teaching on a human level than in teaching spelling, grammar, or numeracy. Not that these aren't incredibly important; they should just be taught in ways that honour people's humanity more.

My mind goes to Aristotle on foundational learning; he talks about intrinsic and instrumental goods. A simple illustration is that teaching someone how to build something has instrumental value; teaching someone how to design something is intrinsically good. At times, though, we must prioritise the instrumental over the intrinsic: take financial literacy. I meet lots of young people in prison who are there because they took part in a high-risk drug deal that would have made them very little money. If they were a bit older, they might have seen it's was not worth the risk. If you're 15 or 16, and there's a stepfather that you need to get away from, a little money might seem like a lot of money. Middle-class children often come to school with an implicit sense of financial literacy, because they're taught this from a young age. It's not always the same for children living in poverty.

Students in some of the not-in-prison groups I teach in London have very instrumental views of education: they want to be doctors, lawyers, accountants. It's not easy communicating from a pedagogy that places value on intrinsic goodness with students who value instrumental goods. I teach philosophy in prison because it makes life more fascinating. I am aware, though, that there's always a social, economic, and cultural context into which I am teaching.

**HM:** You spoke about reevaluation as a philosophical quality you'd like your students to develop. Do you think reevaluating is foundational in any way?

**AW:** Well, even if someone's really alienated from education because they've done the numeracy or the literacy class 1000 times and failed 1000 times, they may still have something to say about whether or not Theseus's ship is still the same ship;<sup>2</sup> about who's the most free, Ulysses tied to the mast or his men with wax in their ears;<sup>3</sup> they may still have something to say about what you should put back into Pandora's box first.<sup>4</sup>

These shared imaginings provide a re-entry into education. Maybe people can only re-enter education through intrinsic goods, precisely because they are intrinsic and, in that sense, foundational: they're of universal import. If the only entry point you offer is via the "times tables" or financial literacy, they're probably just not going to respond.

**HM:** If this "foundational moment" does offer an entry point for reengaging education, what's the foundational skill? Is it self-belief, perhaps believing you can learn again?

**AW:** Another colleague of mine, David Birch, wrote a great book about teaching philosophy to young people called *Provocations*. It's about how one of the reasons to do philosophy is to find out what you believe. Many of my students in prison withdraw from education because they think, "I'm the type of person who's not interested in education". But many are actually deep thinkers; they have a cognitive flexibility that just hasn't been appreciated or acknowledged before, or given time to breathe. In philosophy, there's belief in who you are; there's also belief in who you could be. This plasticity is a big part of the confidence that philosophy can afford you.

**HM:** In your book, you write about vulnerability in communication.

**AW:** Communication is dialogical, which is foundational to teaching philosophy. Philosophy is good at challenging people; it's close to something personal, but it's also not quite personal. We can talk about consequences without talking about the consequences of "your" actions, or responsibility without talking about "your" responsibilities ... it offers that brush with personal experience but stays just slightly above it.

**HM:** Your George Eliot quote caught my attention: "Those who trust us educate us." We usually talk about how teachers should get students to trust them.

**AW:** Seasoned prison officers will tell you never to trust a prisoner. They've been in the job for 30 years, and they've seen very nasty incidents. Many believe they "survive the job" because of their blanket distrust; they think it's safer. But trusting prisoners is a reason for teachers to be teaching in prisons. It would be impossible for me to teach with a pessimistic view of those I'm teaching: teaching is tuning into your students' possibilities, into who they could be as their best selves, and not thinking of them only as criminals.

### Keeping Your Heart Open<sup>5</sup>

Andy West believes the human practice of making prisoners is bad for all of us, that punitive jail houses—with their punitive architecture, their institutions so toxic and terrible—do not give people much choice. "We demand submission but we elicit defiance". Prison is an environment that resists any ambiguity. Its architecture, its survivalist cultures, its noise levels, and its violence turn hearts to stone.

Teaching in prison has also made him more confused about what it is to be free: one of his students, Wallace, says to him, "You're more free in a cell". Freedom is so much in our heads. Mostly, Andy thinks that to be free, we have to live in an environment and a society that allows us to be free and that keeping an open heart is foundational for good pedagogy and good learning.

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1. Descartes's philosophical starting point was an act of demolition and reconstruction: he threw out everything he thought he knew: the idea that sense perception conveys accurate information. His dream argument—how do I know I'm not dreaming?—was one of several arguments he developed to illustrate this point.
2. Aristotle distinguished between the essence of an object, its formal cause, its "what-it-is", and its final cause, which is what it's used for. Theseus ship is the same ship because its essential design remains unchanged despite the variations in the material that was used to build and rebuild it over time.
3. In Homer's epic poem, "The Odyssey," Ulysses desired to hear the Sirens' song despite the knowing that its beauty would drive him despairingly into the sea. To prevent their succumbing to this temptation, he had his men fill their ears with wax and he tied himself to the mast of the ship. From this we get the Ulysses Pact: a decision that is designed and intended to bind oneself in the future. (Homer, "The Odyssey," Book 12, lines 39-54)
4. In Greek mythology, Pandora opens her box out of curiosity to see what's inside and unleashes all the horrors into the world; the only thing she is able to capture and keep inside is hope, which she offers to those suffering the evils she unleashed.
5. "The most terrible thing about it [prison life] is not that it breaks one's heart—hearts are made to be broken—but that it turns one's heart to stone." Wilde, O. (1897). *De Profundis* [Letter to Lord Alfred Douglas].

# My Foundation Starts Here: What Foundational Learning Means for Young Refugees and Asylum Seekers in the UK

 **Hammed Kayode Alabi**, Senior Educational Mentoring Coordinator at Refugee Education UK (REUK), UK

 hammed@reuk.org

## Summary

This paper reflects the author's personal experiences in supporting young asylum seekers and refugees in accessing education in the UK. It explores the non-formal and sometimes less conventional approach by Refugee Education UK (REUK) to help young people who have fled war and other troubles in their home countries to bridge the gaps in their learning.

## Keywords

Foundational learning  
Learning gaps  
Further education  
Refugees  
Unaccompanied asylum-seeking children (UASC)

In the winter of 2021, I joined Refugee Education UK (REUK), an organisation that helps young refugees and asylum seekers<sup>1</sup> access, stay, and thrive in education. This gives me the opportunity to work with young people who have been forcibly displaced from their home countries. Every day, I hear their stories and their hopes for education.

A young teenager I spoke to comes from a country in the Middle East. Let's call him Alward. I asked him if he had gone to school in his home country. "No", he said. He went on to say he did not know what education means; it was the first time he was hearing either words, "education" or "school". Alward was forcibly displaced from his home country. He reached the UK after travelling across many countries in Europe. When he arrived, he could not speak English; in fact, he could barely say "Hello". He clearly needed help accessing services in the UK. Alward was under 18, which also made him an unaccompanied asylum-seeking child (UASC). He was assessed as an adult, however, which means that he did not qualify for school support.

What does foundational learning mean for a teenager with no foundation at all? How does the education system address the challenges that young refugees and asylum seekers face? How can non-formal education address the barriers that formal education struggles to navigate? To answer these questions, I examine what foundational learning means for young refugees and asylum seekers in the UK. I then describe the barriers to education these young refugees and asylum seekers face. Finally, I discuss how REUK's Educational Mentoring Programme works to overcome these barriers.

In my work with young refugees, I meet young people who might have finished secondary school in their home language in their home country but have to start from scratch in the UK. I also meet young people who have a good command of English, who have completed primary and secondary school but who still struggle to get appropriately placed in the British education system. Migrant children often get placed in lower grades than

they should be placed. Efforts to navigate the asylum system in a country that is alien to them compounds their anguish and extends the trauma of their displacement journeys.

Excuse me then if I find a single, neat definition of foundational learning to be problematic. The idea that it involves only basic literacy and numeracy skills, even with the addition of social and emotional skills, needs to be contested. Foundational learning is not one-size-fits-all. Of course, these skills are important; they are building blocks for critical thinking and further education, which the UNHCR argues is needed for refugees to flourish personally and contribute to their new societies (see Dryden-Peterson, 2016; Herbert et al., 2021).

I spoke to Hamid Khan, a colleague at REUK who came to the UK at the age of 16 as an unaccompanied young asylum seeker and who REUK helped with education advice and support to attend university. For Hamid, foundational learning is mostly about confidence building. This was so crucial for him. Hamid's view is that foundational learning should help one visualise a future: "I was always building on math and physics so that I could achieve my dream of studying aeronautic engineering, in which I finally have a degree".

Hamid did not receive any education in his home country either; he had to build his foundations in the UK, his country of asylum. "My foundation starts here, not back home. Education (foundational learning) gives hope", he says. This resonates with so many of the young people I come into contact with—education's foundations and futures are always personal. For young refugees and asylum seekers, "what foundational learning means" depends on their individual needs; besides this, there are several barriers to accessing and thriving in formal education that need to be addressed directly.

Let me tell you about another person who walked through the same door as Hamid. His name is Tory. Tory was also 16 when he came to the UK, and he also could not speak English. He relates:

*So, when I came to this country, forget about English, that was too far. Because back in Afghanistan, I was not educated there at all because of the situation. I could not even write my own name in my own language. So English was too far for me ... I was zero with everything, an empty memory. I had to start everything from zero here.<sup>2</sup>*

Tory's statement reminds me of my earlier meetings with young people in the same circumstances: not being able to communicate in English is a considerable barrier. We need a fair process that assesses the education levels and needs of these young people before placing them in education (Alabi, 2021). Studies show that access to additional English language support is insufficient in many schools or colleges in the UK (Gladwell & Chetwynd, 2018).

Research by REUK reveals other barriers that dictate whether young refugees and asylum seekers are able to stay in education and thrive. A particular barrier that deserves more attention is the lack of an adequate process to diagnose and address special education needs; these needs are compounded when English is an additional language need. This barrier was noted as early as 2002 in research in Glasgow schools that identified young refugees with special education needs whom the National Asylum Support Services had "failed" to report to the education department (Macaskill & Fisher, 2002). Rutter (2003) pointed to the gaps in understanding and providing for refugee children with SEN. This was confirmed two years later in a literature analysis of the experiences and needs of refugee and asylum-seeking children in the UK (Hek, 2005). REUK research, [conducted in partnership with UNICEF UK](#), examines the experiences of young asylum seekers in primary, secondary, and further education. The study notes that "special education needs" are often misidentified as "language needs". Young migrant students may fail not because they have difficulties with learning but because they have difficulties with language. Of course, this may happen the other way around too—migrant students may fail because they have difficulties with learning and not because of language—both are causes for frustration and discouragement, both creating stigma.

Other barriers to education include bullying and lack of social integration; a lack of awareness of the issues affecting young refugees and UASCs by teachers and administrators in schools and colleges; mental health issues rooted in past traumatic experiences, anxiety-related absenteeism, exclusion, and dropout; a lack of education resources or ability to go on class trips or travel to and from school due to poverty; and unstable and unsuitable accommodation. I have seen these challenges firsthand with the young people with whom I work, and indeed I have known some myself.<sup>3</sup> One study noted that overcoming such basic challenges to education is regarded as luxury by refugees and asylum seekers (Dryden-Peterson, 2016).

In summary, my view is that we cannot talk about foundational learning in the traditional sense when there are no foundations at all, when these barriers have not been addressed, and when futures are uncertain. REUK's mentoring programme offers a case study of how non-formal learning approaches can help to construct those missing foundational education building blocks.

### **REUK's Mentoring Programme**

Our education mentoring programme was started in 2009 to address the multiple barriers that young refugees and asylum seekers face in their education journeys. There are caring social workers and other adults who may provide high-level support around school admissions, education choices, school attendance, and even personal education plans. There is



no system-wide, consistent education-focused support for young refugees and asylum seekers such as Alward or Tory. I observe in my daily work how important chatting about random topics can be for these young people, who feel they cannot discuss certain matters in school, such as needing help with homework and their day-to-day struggles, or even make random jokes. All these simple things mean so much to a vulnerable young person in this position. Parental role models are missing for UASCs and young refugees; research demonstrates that this is key to success in education and life (Schmid & Garrels, 2021).

Crowded classrooms generally mean that teachers cannot give each child the attention they deserve. REUK's mentoring programme offers a blend of personal tutoring and well-being support, which is specially designed to meet the needs of young refugees and asylum seekers. REUK matches UASCs and young refugees with trained, volunteer education mentors who meet them weekly to work towards the specific education goals the young person has chosen. This programme has been running for over 11 years and operates in London, Oxford, Cambridge, and Birmingham. Our findings show that 90% of the young people on the programme remain in education, and 85% make progress towards achieving their education goals.

Mentors are particularly helpful for explaining more difficult topics and subjects; this is essential for supporting these young people to pass GCSEs or level 1 and 2 exams. Young people mention that they are less afraid of making mistakes and asking questions and that their mentors make them feel comfortable. A mentor I spoke to at a social event also confirmed this. In my view, the mentoring programme creates a blend of formal and informal spaces for young people to be themselves. REUK research confirms that newly arrived young people, particularly those who have had little or no schooling in their home countries, find that the techniques, the study-skills strategies, and the encouragement their mentors provide give them courage to face difficult situations. REUK tries to pair young arrivals and refugees with an adult in their community; this facilitates integration into the UK education system, and young people speak of how it improves their sense of well-being.<sup>4</sup>

I hope you still remember Tory, who had zero English and “just about zero in everything”. He was matched with a mentor, and it had a huge impact on his life. Tory said:

*When I was in college, I was introduced to Catherine and Hannah at REUK. Later, I was introduced to a mentor who helped me with my English and math and spoke about my plans for future study.<sup>5</sup>*

Another young person in the mentoring programme, Mariama, said:

*My mentor helps me with the assessment and homework that the college gives me, and she is very helpful. I am doing public services level 2, and I passed for level 3, and I am doing level 1 English and math. Sometimes, having lots of work without anyone to help you is very stressful. You are going to think to give up, but if there is someone to support you, you will have the courage to make your dream come true.<sup>6</sup>*

The quotes above show how the mentoring programme supports the foundational skills these young people lack and creates pathways to aspire for better futures. Tory is now a computer science graduate. Alward can have a straight 10-minute conversation on the phone in English—sometimes it can be hard to get a word in while he talks.

The mentoring relationship helps young people achieve their education goals; the mentors report that the relationship increases their understanding of the difficulties these young people face in the UK, and it shows them how they can have positive impacts in their communities. REUK mentoring periods last for 6 months, but the relationship often continues beyond that, often for many years. Some relationships end abruptly, due to changes in education goals or personal challenges and changes. Overall, most agree that these relationships are worthwhile and have positive effects.

In conclusion, foundational learning should be reimagined for young refugees and asylum seekers in the UK, as we cannot talk about conventional foundational learning when there are no foundations. The UK Department of Education should work with organisations such as REUK to provide structured and systematic additional learning and education support for young refugees and asylum seekers in the UK to compensate for the losses and gaps in their learning.

Hamid said, “My foundation starts here”. This is the assumption we have to make about every person who arrives on these shores.

#### Endnotes

1. I use young refugees, asylum seekers and young people interchangeably in this paper.
2. Retrieved from <https://www.reuk.org/story/tory>
3. Although my experience is not the same as the experiences of young refugees and asylum seekers, I grew up in Makoko and Bariga, two slum communities in Nigeria.
4. This is a research Refugee Education UK conducted for UNICEF showing our educational mentoring case study. Retrieved from <https://downloads.unicef.org.uk/wp-content/uploads/2018/09/Case-Study-Educational-mentoring.pdf>
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# Critical Rights Literacy as Foundational Learning: Lessons from Indigenous Migrant Communities

 **Jennifer Allsopp**, Birmingham Fellow, University of Birmingham, UK

 [j.c.allsopp@bham.ac.uk](mailto:j.c.allsopp@bham.ac.uk)

 **Elaine Chase**, Professor of Education and Wellbeing, University College London, UK

 [e.chase@ucl.ac.uk](mailto:e.chase@ucl.ac.uk)

 **Tejendra Pherali**, Professor of Education, Conflict, and Peace, University College London, UK

 [t.pherali@ucl.ac.uk](mailto:t.pherali@ucl.ac.uk)

## Summary

This paper highlights the importance of critical rights literacy (CRL) for migrant communities, drawing from three Guatemalan and Mexican examples. Civil society actors incorporate foundational learning to empower Indigenous migrant communities with movement and access rights. The paper contends that CRL is a vital aspect of foundational learning, showcasing trust and empathy as integral to its realisation among these communities.

## Keywords

Capabilities  
Central America  
Critical rights literacy (CRL)  
Indigenous communities  
Migration

Millions of people on the move lack awareness of their human rights during their migratory journeys. International rights frameworks do not align with their lived realities, particularly where shifting border regimes threaten basic rights, including the right to asylum and related protections. Building foundational knowledge through community-based dialogic processes,<sup>1</sup> trust, and empathy is crucial. Indigenous people, due to the absence of safe and legalised routes, are often forced to migrate via irregular channels. This paper considers the foundational importance of critical rights literacy (CRL) for Indigenous children and adults on the move. It offers illustrative examples of how Indigenous migrant communities in Central America are pioneering the promotion of CRL and demonstrates how the wider international community might learn from these efforts.

The paper draws on three examples of how civil society actors have worked with Indigenous migrant communities through foundational learning in Guatemala and Mexico to illustrate how CRL centres on values of trust and empathy. It illustrates the co-constructing of understandings of human rights through a dialogic process (Freire, 1970).<sup>2</sup> It also draws on “cosmopolitan critical literacy” (Vellino, 2004), an approach that is used to acknowledge and challenge the uneven global power distributions in how rights are conceived. We consider how people on the move respond to attacks on their rights through networks of solidarity in which they share foundational knowledge for survival in circumstances that are often violent and unstable.

The UNICEF and World Bank-led Commitment to Action on Foundational Learning (2022) defines foundational learning as “basic literacy, numeracy, and transferable skills such as

socio-emotional skills”. CRL seeks to enable people on the move to more fully understand the processes through which they may actualise their rights and advocate for themselves and their communities. It involves a collaborative learning process whereby individuals and their wider networks come to better understand, analyse, and challenge oppressive power structures and injustices that underpin legal and political systems by critically engaging with the broader social, political, historical, and economic factors that close down their access to and exercise of rights (Abu Moghli, 2020; Keet, 2015; Vissandjée et al., 2017). This approach can enable migrant communities to engage in collective action to claim their rights and promote greater equity and social justice.

Critical awareness among displaced populations needs to be renewed across different generations, across time and space, and across different stages of the migration cycle. Approaches to CRL involve knowledge and action that transcend individual learners; they can be shared across borders and communities to provide a ‘flexible’ foundation for learning that responds to people’s lived experiences and everyday needs.

For rights, CRL is a foundational competency upon which other knowledges can be built. For pedagogy, CRL can be transformational, developing basic competencies for the learner and generating and sharing knowledge within communities for collective capabilities to [claim rights](#). Critical literacy and critical pedagogy, after Freire (1970), and ecological literacy for David Orr (1992) and others, as discussed elsewhere in this special issue, describe pedagogies for social action.

Understandings and praxes of CRL as foundational within Indigenous migrant communities allow an expansion of foundational learning in content, target, and scope. The short case studies in this essay illustrate the centrality of nurturing emotional and relational skills, including trust and empathy—skills that, we argue, are foundational capabilities alongside reading and numeracy. As Freire argued, critique itself is a foundational capability. The ability to read the world, not just the word, is a prerequisite for all actions to fight effectively for rights. Martha Nussbaum (2002) and Amartya Sen (2003) considered capabilities to be the real freedoms that people have to do and be what they most value.<sup>3</sup> The following case studies show how CRL is integrated into Indigenous foundational learning as an approach to the “capability expansion” Nussbaum and Sen called for—that is, to widen the freedoms people have to exercise their rights.

### **The Citizen’s School for Human Rights Guatemala**

The Network of Community Defenders for Health Rights ([REDC SALUD](#)) is a grassroots Indigenous organisation with over 180 members in 35 rural municipalities. Together with

the Centre for the Study of Equity and Governance in Health Systems Guatemala ([CEGSS](#)), REDC SALUD co-designs and implements the Citizen’s School for Human Rights—*Escuela Ciudadana de Derechos Humanos*. The school blends Freire’s *educação popular*<sup>4</sup> approach to make learning participatory and empowering using Indigenous knowledge practices of “leading by example”, in which the teacher must be a practitioner of the knowledge and the skills they convey. The school uses Indigenous storytelling methods to co-develop rights-literacy content, which is shared as audio files for mobile phones. Recently, the school utilised knowledge from these processes to create animated videos and infographics that inform communities about their rights to the birth registry and non-discrimination, including the right not to be forcibly evicted from their land. The common assumption that all Guatemalans speak Spanish limits their access to mother tongue interpreters and resources. All information, in both material and digital formats, has consequently been translated into the seven Indigenous languages spoken within the target territories.

The Citizen’s School for Human Rights empowers vulnerable communities to advocate for protection, education, and wellbeing in their communities to tackle some of the root causes in displacement. In the light of their digitisation and ease of access via mobile phone, resources are also available to people on the move, including internally displaced individuals, rural-to-urban migrants and deported migrants or returnees. CRL is integrated into the foundational learning curriculum as both a capability and a competence that can be measured as part of the monitoring of learning outcomes.

### **IMUMI’s Focus on Transnational Families Mexico**

For CRL to be seen as foundational, there must be broad agreement and acceptance that literacy in critical rights is important for all—citizens and non-citizens. It must be an outcome of the political contract, rather than the education system, and fought for in the public space. It also needs to be taught in a structured way through formal education and offered as *educação popular* for communities, including workers and migrants. The civil society organisation [IMUMI](#) (Institute for Women in Migration—El Instituto para las Mujeres en la Migración) is working towards establishing CRL as a capability and competence in Mexico across different sectors of society. The foundational realisation here is the commonality of cause with migration and other rights-based struggles, including gender equity and working with victims of criminality or violence, with a focus on solidarity, empathy, and trust. De-criminalising migrant narratives is an important part of this work.

IMUMI conducts research and case documentation on the impacts of restrictive immigration policies and practices in the USA on transnational families and empowers families

to mitigate the challenges they face when members have been deported or returned to Mexico. The social contract is transitional in nature and stems from a bottom-up perspective based on migrants' lived experiences, as well as on Mexico's local, national, and international rights obligations. IMUMI's work involves training government, academia, and civil society organisations on the needs of transnational families and helping families reunite and (re)integrate into Mexican society. Current work includes responding to the situation of children of migrant parents who are born in destination or transit countries. Protection gaps include birth registration, vaccination, and health care, as well as access to legal documents. IMUMI also works in shelters to respond to the needs of pregnant women and young mothers.

IMUMI are building "pop-up" education centres for migrants in transit, including in shelters or closed detention centres, to respond to the isolation of children and young people and the specific challenges in gaining access to knowledge about and exercising their rights. Since children often lack access to formal schooling, these CRL interventions often incorporate broader curricula content that integrates foundational literacy and numeracy skills with awareness raising and critique of rights. While informal in scope, pop-up schools often temporarily take the place of formal education and are better placed and better able to respond to the needs of migrant children. This is particularly true, given the challenges in accessing local schools, travel limitations, and inadequate provision for Indigenous learners' language and cultural needs. Successful CRL rests on access to technology that enables children to connect and "problem solve" with their communities and families. It also enables civil society groups to work meaningfully with and "accompany" (Glockner et al., 2022) individuals over space and time. IMUMI is working to provide migrant communities with technology, including mobile phones and access to the internet, so that they can empower transnational families to collectively advocate for themselves.

### **The School of Happiness TV Guatemala**

While the digital language of choice for many Indigenous migrants from Guatemala and Mexico is Spanish, the *Ki'kotemal* TV project, which is part of the Mayan Conservancy, seeks to realise the potential of new technologies to foster language learning and exchange within the diaspora. This includes, for example, transmitting cultural knowledge and practices around food.

The startup project *Q'uj Ch'au pa K'iche* embraces the 22 Mayan languages in Guatemala. The school has been working on *Ki'kotemal Tijobal* (Ki'che for School of Happiness) since 2014. *Ki'kotemal Tijobal* aims to reach children who are forced to leave their communities and denied opportunities

to learn their ancestral languages. Programmes emphasise ancestral practices and values. They provide young people and Indigenous elders with the resources to promote their traditions and cultures in transformative ways. It also utilises social media platforms such as Twitter, Facebook, YouTube, Instagram, and Soundcloud. According to *Ki'kotemal Tijobal*:

*At the Ki'kotemal School, we are creating spaces where students can ask questions, recover the past, and meet previous generations. It has been our joy to hear some young people declare publicly, "I understand better what it means to be Maya" and "Now I can proudly say who I am, where I come from, and where I decide to go".*

Mother-tongue literacy and instruction are not only a right; from a pedagogical perspective, much subsequent learning depends on foundational knowledge in the mother tongue, encompassing a wide vocabulary, folklore, fluency, and comfort in speaking. For Indigenous movements, in which language, land, and culture are often key elements of political struggle, foundational education skills that include pride in one's language, culture, and love for the land coincide with political identity.

The *Ki'kotemal* TV programmes are grounded in people's lived experiences of poverty, violence, and migration while promoting reflexive awareness of the socio-political roots of these conditions. This foundational learning empowers communities to create collective media tools advancing their rights and fostering a sense of pride and self-confidence in their identities as human beings.

### **Conclusion**

The three case studies discussed in this paper exemplify how CRL is being integrated into Indigenous foundational learning. Foundational literacy means different things in and across diverse contexts. For Indigenous people on the move, CRL represents a foundational capability and a competence for realising rights that help secure just outcomes for migrant individuals and communities. Access to intellectual and digital resources is crucial to the realisation of CRL among Indigenous migrant communities, yet it is typically severely constrained for those in refugee camps, detention centres, and shelters. CRL focuses on the interconnectivity and solidarity praxes of communities that are historically subjected to rights violations and marginalisation—whether in their spaces of origin, in transit, or at their destination—to provide a means for remaining connected to and embedded in their home cultures through building community and affirming Indigenous subjectivities. As Potyguara and Montechiare's article (elsewhere in this special issue) indicates, valuing what Indigenous communities consider important knowledge includes the sharing of cultural heritage and the learning of Indigenous languages.

CRL encompasses people-based pedagogies that are mobile and dynamic, aligning with the fluidity of Indigenous people's lives, as well as place-based pedagogies, wherein tribal land, place, and "land" identity are fundamental for struggles. CRL focuses on participatory critical pedagogies that are shaped by bottom-up approaches. It aims to understand and respond to the rights violations of Indigenous peoples who are commonly minoritised, illegalised, and discriminated against on grounds of their race, class, and migrant identities.

The commitment to building solidarity, particularly among host populations, presents a central and accumulating challenge for CRL—specifically with the growing number of people on the move as a result of climate change and conflict. This requires a continuous reckoning with the dominant ideas about foundational learning and education, and with the economic, political, and social realities that shape these dominant ideas.

*The authors wish to acknowledge that this paper draws from the knowledge and insights of all participants attending the virtual symposium, "Critical Rights Literacy for Displaced Indigenous Populations: Urgent Priorities and New Frontiers in Guatemala and Mexico" (16 November 2021).*


#### Endnotes

1. In addition to being widely used in pedagogy and especially critical rights, (see García-Carrión et al. (2020). Implications for social impact of dialogic teaching and learning. *Educational Psychology*, 11. Retrieved from <https://www.frontiersin.org/articles/10.3389/fpsyg.2020.00140/full#main-content>), dialogical processes are also increasing used for working with people in distress. See <https://www.dialogicpractice.net/dialogic-practice/about-dialogic-practice/>
2. For a useful discussion of Freire's dialogical pedagogy, see Yi-Huang Shi (2018). Rethinking Paulo Freire's Dialogic pedagogy and its implications for teaching. Retrieved from: <https://files.eric.ed.gov/fulltext/EJ1179672.pdf>
3. See Endnote ii on Sen and Nussbaum to Cin et al.'s "Lost in PISA-lation" elsewhere in this special issue.
4. Paulo Freire's term *educação popular* (popular education) is understood as popular, rather than populist, in the sense that it is "rooted in the real interests and struggles of ordinary people; overtly political and critical of the status quo; and committed to progressive social and political change." For a fuller account of the movement today, see: <http://www.rizoma-freireano.org/articles-1414/the-international-popular-education-network>

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# Beyond Phonics and Letter Recognition: Decolonising Foundational Literacy Theories for Africa

 **Dorcas Wepukhulu**, East & West Africa Partner Development Coordinator for the African Storybook Initiative, Kenya

 dorcasw@saide.org.za

 **Judith Baker**, Literacy Consultant for the African Storybook Initiative, US

 judithbakr@gmail.com

## Summary

To address the challenges of foundational learning in Africa and move beyond a narrow focus on phonics and letter recognition, it is essential to prioritise the development and funding of programmes that are truly responsive to the needs of African learners and educators. This requires a shift away from top-down approaches that prioritise scalability and measurability towards a more participatory and community-led approach that prioritises sustainability, local ownership, and the development of African leadership.

## Keywords

Foundational learning in Africa  
Local language  
Access to quantity  
African leadership for literacy

## The Story of an African Storybook

The education of African children is at a critical stage. In the foundation phase, both learners and teachers have unique needs that must be met for children to stay in school and for teachers to stay teaching. Far too often, African children attend school without the foundational support—comfort, safety, motivation, and confidence—they need to thrive. Further, young children are being asked to learn to read in a language they do not even know, making it unnecessarily difficult for their brains to build the complex neurological connections between letter shape, letter sound, and meaning needed for reading. Trying to learn to read in an unfamiliar language without enough texts to practice reading leads to rote memorising and parroting back what teachers say. This causes many children to feel increasingly uncomfortable and unattached as they progress through early grades, with a shockingly high percentage of students dropping out before reaching Grade 4. As teachers fall back onto traditional chalk-and-talk and sing-song approaches to teaching reading, learners are not prepared well for life, neither are they prepared well for national exams that require them to describe processes, provide reasoning, and apply what they learn in class to real-life situations. When learners do not read well enough, they may lose motivation and confidence. The stakes are high—what does this do to the future of our young people?

Meanwhile, teachers are essentially left alone to deal with the challenges they face. In their ‘professional development’, they routinely face new theories about why they were not actually doing their jobs well and what they need to do differently. They are expected to engage these new ideas, which are typically determined by whether funding, new devices, or software are available, with very little support. As a result, many teachers see themselves as failures. Even in the best situations, where teachers are well-educated and have access to foundation-level instructional methods, much is



still missing in the foundational learning that African children need and deserve.

Teacher Simon, a ‘Literacy Champion’ with the African Storybook (ASB),<sup>1</sup> has found success in remote Turkana by creating and reading local stories. This approach has helped connect learners to school and has given educators the tools they need to achieve success.

*There is nothing spectacular that has happened at Lolupe Primary School—except for the coming of the ASB [African Storybook] in 2014! ... a significant rise in literacy activities among our learners: from low interest in reading to high levels of interest, and from limited reading material to plenty of it, both digital and print. The reading culture has developed in the school, exposing learners to materials in their own language with local content as well as to materials from other cultures. Children are learning to love books and to care for them... It is the availability of Turkana folktales and narratives that have above all helped the transition of pupils’ learning from known to unknown. The ASB has picked pace and will be sustainable.*

As Simon explained, reading local stories in the local language helps learners in remote Turkana understand the text before reading it independently. This is an advantage that most learners in the Global North have at home or in their communities long before they start formal schooling. Once motivated by this familiarity, the children read more. Motivated by their children’s interest, educators and parents felt empowered to write down their stories and create new ones.

Another wonderful outcome of local activity is the creation of far more local books than African schools, libraries, or local communities even can buy. Caribu.com estimates that a child should read five books, that is, five different books, each day to build up reading fluency.<sup>2</sup> Scholastic urges parents to read to children at least twice a week but considers reading five books a day to be the best strategy.<sup>3</sup> ASB has long argued that in Africa, the only way to create this volume of storybooks is with the use of open licensing and whole libraries on simple smartphones.

The ASB’s two apps, The Reader app (*A library in one’s pocket*) and the Story Maker app (*A publisher in one’s pocket*), cater particularly well to the connectivity challenges in most parts of Africa. The Reader app allows users to read African Storybooks on their smartphones or tablets offline. The Story Maker App allows users to use their mobile devices to create their own books offline and only connect to the internet when they are ready to publish them. These apps enable users, including educators, marginalised groups, and children, to create stories offline and publish them on the website when connected to the internet. The apps support children’s reading and writing in all languages while promoting the

concept that all languages are important resources rather than barriers to learning.

The sheer number of books in so many different African languages that are required to genuinely enable foundational reading demands local creation. This requires that the tools for creating supplementary books be in the hands of those who are closest to the children. ASB grows the local participants’ sense of worth and supports and strengthens their agency as children’s publishers, writers, editors, translators, and illustrators of literacy and education material for children. ASB’s Literacy Champions enable the programme to achieve depth because they understand their communities’ literacy level and needs, and they are able to mobilise the relevant stakeholders. Their message is a constant reminder that the foundations of literacy for each child are significant, and we should remain vigilant about identifying children who might still be neglected despite the execution of nationwide literacy initiatives.

### Northern Measures

Both African educators and learners can be devalued and demotivated by Global North evaluation regimes that judge foundational programmes by phonics-based curriculum goals alone. These testing systems do not acknowledge the essential and crucial work that is needed to increase a child’s motivation and confidence or to develop local educators’ skills as they create and use storybooks.

For example, how might the success of the following Kenyan programme be measured? During the COVID-19 lockdowns when children were forced to stay at home, the ASB Literacy Champion Senior Librarian in charge of Kibera Library in her 2020 ASB [report](#), explained what the library needed to do:

*Since March, it has been very challenging for children, especially within informal settlements. The majority of the children from the impoverished Kibera slum are unable to access online lessons because they have no access to smart phones and cannot afford data for internet connection... We download the ASB Reader App on donated refurbished phones, which enable children to read storybooks in about 22 households with an average of 6 children. The phones are loaned out to the children in the company of the parent, and are returned to the librarian after one month. If a family utilises the device well, the lending period is extended... one device might be used by up to 20 children ... For [young readers below 6 years], we print stories from the ASB website to read at home under the supervision of parents. As of July, we had given printed storybooks to 250 children.*

Another of ASB’s Champions, Dr. John Ng’asike, an early childhood education university professional, had this to say in one of his [reflections](#) about a school with 137 learners:



*Although performance in all subjects is below average, performance in languages is lower than the rest of the subjects. The only hope for the school lies in intensified reading outside of formal timetable activities. But it has been difficult to convince teachers to offer close support to children's mother tongue reading within the teaching programme. The challenge is fear of teaching a subject (mother tongue) that is perceived to be non-examinable. I took the initiative to engage children in their mother tongue as a way of saying that every language is important and should be spoken. They were very afraid to speak with me in their mother tongue before their teachers. But outside of school, children engaged with me in their mother tongue in the most creative ways.*

African teachers are not always from the community where they work, nor are they always competent to read in the languages of their students. The involvement of parents and other members of the local community is crucial in establishing the groundwork for students to form an attachment to the school and learn, especially when the teacher and children do not share a common language for reading instruction.

If assessment tools used to evaluate the performance of schools, teachers, or students accurately reflected foundational learning, then more resources would be allocated to the things that truly matter.<sup>4</sup> However, the reality is different. In administering an EGRA exam in South Sudan, where students had no access to books in their home language, one of the authors of this paper observed that not a single student answered any question correctly. By contrast, in Arua, Uganda, just across the border, community members created local storybooks, leading to increased enthusiasm for school and greater confidence in student and teacher success. ASB was able to achieve a remarkable turnaround in the South Sudan community. As a result, the first children's storybooks are now being created in the Dinka language.

As the international community seeks to improve literacy outcomes in the Global South, it is worth considering the current emphases of international funders and implementers. These include scalability, measurability, an emphasis on “lessons”, and a focus on device-based exercises and textbooks, with less emphasis on writing and outside reading. While these approaches have benefits, they also raise vital questions for the international literacy community.

For instance, what are the implications of placing so much literacy and numeracy work in the hands of Global North and rich country NGOs and governments? What benefits could be gained from developing, funding, and supporting efforts led and staffed by African organisations? What true global–local partnerships can be built and sustained? Additionally, if we

acknowledge the need for far more foundational education interventions and funding in the Global South, how do we get there? These questions require us to move beyond a narrow focus on scalability and measurability and instead consider the long-term sustainability and impact of our interventions.

## Southern Solutions

The deep gaps in foundational literacy and numeracy cannot be solved by international literacy efforts without sustainable leadership and the development of local solutions by people on the ground. In addition, short-term interventions without local control and ownership may not be sustainable.

As we work to decolonise the theories of foundational learning for Africa, we must ensure that our interventions are grounded in the lived experiences of African learners and educators. This requires a deep understanding of the cultural, linguistic, and socio-economic contexts in which they live and learn. Only then can we hope to build a literacy landscape that truly empowers African learners and educators and enables them to reach their full potential.

Beyond phonics and letter recognition lies a world of possibility—one in which African learners and educators are fully supported and empowered to achieve their dreams. Let us work together to make this vision a reality.

## Endnotes

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# Foundational Learning and Socially Engaged Art in an Era of Overlapping Environmental Crises

 **Adam Roberti**, Executive Director, Xavier Cortada Foundation, US

 adam@cortadafoundation.org

## Summary

Renowned Cuban-American artist Xavier Cortada's practice demonstrates how socially engaged art can drive purposeful pedagogies to tackle the climate crisis. This paper examines Cortada's large-scale projects to explore how socially engaged art fosters holistic individuals and communities, creates opportunities for experiential learning, and develops core foundational learning capabilities such as curiosity, self-efficacy, and responsibility towards oneself, society, and the planet.

## Keywords

Core foundational learning capabilities  
Climate crisis  
Holistic individuals and communities  
purposeful pedagogies  
Socially engaged art

Young people are being raised in a world imperiled by concurrent climate and ecological crises that are having increasingly devastating effects on international political stability, global health, and the delicate balance of Earth's natural systems.<sup>1</sup> These crises are reshaping our world and profoundly influencing the lives and societies that this young generation and the generations to come will have to navigate. We must ensure that our education systems are fit for purpose. Thirty years ago, David Orr wrote that "failing to include ecological perspectives in any number of subjects, students are taught that ecology is unimportant for history, politics, economics, society, and so forth... they learn that the Earth is theirs for the taking." (Orr, 1992, p. 85) Education needs to be rethought from the foundational phase; foundational learning approaches need to center real-world challenges as well as inspire a thirst for knowledge and a will to act. This paper focuses on the role of socially engaged art in advancing the purpose-driven pedagogies that are necessary for our era. It presents two brief case studies on the work of a renowned Cuban-American artist as a way of exploring and understanding how creative strategies make foundational learning more relevant. Xavier Cortada's community-driven art has catalyzed over 25 acres of ecological restoration, generated participatory eco-art projects in every public school and library in Miami-Dade County, Florida, and amplified marginalized voices across the world by facilitating the co-creation of collaborative message murals.

**Figure 1.** In 2008, as a New York Foundation for the Arts (NYFA) sponsored artist, Cortada planted a green flag at the North Pole to reclaim it for nature and launch an eco-art reforestation effort, "Native Flags."



Source: Cortada (2008)

Through an analysis of Cortada’s work, this paper discusses the intersection of foundational learning and purpose-driven pedagogies, arguing that socially engaged art can play a vital role in equipping students with the knowledge, skills, and motivation necessary for personal development and collective action. By examining these interconnected themes, the paper aims to provide insights and recommendations for educators, policymakers, and practitioners seeking innovative approaches to foundational learning that are responsive to the challenges of our time.

### The Need for Purpose-Driven Pedagogies

As we enter the planet’s sixth mass extinction event and sleepwalk toward irreversible damage to our climate and ecological systems, it is more important than ever to develop a generation of young people who are lifelong learners, excited to discover, innovate, and create solutions to our wicked problems. Making this an achievable goal, in the context of a 2021 report from UNICEF, which concludes that nearly half of the world’s children—roughly 1 billion—live in one of 33 countries classified as “extremely high risk” due to climate change impacts, will require educators and decision-makers in the education sector to value students as collaborators in the learning process, not mere vessels waiting to be filled with information. Exposing children to urgent, real-world problems and providing them with the opportunity to be active protagonists in their own learning is a strategy that would supplement meaningful topics with a genuine sense of agency. As David Orr consistently points out, learning is participatory and experiential rather than simply didactic. Purpose-driven pedagogies allow students to understand the importance and relevance of what they are learning while simultaneously establishing each student as integral to a collective effort that is greater than themselves. If children know that there is a meaningful reason for studying a particular subject and that the knowledge they will gain is helpful for addressing a contemporary social or environmental issue, it opens an opportunity for educators to encourage further exploration and self-directed learning. In Part 5 in this special issue, Kwauk similarly explains how, in addition to understanding relevant concepts, “one must also have the confidence, self-efficacy, agency, and opportunities to translate this knowledge into action.”

### Two Illustrations of Xavier Cortada’s Practice

Artists have long been catalysts for evoking emotion and social critique; however, there have been few attempts to utilize their work to catalyze systemic social change and even fewer can be shown to be successful. Based in Miami, Florida, Xavier Cortada offers a unique vision for the role of an artist in society, having spent decades working at the intersection of community engagement, education, and the environment to model the power of art in sculpting our world. Cortada’s socially engaged art develops creative interventions to provide platforms for

experiential learning, leadership, and storytelling, with the intent of building a cadre of eco-emissaries who work together to harness the power of art as a force for social change.

In 2006, Cortada pioneered eco-art in Miami with his “Reclamation Project,” an initiative that creatively introduced the importance and plight of mangroves to tens of thousands of people. This initiative led to the restoration of over 25 acres of coastal wetlands and spawned an ongoing reforestation program in Miami’s Frost Science Museum. The artistic process involved taking volunteers of all ages into mangrove forests to collect mangrove propagules<sup>2</sup> and then working with those same folks to create grid-like installations on the windows of retail shops and restaurants across Miami Beach.

**Figure 2.** “Reclamation Project” grid of red mangrove propagules at Tampa Preparatory School, Tampa, FL.



Source: Cortada (2007)

The placement of these vertical mangrove nurseries, individual propagules that hung in water-filled cups, seemed out of place—they piqued the curiosities of passersby. Those who stopped to check out the eco-art and read the accompanying signage would learn that mangrove seedlings such as these would have hung from trees at that very location before the ecosystem was destroyed to make way for the city. When the installations were taken down, volunteers planted the seedlings along Biscayne Bay, and the process started again. Year after year, new installations were created on storefront windows, as well as in dozens of local public and private schools, in partnership with students of all ages.

**Figure 3.** A family plants mangrove propagules in Virginia Key, Miami, FL.



Source: Cortada (2007)



Cortada later shifted his focus away from environmental degradation and restoration and toward mobilizing communities around climate mitigation and adaptation. In 2018, he partnered with the Village of Pinecrest, a municipality within Miami-Dade County, to create the “Underwater Homeowners Association,” which aimed to make sea-level rise impossible to ignore. Residents discovered their property’s elevation above sea level using an app, and installed an ‘underwater marker’ (a sign with a number depicting their house’s elevation) in their front yard. As the signs displayed the location’s elevation above sea level without any explanation and as they were not familiar political or “for sale” signage, their inherent strangeness aroused the interest of friends, family, and neighbors.

**Figure 4.** Underwater Marker ‘8’ installed in front of the artist’s studio in Pinecrest, FL.



Source: Cortada (2018)

Moments of intrigue became moments of learning: curious individuals would learn about the local impacts of sea level rise by either scanning the sign’s QR code or talking to whoever originally installed it. In addition to these personalized signs, Cortada worked with local public high schools to paint elevation murals at four major intersections along Pinecrest’s Killian Drive, which was temporarily renamed “Elevation Drive.” Cortada’s “Antarctic Ice Paintings” served as the backdrop for the signs and murals, which, working in combination with the slightly mysterious numbers, grabbed the attention of anyone walking by and

**Figure 5.** Elevation Drive intersection mural ‘7’ in Pinecrest, FL.



Source: Cortada (2018)

sparked conversations about rising seas. These interactive public art installations also catalyzed community organizing in the form of monthly “Underwater HOA”<sup>3</sup> meetings, get out the vote efforts, and other local engagement events.

### Where Socially Engaged Art and Foundational Learning Intersect

These two initiatives, the “Reclamation Project” and the “Underwater Homeowners Association,” are good examples of how socially engaged art creates spaces for purpose-driven experiential learning, ultimately cultivating individuals with holistic, ecologically aware worldviews and instilling foundational learning skills, such as curiosity and self-efficacy. The participatory nature of these projects requires neighbors, friends, and family members to work together to create public art installations that have a meaningful impact through mangrove reforestation or climate advocacy. This collaborative process fosters teamwork, leadership, and creativity, allowing participants to develop confidence in their abilities to contribute to a larger effort. By engaging in art-making together, individuals not only learn from one another and strengthen interpersonal relationships, but they also share responsibility for the outcomes of the projects. Their combined efforts result in large-scale installations that generate unexpected and informal spaces for both teaching and learning.

**Figure 6.** “Reclamation Project” grid of red mangrove propagules on a storefront window in Lincoln Road, Miami Beach, FL



Source: Cortada (2007)

In addition to the inherent collaboration prescribed by socially engaged art, Cortada’s work provides memorable experiences that connect individuals to nature and one another. Through the “Reclamation Project,” participants foster a deeper appreciation for our living systems when they immerse themselves in the enchanting world of a mangrove forest to gather propagules and inevitably witness the ethereal play of filtered sunlight dancing upon gently lapping waves, eventually returning to plant the very seeds they discovered. This process engenders a heightened awareness of the interdependence between human communities and the natural world, helping participants broaden their understanding of the complexities

of social and ecological systems. Similarly, the “Underwater Homeowners Association” provides a platform for people to connect with each other and engage in real-world problems. Impromptu conversations in a neighbor’s front yard or a planned community meeting create opportunities for individuals to share their stories, listen to the experiences of others, and collectively envision solutions. These interactions promote foundational learning skills, such as empathy, active listening, and storytelling, all grounded in the purposeful mission of safeguarding one another from the impacts of the climate crisis.

### The Aesthetics of Foundational Ecoliteracy

In a world defined by urgent ecological challenges, it is crucial for educators, policymakers, and practitioners to actively seek creative approaches to foundational learning that empower learners with skills that are both necessary and relevant. Closer attention should be paid to the role of aesthetics in foundational learning. There is intrinsic value to enriching young imaginations if they are to envision a future that is better than the one they are likely to inherit. In his discussion of the aesthetic domain in early childhood programs in

Taiwan, Shih (2020) writes that aesthetics enables children to “generate emotions connected with their environment, thereby developing concern for the natural environment and the identity of social culture.” Paulo Freire [remarked in an interview](#)<sup>4</sup> that “education is artistic in itself; and when art challenges aesthetic curiosity, the taste for beauty is highly pedagogic.”<sup>5</sup> Aesthetic moments can be transformative, often evoking a deep sense of meaning and emotional connection. Cortada’s striking visuals, eco-art installations, and sculptures certainly challenge aesthetic curiosities; they create moments for neighbors and strangers alike that are pedagogical in the threatened beauty of what they reveal about local ecosystems and profoundly political in the collective solutions they demand. As formal education considers how to respond to burning climate questions and overlapping environmental crises, educators and policy makers would do well to make time to explore the vast potential of socially engaged art for engaging people collaboratively, probing thoughtful solutions, and helping to develop the commitments and capabilities we shall surely need to sustain life on earth.

#### Endnotes

1. As Iveta Silova points out (Silova, 2021, p. 589): “Undeniably, the climate crisis impacts are exposing our broken political, economic, and social systems built on centuries of slavery, oppression, and racism.”
2. A mangrove propagule is the cigar-shaped seed or reproductive structure of a mangrove tree that enables its dispersal and eventual establishment as a new individual in coastal environments.
3. Underwater Homeowners Association.
4. From footage on literacy interviews collected by producer Catherine Murphy at The Literacy Project <https://theliteracyproject.org/about/team/>, source unknown.
5. In an interview with Language Arts, Freire says: “For me education is simultaneously an act of knowing, a political act, and an artistic event. I no longer speak about a political dimension of education. I no longer speak about a knowing dimension of education. As well, I don’t speak about education through art. On the contrary, I say education is politics, art, and knowing”


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# Learning to Be Whole Again — Holistic Approaches to Foundational Learning

 **Jwalin Patel**, President, Together in Development & Education Foundation, India

 jwalin10@gmail.com

 **Maya Shakti Berggreen-Clausen**, The Learning Community, Sri Aurobindo International Institute of Educational Research, India

 maya@auroville.org.in

## Summary

This essay critiques the narrow focus of foundational learning on literacy and numeracy in contemporary education; it argues, instead, for holistic education. It goes on to showcase several Indian examples adopting holistic approaches to foundational learning that utilize holistic curricula, prioritize child-centred pedagogy, promote empathetic teacher–student relationships, and transform school cultures.

## Keywords

Education for harmony  
Foundational learning  
Holistic education  
Social and emotional learning  
Southern epistemology

## Criticisms of the Narrow Emphases on Literacy and Numeracy

Mass education systems remain predominantly focused on functional literacy and numeracy. While literacy and numeracy are essential components of primary education, education approaches have been criticised for their narrow emphasis on literacy and numeracy at the expense of holistic development (Miller et al., 2018; Patel, 2023) and teacher-centric practices centred around rote memorisation. In India, there is longstanding criticism of both colonial and mainstream education systems. Colonial education (and its continuing legacies) focused narrowly on training technicians to serve growing industries. These colonial and current mainstream education systems have been condemned for sacrificing more holistic approaches (Tagore; Gandhi; Krishnamurti), the absence of a focus on emancipation and not engaging students in overcoming various sociocultural divides (Tagore; Krishnamurti), their failure to cultivate humanistic values (Tagore; Patel, 2023), and their lack of contextualisation. Tagore condemned the colonial education system as:

*... a mere method of discipline that refuses to take into account the individual. It is a manufactory specially designed for grinding out uniform results... We may become powerful by knowledge, but we attain fullness by sympathy. The highest education is that which does not merely give us information but makes our life in harmony with all existence. But we find that this education of sympathy is not only systematically ignored in schools, but it is severely repressed (Tagore, 1917, pp. 116–117).*

Today, these criticisms are more relevant than ever (Patel, 2023). Key Indian policy papers have called for more holistic education: these include the Sri Prakasa Committee Report (1959), the Chavan Committee Report (1999), and the National Educational Policy (NEP, 2020). The NEP, for example, reaffirms a commitment to “develop[ing] good human beings capable of rational thought and action, possessing compassion and empathy”. These policies also informed the Indian National

Curricular Framework (2005) and teacher guidelines and training programmes. Several Indian thinkers have proposed alternative visions that call for the complete transformations of the education system, including its underpinning philosophies, and to translate such transformations into curricula, classroom, and school-based practices, and pedagogy. Nevertheless, contemporary education practices remain stubbornly focused on literacy and numeracy.

### The Continuing Relevance of Holistic Education

Reductionist and instrumentalist approaches to education always lead to an emphasis on the measurable. These approaches contribute in their own ways to the real global crises we face today: equity, justice, wellbeing, environment, and values (Cremin, forthcoming; Mignolo & Walsh, 2018). This is also reflected in several international development reports (Council of Europe, 2017; OECD, 2015, 2018; UNESCO, 1996, 2014) that emphasise the importance of education for social [and] emotional learning (SEL) and learning to live together. They rely on research that demonstrates how SEL influences a range of learning outcomes, including education outcomes (e.g. learning gains, cognitive skills, and communication skills), behaviour, and improved mental health, and predicts success at and beyond school (Jones et al., 2015).

We call for holistic education that goes beyond literacy and numeracy: an education that fosters a humanistic way of living and being and that educates the whole child not just different parts of a person across different spatio-temporal boundaries (Sri Aurobindo and *The Mother*; Lin et al., 2019; Miller et al., 2018; Patel, 2023). A holistic education would also foster deep understandings of the interconnectedness of and with the world (the human community, nature, and the universe). This emphasis on a critical understanding of an interconnected world resonates with Freire's idea of education as 'conscientisation' and Dewey's ideas for a philosophy of experience that relates to education. Consequently, we conceptualise holistic education as an education that aims for the full development of human personality, capabilities, and social relations and our eco-systemic interconnectedness with the natural world—an education for compassion, emancipation, love, and wonder, as much as for knowledge and skills.

Notably, Indian thinkers have advocated for a holistic education that brings about inner renewal and social change. They believe that through the education of the whole person, a child would deeply understand and transform oneself, others, and the larger interconnected world. Such an education is based upon an idea of emancipation, that is, from one's own conditioning and oppressive societal structures (Krishnamurti). This resonates with Freire and Giroux (2010), who have called for emancipatory and participatory education—or education for social change (Bourn, 2022; Sharma, 2018).

### Broadening the Scope of Foundational Learning

The limited scope of what is heralded as foundational learning finds its roots historically in the political and economic regimes of the global North—its colonialism, industrialism, and neoliberalism. Brehm (2023) referred to these as historic blocks that give legitimacy to political and economic structures and ways of thinking. Education has become an institutional means to train and shape the body politic to meet the needs of the elite—reproducing a growing consumerist, capitalist economy. This process removes people from their traditional, often more sustainable lifestyles, local economies and their connections with nature. Freire described this disconnect as dehumanisation, one that forces people into dependence on a contemporary centralised economy, alienating them from their independence, culture, and self-respect.

Multilateral and international development organisations regard foundational education as synonymous with basic literacy and numeracy, both of which are easily measured. This contrasts with the vision of quality education put forward in SDG 4: SDG 4.7<sup>1</sup> calls for education for sustainable development and a range of associated outcomes. Holistic, decolonial, southern, and Indigenous educators and scholars have consistently called for value education and an education for harmony with oneself, the immediate community, and the larger (natural) world (Patel, 2021a, 2023). Similarly, various national education policies have broadened education aims to include SEL. Gandhi argued that "literacy is not the end of education, nor even the beginning. It is only one of the means by which [a person] can be educated. Literacy in itself is no education". However, if we define foundational education as the skills and competencies that provide a basis for further education and are crucial for functionality in modern society, it is self-apparent that SEL and life skills are essential foundational competencies. Curiosity and wonder are the basis of all learning, as they sustain self-directed learning and thus lead to richer and deeper continuing education.

Multilateral organisations working in the Global South frequently make the claim that a focused approach is easier to implement, to measure, and therefore, to achieve. Even if literacy and numeracy interventions successfully achieve their specific goals, we question their real value, especially if it comes at the cost of developing other purposes of education such as SEL, citizenship, ethical values, life skills, and ecoliteracy (a term explored elsewhere in this collection that describes harmony with and connection to the natural environment). Modern education and top-down implementation of development agendas frequently disenfranchise local stakeholders; this has the unfortunate outcome of young people thinking that their home language, local cultures, or ways of life are backward, primitive, and shameful. More localised, contextualised, and co-created



approaches to holistic education are required to re-enfranchise and empower all stakeholders, ensuring that education outcomes lead to more harmonious, just, and sustainable ways of living and being.

### Towards a Pedagogy for Holistic Foundational Learning

Foundational literacy and numeracy and foundational learning that aims for the holistic development of children are not mutually exclusive. This section offers examples of how certain holistic approaches to foundational learning in India that focus on the development of the whole child might be transposed into curricula, incorporated into teaching and learning processes, and emphasised through teacher–student relations.

Internationally, we observe a growing incorporation of SEL curricula (Social Emotional and Ethical curricula, Second Step, RULER, and 4Rs) and citizenship curricula (Reimers et al., 2016). In India, values education and SEL curricula include the [Social, Emotional and Ethical Learning Curriculum](#) and the [Happiness Curriculum](#) (and its various adaptations), which were inspired by the Dalai Lama and the Indian spiritual leader AK Nagraj, respectively. The latter has been rolled out across thousands of schools in Delhi, and several other state governments are adapting it to their respective contexts. There are growing calls for a more substantial integration of these ideas to ensure that they are embedded across curricula for all subjects (Patel, 2023). One such example is the [Montessori pedagogy](#), where the curriculum is designed to integrate all holistic objectives that leverage other pedagogical methods, such as stories, activity-based learning, and child-centric learning across different subjects (Duckworth, 2006). Similarly, the [Big History Project](#) aims to add foundational value of social studies and history across all curricula by integrating a multitude of perspectives and connecting the past, present, and future. Meanwhile, in [alternative schools in India](#), teachers and children are empowered to question existing curricular structures and to co-create contextualised ones.

Although curricular reforms can extend what is taught, it is essential to also embody holistic approaches into new pedagogies. Participatory and child-centric approaches, such as dialogic pedagogies, activity-based learning, experiential learning, conflict resolution, peer learning, and project-based learning, are central to holistic learning (Noddings 2003; Patel, 2021b, 2023). These approaches are commonly observed within Montessori schools, Freirean critical pedagogy (Giroux, 2010), and Deweyan approaches. Similarly, in India, there are two notable, large-scale experiments in activity-based learning: [Vinoba Bhave's](#) and Gandhi's [Nai Talim](#) (new education), which holds that work and knowledge are not separate. There is also the Rishi Valley Institute for Educational Resources, which promotes activity-based learning methods that are being rolled out in government-run schools in multiple states in India. Participative approaches also reach beyond classroom

processes to embrace school-wide learning and decision making. In [democratic and sociocratic schools](#), for example, students, parents, and teachers participate in individual and collective decision-making. Participatory pedagogies also extend beyond the school: phenomenon-based, embodied, and lived-experience based approaches realise multidisciplinary learning in real-world situations. The yearly Endangered Crafts Melas, organised by Marudam School and Auroville, connect students to their local culture and traditions through immersion in local handicrafts. Alternative schools in India are frequently situated within a forest, leading to students forming a stronger bond with the environment compared to visits to national reserves once in a while (see also the interview with a Forest Kindergarten teacher elsewhere in this volume). In the Finnish education system and various alternative schools, learning happens through real contexts, such as cafes and nature.

Although “what to teach” and “how to teach” are fundamental pedagogical questions, many agree that education is also about relations and learning to relate. If education is to be the foundation for life, it is essential that foundational learning also encompasses learning to be human. Gandhi noted that the “education of the heart can only be done through the living touch of the teacher”. Teachers, their ways of living and being, and teacher–student relations underpin much of learning. Non-judgmental, caring teacher–student relations foster acceptance and inclusion, the important affirmation of a child knowing they are seen and heard. An example of such practices happens in [The Learning Community](#), an educational, research-based experiment in India, where teachers participate in an ongoing process to understand themselves in order to learn to relate better to children. Noddings (2003) called for teachers to model the behaviours they want their students to adopt. Patel (2023) believed this involves genuine engagement in lifelong holistic education for educators themselves.

In conclusion, we call for foundational learning that extends beyond literacy and numeracy to include social, emotional, ethical, values, and ecological learning. These are foundational for learning to be human and the lifelong pursuit of education. Although some will question the feasibility of holistic education, our view is that, in reality, contextualised, co-created, holistic education that is empowering and relevant is ultimately more sustainable.

#### Endnote

1. SDG 4.7: By 2030, ensure all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture's contribution to sustainable development

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# Part 4

## System Anomalies

Just as the non-mainstream approaches to foundational learning in Part Three have implications for systems, the “mainstream” programs and orientations described in this part have implications for foundational learning that go beyond foundational literacy and numeracy (FLN). Similarly, much like the way Antonio Leal—the hero in the conversation with Alexis Gibbs—discovers his freedom to innovate in a government school only when his class is no longer officially designated a special education needs (SEN) class, nor quite considered a “normal” class, the four examples in this part find their places alongside, in niches, and at times only circumstantially part of formal education systems.

Although not about specific examples, the two more analytic contributions, Michele Schweisfurth’s *Classroom Time as a Zero-sum Game* and Rita Heller-Crespo et al.’s *Integrating WCD Development into Teacher and School Leader Training*, respectively, address the systemic issues of “what teachers should focus on in classroom time” and “how WCD approaches may be effectively mainstreamed.” Schweisfurth identifies how successive crisis narratives tend to reinforce narrower focuses and technicist approaches when what is needed is precisely a “broader set of goals and a kinder language.” Heller-Crespo et al. point to a growing momentum and adoption of WCD approaches within education systems around the world but argue for their more deliberate consolidation and support within education systems.

Two contrasting examples of approaches to foundational learning within the early childhood development (ECD) sector are offered in *Mental Landscapes*, the interview with Deborah Bailey, which unveils the somewhat surprising pedagogy of a forest kindergarten in Switzerland, and Katrina Reyes’s report, *Bayanihan in Early Childhood Education*, which covers the Philippine Government’s initiatives to boost foundational learning in the ECD sector and schools during the COVID-19 pandemic. The forest kindergarten children

enthusiastically spend every day of the year outdoors, be there rain, snow, or sunshine. The foundational skills targeted include “awareness, care, and knowledge of nature and environment, social and emotional skills, independence, self-confidence, courage, fine and gross motor skills, music, art, creativity, imagination, drama, and German language skills,” but no literacy or numeracy in a formal sense. Reyes tenders a positive description of the range of systemic initiatives implemented by the Philippine government via media, trainings, community engagement, and outreach, all of which tap into familiar cultural ideas and customs that the government wishes to sustain into the post-COVID period.

The final two articles in this part engage education systems from diametrically opposing perspectives: the first proposes a supplementary approach that aspires to be systems-wide, and the second proposes a discrete approach that aspires for autonomy within a system. Kusha Anand and Laraib Niaz’s article, *Towards Two Literate Nations*, delves into two supplementary programs—Mission Buniyaad in India and Closing the Gap in Pakistan. These initiatives target the reduction of disparities in FLN outcomes. Notably, both programs extend their focus beyond FLN, encompassing a broader range of competencies, such as social and emotional skills, along with life skills. The authors conclude, “A context-specific, child-centred approach is imperative for cultivating an environment of mutual respect and a sense of belonging—particularly for underserved children.” Rita Potyguara and Renata Montechiare’s article, *The Maria Venâncio Indigenous School*, powerfully narrates the story of the Indigenous Tremembé along the Ceará Amazonian coastline. The school plays a pivotal role in their struggle to preserve their culture and consolidate their rights to the land. The school curriculum fuses ethnic knowledge with *do mundo dos brancos* (the world of the whites), blending foundational literacy and numeracy with Indigenous knowledge and values.

# Classroom Time as a Zero-Sum Game: Who and What Loses When Foundational Learning Wins?

 Michele Schweisfurth, University of Glasgow, UK

 Michele.Schweisfurth@glasgow.ac.uk

## Summary

Classroom time, learners' attention, and teacher focus are limited resources.

This review explores the diverse purposes of post-pandemic education. It assesses the possibilities and limitations of literacy- and numeracy-focused approaches to foundational learning. It discusses the impact of the "learning crisis" discourse and testing on teaching and learning. The potential risk to broader educational experiences is examined by considering these factors.

## Keywords

Assessment  
Classroom time  
Foundational learning  
Pedagogy  
Purposes of education

Understandings of the key goals of education are potentially infinite. However, classroom time, learners' attention, and teacher focus are not. Therefore, there are inevitable compromises, conflicts, and payoffs in choosing to privilege one purpose or set of purposes over others. While learning is itself pleasingly elastic, more of one activity supporting a particular goal in a classroom means less of another. This article takes this dilemma as its point of departure. It begins by mapping a range of purposes for education, and then considers, in the context of contemporary post-pandemic realities, the limitations of a literacy- and numeracy-focused version of foundational learning for addressing the breadth of these goals in schools.

## Schooling: What's It For?

Advocates for social progress of all kinds have high expectations for education, and education is itself used as a key indicator of human development, as measured by years of schooling (UNDP, 2022). Elsewhere in this special issue, Turner and colleagues argue for a broad view of "what matters" in education in relation to assessment, particularly international assessments (Turner et al., 2023). Here, I want to focus and build on the framing suggested in the report of the International Panel for Social Progress (IPSP), and use this to reflect on what happens in classrooms.

Between 2016 and 2018, the Education Chapter authors of the International Panel for Social Progress (IPSP) (Spiel et al., 2018) set out four distinct but overlapping purposes for education:

1. The humanistic goal: the development of individual and collective human virtues of all kinds, and capabilities (Nussbaum, 2011) that people consider worthy. These are often manifested in schools through teaching of the arts, humanities, and classics.
2. The civic goal: the enhancement of civic life, including democratic participation, social cohesion, and the development of global citizenship knowledge, attitudes, and skills. In school, this may be taught directly, for example, through civics as a subject, or indirectly, for example, through forms of pupil democracy.

3. The economic goal: promoting economic productivity, including the teaching of specific vocational skills and more generic pre-vocational skills that enhance employability and wealth of the individual and generate collective economic growth.
4. The equity goal: furthering of equity and social justice through schooling's potential to enhance social mobility and inclusion.

Much could be said and argued about each of these; much was said and argued among the panel members—I was there. Two things all members of the panel agreed upon, however, including the economists and vocational education experts, was that the economic goal was in the ascendant at that time, in terms of the framing of national policies and international agendas, and that this was to the detriment of promoting the other goals.

It has been a long five years since then. In 2023, two additional goals should be added to this list. Both would originally have sat somewhat uneasily under the humanistic goal, but they have grown so distinct in breadth and importance they warrant separate attention. One is the wellbeing goal: the development and protection of socio-emotional health. This has always been important, and there are instances where it has policy priority, such as Bhutan's emphasis on education for happiness (Schuelka & Maxwell, 2018). Post-pandemic, this goal takes on new importance. The social isolation, fear, and disrupted routines created by the policy responses to COVID-19 have been damaging. Systematic reviews synthesised in a global scoping report (Heneghan et al., n.d.) have noted that 80% of children and adolescents notice, in themselves, increases in negative feelings, including anxiety, loneliness, and stress. Protective factors include increasing positive interactions and social connectedness based on experiences of feeling close and connected to others (Heneghan et al., n.d.). This has the potential to be—but is not always—fostered in classrooms. There is also important current research that demonstrates that socio-emotional wellbeing is conceived and experienced differently across cultures (Yun You, 2023); this calls for a nuanced and embedded approach to enabling wellbeing in classrooms that confounds commitments to universal approaches and universal measures.

The sixth goal I would posit is education for sustainability, and here I would include both the human development view (sustainability of human society through, for example, the prevention of conflict) and the environmental perspective. The breadth of how this goal might be understood and the myriad ways that schooling might support it deserve a substantial debate beyond the scope of this overview, but one thing is very clear: none of the other five goals matters very much

if humanity and/or the planet prove unsustainable, and headlines suggest that we are moving rapidly in that direction (UN Environmental Programme, 2022).

### Foundational Learning: Undermining the Full Breadth of Potential?

Foundational learning is rapidly becoming a slippery concept; a range of definitions are in operation, depending on how foundational is defined. Here, I want to strip it back to how it is often operationalised in practical terms: the so-called basics of literacy (focused on the decoding processes of reading) and numeracy (reduced to mathematical competence).

Beyond OECD countries, it is actually easier to find data on the learning outcomes of foundational skills than on time spent on them in school. This, in itself, is worrying. Beyond what individual national policies prescribe, why do we know so little about what children actually do in school? Arguably, transversal skills such as intercultural competence or self-regulation could be fostered in English language or math lessons, but are they? Indicative searches indicate that primary classroom time is dominated by lessons focused on literacy and numeracy. In Kenya, for example, the seven core competencies that are to be achieved by learners reflect a broad understanding of the purposes of education: communication and collaboration, self-efficacy, critical thinking and problem solving, creativity and imagination, citizenship, digital literacy, and learning to learn (Republic of Kenya, 2017). However, five out of the nine subjects listed as compulsory in primary schools relate to literacy or numeracy. The National Education Policy of India (Government of India, 2020, p.8) emphasises that “The highest priority of the education system will be to achieve universal foundational literacy and numeracy in primary school by 2025.” The Grade 3 examination focuses narrowly on these skills, despite, again, a wide range of transversal skills being mentioned. Summative testing of this kind will almost certainly be a major driver of how time is spent in classrooms.

I have written at greater length elsewhere (Schweisfurth, 2023) about my fears of a narrowed view of schooling that focuses on reading and math. Beyond any explicit intention to focus classroom time on structured pedagogical versions of these subjects, the power of the “learning crisis” discourse and the washback effects of testing readily-measurable outcomes are likely to make them dominate teaching and learning processes. This position is underpinned by a powerful nexus where economic priorities, datafication, and deficit discourses about teachers and learning outcomes meet.

So, while it's hard to know the reality of how time is spent in classrooms, the drivers are for more time on literacy and numeracy and, therefore, less on other foci. On one level, this creates a simple situation of trade-offs—where extra



time for math instead of music squeezes out humanistic and wellbeing benefits. However, beyond this zero-sum game, a disproportionate focus on literacy and numeracy, and especially on testing these, can actively detract from the other goals. Test anxiety is a real phenomenon, and is known to affect mental health. Given the diverse distribution of talents and interests in any given group of students, spending greater time on subjects that privilege linguistic and logical-mathematical intelligences (Gardner & Hatch, 1989) is potentially exclusive and divisive, hindering the achievement of both the equity goals and the civic goal of equality of civic participation. The human capital arguments for focusing on literacy and numeracy and the relentless quest for economic growth work against the goal of sustainability in all its forms.

## Closing Reflections

We do not know enough about how time is spent in schools, particularly in lower- and middle-income countries. However, we do know that beyond discursive acknowledgements of the importance of a broad range of goals, powerful drivers at the global level reinforce the long-existing primacy of literacy and numeracy as foundational skills, fuelled by discourses that focus on economic growth. In the post-pandemic era, the language of learning loss, learning crisis, and learning poverty all drive the focus on teaching and testing literacy and numeracy, when a broader set of goals and a kinder language have never been more important. To support them, they need to have their share of precious classroom time.

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# Integrating Whole Child Development (WCD) into Teacher and School-Leader Training: Perspectives From Across the World

-  **Rita Heller Crespo**, Intern, Utrecht University, the Netherlands  
 rita.heller@alumni.programaexe.org
-  **Maria van der Harst**, Researcher, Utrecht University, the Netherlands  
 a.m.r.vanderharst1@uu.nl
-  **Joost de Laat**, Professor of Economics, Utrecht University, the Netherlands  
 j.j.delaat@uu.nl
-  **Paul Schöpfer**, Junior Researcher, Utrecht University, the Netherlands  
 p.schopfer@uu.nl
-  **Diederik van Iwaarden**, International Partnership Advisor, Utrecht University, the Netherlands  
 d.c.f.vaniwaarden@uu.nl
-  **Maya Menon**, Founder Director, The Teacher Foundation, India  
 mayamenon@teacherfoundation.org
-  **Robbie Dean**, Director – Research, Evaluation and Network Learning, Teach for All, US  
 robbie.dean@teachforall.org
-  **Luz Avruj**, Institutional Relations and Networks Coordinator, CLAYSS (Centro Latinoamericano de Aprendizaje y Servicio Solidario), Argentina  
 luzavruj@clayss.org.ar
-  **Marco Snoek**, Lecturer – Learning and Innovation, Hogeschool van Amsterdam, the Netherlands  
 m.snoek@hva.nl
-  **Renata Montechiare**, Academic Coordinator - Culture and Education, FLACSO, Brazil  
 renatamontechiare@flacso.org.br
-  **Gretchen Livesey**, Director – Partner Impact, The Center for Whole-Child Education, Mary Lou Fulton Teachers College, Arizona State University US  
 gretchen.livesey@asu.edu
-  **Jane Nantayi Sebuyungo**, Senior Manager- Design and Program Readiness, STIR Education, Uganda  
 jsebuyungo@stireducation.org
-  **Lola Velarde**, Director - Development, European Foundation Society and Education (EFSE), Spain  
 lolavelarde@sociedadeducacion.org
-  **Miguel Ángel Sancho Gargallo**, President, European Foundation Society and Education (EFSE), Spain  
 masancho@sociedadeducacion.org
-  **Toby Horrocks**, Dean – Learning Design, Ambition Institute, England  
 toby.horrocks@ambition.org.uk
-  **Prateesh Prasad**, Delivery Lead – Project Sampoorna, Sattva Consulting, India  
 prateesh.prasad@sattva.co.in
-  **Bjorn Wansink**, Associate Professor, Utrecht University, the Netherlands (Corresponding author)  
 b.g.j.wansink@uu.nl

## Summary

A Whole Child Development (WCD) approach considers foundational learning as being child-centred and multi-dimensional, emphasising a variety of interconnected and context-dependent skills, competencies, and values for a child to thrive. Drawn from discussions with 10 education organisations from across the globe, this article explores how education systems can support teachers and school leaders to take a WCD approach.

## Keywords

Holistic education  
Holistic student development  
Teacher training  
Whole child development (WCD)

The existence of large inequalities in children’s learning outcomes, both within and across countries, is well established and has been exacerbated by the recent COVID-19 pandemic.<sup>1</sup> For example, the Global Education Evidence Advisory Panel—a leading body of international policymakers and scientists—argues that “the pandemic offers a rare opportunity to rethink and reset education provision, so children across all identities, socioeconomic backgrounds, and circumstances can learn and thrive” (Global Education Evidence Advisory Panel, 2022, p. 11).

However, there are ongoing debates about what foundational learning comprises and should aim for. One prominent understanding focuses primarily on [numeracy and literacy as key universal skills](#) (Beharry, 2021). Another approach diverges from this narrow understanding of foundational learning and instead emphasises the multidimensionality of learning and the context specificity of what skills and competencies best enable students to learn and optimally prepare them for life and citizenship. This understanding also highlights the interconnectedness of a child’s academic, social, emotional, physical, moral, and civic development (Schaub et al., 2017). Such holistic approaches are not new, and the roots of this school of thought can be found in the works of Rousseau, Parker, and Montessori (Miller, 1997). In this paper, we refer to these holistic approaches to learning as whole child development (WCD).

A WCD approach recognises that all children, but in particular those growing up in adversity, need a range of knowledge, skills, and experiences in order to benefit from education across contexts and to reach their potential in life. Core capabilities that are part of [WCD approaches](#) include the development of values, academic knowledge, life skills, and social and emotional learning. WCD approaches support academic success but also raise students’ personal satisfaction and growth and empower students to build positive relations and become lifelong learners and [active and engaged citizens](#) within society.

There is an emerging momentum for WCD approaches and a wider recognition of the value of holistic education, with an increasing number of countries incorporating WCD components into education policy and curricula (Cantor et al., 2021; Porticus & ACER 2020; Slade & Griffith, 2013). This momentum is underscored by the March 2022 report “Reimagining Education,” written by the International Science and Evidence Based Education (ISEE) Assessment, a group of more than 250 experts and scientists from a range of disciplines, which calls on education systems to “Re-organise curricula, pedagogies, and learning assessments toward a whole-brain learner-centric, socially inclusive education for human flourishing that emphasises interconnectedness instead of isolation between cognition, metacognition, and social-emotional learning” (Duraiappah et al., 2022, p. 4).

Yet, despite increased awareness, the current education systems in which teachers and students find themselves often do not provide the time, space, and resources to focus on and support WCD. Moreover, the aftermath of the pandemic has also given rise to a rush to ‘catch up on learning deficiencies’ in traditional subjects, such as math and literacy (Beharry, 2021). This paper presents a case-based view across various country contexts on the integration of WCD in teacher and school leader training. The insights presented below are based on discussions facilitated by the Utrecht University Team with 10 member organisations of a Global Learning Community (GLC)<sup>2</sup> for WCD. An overview of the organisations can be found in Table 1 (in Annex).

### **Integrating WCD into Education Systems Through Teacher and School Leader Training—What Does It Entail?**

GLC members emphasise three broad aspects:

1. A co-defined, personalised, experiential approach to teacher- and school leader training.
2. Building a broader school environment that is supportive of WCD.
3. Facilitating holistic learning with and for the broader community.

#### **A Co-defined, Personalised, Experiential Approach to Teacher/School Leader Training**

All 10 discussants highlighted that their teacher- and school-leader training approaches contrast with conventional training methods by seeking to provide teachers and school leaders with an opportunity to co-define a contextualised vision for WCD, including student outcomes. In other words, what is foundational for students is contextually and collectively decided and may thus vary to some extent across settings.

To achieve this, the organisations highlighted that their training approach includes personalised, experiential elements with ample room for reflection. The value of an experiential approach to teacher training is consistent with an extensive body of literature highlighting how an experiential approach is a particularly powerful way for teachers to acquire a deeper understanding of what a WCD approach looks like in practice (see also Lewis & Williams, 1994; *Journal of Experiential Education*). As highlighted by the Teacher Foundation in India, teachers themselves may have no experience with this approach to learning. Therefore, the Teacher Foundation aims to build a generation of teachers who have this frame of reference through a first-hand experience of what student-centred learning comprises. Their approach offers training, in-class observations, co-teaching, coaching, mentoring, and specified moments for feedback.

Training for WCD teaching and leadership was also characterised as personalised and reflexive. Teach For All

(Global) emphasised, for instance, the connections with a professional’s own identity, motivations, and WCD. Their training methodology acknowledges this and makes space to discuss what an education system would look like if it prioritises WCD and what possible tensions may arise when engaging in such types of leadership or teaching practices on a personal and professional level before definitions and frameworks are introduced.

In a similar way, reflexivity is an important strand of the approach of Sattva in India to ensure that all children are reached and included in education. Reflexivity requires awareness of the social inequalities and exclusion that constitute the social realities of some students and intentional efforts to overcome stereotypical biases teachers may have towards children from disadvantaged communities. Although these training approaches are demanding in terms of both time and effort and require a strong commitment among teachers and school leaders, several discussions emphasised that education professionals also benefit on a personal level from the learning experience through increases in their wellbeing and or (regained) motivation.

What the experiences of GLC members seem to confirm is the finding that a motivated, warm, and healthy educator is foundational to learning. For instance, during the COVID-19 pandemic and following governmental requests, STiR Education Uganda broadcast a radio programme to keep students engaged during the lockdown and to support teachers in addressing the socio-emotional needs of students.<sup>3</sup> Soon after, they learned that the broadcast was helping teachers cope with their own struggles during the pandemic. Especially in times of crisis, it turns out that a holistic approach to education and taking into account the social-emotional learning of students and teachers is foundational for wellbeing and learning (Yorke et al., 2021). Some organisations coined the term ‘Whole Teacher Development’ to draw attention to deliberate efforts to achieve beneficial outcomes for both educators and students. The European Foundation Society and Education (EFSE) in Spain found that such approaches can even contribute to addressing schools’ challenges with high staff turnover.

#### **Building a Broader School Environment Supportive of WCD**

Three elements stood out in terms of building a school environment that is supportive of WCD. The first is the creation of new types of collegial networking among teachers, leaders, and officials at all levels, ranging from peer-to-peer support among teachers to cooperative learning between school leaders, etc. (Luyten, 2019). Similarly, research points out that strong support structures are essential, and transformative processes in education depend on, for example, school leaders and teachers encouraging and supporting each other and celebrating small achievements on the way towards larger goals (Boylan et al., 2023).

A closely related second element constitutes a move away from authoritative, top-down leadership styles focused, for example, on control over teaching practices, and towards responsive, distributed leadership, which enables, supports, and rewards the implementation of good teaching practices into everyday classroom experiences for children (Harris, 2013). Such dynamics extend to the way teachers are encouraged to engage with students in such a way that students can become active agents in their own learning journeys.

A final element emphasised is the need to organise (redesign) the school environment to become more equitable (supporting the development of all children) and to become grounded in state-of-the-art science about how children learn and develop. To facilitate this, Turnaround for Children has developed a [toolbox](#) that comprises a range of resources for science-based and equity-focused redesign processes to build whole-child schools.

### **Facilitating Holistic Learning With and For the Broader Community**

A child's learning (or, in fact, any individual's learning) is not confined to the physical or temporal space of the school or the classroom. In the accounts of the discussions with organisations, the need to facilitate both within and outside of school learning is emphasised. This means that what counts as foundational to learning should be negotiated with the school and the broader community. One way of enabling this is to ensure that education is embedded within the community and is of benefit to the socio-cultural realities of the community that the school is part of. For instance, the Latin American Centre for Solidarity Service-Learning (CLAYSS) promotes an approach where students solve challenges in their communities while also applying content learned in school. Students make connections between learning and lived realities by actively engaging in real-life projects. In doing so, they are not just learning for a future career but already acquiring a sense of what it is to be a change agent.

Establishing a link between the school and the community requires ways to connect educators, parents, community members, and students to facilitate continuous learning and fuel the agency of all involved. FLACSO Brazil, working with educators on the Brazilian Amazon, shares that such bonds naturally exist in Indigenous communities. With their ways of living, livelihoods, and the lands they live on directly under threat, the teaching is not separated from the challenges the communities face. Moreover, local schools go through considerable efforts to reconcile and combine the curriculum of Brazilian urban schools with teachings about the history and socio-cultural knowledge of the communities themselves (Potyguara & Montechiare, 2023, in this volume).

### **Transforming Our Education Through WCD**

As captured by the experiences of 10 organisations working within a variety of contexts on the advancement of WCD teaching practices and pedagogy, there is considerable overlap in the overarching values and vision of holistic education and WCD pedagogy, but the on-the-ground implementation and application is highly varied and contextualised. From the perspective provided, the local context in which students are situated is highly important, which means that what is foundational can differ for each context and child. Therefore, the central question is not only what foundational skills are universally important across contexts but also how we can design education systems that respond to foundational needs specific to the child within a specific societal context “so children across all identities, socioeconomic backgrounds, and circumstances can learn and thrive” (Global Education Evidence Advisory Panel, 2022, p. 11).

The discussions with GLC members also show how WCD approaches have the potential to transform education by making learning relevant within the local context, preparing learners for life after school, and nurturing the agency of all stakeholders involved to ultimately build learning environments that support the development of all learners.

These are much-needed elements to address challenges in learning and contribute to the attainment of SDG 4 (UN Sustainable Development Goal 4), especially for those children who are most at risk of being left behind.

#### **Endnotes**

1. For further information see: OECD (2021), *The State of Global Education: 18 Months into the Pandemic*, OECD Publishing, Paris. Retrieved from <https://cdn.theewf.org/uploads/pdf/OECD-State-of-Education-report.pdf>
2. The GLC is supported by Porticus, a philanthropy, and facilitated and convened by Utrecht University.
3. For information of the mental health impacts of the COVID-19 school closures on adolescents and youth, see: <https://participationpool.eu/resource/the-impact-of-covid-19-on-the-mental-health-of-adolescents-and-youth/>

**Table 1.** Overview of GLC organisations participating in the discussions

GLC member organisation	Approach to WCD teacher or school leader training	Geographical locations	Link
The Teacher Foundation	Provides group trainings, in-class observations, coaching, and mentoring for teachers and school leaders to become reflective and effective.	India	<a href="https://www.teacherfoundation.org">https://www.teacherfoundation.org</a>
Teach For All	Recruits and develops future leaders to teach in their nations' under-resourced schools and communities.	Global	<a href="https://teachforall.org">https://teachforall.org</a>
Latin American Center for Solidarity Service-Learning (CLAYSS)	Promotes solidarity service-learning: student-led projects integrated with the curriculum that address community issues.	Global	<a href="https://clayss.org/20clayss/index.html">https://clayss.org/20clayss/index.html</a>
Amsterdam University of Applied Sciences	Integrates WCD into curricula for pre-service teacher training, promoting agency and collaboration with high schools.	The Netherlands	<a href="https://www.hva.nl/faculteit/fo/contact/opleidingen/opleidingen.htm">https://www.hva.nl/faculteit/fo/contact/opleidingen/opleidingen.htm</a>
FLACSO	Improves the quality of education through lesson plans and pedagogical projects with WCD principles at local and regional levels.	Brazil	<a href="http://flacso.org.br">http://flacso.org.br</a>
Turnaround for Children	Designs whole child courses for teachers and school leaders at the district level using equity by design principles.	United States of America	<a href="https://turnaroundusa.org">https://turnaroundusa.org</a>
STiR Education	Provides data-driven coaching to school leaders and learning improvement cycles to foster intrinsic motivation, autonomy, mastery, and purpose in teachers.	Uganda, India, and Indonesia	<a href="https://stireducation.org">https://stireducation.org</a>
European Foundation Society and Education (EFSE)	Offers WCD training to school leadership teams to rethink and communicate vision, revitalise the education community, refocus the curriculum, and systematically manage the school.	Spain, Dominican Republic	<a href="https://www.sociedadeducacion.org/en/">https://www.sociedadeducacion.org/en/</a>
Ambition Institute	Integrates research-based WCD teacher, school leader, and superintendent training into governmental and non-governmental programs.	United Kingdom	<a href="https://www.ambition.org.uk">https://www.ambition.org.uk</a>
Sattva Consulting	Consults as a backbone organisation for the integration of socio-emotional learning in the curricula and practice of state education.	India	<a href="https://www.sattva.co.in">https://www.sattva.co.in</a>



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# Mental Landscapes and Foundational Learning Outdoors: The Experience of a Zürich Waldkindergarten

 **Deborah Bailey**, Forest Kindergarten Teacher, Switzerland

 Bailey@wolfgraben.ch

 **Hugh McLean**, NORRAG, Senior Advisor, Kazakhstan

 Hugh.mclean@graduateinstitute.ch

## Summary

Lisa Molomot's short documentary, [School's Out \(2013\)](#), features an outdoor kindergarten situated in a vast natural forest at Langnau am Albis, a village adjacent to Zürich. The children spend every day of the year out in the forest in all weather, where they gain foundational learning in a naturalistic environment. Hugh McLean speaks to Deborah Bailey, a teacher at the forest kindergarten.

## Keywords

Ecological literacy  
Forest kindergarten  
Interdisciplinary competencies  
Social skills  
Waldkindergarten

All learning by every species stems from an engagement with the natural world and the collaboration and conflict this requires to meet its challenges and realise its promises. David Orr (1992, p. 183) noted how strange it is that education has become an essentially “passive, indoor activity occurring between the ages of six and twenty-one”. The forest kindergartens (Waldkindergartens) we are now seeing in many countries<sup>1</sup> are an attempt to “provide children with the opportunity for unstructured outdoor play, to gain experiences in nature, and to develop a sense of their own capacity and competence” (Severson, 2015, p. 1). Deborah Bailey has taught in the forest kindergarten in Sihlwald—a vast, protected natural forest on the edge of Zürich—for seven years. The kindergarten is twenty years old; it is not private and is linked to the local public school. It offers a two-year programme, with a limited intake of twenty-one children aged from four to seven years; it is led by two teachers.

**HM:** Lisa Molomot's documentary inspired me to reach out and ask for this interview. I was so taken with the obvious delight of the children in being outdoors in all weathers, with so much time to run around, play, climb, use hammers and knives, and make fires. I am curious about what kinds of foundational skills you consider they are learning and how you go about developing these skills as a teacher.

**DB:** The foundational skills are awareness, care, and knowledge of nature and environment, social and emotional skills, independence, self-confidence, courage, fine and gross motor skills, music, art, creativity, imagination, drama, and German language skills. The forest environment helps us a lot to develop these skills.

We keep the same hours as indoor kindergartens; it makes it a lot easier for the families if the schedules are the same. We work with the same curriculum as other pre-schools in the Swiss education system; it's called [Lehrplan 21](#), but we

do things very differently as we're outdoors. The curriculum emphasises interdisciplinary competencies, such as personal social and methodological skills, but we have a lot of scope to develop these, so we're able to focus on things that are not really possible in an indoor kindergarten. In the Swiss education system, as in many other European countries, children usually start reading when they go to school, when they're about six or seven. Our emphasis is developing their gross and fine motor skills instead of reading and writing; this leaves a lot of space for different activities where they learn skills as they work with different materials. We do a lot of handicrafts and a lot of "bastling interdisciplinary competencies", which the children love.

**HM:** ...bastling?

**DB:** ...being creative with natural materials—in the forest, this would be with wood, stones, leaves, moss, seeds, nuts, and so on... using hammers, nails, saws, and things. Indoors, the equivalent would be making something with materials you would usually throw away. We try to get the children to be interested with their hearts. This makes them very motivated and enthusiastic.

Right now, I'm teaching about butterflies; it's caterpillar season, so we're watching them all the time to see what they do and how they develop. We have 15 caterpillars in a box and net. You can do a lot of mathematics with butterflies. We teach sorting, counting, even numbers, calculations up to 10 or 20, and symmetry. In every topic, often about animals, we use storytelling, rhymes, poems, and songs. Drama also helps to deeply understand the topic. So, there's plenty of language development, but no reading and writing.

Of course, social and emotional development is a big topic for us in the forest kindergarten. We teach the children how to work together in groups, and we talk about the way they treat each other. We have a circle time every morning and again before they go home. This is where we talk about any conflicts and how we can solve them. We pass a stone or a stick around, and they all tell us what they liked best or did not like that morning and why. If there is a fight, if someone was scared or didn't get help when they needed it, they share this with the class, and we look for solutions as a group.

**HM:** Do you see the children learning how to share what they feel openly, and that it's normal and natural to disagree? Is there a noticeable difference from when they started to when they've been with you for a while?

**DB:** Yes, I can definitely see a development. We really develop these skills, and the whole group helps. If there is a child who has difficulty in their social interactions, the whole group will help that kid to become part of the group.

Forest kindergarten children are generally regarded as being "socially ahead", and they practice social skills much more than indoor kindergarten kids do. Indoor kindergartens have so many beautiful toys; it seems there is less need for imagination. The children get overwhelmed by materials and all the rules—only two kids are allowed to play in the blocks corner; only two kids are allowed to play in the train area—kids are able to hide away by playing with the toys.

When it's playtime in the forest, there is nothing to hide behind, so they usually have to interact with other kids. For example, in roleplays, they have to use a lot of language. Our kids are independent, they have a lot of self-confidence, and they're courageous and creative because they have so much freedom to explore. They also toughen up, as it is sometimes cold, windy, and wet. Their muscles are strong because we walk about one mile there and one mile back every day.

**HM:** In the film, we see the children using knives and hammers; they climb high trees, swing on high swings, slide down steep slopes; these are all situations that could be dangerous for children.

**DB:** We take a lot of time to carefully introduce all the materials and play areas. They have to know the rules before they can start an action. The older kids, who have already been in the forest for a year, help the new kids to explore. We teachers also watch them in the beginning to find out who might need support for a longer period. Kids instinctively start with new things very carefully and then do a bit more each time. When they're climbing, you see how they climb a little bit higher each day. They don't need a lot of help from the teacher; they encourage each other.

In the 20 years the forest kindergarten has existed, there hasn't been an accident. The worst I can recall ... we have an area where it's steep, and they like to slide down and climb back up. There was a wasp nest they were sliding over. The wasps got really aggravated and started attacking us. Some kids got stung. One kid was allergic, and his face swelled up badly. We have a very good communication setup, with several phone numbers for each child, and we know that there's someone who can be reached at any time to come and collect the child.

The beautiful thing about the forest kindergarten is that children build a real and deep relationship with the environment and all living things. On our daily walks, we see the same animals, the same birds, the same insects, the same farmers, the same plants, and we see them in the four seasons of the year. There was a frog that had been killed by a car on the small road. We carried it into the forest and left it there. Every day, we went to see how it was changing. After a few days, we saw these big beetles with red tails I'd never seen before. We watched how the frog got eaten up. It was so interesting for the children. We also talked about philosophical

questions. Where does the frog go when it's dead? What happens after? Why do these beetles exist?

They don't forget what they learn in the forest. Me too, I will never forget that frog.

They go home and tell their parents. They ask a lot of questions. They're learning so much, so intensively. When they're in nature every day, they develop eyes that see everything, every detail that changes. They'll ask me about a leaf I've never seen. I'll have to go home and learn about it so I can teach about it the next day. It's fantastic, even for me.

**HM:** David Orr speaks about the landscape of the mind—how outdoor landscapes influence our mental landscapes and raise questions about “what”, “how”, and “what next?” He considers one of the most important foundational skills for this ecoliteracy to be a sense of wonder about the natural world. Do you think this “sense of wonder” makes children more curious and less afraid to explore?

**DB:** Yes, absolutely! In the first two or three months, the kids who haven't been out in nature are overwhelmed; some don't know how to play, they don't know what to do, they want a piece of paper, because that's what they know from home. The older kids who have already been in kindergarten for a year help the other kids. We also try to give them the security they need to help them find that connection to the other kids and to what they want to explore. Some kids can take up to three months, but after that, they become forest kids. We have a very structured day (walk to the forest, lesson time, snack time, play time, circle time, and walk back). There is still a lot more time for free play than in an indoor environment.

There are not many conflicts between the children because the trees, the forest, and the outside atmosphere are so peaceful. The children that may have ADHD, or autism, or social problems, tend to calm down and blend into the group. I know that some of these kids would be “misbehaving” in indoor kindergartens. Here, they can build up their self-confidence in their own time. If they need a timeout, there is so much space for them to be quiet and by themselves for a while, if they want that.

**HM:** You spoke about using imagination and making things. Do you specifically try to develop their sense of aesthetics, to see the beauty in an arrangement of stones, flowers, and twigs, or listening to the wind in the trees?

**DB:** Yes, we do! The kids see all the small details, every little tree coming out of the ground, the way it starts, and the symmetry in it. We do lots of art with natural materials. For example, in our circle, every child has their log to sit on; we always make a decoration in the middle, a mandala that reflects the time of the year, or the topic we're talking about.

It's all about aesthetics and meaning and the beautiful ways of being with nature. We also often listen to the sounds in the forest (birds, wind, water). Dwarves and fairies belong to our imaginary family. We let them participate in many activities, and we tell a lot of stories about them. They are very important, as they help build an entrance to nature.

**HM:** For David Orr, aesthetic appreciation is important for developing ecological literacy. His ecoliteracy, though, is about revitalising and broadening our concepts of community and citizenship to embrace a planetwide community of humans and living things, to see the ways in which they are all connected.

**DB:** I agree. The intensive relationship with the forest does not only affect the kids but also their whole families. The parents send each of their kids to us, so sometimes we get to know a family over 6 years. The parents sometimes get very attached, and we are well-known in the whole area. The forest experience stays in their memory as something special and positive; it's sure to affect their whole lives.

#### Endnote


1. For a short history of forest kindergartens, see: Forest School Foundation. (2020, October 9). A brief history of forest schools around the world.

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# Bayanihan in Early Childhood Education: Communities Supporting Foundational Learning in the Philippines

 Katrina Grace C. Reyes, Basic Education Teacher, Philippines

 kgcreyes93@gmail.com

## Summary

With the Bayanihan spirit at its core, the Department of Education, the Early Childhood Care and Development Council, and civil society stakeholders developed multiple teaching and learning modalities appropriate for the “new normal” for each locality. The intention is to bridge the gaps in education equity and access and to support learners through a sustainable whole-community approach.

## Keywords

Early childhood education  
Foundational learning  
Bayanihan spirit  
Whole-community approach

The worldwide COVID-19 outbreak in 2020 changed the education landscape in the Philippines. The Department of Education (DepEd) and the Early Childhood Care and Development (ECCD) Council, in collaboration with private sector partners, implemented viable, varied teaching and learning modalities. These modalities included the use of modules, online platforms, mobile phone, audio/radio, video/television, limited on-site sessions, and home visitations. The aim was to respond to the specific demands in local contexts and to narrow education equity and access gaps for learners with diverse needs.

Even before the pandemic, the learning outcomes in schools were not satisfactory. This situation worsened with the school closures from March 2020 due to quarantine restrictions implemented across most of the Philippines until the last quarter of 2021. According to a 2019 survey conducted by the Philippine Statistics Authority, the basic literacy rate of individuals aged 5 to 9 is 49.7%, while the functional literacy rate of individuals aged 10 to 14 is 86% (PSA, 2019).<sup>1</sup> Despite the challenges posed by the pandemic, numerous programs, activities, and support services aimed at improving foundational learning were launched and implemented.

*Bayanihan*,<sup>2</sup> the Tagalog word for the Filipino spirit of unity and cooperation to reach a particular goal, is at the core of government policies and programs. This emphasis on enhancing partnerships between the home and school, as well as fostering community involvement, is evident in the implementation plans for both the national early learning curriculum catering to 0–4-year-olds and the basic education learning continuity plan spanning kindergarten to Grade 12. The ECCD Council responded to the emergency need for remote learning by developing a specific model for a home-based ECCD Program in which parents, caregivers, guardians, and other members of the family are supported to implement and engage in developmentally appropriate experiences in the confines of their own homes.

In 2008, the Department of Social Welfare and Development (which governs the ECCD Council) issued an administrative order, emphasizing a curriculum that considers the interests

and socio-cultural background of the children. The curriculum promotes gross-motor activities for small and large muscle development, targets children's social skills through receptive and expressive language, and incorporates Indigenous resources such as folk literature, music, traditional games, and cultural events. Caregiver-assisted activities introduce self-help skills such as proper hand washing, toilet training, and visits to health centers. Additionally, concepts such as health, nutrition, sanitation, environment, gender equality, and moral values are integrated into the curriculum.

To nurture their creative side, the children are encouraged to use art materials and drawing tools, play musical instruments, and listen to music. Developmentally appropriate puzzles, play boards, storybooks, picture books, and toys provided by ECCD service providers help children understand their communities. These materials serve a dual purpose, helping children build foundational skills while nurturing their Filipino identity. They encompass diverse activities that promote values such as love for God, the country, oneself, and respect for elders, parents, and the environment.

One of the videos produced by the ECCD Council explains how child development teachers coach parents and primary caregivers to offer developmentally appropriate learning activities at home. Parents are guided in understanding the developmental stages of birth to 6-year-olds, their responsibilities towards them, supporting their health and nutrition, administering first aid, providing basic life support, and recognizing signs of child abuse. Additionally, parents are guided on the use of the ECCD checklist and other assessment tools, as well as provide stimulating activities for their children using toys, songs, poems, storytelling, and games—all designed to develop pre-literacy and pre-numeracy skills. Significantly, parents receive information on how to detect early signs of disability, enabling early supportive interventions. Whenever feasible, parents are provided with support in their local communities. The child development worker adjusts the schedule to hold monthly or bi-monthly meetings, ensuring that parents can effectively implement these activities in their own homes.

The social media account of the ECCD Council includes a number of online webinars and videos, such as *Radyo Bulilit*<sup>3</sup> and *Kwentuhang Bulilit*.<sup>4</sup> These aim to help parents and primary caregivers support children as they attain developmental milestones in cognitive skills, expressive language, fine and gross motor skills, receptive language skills, self-help skills, and socio-emotional skills (ECCD Council, October 2021). Children who experience secure and stimulating home environments with consistent, high-quality cognitive stimulation and emotional support demonstrate significantly better language and math competencies and fewer behavior problems when they enter school. The value of culturally-appropriate learning for foundational skills

acquisition is conveyed through playful family activities such as *Awiting Pambata* (children's songs) and pre-writing skills using play dough, while children learn the names and sounds of the letters of the alphabet in English, Filipino, or their mother tongue (ECCD Council, September 2021).

Determined to cultivate the Bayanihan spirit despite the COVID-19 pandemic, the ECCD Council also engaged a range of partners to promote access to safe play and resources. In September 2021, the Partners Dialog on Promoting Quality Early Childhood Care and Development was convened to enhance inter-sectoral partnerships with stakeholders and implement joint ECCD initiatives. These initiatives can serve as models for other NGOs and business groups, encouraging them to collaborate on projects and programs that benefit children aged 0 to 4 years in the country.

This whole-community approach enabled the ECCD Council to respond more actively to the challenges and further improve early childhood care and development in the country. One of the webinars aired in the Early Years Fair 2021, "*Sa Bawat Barangay<sup>5</sup>, ang Paglalaro ay Ligtas at Suportado*", explains to local counterparts how the entire community, at *barangay* level,<sup>6</sup> can support and protect children's rights to play. It also highlights the importance of safe play resources and spaces within the *barangay*.

In their response to the COVID-19 pandemic, DepEd allowed public and private basic education teachers to implement a condensed curriculum—the Most Essential Learning Competencies (MELCs).<sup>7</sup> These are considered the prerequisite knowledge and skills needed to ensure essential and lasting learning competencies. The kindergarten guide, for instance, identifies seven developmental domains: socio-emotional development, values development, physical health and motor development, aesthetic and creative development, mathematics, understanding of the physical and natural environment, and language, literacy, and communication. MELCs are reinforced through the use of drills, oral repetition, songs, and other play-based activities to help learners better acquire the necessary competencies. If there is time, the teacher focuses on specific learning competencies and add other activities to address specific learner needs.

The recent [2020-2021 Philippines Remote Learning Study](#) includes video recordings by teachers that could be made available to home-learning partners to support the learning of primary grade level students. This was particularly useful for letter sounds and syllables taught using the Marungko method.<sup>8</sup> Oral fluency was practiced during both online and offline classes—in which teachers listened to children read; reading fluency was practiced through question-and-answer methods, offering opportunities for children to talk about what



they had read. The schools also adapted DepEd materials, modified them, and translated them into other regional languages for the Mother Tongue curriculum. Focus on reading practice was still implemented on Fridays with DEAR (Drop Everything and Read)<sup>9</sup>—a break from working on modules and cultivating self-regulated reading practice in English and Filipino. Students are expected to stop any of their academic activities to get a book and read it during DEAR time.

DepEd TV is an online channel that students can listen to and watch. Teachers monitor and assess children’s progress through direct assessment via phone, group chat, or by exchanging video and audio recordings. They also provide direct feedback on any work submitted, and parents are able to monitor their children’s daily tasks and module completion using an assessment checklist. In some cases, reading assessments are conducted during home visits to identify learning gaps.

Literacy and numeracy skills were targeted through games and onsite virtual storytelling sessions through school campaigns such as *Brigada Eskwela*,<sup>10</sup> *Oplan Balik Eskwela*<sup>11</sup> (DepEd, 2020), and National Literacy Month. Partnerships with non-government organizations to help equip teachers with knowledge on how to support children develop their foundational learning skills and to facilitate remediation and intervention programs are still continuing—continuing to demonstrate a collaborative approach.

#### Endnotes

1. For a detailed explanation on how to determine basic and functional literacy, refer to Technical Notes on 2019 FLEMMS at [https://psa.gov.ph/sites/default/files/attachments/hsd/pressrelease/TECHNICAL-NOTES-FLEMMS-2019\\_approved\\_1.pdf](https://psa.gov.ph/sites/default/files/attachments/hsd/pressrelease/TECHNICAL-NOTES-FLEMMS-2019_approved_1.pdf)
2. For a fuller explanation of Bayanihan, see: <https://themixedculture.com/2013/09/25/filipinos-bayanihan/>
3. Radyo Bulilit, the ECCD radio program in the Philippines.
4. Kwentuhang Bulilit, an online program that aims to help service providers and stakeholders have a deeper understanding of Early Childhood Care and Development (ECCD) in the Philippines.
5. For a fuller explanation of Barangay, see: <https://www.britannica.com/topic/barangay>
6. A barangay is a small territorial and administrative district forming the most local level of government.
7. MELCs stands for Most Essential Learning Competencies. For further reading, see: <https://authdocs.deped.gov.ph/wp-content/uploads/2020/06/BE-LCP-Annex-C-1-FINAL-MELC-GUIDELINES.pdf>
8. Marungko is a strategy for teaching reading that introduce letters in the Filipino alphabet based on the sound of the letters.
9. DEAR – stands for ‘drop everything and read’, which is a designated time to stop any task and start reading
10. Brigada Eskwela – is the nationwide campaign in public schools before the opening of classes for all stakeholders to engage and invest time, efforts and resources to ensure that the schools are well-maintained and ready for another school year.
11. Oplan Balik Eskwela, part of the BE-LCP of the Department of Education to ensure that learners know of the different learning opportunities despite the health crisis.

In spite of the collaboration and well-conceived initiatives and programs of the government in partnership with the private sectors, huge deficits in literacy and inadequacies of access to quality education across the country are still evident. Moving forward into the post-COVID years, with an increasing number of schools transitioning to face-to-face classes, the challenge of maintaining the Bayanihan spirit persists. This challenge lies in bridging the education gaps caused by the pandemic and in achieving sustainable development goals driven by a passion for education and the well-being of Filipino children.

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# Towards Two Literate Nations: An Overview of Two Foundational Learning Programmes in India and Pakistan

 **Kusha Anand**, Lecturer, UCL Institute of Education, UK

 k.anand.14@ucl.ac.uk

 **Laraib Niaz**, Postdoctoral Research Associate, Faculty of Education, University of Cambridge, UK

 ln369@cam.ac.uk

## Summary

Mission Buniyaad and Closing the Gap are supplementary programmes that tackle educational disparities in Delhi and Sindh. This article explores the pedagogical and assessment practices intended to tackle educational disparities by strengthening foundational skills. Curriculum challenges necessitate school context-specific programme design, and incorporating teacher feedback is crucial for the scalability and sustainability of these transformative initiatives.

## Keywords

Closing the gap  
Foundational learning  
India  
Pakistan  
Supplementary programmes

## The Need for Foundational Learning Programmes

Conceived through a fractured past over religious grounds in 1947, postcolonial India and Pakistan each undertook a fashioning of distinct national consciousnesses through their education systems (Lall, 2008). India's National Education Policy 2020 declares an urgent "national mission" to ensure that all children attain foundational literacy and numeracy, proposing a time-bound campaign with a clear 2025 deadline to address the challenges in developing foundational skills. The policy calls for an approach that shifts the focus away from strict adherence to national syllabi to achieve this mission: it mandates schools to define their own learning goals, develop innovative pedagogies, design assessments, and reach beyond teachers to involve communities (Anand & Lall, 2022).

Specific references to foundational learning are absent from Pakistan's 2017 National Education Policy; however, it mentions the importance of early childhood education and literacy programmes, non-formal basic education programmes, alternate learning pathways, and open and distance learning for the younger population (16 to 25 years). Larger industries are encouraged to sponsor literacy programmes for their labour forces and for adjacent communities where literacy levels are low. As in India, Pakistan's policy also encourages communities to help achieve its mission of reaching out-of-school youth and children (NEP, 2017).

In India, a key reform idea of the Delhi Chief Minister is to support "weaker" students in government schools, primarily those of inner-migrant families who come to Delhi to find work (Anand and Lall, 2022). Mission Buniyaad was launched as a three-month summer campaign in April 2018. Students were allocated to different groups based on their abilities in order to "catch up" with the better-performing students. The programme was relaunched in 2021 to compensate for learning losses caused by COVID-related school closures (Anand & Lall, 2022). In Pakistan, the Agency for Technical Cooperation and

Development (ACTED) launched its Closing the Gap project to help overcome the multiple barriers to education for girls: financial barriers, the lack of qualified female teachers, fears for girls' safety, and the social acceptance of schooling for girls. The programme specifically targets out-of-school girls aged 10–19 years in Sindh and the Federally Administered Tribal Areas (FATA) – two areas in Pakistan with the lowest learning outcomes for girls and women and where they restrictive social norms (Girls' Education Challenge, 2021).

Education policies and policymakers tend to favour teaching foundational skills in a narrow way (Anand & Lall, 2022; Harmey & Kabuto, 2023). This significantly influences “what” foundational skills are taught and “how” they are taught. We address this in the sections below.

### Is Accelerating Foundational Numeracy or Literacy Restrictive or Liberative?

Mission Buniyaad focuses on basic literacy and numeracy skills. The intention is to reduce dropout rates and help students cope better in higher classes. The post-intervention National Assessment Survey (NAS) reported a 20 percent increase in the number of students (classes III–V) who were able to solve arithmetic division problems. Additionally, there was a 15 percent increase in the number of children in classes VI to IX who could read an “advanced story” in Hindi (India Today, 2019). Regarding literacy acquisition, most teachers use activity-based teaching to teach basic skills, a pedagogical approach encouraged by the government-prescribed Pragati textbook. This textbook acts as a handbook for teachers. Two English language teachers described what this might look like:

*... Imagine there is a ball in my hand, and I'm teaching my students how to introduce [themselves] 'My name is this, and I'm a student of this class' ... the child who is catching, she will say the two sentences [and she throws] it to anyone else. In this way, we involve the students; if all the students in one class are able to say these two sentences, it's a big achievement for me. (Source: OR.3 08/2020. Author's interview – Online)*

*I teach them the sound A, and the shape of A, then I ... show them so many shapes ... just like you are teaching a nursery class student. (Source: KK.2, 08/2020. Author's interview – Online)*

Another teacher shared an instance that led her to think that the peer learning approach encouraged by trainers could be inappropriate for certain learners of lower socioeconomic status in her school:

*... if students are divided into groups, then peer learning works best ... I remember an incident where ... a girl ... [who was] 'academically zero' didn't participate in peer learning*

*tasks. The Hindi teacher said she is a very good child ... the science teacher said she does not know anything ... the maths teacher said she is a headache. (Source: SK.3, 08/2020. Author's interview – Online)*

When challenged that her rating the girl as “academically zero” possibly reflected her own unconscious bias, she offered that the issue turned out to be about language. She and the other teachers agreed to use more Hindi in communicating with the girl, and her performance subsequently improved. Delhi teachers use multiple-choice examinations to assess knowledge, and they are required to follow the AAP party's curriculum mandates and assessment practices. Most teachers regarded the programme to be “restrictive” and pointed out that it also requires “a lot of paperwork”. In addition, they receive very little training; when they do it is by mentor trainer teachers who are unfamiliar with local school contextual settings, such as the ‘background’ of students.

In Pakistan, the Closing the Gap project has provided supplementary foundational literacy and numeracy skills to more than 5,000 girls in the Sindh and FATA regions. The project employed a learner-centred approach that incorporated peer-to-peer learning and created supportive learning environments. The end-line evaluation of the project highlighted an increase in the girls' ability to read and write in both English and in the regional language (GLOW Consultants, 2021). The evaluation also suggests that significant progress was made in promoting gender equality through the positive changes in parental and community attitudes related to the right to education of children and girls.

Teachers emphasised how certain pedagogical changes—such as using drawings, frequent quizzes, and group activities—helped the students: “The students gained a lot and learnt quicker in the group work exercises when compared to individual work tasks” (GLOW Consultants, 2021, p. 34). The teachers also mentioned that they were able to increase student participation through critical questioning and that techniques such as pairing fast learners with slow learners helped create a more inclusive environment in the classrooms. The following quote reflects an awareness of the perils of negative reinforcement:

*Shouting or beating should never be used to discipline children, as it is inhumane. Many other strategies can be used to maintain classroom discipline, such as rewards ... engaging students in discussions and making the teaching interesting [using things like] 5-10-minute icebreaker exercises at the beginning of the class to increase the energy of the students (FGD, Learning Space Teacher, Closing the Gap Endline Evaluation, 2021, p. 34).*

Prior research in Pakistan elaborates on how pedagogical techniques focus predominantly on rote textbook memorisation with little input from teachers (ASER, 2020). Public schools in Pakistan have also been criticised for the

use of corporal punishment; the learner-centred approach emphasised by Closing the Gap describes an important alternative approach.

### Which Foundational Competencies Do These Programmes Develop?

In Delhi, teachers are encouraged to develop students' social and emotional skills, such as self-awareness, through group discussions, debates, and project-based learning. Teachers perceive that these pedagogical approaches improve the emotional well-being of children. For instance, a teacher used the Mission Buniyaad programme to teach attention to detail, financial literacy, and ethical as well as legal awareness by teaching a girl to write her name to help her build the confidence to open a bank account.

*... she told me, "I don't know how to write my name". For two days, I taught her how to write her name. ... She is also an irregular [attending] child. I motivated her [to attend class regularly]. She was very happy when her bank account opened. I made the class clap for her. (Source: DW.6, 08/2020. Author's interview – Online)*

Overall, teachers shared that they were unable to develop foundational competencies while running the programme due to time constraints.

In Pakistan, the curriculum is designed to promote gender equality and social inclusion by creating an awareness of the importance of education and empowering girls to become agents of change in their communities. The endline evaluation report shows an increase in life-skill outcomes for girls in domains such as managing emotions, decision-making, problem-solving, health and hygiene, awareness of rights, child protection and safeguarding, inclusion, financial literacy, the quality of relationships, communication, and confidence:

*... after receiving the life skills lessons, we are now more confident and able to communicate easily with our teachers. We no longer feel shy to ask questions from our teachers and parents. (FGD, Learners, Closing the Gap Endline Evaluation, 2021, p. 36)*

Additionally, the endline evaluation reports increased enthusiasm among students helped by the use of learning aids; this was reflected in the increased classroom participation:

*Before the project, we were completely blind to the English language. Most of us faced difficulties reading a single word in English. Now we know the names of many things in English, such as fruits, vegetables, animals, and other things present in our homes. (FGD, Learners, Closing the Gap Endline Evaluation, 2021. p. 22)*

### How May These Programmes Be Strengthened?

As discussed above, in both research sites, supplementary programmes are based on a broad set of foundational skills and competencies. This influences teacher agency and what and how is taught, as well as what is assessed. The authors believe that promoting a systems-wide adoption of Harmeý and Kabuto's (2023) '[teaching-free literacy approach](#)' for developing foundational skills and competencies in India and Pakistan could reduce educational disparities. The teaching-free approach was developed for teaching teenagers in the UK. The essential idea, however, is that the teacher's job is not so much about teaching but rather guiding the student as they discover for themselves how spoken and written language are connected. A more school context-specific and child-centred approach is necessary for developing an ethos of mutual respect and a sense of belonging – particularly for under-served children. Safe spaces are needed for students to exercise agency, prepare for higher education and the world of work, and, most importantly, immeasurably enrich their lives.

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# The Maria Venâncio Indigenous School of the Tremembé of Almofala: Intercultural Basic Education and the Fight for Indigenous Land

 **Rita Potyguara**, Indigenous Potyguara of Ceará, Federal University of Rio Grande do Norte. Director of the Latin American Faculty of Social Sciences – Flacso, Brazil

 ritagomes@flacso.org.br

 **Renata Montechiare**, Federal University of Rio de Janeiro, Researcher at the Latin American Faculty of Social Sciences – Flacso, Brazil

 renatamontechiare@flacso.org.br

## Summary

The Maria Venâncio Indigenous School offers contextualised education to children in northeastern Brazil. The Tremembé people developed an intercultural curriculum that offers basic skills through combining academic and ethnic-community knowledge. The school recovers orality and the Indigenous language at school, mixing the teaching of Portuguese, mathematics, and science with songs, dances, and Indigenous medicine, among other outcomes.

## Keywords

Basic education  
Indigenous curriculum  
Indigenous education  
Indigenous land  
Tremembé

## The Tremembé School and its Link with the Territory

At the Maria Venâncio Indigenous School, the curriculum is oriented towards strengthening the Tremembé identity and their struggle for the land (Nascimento, 2020).<sup>1</sup> In Nascimento's words, they seek to consolidate a school that "does not change our face, our way of being". A school that exclusively teaches an academic curriculum is of no interest to the Tremembé. It makes no sense for their culture, their horizons, and their collective decisions. The school needs to reflect the precious aspects of their way of life, such as the *Torém*,<sup>2</sup> their instruments, music, and dances; traditional medicine and plant knowledge of their Indigenous spirituality; and their management of boats, fishing, coast, and forest.

The Almofala people historically inhabit the Almofala beach region, part of the municipality of Itarema, in the state of Ceará. The Indigenous families of this region originated from the Tremembé who occupy the state's coastal strip, and the Tremembé from Barra do Mundaú, from Córrego do João Pereira and Queimadas (Inventário Sócio Ambiental, 2017, p. 12). The Tremembé de Almofala inhabits 15 villages spread over a territory of around 5,000 hectares in the coastal area; they consider themselves fisherfolk and cultivators of the land.

The struggle of the Tremembé de Almofala people for the demarcation of their Indigenous land began with the agrarian conflicts of the 1970s. Their lands were bought by a large coconut monoculture company, Ducoco Agrícola SA.<sup>3</sup> After a protracted conflict, the right of the Tremembé de Almofala to the land was recognised by the National Indian Foundation in 1993—the official indigenist body of the Brazilian state.<sup>4</sup> However, official approval remains inconclusive, and a series of legal disputes have



been filed by the company. Currently, the Tremembé Indigenous people live within the fences of the coconut plantation areas, which reduces mobility between villages. Further, the soil has become arid due to the monoculture, and food security is also threatened by industrial fishing in the coastal region, which has resulted in dwindling availability of fish and lobsters, which were once common on Ceará's beaches.

Family farming, particularly the cultivation of cassava, is a staple of the Tremembé diet, and cassava flour continues to be produced in the traditional artisanal and collective way in the villages, as is the fermented ceremonial drink, the mocooró, which is made from cashews. During the ritual Torém, the ritual dance of the Tremembé, mocooró is served accompanied by songs, mixing Indigenous language with Portuguese, that describe the local culture.

The Tremembé have preserved the ecological balance in the region for generations; however, predatory commercial fishing has limited the supply of food for the coastal Indigenous population, and the mangrove areas are now used to make up for the shortage. The mangrove is a delicate coastal transitional ecosystem between terrestrial and marine areas. It is home to a rich biodiversity that includes fish, crustaceans, and molluscs and is a natural nursery for both plant and animal species. Its preservation has become the permanent task of Indigenous populations and coastal extractivists in Brazil, such as the Tremembé.

Their tenure in this territory is subject to threats and legal disputes. For this reason, valuing and reproducing their culture across generations is a central consideration in the collective decisions of the Tremembé traditional council, the CITA,<sup>5</sup> which is made up of the *cacique*,<sup>6</sup> the *pajé*,<sup>7</sup> teachers, and other community leaders. The Maria Venâncio School, which was founded in 1991 in the midst of land disputes, is a central strategy for protecting and disseminating the Tremembé culture.

### **Intercultural Education and the Curriculum at the Tremembé School**

In Brazilian Indigenous schools for Amerindian peoples, the school curriculum must express the principles of the people who conceive it. Unlike traditional schools that provide an essentially academic curriculum, the Tremembé curriculum includes Indigenous knowledge and values, aiming for the whole-child development as understood by the local cultural context.<sup>8</sup> For the Tremembé, it is not enough to know mathematics but not know the pattern or the way of braiding a fishing net. Nor is it enough to study a supposedly universal science that ignores the properties of the plants used in traditional Tremembé medicine. Thus, the school expands the traditional space of the classroom to encompass the territory in which the community lives. This enables a bodily experience of learning when following the school curriculum.

The Federal Constitution of Brazil guarantees Indigenous peoples the right to a differentiated and contextualised education;<sup>9</sup> this means that the community can make its own choices about what the school teaches. They also have the right to offer education in their mother tongue and not in Portuguese. The proposal for interculturality in education rests on the insight that competencies and knowledge learned within a local Indigenous community should be combined with “external” competencies and knowledge, the so-called universal basic competences for education: “Indigenous knowledge and practices must anchor access to other knowledge, in order to value each Indigenous people’s own ways of knowing, investigating, and systematising, valuing the orality and Indigenous history” (*Ministério da Educação*, 2012, p. 4). As the curriculum recognises the indigeneity of Tremembé students and the school as an extension of the community, there are very low school dropout rates among the Tremembé of Almofala.

Knowing and respecting the Tremembé culture, in accordance with CITA guidelines, means teaching local history at school. In basic education, children between 6 and 14 years old learn how long their ancestors have lived in this land, and they learn to value their past, the memory of their elders, even as they learn to see new futures for their people. However, the traditional curriculum of Brazilian urban schools is also part of the aspirations of their people. The elementary and secondary education curricula at the school are organised by merging these two universes of knowledge. Portuguese language and mathematics are offered as well as Tremembé art and body expression classes; geography and physical education take place in parallel with the Tremembé knowledge of the sky, land, and sea.

Children first need to recognise at school what they experience in their community: values, practices, and customs and ways of naming and measuring. Only after this do conventional basic skills, disciplines, and class content start to make sense and learning become intercultural. The use of native language is a further example of the fusion of ethnic knowledge and *do mundo dos brancos*:<sup>10</sup> they go through a process of revitalising their language, which is no longer commonly used but is used mostly in songs and in expressions used by the elderly. Amerindian pedagogies are anchored on the premise that when children arrive at school, their previously acquired knowledge gained in their community environment is recognised. Validating this knowledge facilitates learning and improves the school environment, as the children’s estrangement to new content is softened by community cultural references.

Building a curriculum suited to the reality and aspirations of the Tremembé people of Almofala required a lot of internal dialogue and external articulation. The need to reconcile the wishes and



expectations of family members, students, and teachers was arduous enough on its own terms, doing so in line with the requirements of municipal and state education departments and with community and religious leaders brought even more complexity to the challenge. The contribution of university professors setting up a process that ensured that different points of view were heard proved decisive in constructing a curriculum that was acceptable to everyone.

*... the school is giving exactly the focus of knowledge, of the culture of the Tremembé people starting from the youth and the children. What he can, he cannot, what he must preserve, what he must not. This is the fundamental role of the Tremembé Indigenous school. The fact that the school is different, the step is this (...) to make this child produce culture so that later on he can say: I am a Tremembé, I am a Brazilian citizen, I learned the culture of my people. Chief João Venâncio. (Birth, 2020)*

### School and Community Challenges

The curriculum is a central instrument in the pedagogical construction of the school; but alone, it is unable to guarantee the future the Tremembé de Almofala wants. What the people need is as much political as it is pedagogical; without this, they would not have been able to formalise their teaching strategy. Other action fronts are necessary to present new demands to the state: these include the continuing education of teachers, the development of teaching materials for Tremembé culture and language, and a systemic review of the school's pedagogical project through which school management guides the work.

The Tremembé recognise that the school faces many problems in retaining its original purpose. In Ceará, the Indigenous teacher category is not recognised, as certain legalities need to be in place in the state's education law. In Ceará, there is no special public test for Indigenous teachers, so they are hired for short periods of time, possibly four months, after which time they must be rehired. Often, non-Indigenous teachers are hired as substitutes. This situation limits students' access to teachers of their own ethnicity, hinders the fulfilment of the Tremembé calendar (see below), compromises the holistic education experience of the students, and holds back the professionalisation of Indigenous teachers. Another challenge is the Brazilian National Teaching Evaluation System, which is guided and organised around an urban school model that focuses on a universal and generic person. This effectively disregards the specificity of and the rights to differentiated education of Indigenous peoples. It also shows a lack of support from the state to offer secondary education to Brazilian Indigenous peoples.

The mobilisation for the elaboration of the curriculum also brought innovative ideas to the Tremembé villages meeting needs beyond the bounds of the school. The modular offer in secondary education and the alternation pedagogy,<sup>11</sup> for example, make it possible for young people to continue their studies without giving up work apprenticeships in the village. Taking the Tremembé calendar into account is fundamental for organising the school's operations, since the times for planting, harvesting, fishing, festivals, and celebrations allocate different roles and responsibilities to each member of the community. A school embedded in a local culture must respect its ways of life and negotiate the most appropriate ways to provide mutual support and development.

These considerations are central, as Indigenous education is to support the holistic development of the child, for holistic education. Tremembé Indigenous pedagogy is not confined to the school space—the classes deal with topics ranging from science to traditional Tremembé medicine, as learning places cannot be restricted to the classroom. Learning for the Tremembé means participating in community times and spaces, ritual contacts with the sacred, local political assemblies and demonstrations, the *roça*<sup>12</sup> and the sea. In these times, students, families, teachers, community members, and Indigenous leaders are present. Responsibility for educating is redistributed to involve the participation of the whole community, not just teachers.

In the past, many family and community members of the Tremembé people of Almofala felt compelled to abdicate from their Indigenous identity by the stigma imposed by surrounding society. Now, they are living their culture and anxiously following the recognition of their land. The Tremembé from Córrego João Pereira had their land approved in 2011, and, recently, in 2023, the Tremembé from Barra do Mundaú achieved land title regularisation. Thus, the Tremembé believe that teachers need to participate in the political organisation of the community and that it is essential to build an Indigenous pedagogy that furthers the struggle for the land and validates the lives they live communally in their villages. The Maria Venâncio Indigenous School, its curriculum, and its pedagogical project are part of a wider Tremembé strategy towards autonomy and self-determination.

## Endnotes

1. The research on the Tremembé school is part of a broader work to identify pedagogical practices in Indigenous, Quilombola, rural and border schools in the north and northeast regions of Brazil. Quilombola is an Afro-Brazilian resident of Quilombola settlements first established by escaped slaves in Brazil. See: <http://praticaseducativas.org.br/> Accessed on: 09 Jun. 2023.
2. Torém is the name given to the sacred ritual dance of the Tremembé.
3. For a more detailed account see a brief extract from: Menton & Le Billon, (2021), retrieved from [https://books.google.de/books?id=j-QsEAAAQBAJ&pg=PT107&lpg=PT107&dq=large+coconut+monoculture+company+almofala+ceara&source=bl&ots=DpuslW9vpj&sig=ACfU3U0s9sk-H4GNJLlmxuZpCLZmSDOanw&hl=en&sa=X&ved=2ahUKEwi19ISHocf\\_AhXltKQKHbsVDJEQ6AF6BAgaEAM#v=onepage&q&f=false](https://books.google.de/books?id=j-QsEAAAQBAJ&pg=PT107&lpg=PT107&dq=large+coconut+monoculture+company+almofala+ceara&source=bl&ots=DpuslW9vpj&sig=ACfU3U0s9sk-H4GNJLlmxuZpCLZmSDOanw&hl=en&sa=X&ved=2ahUKEwi19ISHocf_AhXltKQKHbsVDJEQ6AF6BAgaEAM#v=onepage&q&f=false)
4. The Brazilian National Indian Foundation (Funai) is the government agency responsible for assessing and issuing an opinion on Indigenous lands as a first step in the process of regularizing land. Retrieved from <https://www.jfce.jus.br/noticias/noticias/3604-justica-federal-reconhece-legitimidade-de-demarcacao-indigena-em-itarema-ce>
5. The Tremembé Indigenous Council of Almofala - Conselho Indígena Tremembé de Almofala (CITA)
6. The chief, or traditional leader of a Tremembé community
7. The spiritual leader of a Tremembé community
8. In Brazil whole child development is referred to as *educação integral*.
9. Federal Constitution of 1988, article 210, paragraph 2. Retrieved from <https://www.jusbrasil.com.br/topicos/10649501/artigo-210-da-constituicao-federal-de-1988>
10. “From the white world” – an expression referring to non-Indigenous people.
11. Applied pedagogy in Brazilian rural schools where teaching is offered in alternating periods between living at school and living with the family. Organizing the calendar and the pedagogical proposal in this way allows the permanence of farmers, Indigenous and Quilombola students from rural areas and guarantees their professional qualification, promoting greater participation of young people in family decisions.
12. The Roça is a small family plantation, where the family may grow cassava, corn, vegetables etc.

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## Part 5

# Pre-thinking Futures

Given that the term foundational learning is the new kid on the education-policy block, it has a relatively recent past, a range of teenage identity issues to cope with in the present and not too much thought has been given to its particular futures. The articles in this part address key concerns will that inform conversations about foundational learning futures; as always, however, these are likely to be more pertinent to the present than that distant horizon.

Radhika Iyengar's *Learning to be a Conscious Person* and Christina Kwauk's *Climate Action and Climate Justice* deal with environmental disruption and climate warming. Rajib Timalsina and Deviram Acharya suggest ways of strengthening democratic accountability and asserting community-level priorities in national policy conversations in *Transparent Metrics for Trustworthy Results*.<sup>1</sup> Ramya Vivekanandan and Raphaelle Martinez's *Partnerships for Transformation*, as does Timalsina and Acharya's *Transparent Metrics*, scouts different approaches to scale-up and the role of anticipatory governance in planning for foundational learning futures.<sup>2</sup>

Iyengar's powerful personal account of her nascent environmental consciousness as a child in Madhya Pradesh to her working life as an adult in New York leads her to her own understanding that "our independence within wider ecosystems is foundational for all other forms of knowledge." Kwauk develops similar ideas from the lens of student activism and intergenerational and social justice. She calls for greater climate ambition in foundational learning, which, for her, must retain a synthesis of understanding and action.

Working within the mainstream, Vivekanandan and Martinez outline the GPE's whole-system approach in supporting foundational learning - and social and

emotional skills with their country partners. They emphasize the importance of planning for and working at scale, fostering inclusive policy dialogues, and supporting effective leadership at the country level. Timalsina and Acharya's *Transparent Metrics* champions a more incremental, tested strategy for grafting good practice in FLN into how citizen-led education assessments should be restructured in order to advance both democratic accountability and student learning.

Crain Soudien showcases the only paper on numeracy rather than literacy in this entire special issue. His study of theories of change (TOCs) is elaborated in a meta-study of "more successful" math education interventions in South Africa that will resonate for interventions on any subject. Soudien's quest to "find that difference that makes the difference" nevertheless discloses a dichotomy: the more successful the intervention is at achieving its narrow targets, the more likely it is to overlook the main purpose of education, which is to enable individuals and communities to flourish fully in their potential and aspirations. This is the dilemma that resides at the heart of all efforts to improve foundational learning and that is addressed in various ways in each of the contributions to this special issue—a version of Michele Schweisfurth's "classroom time as a zero-sum game"—a conundrum of policy, programs, and planning that, ultimately is resolved only by good pedagogy.

### Endnotes

1. Keri Facer discusses the importance of both climate and democracy her prescient book on learning futures – Facer, K. (2011). *Learning Futures: Education, Technology and Social Change*. Routledge.
2. See Robertson, S. L. (2022). Guardians of the future: International organisations, anticipatory governance and education. *Global Society*, 36(2), 188-205. Retrieved from <https://doi.org/10.1080/13600826.2021.2021151>

# Learning to Be a Conscious Person: Bridging the Gap Between Foundational Learning and SDG 4.7

 Radhika Iyengar, Climate School, Columbia University, US

 iyengar@climate.columbia.edu

## Summary

This is the story of the author's journey in learning to live sustainably in a finite world; this involves learning that every life is part of larger social and bio-diverse ecosystems and that everything has consequences. Foundational learning is about the skills that enable one to become an active and engaged citizen and to learn to live within the planet's natural boundaries.

## Keywords

Bhopal  
Climate justice  
Ecological literacy  
Global citizenship education  
Value-based education

My younger sister and I were in grades four and five when the unthinkable happened. A neighbor woke us up, shouting, "A gas leak, we must escape." "What gas?" Mummy yelled back. "Your cooking gas cylinder?" We soon discovered, in that chilly December night in 1984, that our entire town was covered in a cloud of poisonous gas that had leaked from a local factory. As the scale of the disaster became clearer, we learned thousands of our community members had died; hospitals had no capacity to cope, and many people were still struggling for their lives in their homes. After about two weeks, amid the ensuing tragedy and chaos, the schools reopened. On our way to school, we saw many protests with people holding placards that read, "No more Bhopals" and "We want justice." We wondered fearfully: Is the water we drink contaminated with methyl isocyanate? Are we still breathing poisoned air? Will there be any long-term effects on our health? No one had any answers, and the tragedy etched its marks on us forever.

Fast forward 26 years to 2011. I have completed my PhD at Teachers College, Columbia University, and I am working at the university's Earth Institute. The tragedy is still etched on me. My way of giving back a piece of justice to Bhopal was through my research. A colleague and I examined India's state and national syllabi through a Bhopal-disaster lens. We found scant mention of Bhopal almost 30 years later, despite it being one of the largest industrial disasters on record globally (Iyengar & Bajaj, 2011). Still without justice, retribution, or compensation, the people of Bhopal are expected to forget the unending disaster and move on; the silence of the syllabi speak loudly indeed.

On assignment to India for the Earth Institute a few years later, I led a team from the university's Center for Sustainable Development to help develop a computer-assisted learning program for college-going women who were housed in a residential hostel (ICT Center, 2016). Observing adult learners provided two crucial realizations for my thinking about foundational learning: first, learners make little connection between what they learn in class and what they learn in their daily lives, and second, self-confidence is something that can be taught at any age.

This first realization was triggered by the environmentally harmful activity of burning rubbish in rural Mahbubnagar, where we were stationed at the time. This was considered very natural; multiple pyres of burning plastic lit up every night sky, choking me in the evenings, launching unstoppable bouts of coughing, and still smoldered in the mornings. More alarming than the smog was that no one seemed to mind it. In our discussions on the curriculum for the computer-assisted learning program, everyone agreed pollution was a bad thing, but no one drew any connection with the daily rubbish-burning rituals. I even raised it with a local education official, who patiently explained, “The district has no garbage disposal system, so people burn their trash.” In his “ecological literacy,” David Orr (1992) recalled an insight that the logical question that follows learning to read, write, and count is “What then?” Just as our early analysis of the Indian curriculum *After the Smoke Clears* had shown (Iyengar & Bajaj, 2011), the smoke had not really cleared at all; there were no “what thens” after the Bhopal gas tragedy or the rubbish rituals in rural Mahbubnagar. The ruptures between the curriculum and daily life continued as opaque and poisonous as ever.

My second realization began with a no-less puzzling observation that thankfully involved no coughing: the learners were always silent; no one asked any questions. We speculated that asking questions might be considered rude, but after we had spent more time with the young women, we realized that they were just shy and lacking in self-confidence. They completed their assignments on the computer very rapidly, even though it was the first time for most of them. We decided to integrate social emotional skills, such as self-belief and self-efficacy, into our modules; this encouraged the learners to begin asking questions in class. It confirmed for me that even learning a purely technical skill, such as how to use a computer, can help build a mindful person who has the confidence to explore and discover without hesitation. This resonated with my thoughts on the environmental practices I was still smoldering about: education should not only give us understanding and skills to navigate the world around us, it should give us confidence to make the changes the world needs.

In 2018, I was invited by the Pontifical Academy of Social Sciences at the Vatican to share my ideas on Education for Sustainable Development. I took a deeper look at the Pope’s *Laudato Si’*, which provides a theological perspective on the environment. The encyclical states that caring for the planet is even more critical now than ever. Pope Francis issued a call for “Integral Ecology,” which summons us to live in harmony with all living things. The real purpose of environmental education, he explained, is not simply to teach facts but to teach an “ecological ethics” that leads us to question our practice and ways of making meaning.

After Bhopal, Indian textbooks provided perfunctory information about the tragedy, for example, “Write the name

of the gas that leaked?” The many fill-in-the-blanks and match-the-column activities reveal how we neglect any real learning from the tragedy. The essential stories that connect us to Bhopal found their graves with the gas victims. The Pope’s call for ecological ethics resonates with Arne Naess’s (2005) deep ecology movement, which identifies a willingness to question. Warwick Fox (1990) emphasized empathy as a central idea, as it conveys a non-anthropocentric, more eco-centric relationship with other living things.

COVID-19 locked me down for further reflection, increasing my focus on community care and meditation and highlighting issues of mental health, uncertainty, and environmental damage. The crisis was symbolized for me in the many discarded single-use masks littering the roadsides. I even saw one hanging around a bird’s neck. My hometown, Millburn, New Jersey, received a big blow from tropical storm Ida when it blew into our downtown in 2021 flooding it completely (Iyengar, 2021). When the weather settled, my kids and I, all kitted up with long gloves and boots, went to help clean up the shops. We joined a gentler human flood of mostly mothers and high schoolers going to help shop owners clean up what the deluge had dumped. The violent storm awakened altruism, humanity, and the need to care for one other. Over the next few days, we continued to placate River Rahway, which had so furiously vomited our plastic, garbage, and toxins back at us.

The small harmless-looking canal that runs through Millburn downtown has had a different meaning for all of us since then. We fear its fury. I recall thinking about how we should nurture ideas about caring for one another and the environment in our daily lives rather than waiting for a catastrophe to remind us. My life from Bhopal to the beer cans in the Rahway River has shaped my education philosophy: taking care of one another, climate action, and caring for the environment should be taught in school; they are all part of our foundational learning.

David Orr recognized this connection thirty years ago. For him, ecological literacy is not only knowledge about climate, ecosystems, and the environment; it is the insight that our interdependence within wider ecosystems is foundational for all other forms of knowledge:

*The failure to develop ecological literacy is a sin of omission and of commission. Not only are we failing to teach the basics about the earth and how it works, but we are in fact teaching a large amount of stuff that is simply wrong. By failing to include ecological perspectives in any number of subjects, students are taught that ecology is unimportant for history, politics, economics, society, and so forth. And through television they learn that the Earth is theirs for the taking. (Orr, 1992/2011, p. 251)*



My concern is that education should not only help us understand, it should also help us become active agents for change. Orr (2011) alluded to ecological literacy as consciousness-raising, a way to help us build connections that lead to the prudence and stewardship of the natural world—but also its celebration. For Krasny and Roth (2010), learner knowledge is a precursor to action for climate justice. Orr (2011), however, resisted the idea of treating environmental and climate challenges as a set of solvable problems that require analytic tools and a range of value-neutral, technological remedies. My life showed me that technical fixes do not raise the critical consciousness we need to make change possible. If self-reflection is a first step towards becoming worthy stewards of this planet, foundational learning needs a value-based approach that helps us understand our responsibilities for one another and the world.

I became curious about how this philosophical approach is transmitted through the policy and practice of foundational learning. [Sustainable Development Goal 4.7](#) deals with sustainable development and global citizenship; it affirms responsibility for one's actions and responsible citizenship as important education goals. Surely, this confirms that a narrow human-capital emphasis on learning to read, write, and count and, if you are lucky, learning a productive skill is an inadequate purpose for education. Foundational learning should lay the basis for developing global citizens who think and act responsibly. This cannot be a task for education alone—I am drawn to the ideas of macroeconomists who are proposing de-growth as a viable alternative to relentlessly growing GDP and the many scientists who urge how important it is to live within planetary boundaries (Rockström et al. 2009).

We must act responsibly in these urgent times. The challenges humanity faces are escalating, and inequality is growing [for more than two-thirds of the world's population](#). [The Sixth Assessment Report](#) of the United Nations Intergovernmental Panel on Climate Change warns that the threat is very grave, and our world faces an accelerating rate of devastating floods, hurricanes, droughts, and fires. My daughter, a student in grade 5, will live to see a devastated earth if things remain unchanged. She will have to be ready for more downtown cleanups. Our generation has glimpsed nature at its most magnificent. Nature for my daughter will be about developing coping mechanisms, disaster risk mitigation plans, and building resilience. We have all but destroyed her natural relationship with the earth.

Back in New Jersey, the Historical Society of Millburn celebrated Earth Day by throwing a party for the oldest American Elm in town. She is 200 years old; she saw Washington lead the American War of Independence, and she

saw us arrive in this town as immigrants from India. The old Elm also knows that the [United States is among the top 20 countries](#) worldwide on carbon emissions worldwide; that the rich global north, [especially the United States](#) has had the largest share (24.6%) of planet-warming greenhouse gases that have been released from fossil fuels and industry over the past 170 years. How do the Americans tell the climate perpetrator story in the classrooms? Is it more convenient to ignore it? Across the Atlantic, round the horn of Africa, and across half the Indian Ocean, the new generation in Bhopal schools continues its miseducation on the Bhopal Gas Tragedy; it is still not taught meaningfully in schools (Iyengar & Bajaj, 2011), still not part of the public discussion, still not part of active collective memory—but it is still smoldering. Climate and environmental justice remain strangers in our classrooms because we have been groomed to accept non-controversial lessons that require no difficult explanations. Now, there are more factories in Bhopal city than ever before. The Indian education system continues to ignore that which remains etched in our terrible memories—that crucial moment in the recent past that is still so present—in the same action, it ignores our future.

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# Climate Action and Climate Justice: Foundational Learning in the Climate Crisis

 Christina T. Kwauk, Kwauk and Associates, US

 christina.kwauk@gmail.com

## Summary

This paper challenges the idea that a foundational learning agenda in the midst of a climate crisis can be rooted in anything but learning for climate action and climate justice. It takes a cue from student climate activism to re-evaluate what truly matters when it comes to learning while our “house is on fire.”

## Keywords

Foundational learning  
Climate action  
Climate justice  
Transformative change

In 2018, millions of students around the world skipped school to strike against climate inaction by their governments, calling out the hypocrisy of sitting in classrooms and learning to read, write, and do arithmetic for an uncertain future on a dying planet. In 2019, at just 16 years old, Greta Thunberg spoke at the World Economic Forum in Davos, urging world leaders to act “as if our house is on fire.” Now, in 2023, five years after the first student strikes, young people globally continue to recognize the climate crisis for the existential threat that it is, while the adults in the room continue to ignore a rapidly closing window for action.

Sadly, the adults in the room also include those making decisions about education, stubbornly sticking to a foundational learning agenda, typically for other peoples’ children, that is narrowly defined as achieving literacy and numeracy. Such a definition of learning directs education sector priorities and resources toward short-term interventions that simply cannot move the education system beyond conformative change. In other words, these interventions are tweaks to the existing system that make the system more efficient and effective at doing what it does (i.e., teaching literacy and numeracy). This agenda fails to question whether the education system is the right system to begin with – a system that arguably helped lay the foundations of the climate crisis.

While literacy and numeracy are, of course, necessary for day-to-day functioning, these skills are insufficient on their own to prepare children and youth to thrive on a planet in crisis—from rising sea levels to catastrophic droughts, from extreme storms to deadly heatwaves, from extinction events to heightened conditions for wildfires and flash flooding, as well as food and water insecurity, displacement, conflict, loss, and grief. Learning to read and write as though such events and experiences were irrelevant to, rather than foundational for, learning shortchanges the wellbeing of future generations. It also hamstring society’s ability to achieve the scale of adaptation and the pace of transformative systems change that are required to mitigate further emissions and to transition to a greener and fairer future.

Instead, we should look to the children and youth today who are speaking out against the fossil fuel industry, who are calling out

the hypocrisy between the words and actions of world leaders, who are standing up against environmental injustices committed against Indigenous peoples, who are raising awareness of the impacts of climate change on girls' education, who are starting green enterprises in response to local environmental challenges and unmet community needs, and who are demanding that their schools teach them about climate change. Through their activism, these young people make clear that there is another set of knowledge, skills, and competencies that are foundational to human flourishing in a climate-impacted world. Their example urges us, the adults in the room, to consider how "climate action" and "climate justice" are foundational to learning in a time of climate crisis.

### Climate Action as Foundational Learning

What is foundational learning in a time of climate crisis if not to build among learners, young and old, the consciousness, the competencies, and the capabilities to understand what led us here, what it will take to lead us out, and—perhaps most importantly—to act on this knowledge in empowering and transformative ways? Such foundational learning would include understanding the human activities (i.e., the burning of fossil fuels, deforestation, industrial agriculture) as well as the human follies (e.g., the desire to control others, to extract resources, and to consume lavishly) that allowed (some members of) humanity to catastrophically alter the face of the planet in the span of two centuries, releasing greenhouse gas emissions at a rate not experienced by the planet for several million years. It would also include understanding the interdependence of human wellbeing and the health of the Earth's ecosystems, that human demand for resources cannot exceed Earth's planetary boundaries, and that there are indeed limits to growth.

Altogether, this means that foundational learning in a time of climate crisis is about unlearning what society has come to normalize about concepts of (and behavioral manifestations of) ownership, profit, extraction, and expiration, replacing these with concepts of (and behavioral manifestations of) stewardship, reciprocity, circularity, and regeneration. For very young children, foundational learning in a time of climate crisis is about nurturing that almost innate sense of wonder for all living and non-living things and building tools to spot and ward off a learned desire to conquer, master, or become superior to other living things that can be overpowered. As young people today have demonstrated, it is insufficient to simply "know" these concepts and relationships. Rather, one must also have the confidence, self-efficacy, agency, and opportunities to translate this knowledge into action—into adaptive behaviors and mitigative practices that will positively reshape the trajectory of the Anthropocene. This action must be collective, not just individual, to stimulate deep systemic change.

Using the growth of trees as an analogy, climate action as foundational learning is at first about enabling the seeds of

climate action to sprout and take root in the very early years (e.g., nurturing a toddler's curiosity, awe, and desire to care for the natural world). It then becomes about strengthening these roots and their symbiotic [mycorrhizal networks](#) in primary school through play-based and nature-based learning (e.g., cultivating children's emotional intelligence, their social networks, and their capacity to collaborate). Then it becomes about guiding learners' growth spurts to maturity through project-based, experiential, and service learning in secondary school and beyond (e.g., creating the conditions for adolescents and youth to identify opportunities for action—or resistance). Throughout this growth, teachers play a critical nurturing role.

Depending on the climate context and the age of the learner, climate action as foundational learning might start with building children's skills to share basic information with a caregiver about the interdependent relationship between humans and the more-than-human world, later becoming the ability to stand up for the protection of local biodiversity in the face of ill-advised development in the community. In another context, it might begin with the ability to sort reusable materials from compostable or disposable materials that builds awareness of unsustainable production processes and the unfair burden of waste disposal placed on consumers that makes passing legislation for [extended producer responsibility](#) a "no-brainer." For others, it might begin with the ability to discern local climate hazards, reduce one's own risk of exposure, cope with a range of climate emotions, and empathize with the climate emotions of others. This might later become the ability to observe trends in climate impacts in one's community, to contribute to the development of a community climate adaptation plan, and to communicate effectively the merits of this plan to those with different ideas, experiences, and priorities.

### Climate Justice as Foundational Learning

What is foundational learning in a time of climate crisis if not to equip learners, young and old, with the consciousness and the competencies to transform the underlying values and behaviors that drive the climate crisis? It involves remediating the disproportionate burden of climate impacts experienced by those populations least responsible for climate change, including Indigenous peoples, children, people with disabilities, women, girls, and the poor. Such foundational learning would include understanding that while human activity has caused climate change, only a small portion of humanity is responsible for it. While the majority of the world's poor have experienced the impacts of climate change first and worst, the minority of the world's most affluent continue to profit from the systems driving the crisis. The roots of such an awareness of climate injustice and the subsequent desire to pursue actions that can bring about climate justice are located in children's foundational sense of fairness, equity, and power and can be nurtured alongside the cultivation of their generosity, compassion, and respect for human rights, including bodily autonomy.

In this way, climate justice as foundational learning is a “radical” act of returning our attention to our roots (Gonzalez, 2022)—here, in the sense of the proverbial sandbox, our playground. It is also “transformational” in that within these roots is the potential for the development of competencies and worldviews that enable the emergence of alternative social structures and systems built on equal relations of power and governed by principles of social justice. To arrive at this constitution of competencies and worldviews, and not our present constitution of injustice, is the need for the right environmental conditions—much as the caterpillar requires to transform into a butterfly.

For our youngest learners, these conditions include positively reinforcing the act of listening to one’s “gut reaction,” intuition, or emotional response when something feels unfair or not right—when one’s sister is not allowed to return to school following the floods, when the logging company that cut down the forest on one side of the community comes back for the other side, and when the neighborhood playground is temporarily closed down again because the toxins in the air from the nearby factory have exceeded tolerable levels. For older learners, these conditions include developing language to identify and classify these experiences. Climate justice as foundational learning also means unlearning the beliefs, values, and norms that prop up these systems of gender inequality, environmental racism, and social and economic exclusion, as well as those that suppress Indigenous knowledge. Instead, it means learning that all humans have the right to bodily autonomy and self-determination and, by extension, so do the trees, rivers, animals, and plants on Earth. It means the ability to recognize and rebalance unequal relations of power, to build solidarity and engage in collective action with others, and to enact one’s political agency are foundational not only to the achievement of greater climate justice but also to human flourishing. Such foundational learning not only builds systems of care and compassion toward others but also prepares planetary citizens to tackle a global crisis of planetary scale.

In this context, foundational learning is understanding that the values and behaviors that allow for dominion over land and control of resources are the same values and behaviors that enable the domination and abuse of people. It is understanding that environmental destruction and ecocide are deeply interconnected with power and patriarchy, colonialism, and racism. Such an understanding builds a “feminist planetary consciousness,” an awareness of the interdependence of the collective wellbeing of humanity and the health of Earth’s ecosystems (Kwauk & Casey, 2021). Such a consciousness is foundational in enabling the progression from social justice in the sandbox to eventually climate justice in the negotiation rooms at COP28 (the UN Climate Conference to be held in Dubai in 2023). Such a consciousness is foundational to the world we live in now, because if there is any hope for shared prosperity amid climate change, it rests on dismantling social systems of oppression and the achievement of climate justice.

## Climate Ambition for Foundational Learning

Young people demand that the adults in the room take bolder action on climate change. For those adults at the education table, it is time to define a foundational learning agenda “as if our house is on fire.” This requires a degree of climate ambition for foundational learning that society has not experienced before—a level of ambition that places climate action and climate justice as the bars to which we measure our progress. My colleagues and I have attempted to seed the idea of a “New Green Learning Agenda” (c.f., Kwauk & Casey, 2021, Kwauk et al., 2023a, Kwauk et al., 2023b)—a learning agenda that targets a breadth of green skills for climate action and a feminist planetary consciousness for climate justice, much like that discussed above. Others have called for climate change education mandates, for “greening” the curriculum and teacher training, or for climate action projects in every school. Whatever the policy entry point, foundational learning must function to heal our severed connection to Earth and to each other (Gonzalez, 2022) while preparing present and future generations with skills flexible enough to navigate an uncertain future in a climate-impacted world. There is little time left to be less ambitious.

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# Partnerships for Transformation: How We Progress Towards Foundational Learning for All

 **Ramya Vivekanandan**, Senior Education Specialist / Thematic Lead for Teaching & Learning, GPE Secretariat, US

 [rvivekanandan@globalpartnership.org](mailto:rvivekanandan@globalpartnership.org)

 **Raphaelle Martinez**, Education Policy and Learning Team Lead, GPE Secretariat, France

 [rmartinez3@globalpartnership.org](mailto:rmartinez3@globalpartnership.org)

## Summary

Foundational learning for all, at scale, requires us to work in a spirit of partnership. Countries must define what foundational learning is within their specific contexts and drive their agenda, working towards transformative changes in their education systems. Partners should aim at the common good by acting as honest brokers, contributing diverse perspectives and assets to accompany countries in their unique transformation journeys.

## Keywords

Alignment  
Consensus  
Country-driven  
Partnership  
System transformation

## What is Foundational?

GPE's [current strategy](#) makes the commitment to “help countries achieve improvements in learning along each stage of a child’s education, including early learning, foundational skills such as literacy, numeracy, socio-emotional learning and the wider range of skills necessary to prepare students for the 21st century” (GPE, 2025, p. 15). This perspective on learning, as with all aspects of the strategy, reflects a partnership consensus between our partner countries, donor governments, multilateral agencies, civil society organizations, private partners, and philanthropic foundations.

This commitment offers an expansive notion of learning, one that, in our view, best reflects the diverse needs and ambitions of partner countries. Of course, literacy and numeracy are foundational skills; they provide important building blocks for subsequent learning, and the crucial importance of achieving minimum proficiency in the early years is affirmed by decades of research. This is why countries have committed to developing these competencies throughout the trajectory of the learning journey, including in the crucial first years of schooling.

The [Commitment to Action on Foundational Learning](#), announced at the Transforming Education Summit in 2022, reaffirmed the criticality of foundational learning—defined as “basic literacy, numeracy and transferable skills such as socio-emotional skills” in transforming education systems and addressing (World Bank et al., 2022b). Along with many others, GPE endorses this commitment to action in recognition of its importance.

GPE’s expansive notion includes early childhood education, the benefits of which are supported by longstanding evidence. In countries with high pre-primary education attendance rates, a greater percentage of children reach minimum competencies in reading and math by the end of primary school. These



children are more likely to enter school on time, less likely to drop out or repeat grades, and more likely to complete primary and secondary school (Akyeampong et al., 2023; Heckman, 2011; OECD, 2012). The quality of early learning in pre-primary settings, where children build transferrable socio-emotional skills—the ability to play and work with others, self-confidence, and self-control—thus provides crucial learning blocks that are in themselves foundational for acquiring subsequent literacy, numeracy, and other skills.

With regard to content, the “what” of learning, our view is that literacy, numeracy, and socio-emotional learning (SEL) are all foundational skills, a view glimpsed in the Commitment to Action. Students today need to be able to think critically and creatively, communicate effectively, collaborate with diverse peers, solve complex problems, adopt a global mindset, and engage with information and communications. In 2020, we reviewed a sample of 15 partner countries in Africa and Asia to assess the prominence given to these and other “21st-century skills” in their education sector plans and found that all countries aspire to develop these skills and to improve foundational literacy and numeracy—they do not see these as mutually exclusive. This finding suggests that the ongoing debate about what foundational learning entails is practically irrelevant to country priorities and concerns (GPE, 2020).

A recent synthesis by Porticus and the Jacobs and LEGO Foundations (2023) further challenges the “false dichotomy” between holistic and academic outcomes. Indeed, skills such as critical thinking and collaboration cannot be taught as standalone subjects, as demonstrated in several of the rich examples cited in the report. For example, Speed Schools in Ethiopia—a bridging program for out-of-school children—emphasizes literacy and numeracy instruction along with SEL skills, such as self-efficacy and emotional regulation, an approach that leads to sustained gains after children transition to schools. This is further exemplified in our ongoing dialogue with partner countries on what learning is foundational. They emphasize the importance of skills necessary to engage with current global challenges, such as pandemics, violence, and insecurity, lack of gender equality and climate change, speaking about the magnitude of these challenges in their countries and their conviction that education is a major lever for addressing them.

It is particularly informative to observe how GPE’s current strategy is operationalized by partner countries. Countries develop partnership compacts that articulate their visions for system transformation and reform priorities. We find it very meaningful that consensus can be reached in the context of scarce resources, where everything is seemingly a priority. The endorsed partnership compacts prioritize issues of teaching and learning, and a number of these tend to focus on foundational learning—either explicitly or more generally. Those endorsed as of June 2023 are illustrated in Table 1 below. They reaffirm

our view that operational understandings of foundational learning are broad and reflect different levels of national system readiness, as well as different ambitions and values.

A closer look at the table reveals that Sierra Leone, for example, commits to all students being able to “read fluently with comprehension, acquire fundamental mathematics competencies and develop resilient socio-emotional skills by class 4,” which are deemed foundational for mastering the “5 Cs” central to curriculum framework: comprehension, computational thinking, critical thinking, creativity, and civics. Notably, expanding access to quality pre-primary education—ensuring that “children start primary school ready to learn”—is a central pillar of the compact (MoBSSE & MoTHE, Republic of Sierra Leone, 2022).

Zanzibar focuses on improved foundational skills at the basic education level, which include reading, writing, and arithmetic but also creativity. One intermediate outcome the compact identifies relates to the rollout of Zanzibar’s competence-based curriculum (CBC) at the pre-primary and primary levels. The CBC is application-oriented and activity-based, emphasizing practicality, creativity, and the ability to apply skills in real life. Once again, a broad vision of foundational learning, beyond literacy and numeracy only that includes pre-primary, is evident (MEVT, Zanzibar 2023).

## System transformation for foundational learning

So, how do we advance our efforts to achieve foundational learning for all? [World Bank research](#) reveals that 70 percent of children in low- and middle-income countries are neither able to read with understanding nor demonstrate basic numeracy skills. Although tackling this challenge may seem like a daunting task in GPE partner countries, it is one that can only be tackled through the transformation of education systems.

For some, system transformation may seem too lofty and long-term, but there is a solid body of systems literature that emphasizes how crucial it is for effective foundational learning (Kaffenberger & Spivak, 2022). Such transformation requires country stakeholders to diagnose the underlying causes and interactions that contribute to inadequate learning outcomes and to develop partnerships—between governments, development partners, civil society organizations, teachers’ unions, the private sector and others—to identify and address shared priorities. System transformation requires an alignment of actors, policies, incentives, and capacities. It demands a change mindset at the leadership level—one that is able of monitoring, iterating, and adapting to support reform priorities and maintain direction.

As commonsensical as this approach may seem, it represents a significant departure from “business as usual.” To encourage collaboration and alignment towards a common goal, incentives are necessary. GPE’s approach is to acknowledge the

systemic complexity of competing interests—and the need for coherence and connections between all parts of the system—to achieve the desired results. In concrete terms, GPE supports the strengthening of an environment where system actors are incentivized to transcend their immediate, short-term interests, and we encourage a vision for the whole that is greater than the sum of its parts.

In the context of foundational learning for all, this whole systems approach involves at least three considerations.

### **Working at Scale**

To advance foundational learning, we need to consider scale and sustainability but also, crucially, equity. A systems approach requires strategy and planning to ensure that all children are effectively equipped with foundational skills. This involves the development of significant capacity at the systems level and the utilization of evidence-based practices, such as structured pedagogy, adequate provision of books and materials, teaching at the right level, and professional development for teachers, to reinforce particular skills, including through coaching and communities of practice. However, any investments in programs and processes that support learning outcomes need to be accompanied by policies and investments that facilitate access, inclusion, and retention for all children. As we pointed out earlier, this necessarily includes expanding access to pre-primary education. Equity and inclusion considerations need to be central when working at scale. Experience shows that programs that focus too narrowly on improving foundational skills may ignore existing exclusion issues and even unintentionally worsen them (Holden & Patch, 2017).

The global community needs to hold itself to more rigorous standards to drive more equitable foundational learning outcomes for all. We need to retain a deliberate focus on marginalized groups, including girls, ethnic and linguistic minorities, children with disabilities, and refugees. The research efforts that we undertake in this space should examine not only the technical aspects but also the enabling environment that fosters better foundational learning for all children.

### **Fostering an Inclusive Policy Dialogue**

As important as it is to emphasize technical solutions and evidence-based approaches, we need to take care not to overlook the broader ecosystem in which these solutions operate. The strength of any partnership lies in its ability to bring together diverse voices and perspectives, which enrich the understanding of systemic challenges. It also enables the identification and implementation of solutions that are based on local knowledge and realities, and that incorporate global experience of successful approaches from other contexts.

Naturally, a more diverse range of voices at the policy table means more “non-standard” and perhaps unexpected inputs;

this requires a reciprocal commitment to maintaining open minds. Stakeholders have diverging immediate interests, varying timelines, and unequal exposure to global jargon and procedure: managing policy dialogue that is inclusive and diverse in nature can be a bit like setting up a residents’ association in a modern-day Tower of Babel! There is a palpable tension between the time needed for meaningful inclusion and consultation and the pressures for speedy delivery. However, such efforts are necessary for building country leadership, without which outcomes may not endure for long.

The opportunity to witness GPE partner countries leading partnership compacts with a spirit of dialogue is both humbling and gratifying. Further, that foundational learning still emerges as a priority through the complex politics of diverse interests—is as reaffirming as it is inspiring. The commitments to foundational learning that emerge, however diversely conceived, can only be testimony to effective leadership.

### **Supporting Effective Leadership**

In reflecting on what the key ingredients might be for successful reforms and programs, effective system leadership emerges as the strongest contender. Political will is prerequisite for things to unfold. What then does building the political will for making commitments to a critical issue, such as foundational learning, entail? First, there needs to be continued advocacy for foundational learning at the global level; this requires breadth, such as rallying more actors, and height, such as engaging governments at the most senior levels. This is what the Commitment to Action hopes to achieve: to date, it has endorsed nearly 50 countries and organizations. Second, partner countries should demonstrate leadership at regional and even global levels to build the collaborative partnerships needed to take this forward. Sierra Leone and Colombia offer good examples of leadership at the regional level, convening high-level regional summits to garner Ministerial commitment to advance foundational learning. The upcoming African Union’s theme for Year 2024 is devoted to education, which presents another significant opportunity to advance effective approaches to promoting foundational learning.

Thus, with strong national leadership and the right incentives, actors can align their efforts and find the resources to make foundational learning a reality for every child, regardless of how uniquely it may be defined in each country. Metrics and accountability measures need to be in place to ensure progress and to hold all stakeholders responsible, but this is a topic for another article! Working in partnership and building a true and shared consensus to stay the course will never be easy. However, in our view, it is the only way to realize the commitment to all children learning early and well, thereby contributing to a more equitable and sustainable future for all.

**Table 1.** Partnership Compacts Endorsed as of June 2023


Country	Priority reform	Strategy/intervention areas proposed
Cambodia	Improving learning outcomes	Gender equality, quality learning (core foundational skills, enhanced digital competencies), quality teaching (qualifications, PRESET/INSET/CPD, school-based support for teachers and school leaders)
DRC	Teachers and quality teaching	Status of the teaching profession, teacher professional development, recruitment, teaching and learning environments
El Salvador	Early childhood learning, with equality and inclusion	Learning assessment and learning environments, teacher training (largely in the context of early childhood/early learning and promoting gender equality)
The Gambia	Accessible, equitable and inclusive foundational learning	Improved access to pre-primary/early childhood education (ECE), standards/curriculum, teaching and learning materials (TLM), early grade assessment, teacher training and continuous professional development (CPD), data and technology
Guyana	Strengthening instructional leadership at district & school levels	Training (for school and district leaders), accountability system, EMIS, coordination/communication mechanisms, community participation, inclusive and culturally responsive school improvement plans
Kenya	Improving learning outcomes	Curriculum, assessment, remote learning, early grade literacy, teacher education/professional development (coaching and school-based support), teacher supply
Nepal	Quality teaching, ECE, gender equality	Attracting better teachers, pre- and in-service training
Rwanda	Improved quality teaching & learning	Teacher training and capacity building, learning assessment, remedial programs, TLM, parental support, community-based ECE programs
Sierra Leone	Foundations of learning for all	Pre-primary education, data use, governance and management for FL, pre- and in-service teacher professional development (TPD), teacher management information system, TLM
Tajikistan	Competency-based education (CBE)	Competency-based standards and teaching materials, assessment for CBE, effective teacher professional development to support implementation of CBE
Tanzania (Mainland)	Teacher workforce planning and management, gender equality and inclusion	Teacher planning, teacher education and professional development, recruitment and deployment, motivation and accountability, learning environments
Tanzania (Zanzibar)	Improved foundational skills	Pre-primary and primary competency-based curriculum, including assessment, teacher management and development, gender equality, inclusion, system management
Uganda	Quality foundations for learning	Curriculum, school management, assessment, instructional materials, school feeding, school infrastructure, TPD, teacher recruitment and allocation, teacher terms of service, management of teachers and schools
Zimbabwe	Equitable access	Access intended to facilitate learning (supported by implementation of a catch-up strategy and non-formal education), assessment and inspection reform, teacher professionalism and school leadership

*The views expressed in this article are based on our experience as education practitioners working for the Global Partnership for Education (GPE). They do not necessarily represent the views of GPE, its governing bodies or its member parties.*

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# Transparent Metrics For Trustworthy Results? Measuring Foundational Literacy through Citizen-Led Assessments in Nepal

 **Rajib Timalina**, Assistant Professor at Tribhuvan University (Nepal) and Director of the Annual Status of Education Report (ASER), Nepal

 rajib.timalina@dcpds.tu.edu.np

 **Deviram Acharya**, Officer from the Ministry of Education, Science and Technology (Nepal), and visiting faculty member at Kathmandu University, Nepal

 deviramacharya@outlook.com

## Summary

This paper recasts the six recommendations made by the Educational Accountability 3.0 report by the Beyond Test Scores Project (BTSP) and the National Educational Policy Center (NEPC) in the US for a more effective and equitable approach to assessment in the Nepali context. The analysis positions Nepal's experience within the global debate and the global debate within Nepal.

## Keywords

Citizen-led assessments (CLA)  
Interpretable, and actionable results  
Reciprocal accountability  
Relevant and quality education  
Transparent metrics

Top-down and bottom-up approaches to education accountability have promoted distrust among educators and education stakeholders, as neither group is inadequately involved. The authors have been deeply engaged in both top-down and bottom-up accountability processes in Nepal. From these experiences and our perspectives in the global South, we respond here to this global debate and to the need for more transparent metrics in the Nepali education system. This paper presents ideas that aim to strengthen school improvement and improve education assessment and accountability in Nepal. Given the dissatisfaction with top-down, test-based accountability in the country, citizen-led assessments emerged as a methodology to support learning and strengthen accountability in the education system. This requires an effective approach to measuring education improvement, which inevitably involves several questions: How do we measure well? Will the metrics help us teach better? Do our assessments support the learning needs of the children?

To address these questions, we draw on the recommendations put forward by a group of authors in the US who, in their report on the [Every Student Succeeds Act \(ESSA\)](#),<sup>1</sup> “seek to outline what a more effective and equitable approach to assessment of student learning and accountability for schools and districts might look like” (BTSP & NEPC, 2023, p. 1). After a close examination of the report, we put forward our six recommendations for a more transparent, more effective, and more just education assessment system in Nepal.

## Assessments Should Support Student Learning

Citizen-led assessments (CLAs) started in Nepal as a [methodology to support learning](#) in 2016. They lean on the

idea that learning improvements also require transparency and accountability around assessment and results. We agree that learning improvement and accountability are the main motives of any assessment; however, assessments in Nepal are not being used to enhance student learning; rather, they seem to distract from the core learning process.

In May 2023, ASER Nepal organized a session with 57 primary school teachers from the Lalitpur district to discuss learning assessments. Teachers emphasized the importance of assessments for promoting students but rarely conducted other forms of assessment. We were surprised to find findings that confirm a 30-year-old UNESCO report, which notes that tests prioritize promotion rather than improving instruction and learning (UNESCO, 1993). During ASER 2022, five ward representatives from the Jajarkot District questioned ASER Nepal's model: their view was that it was good at identifying learning gaps but did not provide guidance for improvement.

Based on Nepal's experience, testing metrics alone is not sufficient. The community people want ways to improve the foundational learning of their children other than merely conducting assessments. In most of our interactions with the communities, community leaders showed an understanding that assessment should center student learning, which should arise from an engaging, challenging, and relevant curriculum in each classroom. For example, the curricula for Grades 1 to 7 in Nepal do not stipulate that there should only be written exams (usually schools conduct written exams every four or more months); they expect teachers to conduct continuous assessments on a regular basis. However, most of the teachers in our interaction meetings indicated teaching lessons and then conducting a final test to determine whether the students can be promoted to the next grade level. The authors agree with the US Educational Accountability 3.0 report (BTSP & NEPC, 2023) that high-quality curricula are essential for promoting equity, and it is important to engage, challenge, and make the curricula more relevant. We believe that the engagement of local education stakeholders in education has a role to play here. Rather than simply generating the scores of high-stakes tests simply for 'high-stakes' accountability or for determining whether or not a child should be promoted, we need to develop student portfolios that accumulate regular performance-based assessments of how children perform within as well as outside of the classrooms in their civic-engagement projects.

### **Education Assessments Should Support Reciprocal Accountability**

During our interaction meetings with teachers in March 2023, most of them expressed concerns about the lack of investment in essential needs, such as teacher development, manageable class sizes, and basic materials. Nepal's teachers believe that the schools lack adequate support to fulfill their primary functions. Our examination of the assessment tools from the Education

Review Office (ERO) and ASER Nepal reveals that most of the ongoing assessment metrics overlook social-emotional and physical wellbeing. Our discussions with local government officials revealed their enthusiasm for citizen-led assessments, regarding them as a means of fostering accountability from the grassroots. However, they tend to regard CLAs as a way of holding school leaders and teachers accountable, not themselves; they demonstrate a one-way, unidirectional approach to accountability. We think that the idea of reciprocal accountability is a powerful one and an essential component of assessments: a system's demands on schools should be accompanied by the provision of capacity, support, and resources that the schools need to do their work.

The Educational Accountability 3.0 report embraces the idea of reciprocal accountability, "meaning that while the system holds schools accountable for the education of students, it must correspondingly hold elected officials and other leaders accountable for providing schools with what they need to succeed" (BTSP & NEPC, 2023, p. 6). The concept of unidirectional accountability is flawed. The problem with top-down and bottom-up approaches is that both approaches often place blame solely on teachers and schools and, ultimately, on poor communities.

### **Community Members Must Have a Meaningful Role**

ASER Nepal has demonstrated that the CLA method is successfully able to decentralize education assessments, allowing local youths, parents, teachers, and policymakers to adapt, administer, collect data, and report in simple understandable languages through more community engagement in the learning assessment process. The engagement of local organizations and the mobilization of youth from the same communities where the CLA is implemented is one of ASER's great strengths. ASER's household-based model has helped ASER Nepal reach the most marginalized children, families, and communities, often in the remotest areas. Two volunteers from the Surkhet district who were part of the citizen-led assessment shared that they were, "ashamed that most of the children in our communities are not able to recognize simple words even after schooling for years. We really want to change this situation." The feeling of giving back to the community through making a personal contribution is the main motivating factor that has enabled ASER Nepal to find hundreds of local youths who are eager to volunteer for CLAs, creating the dynamics of a social movement.

However, while community members are engaged in monitoring, teachers are not engaged in the CLA process; this is disempowering for teachers and for assessments. A meaningful role for community members should include discussions with teachers about the support they need to improve teaching, particularly foundational learning. The Educational Accountability 3.0 report (BTSP & NEPC, 2023) does not develop this idea either but it is very important for Nepal.



## Assessments Should Reflect a Broad Notion of Quality Education

In the past two decades, we have observed how teachers in Nepal have responded to assessment frameworks rather than supporting student learning. Teachers are overwhelmingly focusing on standardized test scores. In May 2023, we had discussions with a group of people from the Curriculum Development Center, schoolteachers, officers from the Ministry of Education and university professors in Lalitpur district Nepal. The participants pointed to the need to revise the assessment and curriculum framework to ensure that it measures what they care about in education schools and that it decreases the huge reliance on high-stakes, standardized tests. The focus on quantitative measures misses the importance of measuring student learning and school performance in more holistic ways. Based on our experiences, we realize that the more we lower the stakes for testing and support the capabilities of educators, the higher the performance of schools and students.

A transformational approach to assessment and accountability requires transparent metrics for measuring foundational literacy and numeracy. However, we must not stop here. This is only one aspect of Nepal's goals for education and schooling. We support the Educational Accountability 3.0 report (BTSP & NEPC, 2023) recommendation that assessment systems should include “a broader array of school quality indicators,” and we believe they should reflect the stated long-term goals of education in Nepal to “ensure citizens’ right to acquire relevant and quality education” (MoEST, 2022, p. ix).

## An Assessment System Should Provide Interpretable and Actionable Results

Nine community leaders and schoolteachers we met in 2022 as part of CLAs in Karnali province shared that “the learning assessment reports are written in English with technical language, we people in the community need the help from the experts from outside to understand [what the reports say].” It is ironic that we conduct assessments to support the learning of students, but the educators and community leaders who are directly responsible for ensuring the students’ learning cannot read and understand what the assessment report says. After collecting evidence, reports are prepared in a technical language that is not easily understandable. Most of the participants in our discussion program in May 2023 said that government reports are also not understandable for ordinary people.

Also, many community people in Karnali Province and Madhesh Province in Nepal were dissatisfied with the new grading system from the Nepal government. This involved the decision to publish student results in A–F grades based on end-of-the-year examinations. They did not trust this grading

system, as they felt that the letter symbols were too reductive and not able to show the progress they wanted to track. They were discontented with global education trends, as they did not satisfy local realities. Assessment metrics should support actionable results on the ground.

## Assessments and Assessment Systems Should Evolve and Improve Over Time

Over the last 7 years, ASER Nepal metrics have been changed five times. When we started, there were only four categories for foundational literacy (letter level, word level, sentence level, and a grade two level story). The current ASER Nepal tool has 13 different levels of items. We have learned how important it is to measure progression within the different difficulty levels of word reading, sentence reading, and story reading. We were able to adopt these innovations and evolutions because community members wanted better tools for measuring and analyzing progress in foundational learning.

High-stake standardized tests require a lot of time for changes to work their way through, as the design and methodologies are controlled centrally by teams of experts. The ASER Nepal model has been easier to improve tools over time, and its metrics are able to evolve faster than top-down assessments. However, we still identified shortcomings in the ASER model, which led us to realize the importance of transferring—to teachers, educators, and community members—the skills to develop assessment tools, design data collection, and analyze findings. This will enable them to monitor the process actively and modify and adapt the metrics on their own without relying on outside experts. This will give the ASER assessments more independence and render them more capable; we will have a system that is designed to evolve and improve in real time.

To conclude, an assessment and accountability model should place student learning at its center. This entails redesigning assessments to ensure that all students are able to achieve foundational learning in school, correcting the existing emphasis solely on accountability. The current system could be redesigned as a locally embedded model that promotes reciprocal accountability. Assessments should be structured for community participation; they should be inclusive and seek to minimize barriers that prevent community members from engaging fully. The engagement of government and other stakeholders should facilitate the development of system capacity, teacher support, and the provision of necessary resources. Assessments must provide information that people understand and can use to improve foundational learning. Lastly, assessments should be able to change with the times, so that they are always relevant and responsive to the genuine needs of teachers and schools.

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## Endnote

1. The US No Child Left Behind (NCLB) was repealed when the Elementary and Secondary Education Act (ESEA) was reauthorized in 2015 as the “Every Student Succeeds Act” (ESSA).

# “Right” Foundations in South African Education: Learning from Our Interventions

 **Crain Soudien**, Honorary Professor in the Centre for the Advancement of Non-Racialism and Democracy, Nelson Mandela University, South Africa

 [crain.soudien@uct.ac.za](mailto:crain.soudien@uct.ac.za)

## Summary

This paper explores the efficacy of “high-level” theories of change for achieving the learning objectives of interventions in South Africa. It notes that while theories of change appear to improve interventions on foundational numeracy and mathematics successfully, they also lose the real purpose of education to foreground and develop human subjectivity and agency, both within systems and among teachers and learners.

## Keywords

Education reform  
Foundational numeracy  
Successful interventions  
Theory of change (TOC)

Post-apartheid South Africa has a long history of attempts to “get learning right.” In this short contribution, I draw on a recent meta-analysis of the country’s major interventions in mathematics and science to reflect critically on the ways in which the “getting learning right” discussion configures our understanding of what a good education is. My input acknowledges that the discussion about “what a good education is” remains difficult. Conscious of this difficulty, my contribution proceeds critically from the Deweyan premise that “the only true education comes through the stimulation of the child’s powers ... to act as a member of unity, to emerge from his [or her] original narrowness ... of feeling ... and to conceive of himself [or herself] from the standpoint of the welfare of the group to which he [or she] belongs” (Dewey, 1897, p. 77). There are difficulties in this definition. How groups decide what is in their best interests is not uncontroversial. However, Dewey’s ethical framing of the purpose of education is significant.

This paper looks at the discussion on what are considered to be “successful” interventions in South Africa; it highlights what these discussions prioritise and overlook in reaching an understanding of what “the right” education is. In approaching the processes involved, it is important to understand “how” the South African education experience is framed, the steps involved in its delivery, and the content substance of the experience, that is, “what” education entails. Focusing on the former, simply because of the limitations of space, I look at “how” the language of strategic planning, a key element of neo-liberal management, has been assimilated into the education discourse and how it configures the learning experience. Strategic planning rubrics are central in this configuring process; they find technical expression in notions such as “inputs” and “outcomes” and are mediated by the idea of a “theory of change” (TOC). It is important to characterise how TOCs have landed and are elaborated in making sense of what learning is about.

This paper builds on a recent meta-analysis to make the argument that TOCs carry implicit sociological presumptions about who people are and what is of value for them: “Getting

learning right” thus effectively constitutes reproducing particular kinds of social subjects (see Mathonsi et al., 2022). In the process, it is important to acknowledge that the interests of South African children are significantly advanced in the sense that they become “globally” competitive subjects. However, they are short-changed in other critical ways. Foremost, they lose opportunities to deepen their capacity for acting critically within the world in which they live. As a result, their capabilities are significantly limited.

### The Concept of the TOC

Zygmunt Bauman (1990, p. 5) described the concept of a TOC in social theory as “find(ing) that difference that makes the difference”—a hermeneutic for accounting for how social change occurs. Two ideas of how change works have enjoyed recognition in education: those of functionalism and those of conflict theory. The former has held sway in a variety of forms (see Ballantine et al., 2017). Its programmatic logic maps well onto processes of organisational change, where it works to define and hold in place the agents of change and to specify their scope of activity. In the rubrics of TOCs, input factors and how they are to be activated are managed as change mechanisms towards the achievement of determined and measurable outputs and outcomes, such as the ability to add and subtract (see Anderson, 2004). The framework is almost intuitive for thinking about learning: get the ‘basics’ right! However, the child might learn the basics of a computational exercise but never understand its contextual value.

### The TOC and Education Reform in South Africa

The idea of the TOC has gained a great deal of traction in the South African education environment, where reformers have been confronted with the obdurate legacies of apartheid, not least of all that of inequality. While the country can show some progress with the emergence of a growing black middle class, which is doing relatively well in access and performance terms (Hesse, 2022), it is concerning that only 25% of the children in no-fee schools, which cater to the most economically disadvantaged students and comprise the majority of the country’s learners, achieve the internationally bench-marked grade level in Grade 5 mathematics. This is in comparison to 67% in fee-paying schools and 84% in independent schools (Isdale et al., 2017). The South African government and several non-governmental agencies have invested intense resources and time in attempts to turn this around, but the results have been modest.

The National Council on Innovation (NACI) commissioned a study on behalf of the Department of Science and Innovation to understand why these investments performed so poorly in assessing the effectiveness of mathematics and science interventions in the country. A key question of the study was, “What factors were responsible for the interventions that have succeeded?” (Mathonsi, 2022, p. ix). The study reviewed

24 evaluations of mathematics and science interventions to distinguish between programmes that had highly positive outcomes, moderately positive outcomes, and low or negative outcomes. The focus was on their design elements, their implementation methodologies, and their choice of input factors. The identification of “positive outcomes” (i.e., success) reflects the “satisfactory performance” categorisation given in the Trends in International Mathematics and Science Study (TIMSS) and the Grade 12 pass rates.

The review concluded that interventions that had highly positive outcomes and “exhibited well-organised programme designs” had well-articulated [TOCs] clear objective statements and outcome measures” (Mathonsi, 2022, p. xi, 52, xiv). The TOC, Mathonsi explained, is a “high-level description of the programme in relation to its intended outputs and outcomes and provides an interconnected description of the pathways to the intended long-term change or impact”. Important input factors included the provision of adequate support materials, appropriate time, curriculum leadership support, alignment with the national curriculum, and functional social and learning environments. Interventions that had low or negative outcomes “lacked a TOC and were not based on empirical evidence and baseline studies. They were ... emergency response-orientated ... often adopted ad-hoc and fragmented simplified approaches ... with broad ambitious outcomes and objectives, less time devoted programme activities ... too few resources and ... limited support.”

What was “the difference that made the difference” in these interventions? According to Mathonsi (2022, p. 148), this depended on a number of variables, including “the quality of implementation, the resources (human and material) deployed, the ongoing monitoring and adjustment to direct the intervention toward the set objectives, [and] the context of implementation”. The meta-study noted that “[the way in which the] various success factors interact to bring about the desired effects is a matter that requires further scrutiny”. Relevant to this comment is his mention of how TOCs provide “interconnected descriptions of pathways,” enabling successful interventions to backward-map the learning process. The descriptions of these pathways may have been under-articulated, but the accounts of the nine individual successful interventions highlighted key factors that made a difference, including clear leadership from either the education department or the school management, sustained learner support, and teacher commitment.

The meta-study made six recommendations. These included the need for the education system to attend to legacy issues such as children’s language of instruction, recognition of the imposition of English on children, and improvement of initial teacher education. The study’s first and most important

recommendation, however, was that the system should improve its planning capacity and urgently clarify the TOCs it used to intervene in the system (Mathonsi 2022, p. 153). This recommendation is not without merit. There is logic in suggesting that a system characterised by high levels of dysfunctionality requires tighter planning, monitoring, and evaluation. There is little doubt, too, that such tight management may lead to stronger learning outcomes.

In the context of the high levels of dysfunctionality of the system, these recommendations show the way forward for getting the education challenge in South Africa “right”. The recommendations correctly recognise, in my view, that the role of the major actors in a public system, the administrative and education authorities, is to actively lead in steering the process of learning. The recommendations also understand the need for all stakeholders involved to fulfil their obligations to support children’s learning. In this, the TOCs fulfil their major “formative” function to mitigate dysfunctionality, and in the process, they produce a system that works.

However, the “success” that is produced is not beyond critique. It is primarily the outcome of TOC-managed control when education system leaders need to make education

“good” over the longer term. The models do not take into account the individual thoughts, feelings, and agency of children. As it is focused on the curation of performance targets, the TOC forecloses on the real purpose of education, which, recalling Dewey, must begin with subjectivity of the children themselves, their histories, their potentialities and their aspirations for themselves and for their communities. Instead, first, the children are treated as decontextualised and standardised subjects. They have no history. Second, they are lumped together as a uniform group that can be measured and evaluated based on predetermined benchmarks. Their individuality as human beings is overlooked. Their worth is determined by the degree to which they conform to established standards of achievement. Even though it may be possible that through improving their mathematics scores, children learn critical thinking, the opportunity to authorise a bigger objective for them in determining their own needs as learning subjects is lost. Instead, a logic is instituted that legitimises decontextualised instrumental thinking.

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EDUCATION  
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Chemin Eugène-Rigot, 2  
1202 Geneva, Switzerland

**T:** +41 (0) 22 908 45 47

**E:** [norrag@graduateinstitute.ch](mailto:norrag@graduateinstitute.ch)


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