



3EA

EDUCATION IN EMERGENCIES
EVIDENCE FOR ACTION



3EA IMPACT REPORT 2.1

IRC Healing Classrooms **Remedial Tutoring Programming** **Improves Nigerien And Nigerian** **Children's Learning**

With support from Dubai Cares during the school year 2016-2017, the International Rescue Committee (IRC) delivered *Learning in a Healing Classroom* remedial tutoring programming to support local and internally displaced Nigerien children and refugee Nigerian children's learning outcomes and retention in public schools in Niger. We found that, after twenty-two weeks of program implementation, (1) access to *Healing Classrooms* programming significantly improved students' reading and math skills, and (2) adding low-cost, targeted social-emotional learning interventions to *Healing Classrooms* improved students' overall school grades as well.

The international community made a promise to children in the Sustainable Development Goals:

that all will have the opportunity not only to attend school, but also to learn. It is clear, however, that without a more robust evidence base for education in emergencies (EIE), stakeholders will lack the knowledge required to make sound decisions about the most effective programs and approaches in which to invest scarce time and resources. Without such evidence, decisions will continue to be based on intuition rather than knowledge, and most importantly, children in crisis contexts will continue to be denied the opportunity to receive a quality, safe education that we know builds the holistic skills they need to survive and thrive.

Baseline data collected by the Education in Emergencies: Evidence for Action initiative (3EA) in fall 2016 showed that more than one-third of Nigerian and Nigerian 2nd through 4th graders in our sample (N = 1744) could not identify a single letter in French on the Early Grade Reading Assessment (EGRA), a test designed specifically for use in low-income countries.¹

With the support of Dubai Cares, during school year 2016-2017 the International Rescue Committee (IRC) delivered *Learning in a Healing Classroom* (*Healing Classrooms*) remedial tutoring programming to support

Nigerien and refugee Nigerian children's (grades 2 through 4) learning and retention in public schools in the Diffa region (Diffa and Miane-Soroa departments). New York University's Global TIES for Children (TIES/ NYU) conducted an experimental evaluation of the program in order to provide the first rigorous evidence of whether and how non-formal, "complementary" education programs can bolster conflict-affected children's academic outcomes to support their ability to succeed in formal education systems.

Key Findings

- Access to *Healing Classrooms* remedial tutoring programming significantly improved local and internally displaced Nigerian and refugee Nigerian students' literacy and math skills after twenty-two weeks of implementation. Two randomized trials have now provided evidence that the IRC's *Learning in a Healing Classroom* model of social-emotional learning-infused teacher training and curriculum works across delivery modes and contexts to improve children's academic skills in crisis contexts.²
- Students who received twenty-two weeks of *Healing Classrooms* programming as well as targeted social-emotional learning activities (mindfulness and Brain Games) showed improvement in school grades over those only in *Healing Classrooms* programming.



THE BACKGROUND

Children living in crisis contexts are at a double disadvantage. First, children in such contexts have often experienced unspeakable adversities, exposure to which can lead to a physiological “toxic stress” response that disrupts healthy brain development and affects short- and long-term behavior, health, relationships and the ability to learn.³ Second, stakeholders working in emergency contexts have failed to provide children with evidence-based education opportunities that we *know* work to promote recovery, resilience and learning. Indeed, despite a global trend towards the evaluation of education programs via experimental trials, a review of education interventions in conflict-affected contexts identified only six studies that assessed the impact of such programs on children’s access to and/or quality of learning via the use of a randomly assigned control group.⁴ As it currently stands, stakeholders are implementing programs based on a gamble—with children’s chances of becoming healthy and productive citizens at stake.

The limited research that does exist has assumed an “either/or” approach to formal and non-formal education strategies in conflict-affected contexts. That is, it seeks to address how to improve crisis-affected children’s access to or quality of formal schools, asking “Can non-formal, community-based schools improve access to education?”⁵; or “What strategies can improve the quality of formal schools?”⁶ However, we are aware of no rigorous research to date, however, that examines whether and how non-formal education strategies—like remedial support or accelerated learning programs—can support children’s retention and learning in formal school systems.⁷ Yet given the significant social, economic and political barriers that lead conflict-affected children to drop out of host country formal school systems, as well as the benefits that certification from a formal system can provide refugee children, such research on how to retain children in formal education and improve their academic outcomes is imperative for informing politically- and resource-viable education strategies in conflict-affected contexts.

In addition, children in crisis-affected countries struggle with social-emotional and mental health barriers that prevent them from attending or remaining in school.⁸ In 2015, attacks by Boko Haram caused approximately 213,000 Nigerian refugees, Nigerien returnees, and internally displaced persons (IDPs) to seek protection in Niger’s Diffa region. Of the 82,513 (41,656 boys and 40,857 girls) primary school-age children in Diffa, only 60% are enrolled in school;⁹ these numbers are even lower for refugee and returnee children.¹⁰ And even

when children are in school, these barriers may prevent them from learning; only 52.4% of male and 23.2% of female youth (aged 15-24) in Niger are literate.¹¹ Research from high-income countries indicates that social-emotional learning (SEL) programs that teach children to understand and manage their emotions, establish and maintain positive relationships, and make responsible decisions can significantly improve school-aged children’s foundational social-emotional skills (Effect Size (ES) = .57), as well as longer term outcomes such as emotional distress (ES = .24), conduct problems (ES=.22) and academic performance (.27).¹² Yet we know very little about whether this holds true for—or how to implement such interventions in—conflict and crisis settings.

What are social-emotional skills?

Social-emotional skills are the skills, attitudes, and behaviors that help children effectively and positively manage daily responsibilities and challenges. Also referred to as non-cognitive or 21st century skills, social-emotional skills fall along three inter-related and dynamic domains of child development:¹³

- **Emotional processes:** for example, emotion recognition and regulation, empathy, and perspective taking
- **Social and interpersonal processes:** for example, interpreting others’ behavior, communicating clearly, respecting others
- **Cognitive processes:** for example, working memory, inhibiting inappropriate responses, attention control, and higher-level executive functioning skills

Research in OECD contexts indicates that childhood social-emotional skills predict lifetime health, well-being, and prosperity: over and above income and IQ, children with better social-emotional skills in childhood as rated by their preschool teachers have greater academic achievement in high school and college; higher earnings and financial stability in adulthood; and lower rates of obesity, substance use, incarceration and mental health disorders as adults.¹⁴

HEALING CLASSROOMS REMEDIAL TUTORING PROGRAMMING

During the 2016-2017 school year, the IRC delivered *Learning in a Healing Classroom* remedial tutoring programming to 1,800 Nigerian refugee children and Nigerian local and internally displaced children in host communities in Diffa and Mainé-Soroa departments, a region affected by Boko Haram recurrent attacks. As part of back-to-school campaigns coordinated with Direction Régionale de l'Enseignement Primaire (DREP), the IRC identified and recruited children enrolled in Nigerian public schools for the program. Girls were recruited at a slight majority (53%) to encourage their retention and reduce schooling disparities between boys and girls. Ninety tutoring classes enrolling 20 students had access to six hours per week of French reading and math instruction designed to build the competencies needed to succeed in Nigerian public schools. Programming was delivered in two 11-week cycles, during which time two different versions of *Healing Classrooms* were tested—*Healing Classrooms Basic* (HC Basic) and *Healing Classrooms + Targeted SEL* (HC + Targeted SEL).



Healing Classrooms Basic (HC Basic)

Teachers received a six-day training on the IRC's *Learning to Read and Learning Math in a Healing Classroom* approach. Teachers learned about and practiced SEL-infused approaches such as positive classroom management and child-centered pedagogy, including the use of games and group work. Teachers also practiced implementing scripted lesson plans with high-impact teaching strategies for improving children's learning of French literacy and numeracy. To provide ongoing support, all teachers received regular mentoring visits and attended monthly peer-support Teacher Learning Circles.

Healing Classrooms + Targeted SEL (HC + Targeted SEL)



In **Cycle 1**, mindfulness exercises were added as Targeted SEL to the *Healing Classrooms Basic*. Students and teachers completed short, daily mindfulness exercises in

between subject-matter transitions. In high-income countries, mindfulness-based practices—such as deep breathing exercises and attention to present sensations, thoughts and sounds—have been shown to buffer adults and children from physiological stress responses. No research to date, however, has tested the impact of mindfulness practices in crisis contexts.¹⁵



In **Cycle 2**, “Brain Games” were added as Targeted SEL to the *Healing Classrooms Basic*. Students played quick “Brain Games” that use movements and playfulness to build cognitive control in between subject-matter transitions. The games are designed to target core executive functioning skills—

working memory, flexibility of attention, and inhibitory control—that research indicates provides the foundation for long-term social competence and achievement.¹⁶ Teachers who delivered HC + Targeted SEL received additional pre-service training and in-service mentoring to support their use of targeted SEL activities.

THE EVALUATION

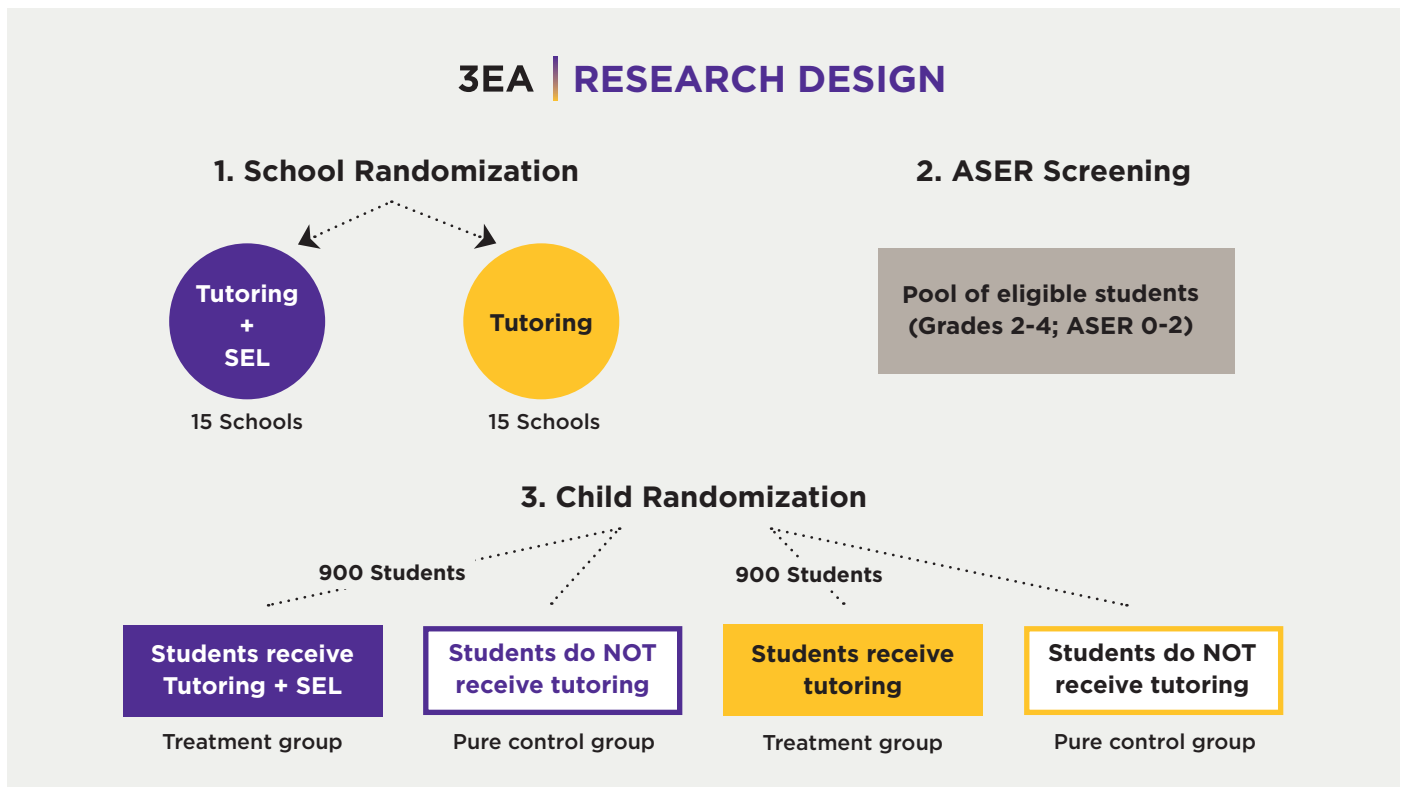
Schools (n=30) in Diffa and Maine-Soroa communities affected by Boko Haram were paired on baseline characteristics and randomized to one of two conditions: a “HC Basic” group (n=15), in which students received six hours weekly of *Healing Classrooms* remedial tutoring services and a “HC + Targeted SEL” group in which students received six hours weekly of *Healing Classrooms* remedial services plus targeted SEL activities. Students in eligible grades (2-4) in all participating schools were assessed on academic math and French literacy competence.¹ Students who scored in the lowest-performing categories qualified for remedial services; due to more eligible students than IRC program had program funds to support, qualifying students were allocated to receive *Healing Classrooms* or *Healing Classrooms* + Targeted SEL support by chance through a lottery. Eligible waitlisted students who attended public school but did not attend *Healing Classrooms* programs were included in the evaluation study as a waitlist no-treatment control group. In summary, schools were chosen by lottery to receive either *Healing Classrooms* Basic or *Healing Classrooms* + Targeted SEL. Eligible students within each of those schools were again assigned by lottery to receive the respective version of *Healing Classrooms* or not.

Children were again assessed on math and French literacy proficiency at endline (after 22 weeks of programming).

Overall school grade averages were also collected from participating schools. We used a multi-level match-pair randomized design to evaluate the impact of *Healing Classrooms* and targeted SEL interventions by addressing the following research questions:

1. Does access to complementary, non-formal *Healing Classrooms* programs (HC Basic and HC + Targeted SEL) positively impact children’s academic learning, compared to children without access to *Healing Classrooms* among local and internally-displaced Nigerien and Nigerian refugee children enrolled in Nigerien public schools?
2. After 22 weeks of programming, does targeted SEL programming (mindfulness and Brain Games) embedded within the *Healing Classrooms* curriculum positively impact students’ academic learning, compared to children in the *Healing Classrooms* Basic program?
3. After 22 weeks of programming, does targeted SEL programming (mindfulness and Brain Games) embedded within the *Healing Classrooms* curriculum positively impact students’ social-emotional skills, compared to children in the *Healing Classrooms* Basic program?

In this brief, we report the results of research questions one and two. We will release an updated report with the results of research question 3 in spring 2018.



¹ ASER: <http://www.asercentre.org>

MEASURING OUR IMPACT

To answer Question 1 and 2, we used three measures to rigorously test the impact of the intervention on reading and math skills: ASER Math, ASER French Literacy, and overall public school grade averages. Students' French literacy and numeracy skills were measured using the assessments developed for the Annual Status of Education Report (ASER). Originally developed by Pratham and extensively piloted by the researchers at the ASER Center and the Abdul Latif Jameel Poverty Action Lab (J-PAL) in India and many other countries world-wide, ASER is widely used tools to assess children's basic literacy and numeracy levels in early grades. Short assessment time and ease of administration allows large-scale evaluation of students' abilities in low-resource settings. IRC has adapted the ASER to align with cultural and linguistic contexts as well as the Nigerien public school curriculum. The child is marked at the highest level which he/she can perform comfortably without many mistakes.

The ASER French Literacy administered in Niger consists of 5 levels:

- Beginner** : cannot recognize letters
- Level 1** : can read letters
- Level 2** : can read familiar words
- Level 3** : can read sentences (Grade 1 level text)
- Level 4** : can read a short paragraph (Grade 2 level text)

The ASER Math administered in Niger consists of 5 levels:

- Beginner** : cannot identify numbers
- Level 1** : can read numbers (1-3 digit numbers)
- Level 2** : can solve simple addition problems
- Level 3** : can solve simple subtraction problems
- Level 4** : can solve simple multiplication problems

Students' public school average grades of the school year 2016-17 were collected at the end of the academic year. This final grade ranges from 0 to 10 and consists of the average score across all subjects in public schools including: reading (*lecture*), math, drawing/art (*dessin*), writing (*redaction/écriture*), dictation (*dictée*), social studies and science (*etude de milieu: géographie, histoire, sciences naturelles*). School grades reflect not only students' academic skills but also teachers' assessment of students' academic and social-emotional behaviors and skills (e.g., participation, attention, effort, impulse control) across a variety of classroom activities and subjects, and are known to be a better predictor of long-term life outcomes.¹⁷



TIES/NYU also worked to develop, adapt and pilot a suite of measurement tools designed to capture information about the cognitive, social and emotional processes that enable learning and mental health. For example, during piloting, TIES/NYU found that some Nigerian and Nigerien children, especially the young children, seemed to inconsistently respond to survey questions about their own social-emotional skills and behaviors. In addition, many children had difficulty understanding and responding to questions in French. Based on the pilot study, we adapted and used a variety of measures to effectively capture students' academic and social-emotional abilities for the evaluation study. For example, we used a scenario-based measure in which children were asked how they would hypothetically respond to certain social situations described in short vignettes,¹⁸ as well as a tablet-based game-like measure of executive functioning that increases students' engagement and does not require language skills. We also provided translation in local language for survey questions. Psychometric analysis of baseline data indicated the majority of these academic and social-emotional measures demonstrated preliminary evidence of reliability and construct validity.

THE PRELIMINARY RESULTS

This memo summarizes preliminary findings that answer our first two research questions after 22 weeks of intervention, between December 2016 and March 2017.

Impact of *Healing Classrooms* (HC Basic, HC + Targeted SEL vs. Waitlist)

“Because of the tutoring courses,
we have seen a remarkable
improvement in children’s levels.”

- MINISTRY OF EDUCATION INSPECTOR

The results of the experimental evaluation shows that public school students with access to both types of *Healing Classrooms* programming (HC Basic and HC + Targeted SEL) had significantly higher improvement in reading and math skills compared to classmates in the same schools who did not access *Healing Classrooms* programming.

Impact of Targeted SEL programs (HC + Targeted SEL vs. HC Basic)

Students in both the HC Basic and HC + Targeted SEL programs showed similar levels of improvement in reading and math skills. Additional targeted SEL programming did not make a statistically significant difference in improving reading and math skills.

However, students who had access to targeted SEL programming as well as access to the *Healing Classrooms* curriculum (HC + Targeted SEL) achieved significantly higher grades in public school than students who had access to *Healing Classrooms* curriculum only (HC Basic). Students who had access to *Healing Classrooms* Basic—without targeted SEL—received similar school grades to that of their classmates who did not have access to tutoring. Given that school grades incorporate social-emotional competencies in addition to academic skills, this finding provides preliminary evidence that targeted SEL interventions can equip students with social-emotional skills that they can apply in academic settings. Further examination of social-emotional outcomes (forthcoming) will provide more concrete and conclusive evidence to the impact of targeted SEL programs.

Attendance and Program Implementation

Implementation data indicated that Nigerian and Nigerien children struggled to attend *Healing Classrooms* remedial tutoring programming. On average, students attended only 58% of the 67 retention support classes offered during 22 weeks of programming. While this is likely due to high levels of mobility among the student population, significant contextual and operational barriers to attending *Healing Classrooms* programming also exist. For example, an ongoing teacher strike in public schools in the Diffa regions led to decreased attendance at retention classes, which took place at the public schools.

Descriptive analyses indicate that among all students with access to HC programs, higher attendance predicts improvements in French literacy and overall performance in public school. We caution, however, that these analyses are not causal, although they do adjust for many potential “selection factors” that may have influenced both students’ attendance rates and learning and well-being outcomes. Nonetheless, we believe it is imperative to address attendance barriers, given evidence that the amount and quality of implementation of *Healing Classrooms* programming matters for children’s holistic learning and development.



PRELIMINARY RECOMMENDATIONS

Results of the impact of *Healing Classrooms* remedial support on social-emotional and additional academic measures will be available in spring 2018. In the meantime, we offer a set of preliminary recommendations for the timely consideration of key stakeholders.

To the Niger Ministry of Education:

- Support a remedial tutoring program aligned with Niger’s national curriculum for literacy and numeracy as an effective retention and learning support program for Nigerian refugees, Nigerien returnees, and IDP children in the formal school system.
- Provide training to teachers on how to incorporate social-emotional learning principles into the academic curriculum of Nigerien schools.
- In order to facilitate learning what works, collect and share disaggregated data about student attendance and performance in Nigerien public schools with research universities and practitioners.

To international donors:

- Invest in non-formal in addition to formal learning opportunities.
- Require the programs you fund to seek education outcomes, not simply outputs.
- Given what we know from education research about how outcomes influence each other, direct resources to programs that seek to achieve a balance of access, safety, academic and social-emotional outcomes.
- Invest in education programs in crisis settings that are based on the best available evidence—even if in stable contexts—and show a commitment to learning how to adapt and revise programs to achieve these outcomes.
- Dedicate 10% of all funding towards research-practice partnerships and learning that will provide the sector with a strong evidence base on what works to improve programs and achieve outcomes, as well as where, for whom, how, under what conditions and at what cost.
- Commit funding that is multi-year and includes resources for design and pilot stages so that research-practice partnerships can develop evidence-based program and research designs quickly, and then sustain programming for the time required to generate rigorous evidence and execute a meaningful learning agenda.



To the NGO community:

- Commit to designing, implementing, and learning from outcomes-focused education programming that is based on the best available evidence in the education in emergencies sector.
- Develop education research agendas and share with the wider EiE community in order to advance research and evaluation endeavors and findings, and also coordinate on different types of applied implementation and research endeavors to ensure that the limited amount of funds to education in emergencies are leveraged throughout the community;
- Recognize that doing rigorous research and evaluation in emergency contexts is complicated; therefore, share practices and lessons learned as a community as well as share the different types of research endeavors being used;
- Test proofs of concepts for curricula for education in emergencies using a small-scale approach before embarking on a large scale research initiative in order to understand how they are implemented, what works, and what needs to be modified.
- Reframe “evaluation research” as “learning how to make our programs as effective as possible”.

OUR NEXT STEPS

Our partnership is taking several steps to ensure that what we have learned this year directly benefits the children and families through changes in our programming. First, we will continue analyzing the data to our second question on impact of targeted SEL programs with more comprehensive measures of students' reading and math skills; and address third research question, which asks whether access to *Healing Classrooms* and targeted SEL programming improves children's social emotional functioning. We will also test the impact of the two SEL interventions—mindfulness practices and executive functioning Brain Games—independently on students' academic and social emotional learning. Second, based on our results, we will actively refine our SEL programming and test an improved version of the *Healing Classrooms* retention support program in school year 2017-2018 in Niger. Since our data highlighted the critical importance of implementation quality, we will videotape a sample of teacher classrooms in 2017-18 school year to improve and begin to validate IRC's Teacher Classroom Observation tool, which captures crucial facets of implementation such as program adherence and instructional quality.

Third, we will pilot systems for real-time data collection—including attendance data collection—thereby reducing staff burden and increasing our ability to make mid-course corrections. In doing so, we aim to not only contribute much-needed evidence to the education sector, but to learn how research and practice must work hand-in-hand to achieve the vision of an evidence-based education in emergencies field.



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Dubai Cares is a flagship partner of the 3EA initiative, a five-year program enabling global education actors to ensure that children in crisis-affected settings attend safe and predictable schools and gain the reading, math and social-emotional skills they need to thrive and succeed in school and life.

ENDNOTES

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