Challenging the False Dichotomy:

An Evidence Synthesis

This report synthesizes existing literature on the impact, value and critical need for holistic approaches within education systems. It highlights the connectivity between holistic skills and academic achievement, overcoming adversity, and in improving societal and economic outcomes.

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Methodology: The analysis team conducted a review of academic and grey literature primarily between 2000 and 2022, with some exceptions for key documents. The synthesis also targeted insights and examples from low- and middle-income countries. The findings are based on the analysis of more than 360 sources. While sources in languages other than English were actively sought, most sources are in English. Other languages in which evidence has been reviewed include Spanish, Portuguese, and Dutch. The primary sources of evidence include peer-reviewed journals, evaluations, systematic reviews, discussion papers, policy documents, research syntheses, and reports from highly active organizations and implementers in the field. Given the scale of documents available, a strong emphasis was placed on incorporating meta-analysis reports and material that already synthesize studies, as well as targeted and pragmatic searches of existing literature.

In the literature review undertaken, and notwithstanding the challenges of accepted terminology and empirical accessibility, the term holistic approach is used to cover a broad definition, and the terms referenced below (in the Definitions section) were used as parameters for source identification. A holistic approach to learning is thus used interchangeably with the terms defined below, in so far as this is the lens that key stakeholders often consider when deciding whether to prioritise, support, or engage in this area. This review was completed in December 2022.

Definitions

Holistic approach: This is an approach which aims to educate the whole child, physically, socially, emotionally, and academically, with the active engagement and support of the community.[1] A holistic approach recognises that all children, particularly those facing extreme adversity, require a range of knowledge, skills, experiences, and core values that will enable them to engage as productive and ethical citizens, and reach their potential in life.

Holistic approaches to learning are defined and characterised in a variety of ways, encompassing a spectrum of terms that were included in the review process and serve as an umbrella term that includes: whole child development, social and emotional learning, play-based learning, character education, 21st century skills, transversal competencies, life skills, well-being, psychosocial support, soft skills, global competencies,

[1] Tarricone, P., Nietschke, Y., & Hillman, K. (2020). Measuring what matters: Insights on the Value of Whole Child Development.

noncognitive skills, citizenship, non-academic skills, career readiness, and character education. For the purposes of sourcing evidence, it includes holistic learning, development, pedagogy, curriculum, skills, competencies, mindsets, and behaviours, and is used as the primary reference point within the report. While approaches and skills are different, for the purposes of this paper we separate those out depending on the context cited. We acknowledge the differences in the interpretation and definitions of each of these terms, and that often organisations use different frameworks or conflicting terminology in relation to a similar set of skills. While the complex and conflicting terminologies used in the field can make it difficult to compare research findings, by seeking evidence that included the terms above (and associated skills), the report succeeds in synthesizing what we know (and what we don't) in relation to impact. For the purposes of this paper, we focus on what they have in common, namely the belief that education should be geared towards a breadth of skills, beyond literacy and numeracy, given the weight of evidence behind their impact.

Learning: This is defined as the complex and long-term psychosocial process consisting of the individual acquisition or modification of information, knowledge, understanding, attitudes, values, skills, competencies or behaviours through experience, practice, study, or instruction.[2]

Education systems: This refers to the entire system of education, including governance at national, regional, district and/or community levels, and public and private delivery, and includes such aspects as financing, laws, education priorities, training, accountability, education and school resourcing, curriculum, pedagogy, school environments, assessment, education management information systems (EMIS), international, national and regional policy, as well as the institutions that support the delivery of education. It encompasses all stakeholders, which includes children of legal schooling age, including out-of-school children, teachers/practitioners, parents, school leaders, teacher training institutions, ministries of education, and related policy makers and technical specialists.

Life outcomes: These are the consequences that impact a person's ability to lead a fulfilling and stable life, and that supports their ability to thrive. These can include health and well-being (both physical and mental), financial and employment quality, emotional stability, social connections, and the ability to adapt to changing circumstances and adversities.

[2] UNESCO, International Bureau of Education webpage. Retrieved from http://www.ibe.unesco.org/en/glossary-curriculum-terminology/l/learning

Executive Summary

Effective holistic approaches within education systems lead to improved academic, health, income, employment, societal and well-being outcomes. Their impacts are lasting, and their effectiveness spans high- to low-income countries. Their results are felt most strongly by those that need it the most. Such approaches make for smart financial investment, and they have led consistently to improved long-term life outcomes.[3] Despite this, the wider institutionalisation of holistic practices in education systems remains the exception rather than the rule.[4] This, in part, can be attributed to the misperception that a trade-off exists between supporting academic development versus holistic development, the "false dichotomy" that is being challenged within this synthesis. In fact, holistic child development incorporates, and is deeply intertwined with, academic rigour. Beyond academic outcomes, holistic approaches have a compounding positive effect over the course of a person's life. The consistent finding from the literature is that a holistic approach is a powerful driver of success and important buffer against adversities. Evidence behind these claims is both robust, consistent, and increasingly representative of diverse contexts.

Part of the challenge is that education systems are complex, with many competing interests and voices. However, in searching for a common ground in areas of critical concern for key stakeholders, four patterns of outcomes emerged. The patterns of evidence corroborate the hypothesis that, by supporting the holistic development of children, we can increase academic achievement, support children to overcome adversity, deliver wide-ranging societal and social consequences, and realise clear economic benefits.

- **Increasing academic achievement:** Across contexts, age ranges, and subjects, a holistic approach to learning, benefits and improves academic performance. Academic and holistic skills are intertwined and teachable, strengths and weaknesses in one area foster or hinder development in the other. We know that education systems can transform in ways that are equally attentive to students' academic and holistic development, and that this does not compromise academic rigour but strengthens it.

[3] Collaborative for Academic, Social, and Emotional Learning (CASEL). (2022). What Does the Research Say? Retrieved from https://casel.org/fundamentals-of-sel/what-does-the-research-say/
[4] Datnow, A., Park, V., Peurach, D. J., & Spillane P. (2022). Transforming Education for Holistic Student Development. Retrieved from https://www.brookings.edu/wp-content/uploads/2022/09/Brookings_Report_Tranforming-ed-for-holistic_FINAL.pdf

• **Overcoming adversity:** Prioritising and cultivating holistic skills and approaches within education systems offers a critical buffer for adversities that a child may face and has far-reaching impacts for the child, families, communities, and wider society. It also offers an effective means of addressing the impact of learning disruptions caused by the COVID-19 pandemic, displacement, crises, and climate change. A holistic approach to learning benefits all children and is essential for every child to thrive, but disproportionally benefits children facing adversity; many of whom experience trauma such as abuse, displacement, poverty, and exposure to conflict.

•**Societal consequences:** Outcomes related to well-being, health, criminal behaviour, and addiction have been shown to be impacted by key holistic skills. These skills can support overcoming the impact of a toxic stress response that can lead to immediate and long-term negative consequences, such as poor physical and mental health, behaviour issues, and unhealthy relationships, which have wider impacts beyond childhood. Holistic skills also stimulate relationships within the classroom and home environment.

• **Economic benefits:** The cultivation of holistic skills outweighs investment in what has been for decades the status quo of a system based primarily on academic skills. Social costs, employability, productivity, active citizenship, income levels, and reduced health and criminal justice costs can be attributed to the development of key holistic skills in children, which will compound their benefit when they become adults.

The empirical evidence includes examples of what success looks like in practice. While a sizeable proportion of the most rigorous evidence comes from the US and Europe, an increasing number of studies come from Africa and the Middle East, South Asia, and Latin America.[5] The focus here was to highlight examples that take diverse forms. The examples highlight successful holistic approaches in different levels of education systems (Colombia), examples of initiatives with strong results and promising early steps towards wider system adoption (Ethiopia, the Study on Social and Emotional Skills), and initiatives in crisis-affected contexts (The Better Learning Programme). The examples of success stories at school, district, and national levels are growing steadily. As is the increasing recognition that these skills and approaches, along with appropriate measures for them, are critical elements of modern education systems. The evidence base also points to enabling conditions for holistic approaches to thrive, based on patterns of success within the wider environment and systems

There remain important evidence gaps and unknowns, and for the case to be made even stronger, these need to be addressed, particularly to better understand the constraints that prevents wider scalability. The motivation in synthesizing key evidence around why a holistic approach matters, is to not only build a compelling case for key stakeholders in the sector, but to serve as a tool for those already advocating for this approach within their own education systems, who despite the weight of evidence still need to convince those in power of its importance and viability. This highlights the need for honest dialogue across sector representatives to consider thoroughly how the multiple terms, definitions, and overly complex communication can be a barrier to changing mindsets.

Globally, we are at a critical juncture when it comes to the role and power of education. Driving this urgency is the need to address the global learning crisis, learning loss, a re-escalation of the number of out-of-school children, and worsening mental health amongst children. The anticipated impacts of climate change and the increase in displaced populations add further to the considerable challenges faced across systems. When considering the state of many education systems globally, evidence shows that the pandemic has exacerbated inequities in education, with children from low-income households, those with disabilities, as well as girls, less likely to access remote learning. These threats highlight the criticality of instilling key holistic skills in children that help them adapt, overcome, and thrive during such uncertain times, as well as making the case that such skills sit alongside academic skills such as literacy and numeracy when it comes to vital outcomes.

[5] Ibid

01 Introduction

The purpose of this paper is to synthesize existing literature on the impact, value, and need for holistic approaches within education systems, with a view to making the evidence accessible and translatable to decision-makers across contexts. The report makes clear why it is critical that education systems should strive for the holistic development of students given the evidence available. It was born out of a need to: better summarise and utilise research against the false dichotomy that a trade-off exists between holistic and academic outcomes; to lift the evidence that holistic approaches in education are foundational to a successful school life, academic success, and long-term life outcomes; and to make the case that holistic approaches are workable and effective. A disproportional focus on literacy and numeracy remains across national education levels. While there is a clear and urgent need to address the effects of learning loss, recognising the inter-relationship between academic, social, emotional, and cognitive development is fundamental to overcoming that loss. As such, this evidence synthesis is designed to support and inform the development of advocacy tools for dialogue and engagement with key stakeholders, including teachers, parents, political leaders, funders, and decision-makers. It recognises that academic learning is but one dimension of holistic development.

What Do We mean by a Holistic Approach to Learning?

Holistic learning is not a new concept. It has been framed under other terms, including peace building and civic engagement, with the nascent movement in the past two decades focusing on fully activating all aspects of a child so they can reach their potential throughout their life.[6] It is an approach that goes beyond just academic knowledge and skills of literacy and numeracy, and aims to educate the whole child, physically, socially, emotionally, and academically, with the active engagement and support of the community.[7] A holistic approach recognises that all children, particularly those facing extreme adversity, require a range of knowledge, skills, experiences, and core values that will enable them to engage as productive and ethical citizens, and reach their potential in life. As an approach to learning, it encompasses a range of personal and interpersonal competencies that play a key role in the acquisition and development of other skills, and one that is based on the interconnected nature of academic and holistic learning that starts during early infancy and continues throughout life. Academic performance is an important learning outcome, which occurs more effectively through a holistic approach. Around the world, the principles of holistic student development are being pressed even more deeply into contemporary policy discourse by neuroscience, climate science, social science, and learning sciences. Together, these disciplines underscore the close relationship between child and ecology, the essential mediation of relationships and contexts, and the wisdom of holistic child and student development.[8]

While this analysis refers to a holistic approach to learning, many organisations, stakeholders, and methods come to this issue from different angles. Widely used terms in the literature include: whole child development, social and emotional learning, play-based learning, character education, 21st century skills, transversal competencies, life skills, well-being, psychosocial support, soft skills, global competencies, noncognitive skills, citizenship, and character education. Each approach focuses on coinciding aspects, based on the principle that effective education involves a holistic approach to learning and surrounding a child with an ecosystem that requires coordination among policy, process, and practice.

What We Know About Teaching and Nurturing Holistic Skills

Learning is holistic by nature. The brain and the development of intelligences and capacities are malleable, and the "development of the brain is an experience-dependent process",[9] which activates neural pathways that permit new kinds of thinking and performance. What happens in one domain influences what happens in others. For example, emotions, such as anger or joy, can trigger or block learning. Contrary to the belief that academic and cognitive functions are separate from emotional and social functions, research in neuroscience and the behavioural sciences provides evidence that these functions are intricately interrelated.[10] Decades of research in psychology, social science, and neuroscience demonstrates that learning depends on deep connections across a variety of skills, attitudes, and character traits.[11] The interrelationship between functions helps explain why an academic and knowledge-focused approach to education cannot be separated from the wider set of processes that are integral to learning.

Evidence is also clear on the fact that children must first develop the skills that make learning possible before "higher-order" skills. These include self-regulation, self-awareness, and resilience, among other qualities.[12] The development of these skills translates to creating relationships with adults which provide emotional security, the skills to manage stressful conditions, the regulation of emotion, and the ability to reach goals.[13] These skills, which can be enabled and taught, are critical gateways for engaging in learning, connecting to peers and teachers, and supporting academic achievement.

While the brain is malleable throughout life, there are two age ranges that are particularly sensitive for brain development, and which are a crucial time for interventions within education systems.

- **Early years (0-5):** Because a child's developing brain is most responsive during the

[6] United Nations Educational, Scientific, and Cultural Organization (UNESCO). (2022). Retrieved from http://www.ibe.unesco.org/en/glossary-curriculum-terminology/h/holistic-learning-approach#:~:text=An%20approach%20that%20seeks%20to,more%20effective%20and%20comprehensive%20learning.
[7] Tarricone, P., Nietschke, Y., & Hillman, K. (2020). Measuring what matters: Insights on the Value of Whole Child Development.

[8] Datnow, A., Park, V., Peurach, D. J., & Spillane P. (2022). Transforming Education for Holistic Student Development. Retrieved from https://www.brookings.edu/wp-content/uploads/2022/09/Brookings_Report_Tranforming-ed-for-holistic_FINAL.pdf; Nasir, N. S., Bang, M., & Yoshikawa, H. (2021). Reimagining American education: Possible futures: What might we accomplish in 25 years? Phi Delta Kappan, 103(2), 54–57. Giannini, S. (2022). UNESCO and the Futures of Education. In M. Suárez-Orozco & C. Suárez-Orozco (Eds.), Education: A global compact in a time of crisis (pp. 361–377). Columbia University Press.
[9] Cantor, P., Osher, D., Berg, J., Steyer, L., & Rose, T. (2019). Malleability, plasticity, and individuality: How children learn and develop in context. Applied Developmental Science, 23(4), 307-337.
[10] Osher, D., Cantor, P., Berg, J., Steyer, L., Rose, T., & Nolan, E. (2017). Science of learning and development: A synthesis. American Institutes for Research.
[11] M. Immordino-Yang, L. Darling-Hammond, and C. Krone (2018). The brain basis for integrated social, emotional, and academic development: How emotions and social relationships drive learning. Washington: The Aspen Institute National Commission on Social, Emotional, and Academic Development.
[12] 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).
[13] Stafford-Brizard, K. B. (2016). Building blocks for learning: A framework for comprehensive student development. Turnaround for Children,1-16.

earliest months and years of life, this period sets the foundation for lifelong health and wellbeing. Adverse experiences and the absence of nurturing environments during this time increase the likelihood of both physical and mental health difficulties in adulthood.[14] Between the ages of three and five, children begin to develop the skills of controlling impulses and emotions, thinking flexibly, and setting goals. These "executive functions" are building blocks for nearly all future learning, including the development of many holistic skills and moral values. Their early development predicts many life and learning outcomes. [15]

- **Adolescence (10+):** We know that after early childhood, adolescence (particularly 10-15 years) is a critical window of opportunity, as well a period of intense physiological, cognitive, neurological, emotional, and social changes.[16] The plasticity of the adolescent brain also provides the potential for resilient responses to childhood trauma and distress.[17] This makes early adolescence a crucial time for holistic interventions, especially those aimed at cultivating resilience against current and/or future adversities. Experience and research show that we can have a significant impact in this period. Conversely, this is a period of extra risk, which can have opposing positive or negative impacts on various factors. In the past 20 years, our understanding of human development has been revolutionised by brain imaging techniques that have revealed the importance of adolescence in shaping life outcomes and the impact of adversity on normal brain development. [18,19] During rapid and sensitive periods of human development, such as adolescence, extreme adversity may have particularly serious consequences

Three driving elements of a holistic approach to learning are fundamental to monopolising these windows of opportunity, particularly in the context of teaching:

- **What:** Strengthening core skills and capabilities of children and youth to achieve their full potential. Skills and competencies are prioritised based on context. Core values and capabilities are considered a key part of a holistic approach, which can include (but are not limited to): the development of values (e.g., hope, compassion, tolerance); academic knowledge (e.g., literacy, numeracy, language); life skills (e.g., critical thinking, empathy, collaboration, communication); and social emotional learning (e.g., resilience, coping, self-reflection).[20]

- **How:** Creating conditions that foster student development of these core skills and capabilities in safe, engaging, and appropriately challenging learning environments. Examples include innovative pedagogy and learning approaches that include active learning, project-based learning, play-based learning, inquiry-based learning, and other engaging methodologies that put the student at the centre. These form the "how" of learning and this type of environment has been shown to be even more critical for children's ability to learn when facing adversities and supporting the development of resilience.[21] Learning ecosystems are seen increasingly as having strong potential to transform how learning happens. Over the last decade, the term "learning ecosystem" has proliferated as a metaphor for thinking differently about the future of education, moving beyond a top-down systems approach.[22] In a holistic context, an individual needs to grow and develop through a diversity of learning experiences which are influenced by schools, families, communities, and the wider environment. Thought leaders have begun to explore whether the opportunity exists to create dynamic, diverse, and evolving learning ecosystems which enable all young people to be lifelong learners, leveraging a broader and more powerful range of assets. Such a reconfiguration of education systems and collective mindsets promise to create the conditions for more dynamic and powerful collaborations which stimulate and enable innovation.[23]

- **Who:** Engaging families, caregivers, schools, and the community to consider the factors that children face that can affect their learning and development. When we consider the whole child and re-engineering education systems by embedding holistic approaches, much of the burden of transformation rests on the shoulders of local education professionals, parents, community members, and students.[24] This means engaging actors at all levels of a child's social ecology to support learning and development. By supporting this learning and development through co-created activities/interventions, community actors are not only able to foster a child's academic and social development but also the development of the community by fostering responsible citizenship.[25]

[14] Shonkoff, J. (2014). A healthy start before and after birth: Applying the biology of adversity to build the capabilities of caregivers. In K. McCartney, H., Yoshikawa, & L. B. Forcier (Eds.), Improving the Odds for America's Children (pp. 28-39). Harvard Education Press.
[15] Bollington, A. & Grob, R. (2017). Overview of evidence behind Porticus's approach to WCD.
[16] National Academies of Sciences, Engineering, and Medicine. (2019). The Promise of Adolescence: Realizing Opportunity for All Youth. Washington, DC: The National Academies Press. Retrieved from https://doi.org/10.17226/25388.
[17] Ibid.
[18] Caskey, M. Anfara AV. (2014). Developmental Characteristics of Young Adolescents. Association for Middle Level Education. Retrieved from https://www.amle.org/BrowsebyTopic/WhatsNew/WNDet/TabId/270/ArtMID/888/ArticleID/455/Developmental-Characteristics-of-Young-Adolescents.aspx.
[19] Center on the Developing Child (2007). The Impact of Early Adversity on Child Development (In Brief). Retrieved from https://developingchild.harvard.edu/resources/inbrief-the-impact-of-early-adversity-on-childrens-development/
[20] Bollington, A. & Grob, R. (2017). Overview of evidence behind Porticus's approach to WCD.
[21] Centre on the Developing Child. (n.d.). Resilience. Retrieved from https://developingchild.harvard.edu/science/key-concepts/resilience/

[22] Hannon, V., Thomas, L., Ward, S., & Beresford, T. (2019). Local learning ecosystems: emerging models. WISE report series in Partnership with Innovation Unit. Retrieved from https://drive.google.com/file/d/1Lp6q1iKTqKeLobwhsxKx GMBgNk8dhOyZ/view. Accessed, 10-21.
[23] Ibid.
[24] Datnow, A., Park, V., Peurach, D. J., & Spillane P. (2022). What global education systems can teach us about transforming education for holistic student development. Retrieved from https://www.brookings.edu/blog/education-plus-development/2022/09/13/what-global-education-systems-can-teach-us-about-transforming-education-for-holistic-student-development/
[25] Global Centre for the Development of the Whole Child. (2022). Activating Systems. Retrieved from https://iei.nd.edu/gc-dwc/activating-systems

02 Why Does a Holistic Approach to Education Matter at Individual, Societal, and Economic Levels?

A holistic approach within education systems matters because of the compounding effect it has, which ripples outward across that child's ecosystem. The body of evidence shows concretely how key holistic capacities are essential prerequisites to learning in terms of cognitive development, mental health, physical health and prosocial behaviours.[26] The consistent finding from the literature is that a holistic approach not only improves academics; it is a powerful buffer to adversities that a child faces throughout their development. Prioritising it within education systems can have far-reaching and long-lasting effects for the child, society, and the economy. More broadly, given the challenges that humanity faces today, a key motivating factor should be the known impacts that holistic approaches have in the creation of healthy social ties. There are lasting transformations into outcomes of gender equality, peace and non-violence, health and well-being, and sustainable societies.[27] This results in children who are well-equipped for life and more able to meet both the opportunities and the challenges they face at home, at school, and in the world at large. [28]

Increasing Academic Achievement

There is clear consensus that major domains of human development – social, emotional, cognitive, linguistic, academic – are deeply intertwined in the brain and behaviour.[29] Supporting holistic skills, including social, emotional, and cognitive development, relates positively to traditional performance measures of education systems, including attendance rates, grades, test scores, completion rates, success in higher education and careers, more engaged citizenship, and better well-being.[30] Evidence in a US context, across 213 programmes, shows that schools can cultivate holistic skills and habits into an academically rigorous curriculum and empower students to practice these skills.[31] Because holistic and academic skills are interrelated, when students' social and emotional skills are supported through instruction and a caring and safe learning environment, their well-being is enhanced alongside academic achievement.[32] We also know from displaced and emergency settings that psychosocial wellbeing is a significant precursor to learning and is essential for academic achievement. It has an important bearing on the prospects of both individuals and societies. [34]

Evidence from neuroscience and the science of learning, demonstrates that effective learning depends on secure attachment, affirming relationships, meaningful learning experiences, and the explicit integration of social, emotional, and academic skills.[35] A McKinsey study goes one step further and considers impacts on student education outcomes. Drawing from 2015 PISA (Programme for International Assessment) data across more than 78 countries, research found that mindset can be twice as important as socioeconomic background in predicting academic performance.[36] 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.[37] Significantly, boys from lower socio-economic quartiles with the right mindset achieved better academic performance than boys in the highest quartile with a poor mindset. [38]

The sector is increasingly better able to assess social and emotional skills and analyse how they relate to academic grades. The recent OECD Study on Social and Emotional Skills (2020) collected information on school grades in three subjects: reading, mathematics, and the arts, as well as the results of a short cognitive ability test administered to participating students. Data from the study shows that students' social and emotional skills are significant predictors of school grades across age cohorts, contexts, geographies, and subjects.[39] Being intellectually curious and persistent are the skills most strongly related to school grades for both 10- and 15-year-olds in all three subjects tested. Evidence also suggested that the relationship between social and emotional skills and school performance is nuanced. Some skills are uncorrelated with school performance but other skills, most notably persistence and curiosity, are strongly related to higher school performance for both age ranges. Another wide-ranging study demonstrating this relates to an analysis of more than 200 socio-emotional interventions (in the US) targeting children aged five to 18. It concluded that participating students exhibited higher academic achievement, with the gain in performance estimated to be equivalent to 11 percentile points. [40]

When considering a low-income country context, where evidence is rapidly increasing, we can point to strong examples of how holistic approaches advance academic outcomes. Studies have shown that, when students are exposed to holistic pedagogy and skills, they excelled academically in comparison to those students who were not, including in low-income country contexts.[41] USAID's Systematic Review of Social and Emotional Learning programmes found that marginalised groups outperformed non-marginalised groups on outcomes, including social and emotional skills and academic performance, when the specific needs of those children were taken into account.[42] Another strong example of impact includes an evaluation in the Democratic Republic of Congo, which found that teacher professional development paired with a social and emotional learning curriculum improved student perceptions of their school as safe and supportive and, in turn, led to improvements in their literacy and numeracy skills. [43]

Speed Schools in Ethiopia have demonstrated how critical a holistic pedagogy is for academic success.[44] Children who were exposed to social and emotional learning, including self-efficacy, emotional regulation, mental health, and wellbeing, along

[26] Richardson, D., Vrolijk, M., Cunsolo, S., Cebotari, V. (2021). What makes me? Core capacities for living and learning. UNICEF Office of Research: Innocenti, Florence.
[27] Smart, A., and Sinclair, M. (Eds.) (2022). NISSEM Global Briefs: Educating for the social, the emotional and the sustainable. Volume III: SEL in context. NISSEM.
[28] Richardson, D., Vrolijk, M., Cunsolo, S., & Cebotari, V. (2021). What Makes Me? Core Capacities for Living and Learning.
[29] 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.
[30] Ibid.
[31] Berman, S. & Darling-Hammond, L. (2021). Communicating the "learning" in social-emotional learning. Retrieved from.https://fordhaminstitute.org/national/commentary/communicating-learning-social-emotional-learning
[32] Durlak, J.A., Weissberg, R.P., Dymnicki, A.B., Taylor, R.D., & Schellinger, K.B.. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. Child Development, 82(1): 405-432.
[34] McNatt, Z., Boothby, N.G., Wessells, M.G., & Lo, R. (2018). Guidance Note on Psychosocial Support: Facilitating psychosocial wellbeing and social and emotional learning.
[35] Darling-Hammond, L., & Cook-Harvey, C. M. (2018). Educating the Whole Child: Improving School Climate to Support Student Success. Learning Policy Institute.
[36] Defined by McKinsey as attitudes and beliefs.
[37] OECD. (2016). PISA 2015 Results (Volume I): Excellence and Equity in Education. PISA. OECD Publishing: Paris. Retrieved from https://doi.org/10.1787/9789264266490-en
[38] Mourshed, M., Krawitz, M., & Dorn, E. (2017). How to improve student educational outcomes: New insights from data analytics. McKinsey & Company. September.
[39] OECD. (2021). Beyond Academic Learning: First Results from the Survey of Social and Emotional Skills. OECD Publishing: Paris. Retrieved from https://doi.org/10.1787/92a11084-en
[40] Durlak, J.A., Weissberg, R.P., Dymnicki, A.B., Taylor, R.D., & Schellinger, K.B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. Child Development, 82(1), 405-432.
[41] 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.
[42] Women, U., & Aldin, C.O.M.E. (2021). Social and Emotional Learning (SEL) Systemic Review.
[43] Torrente, C., Aber, J. L., Starkey, L., Johnston, B., Shivshanker, A., Weisenhorn, N., Annan, J., Seidman, E., Wolf, S., & Tubbs Dolan, C. (2019). Improving primary education in the Democratic Republic of the Congo: End-line results of a cluster-randomized wait-list controlled trial of Learning in a Healing Classroom. Journal of Research on Educational Effectiveness, 12(3), 1–34.

with literacy and numeracy, sustained the gains they made when they transitioned to public school. In fact, it was found that one year in a Speed School was a better preparation for success in the later grades of public schools (where holistic pedagogy and social and emotional skills are not explicitly part of the curriculum) than three years in their earlier grades.[45] USAID's systematic review across low-income contexts, along with the review of integration of social and emotional learning in basic education programming, found promising effects in relation to academic outcomes.[46]

For example, their review of the Positive Youth Development programme, which is based on a holistic approach to learning in low and middle-income countries, found that academic outcomes and transferable competencies improved. They found that what differentiates the programmes from those focused-on literacy and numeracy alone, was the combination of traditional assets of technical, vocational, and academic skills, alongside social and emotional skills.[47] The SOAR (Strengthening Opportunities for Adolescent Resilience) programme is another example of success. Focused on combining key academic and life skills, it has been operationalised in Asia (India, Nepal, Pakistan, Afghanistan) and Africa (Somalia, Zambia, Zimbabwe, Malawi) and has demonstrated clear improvements in literacy and numeracy rates across contexts, despite the severe marginalisation experienced by participating students. [48]

Overcoming the Effects of Adversity

During rapid and sensitive periods of human development, extreme adversity has particularly profound consequences, which heightens the potential that holistic approaches can have within education systems as an effective antidote. This is supported heavily by research identifying a neurological basis for the links between children's emotional experience within stressful versus supportive environments and their social and academic performance within those contexts.[49] Because of this, we know that a holistic approach to learning benefits all children of every background, but it disproportionally benefits children facing adversity (including across high- and low-income country contexts), many of whom experience cumulative stress factors and trauma.

For example, children who experience long-term exposure to trauma resulting in toxic stress can experience a cumulative toll on their physical and mental health that lasts a lifetime. Traumatic experiences that result in toxic stress, including for those in emergencies or experiencing displacement, undermine critical skills for children and adults, namely the development of self-awareness, self-management, social awareness, relationship skills, and responsible decision-making; all of which make it difficult to learn.[50] Such exposure, particularly in early childhood, can lead to lifelong impairment of learning, behaviour, and physical and mental health. [51] The impacts become more complex given that the more adverse the experiences in childhood, the greater the likelihood of developmental delays and health problems in adulthood, including heart disease, substance abuse, and depression.[52] The impact of these adversities does not stop with an individual child: It can have a catastrophic ripple effect for generations. We know this because severe adversity can alter the genetic expression of individuals, which can then be passed down to children at a biological level.[53] We also know that, if not addressed, "cycles of adversity" emerge where adversity during the childhood of one generation leads to conditions of risk for poverty and adversity in the next.[54]

Some stress in life is normal and even necessary for development. Children need to experience some emotional stress to develop healthy coping mechanisms and problem-solving skills. However, the type of stress a child experiences when exposed to a conflict or natural disaster can become toxic if there is intense, repeated, and extended activation of the body's stress-response system, particularly if there is no supportive adult figure to offer protection.[55] The antidote to this has been shown to be an effective holistic approach to education, which cultivates skills that are critical to mitigate the negative and life-changing impact of such trauma.

Societal Consequences

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.[56] They also correlate with improved life satisfaction.[57] Holistic skills distinguish strong parents and active citizens by improving a persons' ability to get along with others, to share, and to prioritise broad societal goals.

Several meta-analyses and longitudinal studies show that there is a strong link between low self-control and crime rates. While mostly US-based, this body of research focused on the relationship between self-control – a common element of most social and emotional frameworks – as a dependent variable of delinquency or crime.[58] This research also connects to the benefit of early intervention and the lasting prevention effects achieved by affecting early-childhood experiences in ways designed to enhance socialisation and monitoring.[59] Given the age and wider ripple effects, the evidence shows that prevention focused on early intervention is more cost effective and consequential in reducing crime rather than prevention focused on adult interventions such as policing and imprisonment.

Evidence shows education programmes that intentionally incorporate holistic skills have the potential to help foster inclusivity at school by removing institutional barriers such as inequitable discipline, school management, and instructional practices that prevent marginalised learners from accessing or participating fully in learning opportunities.[60] Often these children are the cohorts least likely to be in school or at most at risk of dropping out. In contexts like these, targeted support and outreach that

[44] Speed School programmes provide opportunities for primary school aged out-of-school children aged nine to 14 to be reintegrated into government schools after 10 months of accelerate learning provision.
[45] The Speed School pedagogy and how it unlocks the creative and learning potential of disadvantaged children in Ethiopia. (2018).
[46] Women, U., & Aldin, C.O.M.E. (2021). Social and Emotional Learning (SEL) Systemic Review. (included data from Honduras, Nigeria, Uganda, Lebanon, Pakistan, Bangladesh, Philippines.)
[47] Ibid.
[48] Care. (2021). Impact Brief: Strengthening Opportunities for Adolescent Resilience (SOAR). https://www.care.org/wp-content/uploads/2021/03/SOAR-impact-brief-1.pdf
[49] Blair & Raver. (2012).; Greenberg, Kusché, & Riggs. (2004).; Riggs, Greenberg, Kusché, & Pentz. (2006).
[50] Ibid.

[51] Shonkoff, J.P., Boyce, W.T., & McEwen, B.S. (2009). Neuroscience, molecular biology, and the childhood roots of health disparities: building a new framework for health promotion and disease prevention. Jama, 301(21), 2252-2259.
[52] Centre on the Developing Child. (n.d.). Toxic Stress. Retrieved from https://developingchild.harvard.edu/science/key-concepts/toxic-stress/#:~:text=Extensive%20research%20on%20the%20biology,and%20health%20across%20the%20lifespan. [53] Jiang, S., Postovit, L., Cattaneo, A., Binder, E.B., & Aitchison, K.J. (2019). Epigenetic modifications in stress response genes associated with childhood trauma. Frontiers in Psychiatry, 10, 808.
[54] Stack D.M., Serbin L.A., Mantis I, & Kingdon D. (2015). Breaking the Cycle of Adversity in Vulnerable Children and Families: A Thirty-Five Year Study of At-Risk Lower Income Families. International Journal for Family Research and Policy.
[55] Center on the Developing Child. (2016).; Shonkoff & Garner. (2012).
[56] 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).
[57] 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.
[58] Gottfredson, M. (2017). Self-control theory and crime. Oxford Research Encyclopaedia of Criminology and Criminal Justice.
[59] Ibid.

help identify children most at risk are critical. Initiatives such as Accelerated Learning Programmes, which incorporate holistic skills, flexible and relevant learning options, and connecting to caregivers, are important entry points.[61]

A strong body of evidence also shows the relationship between the socio-emotional development of children and their commitment to school, academic, and professional performance, as well as other positive outcomes for individual and collective well-being in regard to health, violence, and criminal behaviour. [62,63] It is well established that more frequent childhood "maltreatment" experiences significantly predict later development of various neurological changes and psychiatric disorders in adolescence and adulthood, including anxiety, depression and alcoholism; all of which have far-reaching societal consequences.[64] 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.[65,66] Evidence is strongest on this in a US context, but there are evidential impacts in relation to HIV rates, health outcomes, and reduced adolescent pregnancy rates in countries including Panama, Malawi, Nepal, Liberia, Uganda, and the Dominican Republic. [67,68]

Economic Benefits

The cultivation of holistic skills outweighs investment in what has been for decades the status quo of prioritising academic skills. Moreover, a study of impactful holistic programmes points to high cost–benefit ratios, which implies that social and emotional learning is a viable intervention strategy from a purely economic perspective.[69] When considering "market returns", holistic skills matter because by investing in their development, countries will see greater returns in education, health, and productivity. The resultant lack of learning and skill development puts children at risk of future unemployment, low wages, stigmatisation, and other social and economic disadvantages.[70] Particularly from a health system perspective, neurological and psychiatric disorders that can occur as a result of childhood trauma, such as anxiety, depression, and addiction, pose a risk for a wide array of cardiovascular, respiratory, neuroendocrine, cognitive, and autoimmune diseases.[71] In turn, these disorders result in substantial costs in terms of health care utilisation, suicidality, disability, unemployment, and absenteeism.[72]

The Heckman theory shows that investing in holistic skills, including attentiveness, motivation, self-control and sociability, in early childhood education will not only reduce social costs for society and national governments, but will strengthen and promote economic growth, driven by the success for these children in school and life.[73] This does not undermine the need to also consider the importance of adolescence and other development periods, but it points to the early years as a critical time for investment for long-term gains.

From an industry perspective, employers have long held the view that graduates (secondary and tertiary) lack the skills critical in today's climate. A World Economic Forum (WEF) report identified 16 skills as important for the 21st century, twelve of which were holistic skills.[74] Microsoft also examined the most in-demand skills in current workforces and the skills needed for the future. Based on reviewing 76 million job postings on 25,000 job boards and corporate websites, the report found that the number of skills students will need to be successful continues to grow.[75] However, the fundamentals of these are based on key holistic skills such a collaboration, communication, critical thinking, and creativity. There is also evidence of correlation between holistic skills and earnings, though primarily from high-income country perspectives and most examples were more than a decade since publication.[76] The WEF analysis found that investing broadly in these skills, could add an additional $8.3 trillion in increased productivity to the global economy by 2030.[77] They also estimate that preparing today's generation of school-age children with better collaborative problem-solving, could add $2.54 trillion – more than $3,000 per school-age child – from this one skill alone.[78]

When considered in the context of success in action, a solid body of research, though again more prominent in a high-income country context, demonstrates the significant associations between holistic skills and other adult outcomes. These include productivity and collegiality at work, positive health indicators, and civic participation; all of which benefit wider society.[79] From the UK, the Early Intervention Foundation reported that £17 billion was spent on "picking up the pieces" of damaging social issues facing young people through late intervention and essential services.[80] A US study found that for every dollar spent on social and emotional school programmes, society reaped an average benefit of $11.[81]

60 United States Agency for International Development (USAID). (2019). Social and Emotional Learning and Soft Skills USAID Policy Brief.
61 Retrieved from https://inee.org/eie-glossary/accelerated-education-program-aep#:~:text=An%20accelerated%20education%20program%20(AEP,%2C%20marginalisation%2C%20conflict%20and%20crisis.
62 Duckworth & Seligman, 2005; Duckworth et al., 2007; Durlak et al., 2011; Heckman & Kautz, 2013; OECD, 2015.
63 Brookings. (2015).; Case and Deaton. (2017).; Chernyshenko, Kankaras, & Drasgow. (2018).; Durlak, Dymnicki, Schellinger & Weissberg. (2011).; Durlak et al. (2011).; World Economic Forum. (2016); Heckman & Kautz. (2012).; Heckman & Rubinstein. (2001).; Herrera et al. (2015).; Kankaras. (2017); OECD. (2015).
64 Busso et al. (2017).; Opel et al. (2019).; Skinner et al. (2016).
65 Botvin, G. (2000). Preventing Adolescent Drug Abuse Through Life Skills Training.
66 Heckman, J., Stixrud, J., & Urzua, S.,. (2006). The Effects of Cognitive and Noncognitive Abilities on Labour Market Outcomes and Social Behaviour.
67 Araúz Ledezma, A.B., Massar, K., & Kok, G. (2021). Social emotional learning and the promotion of equal personal relationships among adolescents in Panama: A study protocol. Health Promotion International, 36(3), 741–752.
68 Deitz, R., Lahmann, H., & Thompson, T. (2021). Social and Emotional Learning (SEL) Systematic Review. Dexis Consulting Group.
69 Belfield, C., Bowden, A. B., Klapp, A., Levin, H., Shand, R., & Zander, S. (2015). The economic value of social and emotional learning. Journal of Benefit-Cost Analysis, 6(3), 508-544.
70 IASC Reference Group. (2010).
71 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.
72 Birnbaum, H.G., Kessler, R.C., Kelley, D., Ben-Hamadi, R., Joish, V.N., & Greenberg, P.E. (2010). Employer burden of mild, moderate, and severe major depressive disorder: mental health services utilization and costs, and work performance. Depression and Anxiety, 27(1), 78–89.
73 Invest in Early Childhood Development: Reduce Deficits, Strengthen the Economy. (n.d.) https://heckmanequation.org/resource/invest-in-early-childhood-development-reduce-deficits-strengthen-the-economy/
74 World Economic Forum. (2016). New vision for education: Fostering social and emotional learning through technology.
75 Anderson, C., & Gantz, J.F. (2016). Keys to the future: Align workforce readiness skills to ensure student success. International Data Corporation.
76 Murnane, R.J., Willett, J.B., Braatz, M.J., & Duhaldeborde, Y. (2001). Do Different Dimensions of Male High School Students' Skills Predict Labor Market Success a Decade Later? Evidence From the NLSY. Economics of Education Review, 20, 311–320.; Waddell, G.R. (2006). Labor-Market Consequences of Poor Attitude and Low Self-Esteem in Youth. Economic Inquiry, 44, 69–97.; Drago, F. (2011). Self-Esteem and Earnings. Journal of Economic Psychology. 32(3), 480–488.
77 World Economic Forum. (2022). Reskilling Revolution: Leaders Preparing 1 Billion People for Tomorrow's Economy. Retrieved from Reskilling Revolution: Leaders Preparing 1 Billion People for Tomorrow's Economy > Press releases | World Economic Forum (weforum.org)
78 Ibid.
79 Garcia, E., & Weiss, E. (2016). Making Whole-Child Education the Norm: How Research and Policy Initiatives Can Make Social and Emotional Skills a Focal Point of Children's Education. Economic Policy Institute.
80 Early Intervention Foundation. (2015). Social And Emotional Learning: Skills For Life And Work. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/411489/Overview_of_research_findings.pdf.
81 Belfield, C., Bowden, A.B., Klapp, A., Levin, H., Shand, R., & Zander, S. (2015). The economic value of social and emotional learning. Journal of Benefit-Cost Analysis, 6(3), 508-544.

03 Success in Practice

In recent years, significant research, pedagogical innovations, dedicated educators, and policy changes have brought holistic learning into educational practice to complement the existing focus on cognition.[82] Selected from a growing body of evidence around what success looks like in practice, the following examples demonstrate cases that have successfully embedded a holistic approach in education systems (Colombia), examples of initiatives with strong results and promising early steps towards wider system-adoption (Accelerated Education in Ethiopia and the Study on Socio-Emotional Skills Study), and initiatives in crisis-affected contexts. Given that a sizeable proportion of the most rigorous evidence comes from the US and Europe, the focus here was to highlight examples from less represented regions.

Speed in Name, Holistic in Nature: Accelerated Education Programmes in Ethiopia

Ethiopia's Speed Schools, in existence since 2011, provide access to learning for out-of-school children aged nine to fourteen. The title of "Speed School" defines its approach – by delivering three years of primary school curriculum in just ten months – with the view to making the bridge back to education at fourth grade. The initiative started off in one region and is now implemented in the four largest regions of the country. Due to its success, Ethiopia's government has made an official commitment in the 2030 Education Roadmap and current Five-Year Education Development Strategic Plan to proliferate Speed Schools countrywide.

An impact study from 2018 found that of all former Speed School students tracked, approximately 75% were still in school compared to between 61%-66% of tracked comparison government school students who had not attended the Speed School. Graduates scored 10.4% (Mathematics), 13.5% (Sidama – the main language in schools in the study) and 7.4% (English). This was higher than their government school counterparts and a result which was statistically significant.[83] The evidence suggests that this success is in part related to their approach in embracing a distinctive pedagogy of social and emotional learning, encompassing values and behaviours that tend to produce inclusive classroom practices. The pedagogy places value on students' active contributions to their learning. Researchers found that because Speed School students become accustomed to active involvement in lessons, they are confident in participating in lessons and have the ability to learn even within the less interactive environments of government schools.

An additional layer of the programme is that the training of Speed School facilitators emphasises learning about the students' socio-economic backgrounds and their needs in relation to learning in a safe and inclusive environment. The Speed School Training Handbook, for example, explains students' "misbehaviour" as emanating from the teachers' failure to engage the child, or caused by the school infrastructure (lack of water or pleasant latrines) or the child's circumstances such as hunger, ill health, or family issues, rather than as emanating within the child themselves. This approach also connects to each child's families. Alongside classes, mothers of students are required to join mutual support groups that focus on microfinance principles to assist them in supporting their child through the programme and beyond. It also introduces a school readiness programme for younger children, and in parallel links are created with the primary schools that will receive Speed School graduates to ensure ease of transition.[84]

The integration of the model into the government system is in initial stages but looks promising. This process started several years ago when two regional education administrations first provided resources for Speed Schools in their region. By 2021, five regional education bureaus and the City of Addis Ababa incorporated Speed School classes into their annual education plans and budgets and funded nearly half the total 749 Speed School classes in their areas. At the federal level, the Federal Ministry of Education in Ethiopia established a new unit in 2021 to oversee the implementation of the Speed School programme nationwide. [85]

The Case of Colombia and Successful Holistic Models Targeting Rural Children

Successful examples of holistic approaches within education are not just a recent phenomenon. In the 1970s, Escuela Nueva was developed as an education model, geared towards rural primary schoolchildren in Colombia. Leveraging a holistic approach by cultivating a child-centred learning model, it is characterised by placing the teacher as a facilitator rather than a lecturer, flexible calendars, relevant curricula based on life skills, and closer relationships between the school and the community to increase the retention of students who face adversity. It has been shown to improve literacy and numeracy, while also advancing the development of holistic skills such as active learning, self-esteem, creativity, and civic values.[86] To date, Escuela Nueva has led to increased retention of students, in particular rural students, as well as improved learning outcomes when compared to schools that are not classified as Escuela Nueva.[87] Additionally, the model has expanded to more than 20 countries globally and has been adapted and contextualised within these diverse contexts.[88] One study also looked at the longer-term impact of Escuela Nueva on selected aspects of democratic and peaceful social interaction behaviours. The study compared responses from Escuela Nueva alumni of secondary school age, with secondary school students who had completed conventional primary schools. Some significant differences were found, including an inclination of Escuela Nueva alumni towards participatory democracy in contrast with the inclination of conventional school alumni towards representative democracy. Escuela Nueva alumni were also more likely to join voluntary organisations.

Assessing Holistic Skills at a Multi-Country and Multi-Contextual level

Assessment can be an important catalyst for reform, creating an effective pathway towards the wider adoption of holistic approaches in systems. However, traditionally,

[82] Smart, A., & Sinclair, M. (Eds.) (2022). NISSEM Global Briefs: Educating for the social, the emotional and the sustainable. Volume III: SEL in context. NISSEM.
[83] Akyeampong, E. (2018). African socialism; or the search for an indigenous model. Economic History of Developing Regions, 33(1), 69-87.

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[85] Muskin, J., & Kaper-Barceleta, P. (2021). Ethiopia inaugurates New Speed School Unit to reach Out of School Children. Retrieved from https://hundred.org/en/articles/ethiopia-inaugurates-new-speed-school-unit-to-reach-out-of-school-children
[86] Colbert, V., Bostilli. (2018). Why We Should Pay Attention to the Escuela Nueva Model. Retrieved from https://www.thedialogue.org/blogs/2018/03/why-education-planners-should-pay-attention-to-the-escuela-nueva-model/
[87] Hammler,K. (2017). The Colombian Escuela Nueva School Model: Linking Program Implementation and Learning Outcomes. Retrieved from https://escuelanueva.org/wp-content/uploads/2019/11/The-Colombian-Escuela-Nueva-School-Modeling.compressed-1.pdf
[88] Global Centre for the Development of the Whole Child. (2019). Fostering Resilience for Children in Adversity. Retrieved from https://iei.nd.edu/sites/default/files/2020-11/2337-FRI%20Fostering%20Resilience%20for%20Children%20in%20Adversity_0_compressed.pdf
[89] Forero-Pineda, C., Escobar-Rodriguez, D., & Molina, D. (2006). Escuela Nueva's Impact on the Peaceful Social Interaction of Children in Colombia. In A.W, Little (ed.). Education for All and Multigrade Teaching: challenges and opportunities (pp. 265-300). Netherlands: Springer. Retrieved from Escuela-Nueva's-Impact.compressed.pdf (escuelanueva.org)

holistic skills have been left out of assessment (both summative and formative) and measurement frameworks focus primarily on academic outcomes. Within a classroom, measuring holistic skills can take the form of feedback, probing discussions, unobtrusive assessments, and student generated assessments.[90] On a large scale basis, the OECD's Study on Social and Emotional Skills is an example of a successful international effort to collect insights from students, parents, and teachers on the social and emotional skills of learners aged 10 and 15. As the first internationally comparative tool, its development across geographically, culturally and linguistically diverse countries has shown that it is possible to develop reliable, comparable information on holistic skills that can be measured across contexts. The multi-national collaborative nature of the study also demonstrates that agreement on holistic skills, often considered elusive across diverse contexts and geographies, is possible. While the study is now entering a second phase, expanding across more countries, as a tool, it makes holistic skills visible, comparable, and therefore amenable to deliberate policy action in similar ways that traditional tests do with academic knowledge and skills.[91] As a result, the study will provide participating cities and countries with information on the social and emotional skills of their students and insights on how to support development at policy and practice levels. It has set in motion efforts to integrate holistic measures within large scale international assessments and begin the process of adjusting accountability measures which have traditionally been geared towards academic outcomes.

Key findings of the study include:

- Unlike academic learning, the development of social and emotional skills in students does not follow a steady upward trend. A striking, but not unexpected, result from the survey is that all 15-year-old students, irrespective of their gender and social background, reported lower social and emotional skills on average than their 10-year-old counterparts.
- There is a gender gap. By age 15, girls, on average, report significantly lower creativity than boys. Yet, parents' and teachers' ratings were similar across genders in both age groups. It is possible that this pattern is due to boys who are overconfident in their creative skills, whereas girls, on average, have more realistic evaluations.
- Specific holistic skills are important predictors of school grades across age cohorts, subjects, and cities. Being intellectually curious and persistent are the holistic skills most strongly related to school grades for 5-, 10- and 15-year-olds in reading, mathematics, and the arts.[92,93]

Effective Holistic Approaches for Crisis-Affected Children

The Norwegian Refugee Council's Better Learning Programme (BLP) is a promising example of an adaptive integrative model that has been effective in improving the well-being and learning of displacement affected children at scale. The programme is based on the provision of psychosocial support classroom-based interventions and mobilises a child/youth's support network of caregivers, teachers, and counsellors, encompassing a holistic approach at its core.[94] With a holistic approach to supporting children's recovery and improving their conditions for learning, it has three strands: BLP-1 – a general, classroom-based psychosocial support (PSS) approach targeting all children and young people; BLP-2, a small group intervention to support resilience amongst a more specific target group with low academic achievement; BLP-3 – a specialized PSS approach to support children experiencing chronic symptoms of traumatic stress.[95] Demand for the BLP has increased in recent years in response to emergencies and protracted crises, and has been implemented in several countries, including Palestine, Jordon, Lebanon, Syria, and Niger. The BLP is considered innovative in the Education in Emergency sector where there are no other similar multi-tiered and evidence-based programmes.[96] It can be effectively contextualised and implemented by any teacher or counsellor who has been trained on the approach, making it ideal for emergency and under-resourced humanitarian settings. A core reason for its' effectiveness, as found with Palestine and the Syria refugee response, is the evidence base which underpins it. The foundation of the programme reflects the research cited previously in relation to recovering from toxic stress and on-going adversities.

The programme focuses on improving children/youth's learning capacity by integrating techniques for coping with traumatic stress into daily teaching and learning and encouraging pupils' natural recovery. Critically, the programme provides teachers with tools to address often complex psychosocial issues without requiring a psychosocial support background, which means that it can be used systematically in classrooms to address, not only the well-being needs of children affected by conflict or displacement, but also to improve classroom management through supporting all children to manage their stress and learn how to calm themselves.[97] Evaluations of the programme in the context of Palestine, show considerable improvement in well-being, specifically in self-regulation, confidence, and self-awareness which translates into increased capacities to cope with challenges and stressful situations. Moreover, the relationships and communication between students, their families, and teachers improved. Countries that have implemented the BLP, report an improvement in study skills and learning outcomes in addition to the improvements in well-being, based on combining techniques across the various strands of the programme.[98] More recently, BLP has been rolled-out to countries hosting large numbers of Ukrainian Students, including Moldova and Poland, as an example of an initiative that seeks to support social and emotional well-being of students affected by conflict through both classroom-based learning delivered by teachers and targeted sessions with trained councillors.[99]

[90] Marzano, R. Building SEL Skills Through Formative Assessments. Retrieved from https://www.edutopia.org/blog/building-sel-skills-formative-assessment-robert-marzano
[91] OECD. (2021). Beyond Academic Learning: First results from the survey on social and emotional skills. Retrieved from https://www.oecd.org/education/beyond-academic-learning-92a11084-en.htm
[92] Ibid.
[93] OECD. (2021). Caring, sharing daring: Social-emotional development at age five. Retrieved from https://issuu.com/oecd.publishing/docs/play-create-learn-what-matters-most-for-five-year-

[94] UN Transforming Education Summit. (2022). Collection of Best Practices. Retrieved from https://transformingeducationsummit.sdg4education2030.org/system/files/2022-07/AT1GP197.pdf
[95] Shah, R. (2017). Improving children's wellbeing: An evaluation of NRC's better learning programme in Palestine.
[96] Ibid.
[97] Ibid.
[98] June T. Forsberg & Jon-Håkon Schultz (2022): Educational and psychosocial support for conflict-affected youths: The effectiveness of a school-based intervention targeting academic underachievement, International Journal of School & Educational Psychology, DOI:10.1080/21683603.2022.2043209
[99] OECD (2022). Supporting the Social and Emotional Well-Being of Refugees Students from Ukraine. https://www.oecd-ilibrary.org/docserver/af1ff0b0-en.pdf?expires=1670406577&id=id&accname=guest&checksum=2C43E87EE254504EC7A766E23FAA9000

04 Ingredients for Success: A Spotlight on Enabling Conditions

Given the large body of evidence on the criticality of embedding a holistic approach within education systems, it's possible to identify patterns related to key enabling conditions. Much of the evidence highlights the need to design holistic learning to ensure consistency across contexts and to consider enabling environments where children can participate and feel physically, socially, and emotionally safe. Success will mean that systems need to identify and build on the strengths of their current educational infrastructures while also identifying areas in need of improvement.[100]

The Critical Role of Teachers and Effective Pedagogy

Teachers strongly impact student motivation, engagement, learning, and behaviour. Studies across countries have shown that teacher quality is the single most important school variable influencing student achievement, [101] and the "teacher effect" (or a teacher's value-add), accounts for significant variation in student achievement [102] Studies on teacher value-add have found that, as with test scores, teachers vary considerably in their ability to impact students' social and emotional development, including a variety of observed school behaviours [103,104] A US study found that teachers' impact on students' social and emotional skills was ten times more predictive of students' longer-term success in high school (as measured by on-time graduation, grade-point average at graduation, taking the SAT, and reported intentions to enrol in a four-year college), than teachers' impact on student test scores. [105] The evidence also shows that these positive adult influences must begin in the early years and continue during a child's entire school career [106] Positive student-teacher relationships are even more important for students who are at elevated levels of risk. [107] Emotionally close, trustful relationships with nurturing teachers and high teacher responsiveness foster positive development and learning.[108] They are the lifeblood of education systems and, consequently, need to be explicitly trained in holistic approaches. Inclusive instructional strategies adopt pedagogies that use social and emotional support as scaffolds to foster motivation, which many low-achieving students lack. Other effective holistic teaching strategies include collaborative learning approaches, organising students into small groups, promoting debate and dialogue amongst peers, and cultivating a culture of student participation and leadership [109] These approaches have been shown to both use and improve social and emotional skills, which in turn, advance and reinforce academic learning and outcomes.[110] This can't occur without buy-in and ownership. This includes actively involving teachers in holistic reforms and establishing a budget in parallel with reforms in assessment or curriculum that also incorporates teacher training.

The critical impact of teachers is also true within emergency, conflict, and displaced settings. In education in emergency contexts, as well as with children facing significant adversities more generally, there is a misconception that only mental health professionals can provide psychosocial support. While mental health professionals are important referral options, depending on the context, it is crucial to remember that children's and youths' psychosocial well-being is linked to their day-to-day relationships and their own coping mechanisms. Evidence has shown that with high-quality, yet focused training, teachers and caregivers can provide simple and effective social and emotional activities and lessons.[111] This is also because children's and youths' well-being is intricately linked to the most important people in their lives: their parents, siblings, extended family, friends, teachers, religious leaders, and others. As such, these relationships are essential protectors for children and youth affected by a disaster. There is also an important relationship between holistic learning and trauma-informed pedagogy, which combines traditional social and emotional competencies, with an integrated approach that addresses the impact toxic stress and trauma can play on student's physiological, physiological, neurological, and emotional response. [112] It must be acknowledged that when considering mental health provision in children and youth, social and emotional learning should not be used as a replacement for targeted mental health interventions, nor do mental health interventions necessarily build these skills. Additional mental health supports and more targeted services for those children and youth with greater needs should be layered on top of social and emotional programmes that are provided for the general student population. [113.]

Ultimately, a holistic approach needs to be joined-up and considered in a learning ecosystem. It requires rethinking teaching and learning so that academic content and students' social, emotional, and cognitive development are joined not just occasionally, but throughout the school day. This represents, in many systems, a substantial change from decades of educational practice that assumes focusing on social and emotional skills by teachers takes time away from learning academics, particularly for older students.[114,115] Driving much of this – addressed in a later section - is the issue of incentivisation, with traditional accountability systems geared towards pressing teachers to "teach to the test".

The Ability to Assess Holistic Skills

For something to be valued and effectively monitored, it should be measured.[116] This is similar to the argument that "what gets assessed gets addressed", or "what gets measured gets treasured".[117] Traditionally, it has proved difficult to measure holistic skills in a reasonably reliable and comparable way. And while considered embryonic, [118] recent advancements in assessments have shown that it is possible to establish measures of holistic skills that are applicable and relevant across international and cultural boundaries, and which cover outcomes that are highly predictive of labour-market and social success. Even though research has shown the presence of some culture specific constructs,[119] skills including task performance, emotional regulation,

[100] Datnow, A., Park, V., Peurach, D. J., & Spillane P. (2022). What global education systems can teach us about transforming education for holistic student development. Retrieved from https://www.brookings.edu/blog/education-plus-development/2022/09/13/what-global-education-systems-can-teach-us-about-transforming-education-for-holistic-student-development/
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[102] Chetty, R., Friedman, J., & Rockoff, J. (2014). Measuring the impacts of teachers I: Evaluating bias in teacher value-added estimates. American Economic Review, 104(9), 2593-2632. Retrieved from http://dx.doi.org/10.1257/aer.104.9.2593.
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[104] OECD. (2018). What the TALIS-PISA link insights imply for policy and future research. Retrieved from https://www.oecd-ilibrary.org/sites/9bc425ba-en/index.html?itemId=/content/component/9bc425ba-en
[105] Florian, L., Young, K., & Rouse, M. (2010). Preparing teachers for inclusive and diverse educational environments: Studying curricular reform in an initial teacher education course. International Journal of Inclusive Education, 14(7), 709-722.
[106] Mourshed, M., Krawitz, M., & Dorn, E. (2017). How to improve student educational outcomes: New insights from data analytics. McKinsey & Company. September.
[107] Hamre, B.K., & Pianta, R.C. (2005). Can instructional and emotional support in the first-grade classroom make a difference for children at risk of school failure? Child Development, 76(5), 949-967.
[108] Jones, S.M., & Bouffard, S.M. (2012). Social and Emotional Learning in Schools: From Programs to Strategies. Social Policy Report. Volume 26, Number 4. Society for Research in Child Development.
[109] Martínez, L. (2016). Teachers' voices on social emotional learning: Identifying the conditions that make implementation possible.
[110] Davis, K., Hammett, R., Seagraves-Robinson, T., Christian, D.D., & Low, G. (2021). Social Emotional Learning: A Framework for Practice and Pedagogy. AI Practitioner, 23(4).

[111] McNatt, Z., Boothby, N.G., Wessells, M.G., & Lo, R. (2018). Guidance Note on Psychosocial Support: Facilitating psychosocial wellbeing and social and emotional learning.
[112] Portell, M. (2021). Harnessing the Synergy Between Trauma-Informed Teaching and SEL. Retrieved from https://www.edutopia.org/article/harnessing-synergy-between-trauma-informed-teaching-and-sel
[113] United States Agency for International Development (USAID). (2017). A systematic review of positive youth development programs in low- and middle-income countries. Retrieved from https://pdf.usaid.gov/pdf_docs/PA00MR58.pdf
[114] Aspen Commission. (2019). From a Nation at Risk, to a Nation at Hope: Recommendations from the National Commission on Social, Emotional, and Academic Development
[115] OECD. (2018). A Teacher's Guide to TALIS 2018. Retrieved from https://www.oecd.org/education/talis/TALIS-Teachers-Guide-to-TALIS-2018-Vol-I_ENG.pdf
[116] Richardson, D., Vrolijk, M., Cunsolo, S., Cebotari, V. (2021). What makes me? Core capacities for living and learning. UNICEF Office of Research: Innocenti, Florence.
[117] Pederson, P.V. (2007). What Is Measured Is Treasured: The Impact of the No Child Left behind Act on Non-assessed Subjects. The Clearing House, vol. 80, no. 6, pp. 287–91. JSTOR. Retrieved from http://www.jstor.org/stable/30189940. Accessed 2 Jul. 2022.
[118] Retrieved from https://oecdedutoday.com/new-approach-social-emotional-skills/
[119] Cheung, F.M., Leung, K., Zhang, J.X., Sun, H.F., Gan, Y.Q., Song, W.Z., & Xie, D. (2001). Indigenous Chinese personality constructs: Is the five-factor model complete? Journal of cross-cultural psychology, 32(4), 407-433.

collaboration, engaging with others and their facets tend to be present in most cultures and languages, making cross-cultural comparisons feasible. Increased national interest in holistic skills, alongside innovation and capability in measurement tools, will see the inclusion of creative thinking in PISA for the first time in 2022. It is also vital for education systems to collect data on a broad set of learning outcomes, to shed light on factors that drive inequality in education, and to provide a broader understanding of how skills develop and progress. In addition, we know that high-stakes tests based on narrow performance measures do not provide an accurate assessment of learning. The OECD's Study and Social and Emotional Skills (detailed in a previous example) has established a world-first assessment tool which has resulted in critical findings in relation to holistic skills. This does not take away from the need to develop contextually relevant assessments, but the evidence shows that comparative measures are possible and that valid, reliable information on holistic skills can be produced across diverse populations and settings.

While it is still the case that the scale of valid and reliable measures of holistic skills in low-resource and crisis contexts has constrained the generation of evidence, this is changing and there is a notably increase in data from low-income countries in recent years due to frameworks that incorporate context and environment, alongside cultural and diversity factors. The Inter-agency Network for Education in Emergencies Measurement Library is an example of how contextually relevant measurement tools for low- and middle-income countries can be developed and accessed.[120]

Despite strong progress in improving assessments and gearing them increasingly towards holistic measures, embedding assessment measures is not a straightforward process. Refined information on student and school learning outcomes, which would allow reliable comparisons between schools to trigger interventions, requires government investment, even in high income countries. Proven critical investments in assessment systems include maintaining data flows, ensuring good quality, and training staff and available user costs.[121] These can be prohibitive in low- and middle-income countries, which remain more prone to assessment data focused less on comparisons against fixed standards and more on grade promotion connected to examination results.[122]

The Importance of Contextualisation

Contextualisation, in partnership with diverse local stakeholders,[123] is a critical step in developing or adapting holistic frameworks, programmes, and measures to local contexts.[124] While alignment across international boundaries is possible, holistic learning practices are heterogenous and need appropriate contextualisation. Contextual factors include experiences, environments, and relationships, as well as sociocultural norms, and the political and economic realities of the settings in which people learn, play, and grow.[125] Holistic interventions show the largest effect size when the intervention is designed with a specific context or culture in mind. This supports the principle that social and emotional learning is not a one-size-fits-all intervention.[126] This is also why holistic measurement should be guided by relevance, followed by actionable, developmentally salient, and sensitive to differences over time and variation.[127] When working in diverse global contexts, it is also important to consider how various holistic skills and competencies are understood and valued among different cultures and communities.

To date, most studies have been conducted in high-income contexts, using instruments created and designed with those specific populations in mind. Researchers in low-income settings cannot simply transfer measures from one context to another and must adapt them to accommodate differences between the target groups. While it is important that contextually comparative measures are developed, it is also critical that what is defined as holistic learning is also based on locally driven frameworks with unique competence areas and skills. Harmonising a global framework with a country's education curricula is one effective method of contextualisation. Some strong examples include: the adoption by Uganda of the Collaborative for Academic, Social, and Emotional Learning framework; the Asegurando la Educacion programme in Honduras, where social and emotional learning interventions were used to promote an equitable and inclusive school and community environment; the social and emotional learning framework developed and adopted in Lebanon; and the recent competency-based curriculum in Kenya.[128,129]

Wider Integration Within the System

One of the cornerstones of the recent evolution towards holistic learning at national and district/state levels is system integration, whereby holistic learning becomes part of the core objectives of the education system and integrated and embedded within the system. This makes it possible for all schools within a district or state to follow a common conceptual framework, learning standards, and locally relevant holistic approaches. The implications are that a systems approach needs to address the inclusion of holistic skills in pedagogical training and teaching materials, as well as being reflected in the wider enabling environment that includes national policies and plans, curricula frameworks, budgeting and financing, human resources, and capacity development. Incorporating a holistic approach in one part of an education system, for example changing policy but not teacher training, will create potential roadblocks for integration across the wider system. In other words, policy change does not always equal full integration.

In looking at contexts that have been successful, this is a key ingredient. The ministries of education in countries such as Romania and Turkey have been instrumental in developing national level materials to promote social and emotional, and holistic learning more broadly.[130] In Romania, a national social and emotional learning curriculum is provided to students from lower secondary education to promote resilience. Similarly, in Turkey, the Ministry of Education with the support of UNICEF has

[120] Retrieved from https://inee.org/measurement-library
[121] Rosenkvist, M.A. (2010). Using student test results for accountability and improvement: A literature review.
[122] Ibid.
[123] Jones, S.M., Bailey, R., Kahn, J. & Barnes, S.P. (2019c). Social-emotional learning: What it is, what it isn't, and what we know. Education Next. Retrieved from https://www.educationnext.org/social-emotional-learning-isnt-know/; Jukes, M., Gabrieli, P., Mgonda, N.L., Nsolezi, F., Jeremiah, G., Tibenda, J., & Bub, K. L. (2018). "Respect is an investment": Community perceptions of social and emotional competencies in early childhood from Mtwara, Tanzania. Global Education Review, 5(2), 160-188.
[124] Brush, K. E., Jones, S. M., Bailey, R., Nelson, B., Raisch, N., & Meland, E. (2022). Social and Emotional Learning: From Conceptualization to Practical Application in a Global Context. In Life Skills Education for Youth (pp. 43-71). Springer, Cham.
[125] Jones, S. M., Brush, K.E., Bailey, R., Brion-Meisels, G., McIntyre, J., Kahn, J., Nelson, B., & Stickle, L. (2017). Navigating SEL from the inside out: Looking inside & across 25 leading SEL programs. Wallace Foundation.

[126] Wigelsworth, M., Lendrum, A., Oldfield, J., Scott, A., Ten Bokkel, I., Tate, K., & Emery, C. (2016). The impact of trial stage, developer involvement and international transferability on universal social and emotional learning programme outcomes: A meta-analysis. Cambridge Journal of Education, 46(3), 347-376.
[127] Hayashi, A., Liew, J., Aguilar, S.D., Nyanamba, J.M., & Zhao, Y. (2022). Embodied and social-emotional learning (SEL) in early childhood: Situating culturally relevant SEL in Asian, African, and North American contexts. Early Education and Development, 1-18.
[128] USAID. (2021). Integration of Social and Emotional Learning into Basic Education Programming. Findings from Eight Case Studies.
[129] Retrieved from https://easel.gse.harvard.edu/lebanon-sel-framework-mapping-project
[130] Smart, A., & Sinclair, M. (Eds.) (2022). NISSEM Global Briefs: Educating for the social, the emotional and the sustainable. Volume III: SEL in context. NISSEM.

created materials for students to promote psychosocial support. In Delhi, India, the development of the Happiness Curriculum is an example of a scalable, effective social-emotional learning programme that was responsive to the needs of Delhi's diverse students.[131] Several school districts in the US (e.g., Illinois, Washington, and California's CORE districts) have already integrated holistic skills (in this case framed as social and emotional learning) in their entire education system. The State of Washington, as well as Estonia, have both adopted learning standards that are developmentally appropriate across stages of education and adapted the interventions accordingly.[119]

In Kenya, Tanzania and Uganda, the ALiVE initiative works on developing context relevant, open-source assessment tools to measure progress in developing values and life skills and inform systems change.[132] More widely, a systematic review of documented impacts of programmes aimed at fostering socio-economic skills in developed and developing country contexts found that successful (school based) approaches followed a SAFE approach – sequenced, active, focused, and explicit. This has the result of optimising the success of system integration, from policy to classroom levels. Programmes that took a whole-school approach, prioritised implementation reliability, and had systems integration as a key goal tend to be more successful.[133] The evidence also highlights that to make meaningful improvements to a student's socio-emotional skills, it requires home and community learning environments to be well aligned to the efforts made in schools. As a resource, home learning environments are not fully tapped into by education systems. This requires consciously designed learning experiences, appropriate assessments and levers, bonding with teachers, positive peer experiences, intergenerational understanding, and community involvement. [134]

Political Will and Stakeholder Buy-In

A change in educational culture does not necessarily require a major increase in resources, but it does require a prioritisation of resources and a change in mindset surrounding incentives.[135] Efforts to sustain gains from investing in and scaling holistic approaches within education systems will only succeed with political will and country-led demand. Political will around holistic learning is evidenced by the increasing number of countries that are participating in international studies, adopting contextual holistic frameworks, and prioritising parts of holistic development such social and emotional skills, well-being, and mental health in their national education plans. The evidence shows, however, that decision-makers at government levels still need to be convinced that a focus on holistic skills has clear impacts on learning outcomes.[136] An Australian Council for Educational Research study in 2020, aimed at understanding how policymakers view holistic development (within the frame of whole child development), cites policy constraints, including incoherence of policies supporting holistic development and a lack of high-level commitment/awareness, as barriers to integrating holistic development.[137] This points to the criticality of monitoring outcomes. The study found that academic achievement was a key motivating factor in why national and city governments elect to participate in holistic programmes. This points to the criticality of highlighting the evidence around how holistic skills not only advance but are a key part of academic achievement. It also points to the importance of demonstrating the evidence around wider social and economic impacts of integrating effective holistic learning in children.

Related to this is the importance of avoiding political monopolisation, which has become apparent in a US context in recent years. A Fordham University study found that terminology and interpretation by parents, education leaders, and policymakers are critical elements to buy-in. The fact that holistic terms are framed as separate to academic learning raises the "spectre of imposing particular cultural norms that counter those being taught in the home".[138] It is critical to explain what we mean by holistic learning to avoid political monopolisation. It is important to make clear that is it not a separate subject, but rather an approach to education that integrates learning so that students are best able to be successful.[139] This also points to the importance of including teachers and parents in the dialogue around change. If consultation is effective, there is strong potential to improve systems for the better.

On a global scale, a consideration that is often overlooked is that 193 countries adopted the UN Sustainable Development Goals (SDGs) in 2015. And, while not directly framed as such, holistic skills play an important role in the SDGs, particularly SDG4, which aims to: "ensure inclusive and equitable education and promote lifelong learning opportunities for all by providing students with the skills, competencies and learning environments they need to be effective and engaged learnings". This points to political will at scale, which while limited, could be used to speak the language of accountability and progress when it comes to supporting the prioritisation and application of holistic learning across systems.

[131] Datnow, A., Park, V., Peurach, D.J., & Spillane P. (2022). What global education systems can teach us about transforming education for holistic student development. Retrieved from https://www.brookings.edu/blog/education-plus-development/2022/09/13/what-global-education-systems-can-teach-us-about-transforming-education-for-holistic-student-development/
[132] Regional Education Learning Initiative. (2021). Assessment of Life Skills and Values in East Africa – AliVE Launch. Retrieved from https://reliafrica.org/alive/
[133] Sánchez Puerta, M.L., Valerio, A., & Gutiérrez Bernal, M. (2016). Taking Stock of Programs to Develop Socioemotional Skills: A Systematic Review of Program Evidence. Directions in Development. Washington, DC: World Bank. doi10.1596/978-1-4648- 0872-2. License: Creative Commons Attribution CC BY 3.0 IGO
[134] UNESCO. (2021). Reimagining our futures together: a new social contract for education.
[135] Aspen Commission. (2019). From a Nation at Risk to a Nation at Hope: Recommendations from the National Commission on Social, Emotional, and Academic Development.
[136] Tarricone, P., Nietschke, Y., & Hillman, K. (2020). Measuring what matters: Insights on the value of Whole Child Development.
[137] R4D. (2021). Evaluation of Measuring What Matters Programme. Porticus: Tarricone, P., Nietschke, Y., & Hillman, K. (2020). Measuring what matters: Insights on the value of Whole Child Development.

[138] Berman, S. & Darling-Hammond, L. (2021). Communicating the "learning" in social-emotional learning. Retrieved from https://fordhaminstitute.org/national/commentary/communicating-learning-social-emotional-learning
[139] Ibid.

05 Evidence Gaps

Despite the scope and scale of the literature available, there remain important gaps in both what we know about holistic learning and its impacts. The primary consideration in this section was defining key areas where evidence is lacking or where the sector could benefit from better understanding to strengthen the case for embedding a holistic approach in education systems. Five key gaps elaborated below were identified.

The Impact of Holistic Approaches During Adolescence

The evidence base is more extensive in relation to the long-term effectiveness of interventions that start in early childhood and elementary school compared to their adolescent counterparts. Programmes and interventions at younger age ranges have more follow-ups. At adolescent levels that are typically shorter and have fewer outcomes, they tend to be analysed over shorter horizons.[140] There is an opportunity to support longitudinal studies from adolescence into adulthood, particularly in tracking long-term life outcomes and understanding skills progression. Undoubtedly, more rigorous evidence is needed to help make the case across age levels, in relation to investing in adolescents and wider outcomes. The criticality of better understanding the importance of adolescence is compounded by the "youth bulge" –the demographic pattern where a large share of the population is comprised of children and young adults.[141] In countries where a large cohort of young people cannot find employment and earn satisfactory income, the youth bulge will become a "demographic bomb" because a large mass of discouraged youth is likely to become a potential source of social and political instability.[142]

Evidence from Low-income Countries is Improving, but More is Needed

Despite progress in recent years, there remains an over-representation of studies from Europe and the US. The gap is closing, and increasingly there are contextually rich studies and evidence from low-income countries. This is also true of evidence in relation to displaced populations and crisis settings, but more studies need to adopt a comparative view across diverse cultural settings.[143] RISE recently synthesized the state of research regarding socio-emotional learning, mental health and well-being in low-income contexts and found that, despite recent momentum, research coverage remains sporadic. While more research is available in high-income countries, the methods and tools used are not necessarily transferable or suitable for use in diverse cultural settings.[144] With the intended inclusion of out-of-school children in PISA 2025, critical contextual data on learning outcomes will help the sector better understand longer term outcomes, particularly if systems are better able to monitor progression into adulthood in contexts with high rates of adversity.

There is also limited evidence in relation to a 'cost benefit analysis' or return on investment on the impact of holistic learning on students, when compared with traditional academic approaches for low- and middle-income countries. The focus on outcomes in these contexts tends towards academic. We know that the skills that a more holistic approach cultivates drive attainment and achievement, which then become the focus of educational investments, but they warrant direct analysis across all contexts. [145]

The Damage of Confusing Taxonomies

While not considered a traditional evidence gap, the lack of consensus and clarity around what is meant by holistic learning, alongside competing frameworks and approaches, poses a problem. This appears to damage the way in which the sector can effectively communicate to stakeholders such as teachers, parents, and politicians, and support them to make decisions about the right strategies and approaches to use in practice. The sheer scale of literature means that the multiplicity of terms and frameworks have, to date, complicated the advocacy messages around why holistic learning is so critical. The legacy of these terms appears to be a barrier to explaining to key stakeholders the robust evidence base behind the impact of approaches. This has resulted in confusion that acts as a barrier to meaningful discussion between stakeholders. When we focus on which holistic skills, for example, oftentimes the same word is used to describe different skills or different terms are used to describe the same skill.[146] The Taxonomy Project in Harvard's EASEL Lab is working on this issue, by generating a coherent taxonomy of holistic skills that organises, describes, and connects them across disciplines in a way that is agnostic to brand and sensitive to development and context.[147]

Another inherent challenge is that holistic approaches have been widely defined and characterised, varying from conflict resolution, anti-bullying, and civic engagement to a host of other important but quite different topics.[148] The diversity of focus and approach is not inherently a problem; frameworks are highly aligned with their specific purpose and objectives, making for a rich and vibrant field that offers a variety of options and approaches relevant to each context.[149] However, when this type of complexity becomes difficult to communicate, those advocating for a holistic approach are faced with making a challenging case when seeking change within their respective systems. From a policymaking perspective, the wide array of frameworks can make it difficult to sort through and compare research that establishes which is the most effective and culturally relevant approach for specific contexts.

The Relationship Between a Holistic Approach and Long-Term Life Outcomes

While a targeted focus on which skills and when is not within the scope of this paper, much of the research falls short of suggesting a prescribed sequencing of skills. Holistic learning frameworks would benefit from further research that prioritises these developmental questions.[150] Holistic frameworks would also benefit from

[140] Kautz, T., et al. (2014). Fostering and measuring skills: Improving cognitive and non-cognitive skills to promote lifetime success.
[141] Lin, J.Y. (2012). Youth bulge: A demographic dividend or a demographic bomb in developing countries. World Bank. Retrieved from http://blogs.worldbank.org/developmenttalk/youth-bulge-ademographic-dividend-or-a-demographic-bomb-in-developing-countries (accessed 27 June 2014).
[142] World Bank. (2011). World Development Report 2011: Conflict, Security, and Development. Washington, DC: World Bank.
[143] Richardson, D., Vrolijk, M., Cunsolo, S., & Cebotari, V. (2021). What Makes Me? Core Capacities for Living and Learning.
[144] Bayley, S., Wole, D., Yorke, L., Ramchandani, P., & Rose, P. (2021). Researching Socio-Emotional Learning, Mental Health and Wellbeing: Methodological Issues in Low-Income Contexts. RISE Working Paper Series. 21/068. Retrieved from https://doi.org/10.35489/BSG-RISE-WP_2021/068

[145] Belfield, C., Bowden, A. B., Klapp, A., Levin, H., Shand, R., & Zander, S. (2015). The economic value of social and emotional learning. Journal of Benefit-Cost Analysis, 6(3), 508-544.
[146] Murano, D., Way, J., Anguiano-Carrasco ,C., Walton, K., Burrus, J. (2018). The Use of the Big Five Model as an Assessment Framework. [147] Retrieved from https://easel.gse.harvard.edu/files/gse-easel-lab/files/taxonomy_handout_0.pdf
[148] CASEL. (2013). CASEL guide: Effective social and emotional learning programs – Preschool and elementary school edition. Author; Chicago, IL: 2012; Jones, S.M., & Bouffard, S.M. (2012). Social and Emotional Learning in Schools: From Programs to Strategies. Social Policy Report. Volume 26, Number 4. Society for Research in Child Development.
[149] Brush, K.E., Jones, S.M., Bailey, R., Nelson, B., Raisch, N., & Meland, E. (2022). Social and Emotional Learning: From Conceptualization to Practical Application in a Global Context. In Life Skills Education for Youth (pp. 43-71). Springer, Cham.
[150] Stafford-Brizard, K.B. (2016). Building blocks for learning: A framework for comprehensive student development. Turnaround for Children, 1-16

defining themselves by evidenced outcomes, measured through longitudinal studies. Frameworks are aspirational. They represent a blueprint for the skills we can or should target in order to move the need to desired outcomes.[151] However they do not currently connect to understanding the long-term impact of their application. The body of evidence around the impact on long-term life outcomes is robust. However, it could be made even stronger if key holistic frameworks were connected by the impact at individual and systems level based on long-term monitoring of outcomes. Data on student learning outcomes should also be consistently adjusted for socio-economic background, and protection status/displacement where relevant and follow students over time.

Further Analysing the Impact of Misaligned and Narrow Accountability Mechanisms

In reviewing the evidence, there was minimal literature related to the barriers of current accountability mechanisms within education systems when it comes to prioritising a broad breadth of skills. Despite the global variation in how education systems are run and managed, there is consistency across accountability approaches. This refers to the institutions or individuals who are obliged, based on a legal, political, social or moral justification, to provide an account of how they met clearly defined responsibilities.[152] Accountability, therefore, in most national contexts does not rest with a single institution or actor. For instance, schools may be responsible for providing supportive learning environments or teachers may be responsible for academic results, but to deliver on this they rely on governments providing resources and teachers respecting professional norms. Given that the development of holistic skills by their nature straddles the boundary between school settings, home life, and the wider environment, it could be of great benefit to understand options for reforming accountability to tie more closely with holistic outcomes. The status quo is that schools and teachers adjust to academic results, by narrowing the curriculum, teaching to the test, or teaching those on the verge of passing. This can result in reducing content knowledge and mastery at an individual level, while also narrowing system wide curriculum, towards only those subjects and skills that are assessed. For meaningful reform, education systems may need to address established conventions that no longer serve the needs of students and pave new terrain by supporting building accountability systems that serve holistic student development.[153]

[151] Brush, K.E., Jones, S.M., Bailey, R., Nelson, B., Raisch, N., & Meland, E. (2022). Social and Emotional Learning: From Conceptualization to Practical Application in a Global Context. In Life Skills Education for Youth (pp. 43-71). Springer, Cham.
[152] Ibid.
[153] Datnow, A., Park, V., Peurach, D.J., & Spillane P. (2022). What global education systems can teach us about transforming education for holistic student development. Retrieved from https://www.brookings.edu/blog/education-plus-development/2022/09/13/what-global-education-systems-can-teach-us-about-transforming-education-for-holistic-student-development

06 Conclusion

Holistic approaches influence outcomes beyond academic learning, including health, income, employment, and well-being. These approaches are not ambitious; they are already happening. These approaches can be applied. These skills can be taught. The evidence base is decisive across age ranges, social economic levels, and national boundaries that children and youth are more likely to succeed if they develop holistic skills that help them more readily respond to the demands of life. Decades of research clearly show that holistic skills are integral to mastering academic content and developing behaviours that support students to reach academic benchmarks.[154] Significantly, evidence shows that it is the children who face extreme adversity that benefit most from a holistic approach. Moreso, these approaches can address the global education challenge that we face by instilling in children the power to overcome multiple adversities, which can drive destructive outcomes and have a cumulative effect across generations.

The evidence captured in this document shows it can be done and is being done. Children can thrive within education systems that are based on holistic learning models, across contexts, in ways that allow them to achieve their potential. A holistic approach can be a crucial lifeline for children faced with prolonged trauma and toxic stress. Mindset, attitudes, and beliefs cultivated through a holistic approach have been found to be twice as important as socioeconomic background in predicting academic performance. This means family origin, trauma, adversity, and social context does not define the future of children if education systems are able to strengthen a child's mindset and mental architecture.

What we also know with certainty is that there is no false dichotomy. The skills that form the basis of holistic learning and development are inter-related and fundamentally intertwined with academic learning. The interconnected development of academic and holistic skills starts in early infancy and continues throughout a persons' life.[155] While many elements of a child's life improve along with the cultivation of a broad range of skills, one of the main outcomes is better academic performance.[156] All cognitive learning has myriad social and emotional facets.[157,158] Setting up a trade-off between academic learning and a more holistic approach establishes a false dichotomy and encourages a misunderstanding of the science of learning itself.

When it comes to improving the quality of education, we are at a crossroads with the progress made to date. Efforts have begun to stagnate and, in some cases, reverse.[159] Globally, we are still coming to terms with the learning loss and increases in out-of-school rates due to COVID-19 school closures, compounding the current learning crisis. This is reflected in 258 million children being out of school and a further 24 million

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at risk of dropping out.[160,161] Half of all pre-primary aged children (175 million children globally) are not enrolled in preschool.[162] Estimates suggest that 70% of children are in "learning poverty": an increase of a third in low- and middle-income countries. This rate was 57% before the pandemic.[163] In crisis contexts, the challenge is even steeper. Out of 222 million school-aged children, only 11% are in-school and acquiring minimum literacy and numeracy proficiency levels.[164] Learning poverty, defined as being unable to achieve reading proficiency by age 10, reaches almost 100% across a range of conflict-affected countries.[165] Given this, it is paramount to support current and future generations in their ability to overcome these challenges and heighten the urgency to instil key holistic skills that help children adapt, overcome, and thrive during such uncertain times. A holistic approach to learning is not a magic bullet, it is complex and takes prioritisation and commitment from all levels of a system to fully work, but the evidence is clear that it can, when effectively applied, benefit society in extraordinary ways.

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