

Commentary: Vulnerable children—A global perspective

Jenna Bulat | Amber Gove

RTI International, North Carolina, USA

Correspondence

Amber Gove, RTI International, NC, USA.
Email: agove@rti.org

The articles in this special issue tackle these issues head on.

Abstract

In this commentary, we discuss the global similarities in the intersections of poverty, disability, and learning, and share lessons that are being learned internationally that can inform U.S. domestic research and implementation. These lessons cover multiple aspects of learning and development, instructional materials and approaches, integration of social emotional and school climate considerations, and engagement of families and communities.

KEYWORDS

disability and inclusion, global south, low and middle income countries, social and emotional learning, vulnerable children

The challenges that impede the learning and development of the most vulnerable children in the United States are, most unfortunately, shared by nearly every country around the world. These challenges are amplified to even more dire degrees in middle- and low-income countries, where poverty and resulting food-insecurity, trauma, inadequate early learning opportunities, and language barriers are commonplace. As a result, school absenteeism and dropout are rampant, with only three quarters of students in middle-income countries still in school by age 15 and only half learning the basics (UNESCO, 2020); these statistics are even lower in low-income countries. The articles in this special issue tackle these issues head on.

In this commentary, we discuss the global similarities in the intersections of poverty, disability, and learning, and share lessons that are being learned internationally that can inform U.S. domestic research and implementation. These lessons cover multiple aspects of learning and development, instructional materials and approaches, integration of social emotional and school climate considerations, and engagement of families and communities.

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial](https://creativecommons.org/licenses/by-nc/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

© 2022 The Authors. *New Directions for Child and Adolescent Development* published by Wiley Periodicals LLC.

What the articles tell us

Building on evidence from elementary school conjoining behavioral consultation programs—in which teachers, caregivers and students take shared responsibility for problem solving social, emotional and behavior issues—Garbacz et al. test whether similarly designed middle years programs can have similar effects. Their modifications include cultural adaptations, increasing student involvement and shortening meeting times, all designed to respond to the behaviors and needs of older students and their families. The work is key for informing adaptations of approaches to different age levels or geographies, and provides lessons on how best to incorporate (and test for) the value of these changes and their impact on outcomes.

Patton Terry, McCardle, and Zuckerman draw on the concept of vulnerability, used widely in public health and social science, to offer a framework for understanding the factors that may make children more likely to experience reading difficulties. These include the child, family, school, and community factors that can both contribute individually and interact with one another to explain children's reading development and progression—or lack thereof. The authors make the case for reading research to evolve, as the field of child development has, to study the myriad dynamic factors and processes that interact and compound one another to make children more resilient or susceptible to the layered risk factors that affect their academic progress. Neighborhood factors, largely neglected in reading research, are included as one example for fertile examination: in one study of 19 schools, neighborhood gun violence rates predicted 28% of the variance in third grade reading achievement.

In the United States, Black children disproportionately live and are schooled in contexts with multiple vulnerability factors. Iruka uses an assets-based approach to identify the factors, including promoting environments, that would enable Black children to thrive in early childhood education (ECE). Following a review of the ECE landscape, including quality and access indicators across demographic groups, Iruka offers evidence for developing approaches that seek to dismantle racism and its consequences for the development of Black children in the formative early years. In addition to the access challenges, Iruka argues that policies must recognize and overcome differences in the quality of ECE that Black children receive, differences that are compounded by the trauma and adversity experienced by their educators and caregivers. Finally, attention to equitable outcomes is paramount; Black children's outcomes continue to be associated with race even after controlling for other factors. Monitoring and accountability systems that integrate indicators of equity would enable policy makers to track and adjust programming to improve outcomes for Black children.

Christodoulou et al. examine how socioeconomic status (SES), defined as access to family and community social and financial resources, contributes to student vulnerability to reading difficulty. Systematic reviews estimate that SES explains 10% of the variation in reading achievement, and students in the lowest SES quintile are disproportionately more likely to be identified as having a learning and/or reading disability. SES does not directly contribute to lower reading scores, but is instead a characteristic of the household, school, and community factors that, compounded, contribute to determining whether the environment promotes or hinders reading development. Factors including home literacy environment, oral language exposure, and opportunity gaps including the unequal distribution of resources, explain many of the differences in reading outcomes. Differences in children's early experiences, including factors tied to SES and oral language development, manifest in neural development and connectivity. Among the interventions that have demonstrated effectiveness in narrowing these gaps are systematic literacy instruction and structured

storybook reading, but as the authors argue, interventions designed to specifically overcome the effects of lower SES on reading development are an area for further study.

School achievement, like all human traits, Holden et al. remind us, is the result of the interaction between genetic and environmental factors. International studies of families and twins estimate that genes explain 66% of the variance in general learning achievement, with environmental factors accounting for the rest—a somewhat hopeless result for those seeking to improve learning environments as a way to move the needle on learning outcomes. Understanding what works for whom and under what conditions requires better examination of the interactions between genes and the environment. A barrier to increased understanding, the authors argue, is the lack of diversity in genetic studies; as evidence they cite their meta-analysis which found that only seven of 37 twin studies had samples in which non-white participants accounted for more than 25% of the total. The lack of diversity in these studies hampers researchers' ability to identify the environmental conditions under which vulnerable racial groups have a great chance of thriving. Soberingly, "almost the entirety of our scientific knowledge on how genes and environments interact together on school achievement measures is based on White participants." (Holden et al, this issue, p. 47) The authors caution that drawing conclusions from these studies to inform policy should be halted until the samples become a better reflection of the diversity of genetic and racial backgrounds of the student population. For those of us working in international contexts, this advice is especially important.

What we are learning elsewhere

A framework of vulnerability—such as introduced by Patton Terry, McCardle, and Zuckerman—is a useful model for understanding differences in academic achievement between populations of students: namely, between students whose lived realities include poverty, language barriers, gender or gender orientation, disability, or other factors that put them at risk of failing to reach their academic potential—vulnerable students—and students who do not experience those same risks. What if, however, all students in your school, your community, your research sample are vulnerable?

It is a sobering commentary on the United States that the challenges its education system faces do not differ dramatically from those of the poorest countries in the world. Choose any indicator related to student academic performance you would like—education-earmarked funding, student performance on government or international reading assessments, resources available to schools, capacity of teachers and school administrators, ratio of students to quality learning materials, time on task in the classroom, engagement of parents and communities in their children's learning—and the greatest difference between public schools in low- and middle-income countries (LMICs) and those in the United States is likely to be one of scale. In Mississippi, for example, the poorest state in the United States, 28% of children live in poverty, and this percentage increases to 43% for Black children (United Health Foundation, 2022). This is only 20 percentage points lower than the heartbreaking statistic of 63% of children living in poverty in Malawi (UNICEF Malawi, 2022), the world's third-poorest country. While the thought of damaged school buildings lacking clean running water, Internet access, quality teaching and learning materials, and qualified teachers may conjure images of rural Africa, they could just as easily exist in rural communities in the United States.

That difference in scale is an important one, however. Using a vulnerability framework, the majority of children in LMICs are vulnerable, and this is particularly true in countries that currently face or have recently faced political unrest. In a country like Haiti, where

In a study of Hausa literacy in two states in Northern Nigeria, oral reading fluency scores for students who had a textbook in their local language of Hausa were found to be double or triple those of pupils who reported they did not have the textbook (RTI International, 2011). In a study of early grade reading outcomes in Uganda, Piper (2010) found that the most important predictors of learner achievement across languages were whether the learners had a reading textbook and reading materials at home.

An analysis of data from 49 countries participating in the 2011 Progress in International Reading Literacy Study (PIRLS) demonstrated a clear relationship between reading outcomes and language: learners had higher average achievement scores when their L1 was the language of the assessment (Mullis et al., 2012).

civil and political upheaval vie with earthquakes, hurricanes, and a global pandemic to disrupt the population, many children face not only poverty but also food and shelter insecurity, trauma, and sporadic school closings. To compound this issue of scale, data about the nature and scope of vulnerabilities facing children are harder—and in some cases nearly impossible—to obtain in LMICs; without these data, efforts to remediate vulnerabilities can be stymied.

This lack of data is particularly relevant when attempting to capture the prevalence and types of disabilities among children in LMICs. An estimated 1 billion people worldwide, 15% of the world population, have a disability (World Health Organization, 2015), 80% of whom live in low- and middle-income countries (World Health Organization, 2015). Moreover, of these 1 billion people worldwide with disabilities, an estimated 150 million are children (14 years of age and younger), 93 million of whom have a moderate or severe disability (World Health Organization, 2011). These are staggering estimates, and yet they are just estimates, because most LMICs lack the resources to accurately assess the overall prevalence of disabilities within their citizenry. They also lack the ability at the school or classroom level to identify individual students who are struggling due to a disability, and even though the majority of countries across the globe have ratified the United Nations Convention on the Rights of Persons with Disabilities, which mandates that all children with disabilities have the right to a quality education to reach their full potential, even with data in-hand most LMICs lack the knowledge and resources needed to address the needs of these children (Bulat, Hayes et al., 2017).

These challenges notwithstanding, there is much we know about how to meet the learning needs of the hundreds of millions of children who face vulnerabilities in LMICs, even if we cannot yet consistently and accurately quantify the specific vulnerabilities they face—whether at a national prevalence level or at the level of an individual child.

Instructional materials and approaches

Through over a decade of supporting LMIC governments in improving their education programs, we have consistently seen the following elements of instruction to be requisite and effective for teaching foundational skills such as literacy and mathematics to vulnerable children. While particularly important to teaching literacy, however, these elements of instruction have relevance across all content areas (Bulat, Dubeck et al., 2017). These approaches are also particularly useful for LMICs, in which the vast majority of children attending public schools are vulnerable.

- **Effective Teaching.** Teaching effectively is not easy, and vulnerable students bring unique learning needs and opportunities that can stretch a teacher. Whatever the content area being taught, and whatever the individual student learning needs, instruction must respect and respond to the child's developmental needs, and must be inclusive, contextualized, and balanced. Contextualizing instruction must consider the language environment (is the language of instruction the same as the child's home language? Does academic success require the child to become biliterate?), the skills and knowledge the child brings to the learning experience, the capacity of teachers and support personnel, existing pedagogical practices, the child's academic experiences at home and at school, and the presence—or not—of sufficient quantities of high-quality teaching and learning materials. Instruction must also be balanced, offering explicit instruction coupled with many and diverse opportunities to practice, in small groups and individually, in the classroom and at home. Effective teaching also requires modifying the classroom environment to meet the needs of students with disabilities and working across the school to help ensure that vulnerable students are included in all academic and social activities (Bulat, Hayes et al., 2017).
- **Sufficient, High-Quality Texts and other Materials.** Whether teaching literacy or any other content area, all students benefit from having high-quality texts and other learning resources to use. This is particularly true for vulnerable children who benefit from responsive, culturally relevant, inclusive, and pedagogically and developmentally appropriate learning materials. For reading, a print-rich environment ideally exposes students to different types of texts at different levels of difficulty. For mathematics, effective instruction includes making manipulatives available to students and teachers (Sitabkhan & Platas, 2018). Unfortunately, in LMICs making high-quality teaching and learning materials available can be a challenge. In communities in which the predominant language has not yet been codified, creating teaching and learning materials can include the lengthy process of developing a written orthography, and a lack of resources to re-print and distribute materials can keep needed books from students' hands.
- **Adequate Time on Task.** Making good use of the time available during school hours is an important factor in effective instruction, as the time allocated to literacy instruction can substantially impact learner achievement (Wright, 2000). LMIC education systems mandate many aspects of instructional time—such as the length of the school day, the number of minutes that can be allocated to teach literacy, and the amount of emphasis to put on components of literacy instruction—yet even within those constraints available instructional time can be maximized by balancing the time allotted to skill development, practice, review, and assessment, and maintaining a good pace of instruction. Instructional time can also be squandered by mismanagement of a lesson plan, unplanned breaks in the school calendar, and teacher and student absenteeism.
- **Inclusive Test and Assessment Systems.** As with classroom-based communications, classroom-based assessments—whether formative or summative—should be respectful and responsive to the needs of vulnerable students, allowing them the time, space, and flexibility to demonstrate their knowledge and skills as they feel most comfortable doing. While a cohesive body of research on the effects of embedded formative assessments on learner reading growth does not yet exist, much existing research suggests that a teacher's attention to minute-by-minute and day-to-day formative assessment substantially improves students' literacy outcomes (William, 2011), especially for students with disabilities and other students who may be struggling to master the content being taught.
- **Thoughtful use of Mother Tongue.** One vulnerability facing many students around the world is being part of a minority language and having to learn English as a second or even

third language. Learners come to school with extensive (often subconscious) knowledge of their home language, including its phonological and syntactic systems, and with thousands of vocabulary words already known. This knowledge of a language and existing oral vocabulary can serve as a solid foundation for learning if the teacher understands how to use them. Conversely, when the language used to teach is not learners' home language or a language they understand well, learning is more difficult. Decisions about what language(s) to use for instruction, when to introduce second or third languages, and how to do so are complex and often informed by political goals and social norms. However, when considering the needs of vulnerable students, it is important to implement those decisions in ways that build upon students' assets.

Integration of social-emotional and school climate considerations

As highlighted in this issue, social and emotional skills can play an important role in fostering learning, by enabling a child to manage emotions, regulate behavior, and make the kinds of healthy, responsible social decisions that promote learning, rather than detract from it (CASEL, 2021). What is less certain is how to effectively teach these important skills to vulnerable children in LMICs, and especially how to do so at scale. Little research has been done on the academic benefit of explicitly teaching social-emotional skills to children in LMICs—and even less research on the benefit of building social-emotional skills among teachers—but there is no reason to doubt its importance.

In fact, early attempts to build these skills in vulnerable students and their teachers, and to create the kinds of enabling and nurturing environments in schools that foster social-emotional learning, are promising. For example, a social-emotional learning (SEL) and school climate program, Journeys, implemented in Uganda showed great promise. The Journeys approach uses co-curricular activities such as guided reflections, dialogue, interactive games, art, and drama to directly strengthen students' SEL skills, while inspiring and guiding school staff and community members in how to establish the learning conditions that foster students' SEL (Randolph, Burkholder et al., 2019). Unfortunately, COVID-19 school closures prevented the completion of a longitudinal study of the impact of this approach on students' learning; however, teachers anecdotally attributed improvements in their own SEL skills to Journeys, including the ability to build positive relationships with students, greater patience in teaching students, increased understanding of individual student differences and the different needs of students, and a greater ability to see students' potential and capacities.

Similarly, a study in Malawi and Uganda of the relationship between SEL and school culture in exceptionally high-performing schools (schools performing above the 95th percentile in these two countries) showed that these schools shared a common characteristic: they all valued safe and nurturing school climates, which in turn fostered increased SEL (Randolph, Edwards et al., 2019). In schools that promote safe and nurturing environments, SEL becomes an integral part of school life, in and outside of the classroom, and as a result, students are free to learn. Students trusted their teachers to not use harsh punishment; trusted teachers also encouraged them to study hard, to not be late, to remain in school, and to have hope. For students, these teacher behaviors provided a sense of safety and feeling cared for that allowed them the freedom to express themselves openly and to practice emerging SEL competencies. This in turn built the *agency* students need to stay on target, remain in school, and perform their best (Randolph, 2020).

Engaging families and communities

The link between family engagement in a child's learning and that child's learning progress is well established, and the US Every Student Succeeds Act (ESSA) even encourages schools to engage with families to promote children's learning (US DOE, 2016). Research is also exploring the most effective ways to engage families, including multilingual families and non-English speaking families in rural communities in the United States (Coady, 2019). Less definitive research has linked family and community engagement with student learning outcomes in LMICs, but as with SEL, work being done suggests that children benefit when their parents are engaged in their education, regardless of their geographic location. As one example, in the low-income country of Liberia, parents benefitted from a community engagement model that encouraged caregivers to make time and space to read with their children and to engage with the children's teachers. Even a year after community engagement activities ceased, parents reported spending more time helping their children learn than they had before.

How we can learn from one another

What do we have to learn from each other, as we look across education systems within and outside the United States? Whether in the United States or LMICs, education systems have more in common than not. They must meet the varied needs of diverse students, including students who are vulnerable and require sustained and targeted support to excel. Yet they are often crippled with chronic funding shortages, underprepared and under-paid teachers, sub-optimal class sizes, and inadequate resources.

Historically, lessons learned have flowed from the global north to the global south, with research, best practices, and tools from high-income countries being fit like square pegs in the round holes of LMIC contexts. However, as the field of international education continues to explore ways to train teachers at scale with minimal budgets, or to move learning online in Internet deserts, or to empower communities of illiterate parents to invest in their children's education, innovations borne from necessity in LMICs can inform practices in low-income states, counties, or schools in the United States.

CONFLICT OF INTEREST

The authors have no known conflict of interest.

REFERENCES

- Bulat, J., Dubeck, M., Green, P., Harden, K., Henny, C., Mattos, M., Pflapsen, A., Robledo, A., & Sitabkhan, Y. (2017). *What we have learned in the past decade: RTI's approach to early grade literacy instruction*. RTI Press. <https://doi.org/10.3768/rtipress.2017.op.0039.1702>
- Bulat, J., Hayes, A. M., Macon, W., Tichá, R., & Abery, B. H. (2017). *School and classroom disabilities inclusion guide for low- and middle-income countries*. RTI Press. <http://doi.org/10.3768/rtipress.2017.op.0031.1701>
- CASEL (2021). *What is the CASEL framework?* CASEL. <https://casel.org/fundamentals-of-sel/what-is-the-casel-framework/>
- Coady, M. (2019). Rural multilingual family engagement. *The Rural Educator*, 40(3), .<https://doi.org/10.35608/ruraled.v40i3.545>
- Mullis, I. V., Martin, M. O., Foy, P., & Drucker, K. T. (2012). PIRLS 2011 international results in reading. International Association for the Evaluation of Educational Achievement. Herengracht 487, Amsterdam, 1017 BT, The Netherlands.
- Piper, B. (2010). Uganda early grade reading assessment findings report: Literacy acquisition and mother tongue. Retrieved from <http://learningportal.iiep.unesco.org/en/notice/T1428320983>

- Randolph, E. (2020). Understanding and leveraging the promise of positive school and classroom climates: What we have learned from Malawi and Uganda. *Understanding and leveraging the promise of positive school and classroom climates: What we have learned from Malawi and Uganda* | SharEd (rti.org).
- Randolph, E., Edwards, L., & Norman, J. (2019). The central role of school culture and climate in fostering social and emotional learning: Evidence from Malawi and Uganda. In Smart, A. et al., (2019) *NISSEM Global Briefs: Educating for the social, the emotional and the sustainable*, page 198–213. <https://shared.rti.org/content/central-role-school-culture-and-climate-fostering-social-and-emotional-learning-evidence>
- Randolph, E., Burkholder, G., & Sempa, H. (2019) The Journeys approach to building a safe, inclusive and positive school and fostering social and emotional learning culture and climate in fostering social and emotional learning: Evidence from Malawi and Uganda. In Smart, A. et al., (2019) *NISSEM Global Briefs: Educating for the social, the emotional and the sustainable*, page 250–263. <https://www.scribd.com/document/424176469/NISSEM-Global-Briefs>
- RTI International. (2011). Nigeria Northern Education Initiative (NEI): Results of the Early Grade Reading Assessment (EGRA) in Hausa. <https://globalreadingnetwork.net/eddata/northern-nigeria-education-initiative-nei-results-early-grade-reading-assessment-egra-hausa>
- Sitabkhan, Y., & Platas, L. M. (2018). *Early mathematics counts: Promising instructional strategies from low- and middle-income countries*. RTI Press. <https://doi.org/10.3768/rtipress.2018.op.0055.1807>
- UNESCO. (2020). Global education monitoring report summary 2020: Inclusion and education: All means all. Retrieved from Resources | Global Citizenship Education (GCED) Clearinghouse | UNESCO & APCEIU (gced-clearinghouse.org).
- UNICEF Malawi. (2022). *The situation of children and women in Malawi*. Retrieved from *The situation of children and women in Malawi*, UNICEF Malawi.
- United Health Foundations. (2022). Children in poverty. Retrieved from Explore Children in Poverty in Mississippi | 2021 Health of Women And Children Report | AHR (americashealthrankings.org).
- US Department of Education. (2016). Every student succeeds act of 2015. <https://www.ed.gov/essa?src=rn>
- William, D. (2011). *Embedded formative assessment*. Solution Tree Press.
- World Health Organization. (2011). *World report on disability*. World Health Organization.
- World Health Organization. (2015). WHO global disability action plan 2014–2021. http://apps.who.int/iris/bitstream/10665/199544/1/9789241509619_eng.pdf?ua=1
- Wright, J. (2000). Finding enough time in the school day: A visual guide to teaching time in the classroom [online handout]. Retrieved from <http://www.jimwrightonline.com/pdfdocs/engagedTime.PDF>

How to cite this article: Bulat, J., & Gove, A. (2022). Commentary: Vulnerable children—A global perspective. *New Directions for Child and Adolescent Development*, 2022, 95–102. <https://doi.org/10.1002/cad.20461>