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## An empirical investigation of social emotional learning among children in primary education: The case of Catch Up in Zambia

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### Abstract

To tackle the learning crisis, the government of Zambia introduced the Catch Up program, using the Teaching at the Right Level (TaRL) approach. The goal of Catch Up is to increase literacy and numeracy skills among grade 3–5 learners through grouping learners by learning level (not age), using an accelerated learning methodology

and regularly measuring learning progress. Continuous professional development of school leaders and senior teachers in methods of tailored instruction is an essential component of the success of the Catch Up program. It is hypothesized that Catch Up may stimulate socioemotional learning (SEL) in addition to increasing literacy and numeracy skills. The TaRL classroom methodology includes several play-based components: the classes are joyful, socially interactive, iterative, and meaningful and the activities are designed to build confidence and are highly engaging. The promotion of accelerated learning with characteristics of play has the potential to contribute significantly to SEL (Ljubetic et al., 2020; Hromek & Roffey, 2009). This article presents preliminary findings from a research study conducted in Lusaka and Central provinces in 2022 and indicates that the Catch Up program contributed to the development of two fundamental SEL domains, empathy and conflict resolution, in participants. Positive but not significant moments were also identified in stress management. Another important finding was that in both empathy and conflict resolution, including stress management domains, community schools performed better than government schools.

### Introduction

Providing quality education to all children is a challenge in many sub-Saharan African countries (Vromant et al., 2021; Asongu & Odhiambo, 2018). Previous research has demonstrated that many learners move from one grade to the next during their early to middle primary years without acquiring foundational literacy and numeracy skills (Banerjee et al., 2016; Brombacher et al., 2015; Pritchett, 2013, 2015). This holds true in Zambia where a national assessment of literacy and numeracy of primary school students in 2014 revealed that nearly 1 in 7 grade 2 learners were unable to read a single word in their local language. About 38 percent of grade 5 learners were illiterate and had poor math skills (MoGE, 2016). Factors that contribute to this reality include, among other things,

high pupil–teacher ratios, lack of teaching and learning materials, limited school infrastructure, poverty, and inadequately trained teaching staff (Piper et al., 2018).

To tackle the learning crisis, Zambia introduced the Catch Up remedial program, using the Teaching at the Right Level (TaRL) methodology. TaRL, pioneered by Pratham (India), was evaluated and refined for over 15 years in collaboration with the Abdul Latif Jameel Poverty Action Lab (J-PAL) (Banerjee et al., 2016). Since 2015, the TaRL approach has been further adapted and refined in several African countries. A summary of the TaRL approach, and how it differs from ‘business as usual’ in schools, can be found in Table 1. The goal of Catch Up, in line with TaRL, is to improve literacy and numeracy skills among grade 3–5 learners. At the classroom level, TaRL is a teaching approach that assesses children using a simple testing tool and then groups them according to their learning level rather than their age or grade. For a period of the day, children in middle-to-upper primary grades focus on foundational skills using an accelerated learning methodology.

At the systems levels, the TaRL approach works with education policymakers to reorient the system towards effective learning. This work includes encouraging policymakers to dedicate time to teaching children basic skills, moving away from the age-grade structure to focus on the level of the child, setting up mentoring systems to support teachers to deliver effectively, embedding approaches of continuous improvement, and setting up systems of measurement that lead to action.

The governance structure of the Ministry of Education in Zambia is divided into provincial, district, zonal, and school administration. Staff at all these levels are trained in the TaRL methodology for the purposes of mentoring, monitoring, and training teachers at the school level. Several trainings are conducted for selected master trainers (who are ultimately Catch Up ‘trainers of trainers,’ selected from amongst the cadre of province, district, and zonal government coordinators), and senior officers known as education standards officers at

both provincial and district level. Another set of trainings is conducted for the headteachers, as well as new and/or refresher trainings for class teachers, on the accelerated learning methodology. In Lusaka and Central provinces, teachers were also trained on the role of play in holistic development, including SEL. In addition to training for delivery of Catch Up, teachers receive mentoring support and undertake practice periods of at least 20–25 days.

Catch Up typically consists of daily one-hour instruction, which may take place before or after school, or even – in schools with a double-shift system – during the lunch break.

A particular challenge to the Catch Up program is that Zambia is a multilingual country with approximately 72 languages in total. Seven of these are considered core languages while the rest are dialects (Banda & Mwanza, 2017). The core languages include Nyanga, Bemba, Tonga, Lozi, Lunda, Kaonde, and Luvale. The educational curriculum uses these seven languages for instruction. The curriculum also stipulates that learners from pre-school to grade 4 will learn in the local language based on the region in which the school is located and the closest native language (among the seven instructional languages) used in that locality. Catch Up is therefore delivered in a familiar language.

## Data-driven decision making

Owing to its success in Eastern, Southern, and Lusaka provinces, the Catch Up program has expanded to seven of the ten provinces in Zambia from 80 pilot schools in 2016. By January 2022, about 3,300 of Zambia’s approximately 8,800 primary schools were implementing Catch Up with support from VVOB, TaRL Africa, the Belgian Government, LEGO Foundation, UNICEF, and Hempel Foundation. The success of the program can be easily measured via the continuous stream of data it generates. In the program, senior teachers and grade teachers learn to assess literacy and numeracy skills among their learners three times a school year using a simple

	<b>'Business as usual'</b>	<b>Teaching at the Right Level (TaRL)</b>
Goal & assessment	Goal is to complete the grade level textbook or curriculum. Assessments are aligned with curriculum and often complex – not suitable for classroom use.	Goal is to ensure basic foundational skills for all, with clearly articulated goals for basic reading and math. Simple one-on-one assessments conducted by instructors at three points i.e., the beginning (baseline) meant for first round of grouping, middle (midline) for tracking progress and possible regrouping based on progress made, and end of an academic cycle (endline) for general reflection of progression rate across the academic year.
Training & mentoring	Minimal continuous professional development or targeted coaching for teachers, traditionally using non-practitioner trainers.	Practical training of leaders and instructors on the approach with practice periods of at least 20–25 days.
Grouping	Full class assembled together by grade level. Whole class teaching with little room for adjusting teaching to suit learner's needs.	Learners grouped by learning level rather than by grade. Learners move quickly from one group to the next as their learning progresses.
Teaching & activities	Teachers focus mainly on whole-class instruction ('Chalk and Talk' or textbook-driven), focus on curriculum leads to teaching to the 'top of the class'.	Teachers use simple and engaging daily learning activities that can be adapted as learners progress. Learners engage in activities in large groups, small groups, and individually.
Measurement, monitoring, & review	Pen and paper assessment done at the beginning and end of a learning unit. Minimal data analysis to understand student learning or adjust teaching before moving to the next learning unit.	Simple assessment for planning, and similar assessment used periodically to track student progress, review data, and make decisions on learner progress and program design. Quick decision-making to inform program delivery and future course.

● **Table 1:** Comparison of 'Business as usual' to the Teaching at the Right Level methodology

assessment instrument. These three moments of data collection take place at the start of term 1, the end of term 1, and the end of term 2. The teachers then decide, based on the performance of the learner, whether he/she can move from one level to the next. The whole idea of grouping by learning level in Catch Up is that it has to be dynamic: children feel they can move quickly from one level to the next based on good performance. Furthermore, hardcopy aggregated school-level data are collected by zonal staff. The data is then entered into a web portal by Zonal In-Service Coordinators. The district and provincial staff have access to the portal and periodically review the data. In this way, the Ministry of Education can track learner progress in zones, districts, provinces, and even at national level.

## Learning through play

At its core, the TaRL classroom methodology stimulates children to be active participants in the class, have increased interactions among peers, and work on their abilities to express themselves. It provides learners with opportunities to persevere through a difficult task and opportunities to lead others. The methodology actively promotes cooperation skills and prosocial behavior through a series of activities, and thus provides practice in social and emotional skills and values. Furthermore, the TaRL activities often have a play-based component and are adapted to the daily lives of children. The TaRL methodology also aims to build confidence by providing children with an opportunity to be heard and build their skills in a safe environment. TaRL classes are joyful (many activities are game-based), socially interactive (learners work in groups), iterative (learners have the opportunity and are encouraged to discover on their own), meaningful (making use of local materials, teaching mother tongue), and highly engaging (children actively interact with the teacher and engage in activities).

The characteristics of learning through play have been captured by a framework of 7 C's: concrete, captivating, connected,

7 C's	Examples of TaRL activities
Concrete	Most TaRL activities are interactive through using learning through play (e.g., clap and snap, basket game, group activities, storytelling, use of games, songs).
Captivating	Catch Up is much more captivating than a standard lesson, for example, with syllable cards, picture reading, peer-to-peer learning, and individual-level activities.
Connected	Contextualized content in their own familiar/local language. For example, understanding mathematical operations through using word problems connected to their daily lives.
Challenging	Regarding literacy, TaRL includes word-building games, a challenge to create as many words as possible with a certain level of competition among learners. Regarding numeracy, TaRL includes problem solving, where learners are trying various operations to figure out which one is the most appropriate method. The TaRL methodology pushes the limits of learners, who graduate from each learning level as they acquire skills and are then given more challenging tasks in the next level.
Collaborative	TaRL has whole-class, small-group, and individual-level activities. Peer-to-peer learning is encouraged, especially in comprehension activities at story level where groups present to each other and learn from each other. Learners are encouraged to ask friends for help when they get stuck.
Creative	Learners can share their thoughts, tell their stories creatively, and express feelings and emotions in an informal talk (with peers and teachers). The aim is to build an open, welcoming environment in the class where all learners are comfortable and for teachers to build friendships with learners. There is a focus on positive stories. By doing informal talk every day, every learner should at some point have an opportunity to share and discuss.
Cheerful	Joy is integrated throughout the TaRL activities. The informal setting allows for laughter, interaction, jokes, singing, dancing and clapping. All children are expected to actively participate and engage in lesson-based activities. Learners experience joy because they are being taught at their own level, which increases the feeling of success.

- **Table 2:** Characteristics of learning through play in a framework of 7 C's

challenging, collaborative, creative, and cheerful. This framework is adapted from the learning through play framework of the LEGO Foundation, which has five characteristics of play-based learning (Parker & Thomsen, 2019). The 7 C's can be applied to TaRL activities (included in the Catch Up program) and are shown in Table 2.

The following examples illustrate the 7 C's as applied to two activities in the Catch Up program.

- **Captivating:** Learners are attracted and interested in the activity. They logically connect sentences to the first sentence given by the teacher or their fellow learners.
- **Challenging:** Learners are challenged to connect the sentences that are similar in context and have logical connections to make a story with a proper ending, sequence of events, and accurate punctuation marks and tenses.
- **Creative:** Learners are given choice and freedom to decide how they will make the story, which sentences they will use, the sequence of events, and how the story will end.
- **Collaborative:** Learners interact, exchange ideas, and learn from each other.
- **Cheerful:** Learners have fun and engage with laughter.

## Research on Catch Up and SEL

Socioemotional learning is the process of acquiring skills that empower children with abilities to build healthy relationships, cope better with stress, engage in healthy conflict, empathize, and be aware of self and those around us. As pointed out by Coryn et al. (2009, pp. 283–284), 'Social-emotional learning (SEL) goes by many names: emotional intelligence, emotional quotient, social intelligence, and social-emotional competence.' Throughout this article, we define SEL as a process of developing intra- and interpersonal knowledge, skills, attitudes, and mindsets that individuals need to succeed in life (Taylor et al., 2018).

## Story making - Go Ahead

### Outcome of this activity:

- Construct sentences in a logical order to tell a story.

### Process:

Teacher will:

- Divide learners into groups and ask them to appoint a leader in each group.
- Each group is supposed to make one story by using a sentence as a thread.
- The group leader will say the first sentence and write it down.
- Then each group member adds one sentence in turn. This is written down by the group leader.
- When everyone has added their sentence, the group leader will read out the story.
- Groups will reflect on their story – does it make sense? Does it have a good sequence? Etc.
- Then the class will hear stories and discuss.

### Important points

- Ensure that all the sentences are in a similar context and have some kind of connection to make a story.
- The story should have a proper ending.
- Tenses should be used properly: for example, if it starts in past tense then it should end in past tense.
- The sequence of events should be connected to make the plot clear.
- If the story does not seem to have an end, then ask the group to form an ending using new words.
- The leader then tells the story.

- **Example 1:** Story making – ‘Go Ahead’

## Word and sentence building with flash cards

### Outcomes of this activity:

- Strengthen skills of word and sentence formation from sounds and syllables.

### Process:

Teacher will:

- Divide learners into two or more groups. Each group is given a set of similar flash cards.
- Give each group 5–10 minutes to make and write as many words as they can from the flash cards. This can be a competition to engage learners. (Flash cards can be reused.)
- Then choose a learner from each group to read the words that their group has made. Ask the group how many words they made.
- Encourage learners to identify meaningful and meaningless words.
- Give each group some additional words. The groups then make sentences using the new flash cards and the words they have already made.
- Ask a learner from each group to read the sentences they have made. The class is asked if the sentences make sense.
- Challenging: Learners are pushed to think and come up with words and sentences that have meaning using the available flashcards and that can be quite demanding but stimulating.
- Concrete: The use of syllable and word flashcards in groups takes the form of a game and this in itself is an activity that is concrete in nature.
- Connected: The syllables and words are usually expected to be in a familiar language of instruction. It also builds on words that the learners already know and the words that have meaning culturally are also accepted.
- Creative: Learners are encouraged to be make whatever words they feel are possible in the shortest period. This stimulates creativity and sometimes, they make words that do not have meaning but can be read phonologically.
- Collaborative: Learners work together in teams to make words that are possible with flashcards.
- Cheerful: Learners have fun because it feels like a play competition as they make words and there is a lot of excitement involved.

- **Example 2:** Word and sentence building with flash cards

The current study adheres to the work of D'Sa and Krupar (2019) who investigated SEL among a group of Syrian refugee children using the International Social Emotional Learning Assessment (ISELA). This research instrument was developed for a target group of vulnerable children in primary education and includes psychometric measurements. Not many other research instruments measuring SEL in low resource contexts focus on children in primary education (Parker, Van Beek & Callanan, 2019). Furthermore, many children in Zambia grow up in poverty, with the daily stress associated with it. Finally, the ISELA is a tool that is easy to contextualize and flexible to adapt, it can easily be used among respondents with low literacy levels, and it has no restrictive copyright conditions.

This article hypothesizes that Catch Up may stimulate socioemotional learning (SEL) in addition to increasing literacy and numeracy skills. One of the reasons for this hypothesis is that TaRL is a learning through play methodology. Some of the opportunities it provides in its bundle of activities, drawing on research that has linked learning through play to SEL (Ljubetic, Maglica, & Vukadin, 2020; Hromek & Roffey, 2009), have the potential to impact SEL. However, the evidence base for the effects of TaRL explicitly on developing these SEL skills is anecdotal: the hypothesis was not covered in Banerjee et al. (2016). The effects of ability grouping on SEL are also under-studied.

Interestingly, for our multilingual country of study, Zambia, the word 'feeling' or 'emotion' is not fully captured in its languages. Instead, Zambian languages contextually use 'hearing' to mean feeling in almost all contexts. Therefore, socioemotional learning is also synonymously identified by researchers and professionals in Zambia as friendliness, neighborliness, and goodness but these words, while important in being contextually relevant, do not cover the full meaning of SEL. There is need for research to explore and develop tools that measure socioemotional learning from a Zambian cultural context (Gehlbach et al., 2018; Meyer et al., 2018). The

Perseverance domain



We will now play a game. First, can you tell me which hand you use to write your name?

For this game, you should ask the child to draw using their non-dominant hand. If they use their right hand to write their name, they should use their left hand in the game. If they use their left hand to write their name, they should use their right hand in the game.

I am going to show you a picture and I want you to use your <non-dominant> hand to draw that picture. You must always use your <non-dominant> hand. You can use your other hand to hold the paper but you cannot draw using that hand. If you get frustrated or you feel like you cannot do the drawing please tell me. We can then move to the next activity. Okay? Are you ready to play this game?

- 1) Show the child the first laminated card. Give the child 60 seconds to draw the picture.  
At 20 and 40 seconds if the child is still drawing, say: "You can stop at any time and we can move to the next game."  
  - IF THE CHILD GIVES UP BEFORE 60 SECONDS, THEN MARK 'INCORRECT' for item F1 in the scoring sheet and proceed to F2.
  - IF THE CHILD IS FINISHES THE DRAWING WITHIN 60 SECONDS OR IS STILL DRAWING AT THE END OF 60 SECONDS MARK 'CORRECT' for Item F1 in the scoring sheet and proceed to F2
  - If the child is still drawing at the end of 60 seconds tell him/her that he/she has done well and that you will now move to the next drawing.
- 2) Follow the same instructions as above for card 1
- 3) Follow the same instructions as above for card 1
- 4) Follow the same instructions as above for card 1

#	Item	Correct	Incorrect	No Response	Skip pattern
F1	Child completed first drawing OR was still drawing at the end of 60 seconds	1	0	999	If 0 or 999 G 1
F2	Child completed second drawing OR was still drawing at the end of 60 seconds	1	0	999	
F3	Child completed third drawing OR was still drawing at the end of 60 seconds	1	0	999	
F4	Child completed fourth drawing OR was still drawing at the end of 60 seconds	1	0	999	

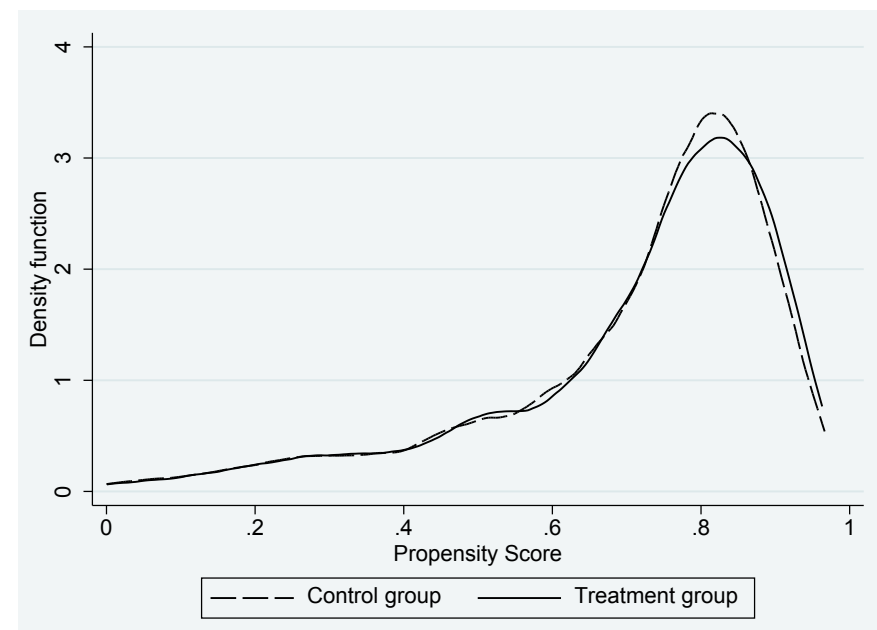
● **Example 3:** Measuring SEL with ISELA (Perseverance domain)

competencies captured in the ISELA are the closest we could get to capturing social-emotional learning in Zambia so far.

The research instrument discussed in D'Sa and Krupar (2019) includes five SEL domains, namely: self-concept, stress management, empathy, perseverance, and conflict resolution:

- *self-concept* – the child's ability to express personal preferences, feelings, and abilities;
- *stress management* – the child's conscious use of personal skills and resources to reduce the impact of stress;
- *perseverance* – the child's ability to stay on task even if the task is difficult or the child experiences delay in achieving success;
- *empathy* – the child's ability to be aware and understand the emotions and expectations of others;
- *conflict resolution* – a child's interpersonal conflict resolution strategies.

Apart from these five domains, the ISELA includes two other scales: *relationships* – a child's understanding and utilization of their social networks and support system across varying situations – and *learning environment safety* – a child's understanding of the safety in their environment, i.e., the school. The relationship scale shows how a child engages their network as they navigate all the other domains, hence it includes items reflecting every scale. Learning environment safety is beyond the scope of this article. When using the ISELA, the assessor presents stimuli to the child and asks a range of questions to the child. These questions are picture-based and scenario-based, and the child is given an opportunity to respond. An example of how the perseverance domain is assessed is demonstrated in Example 3.



● **Figure 1:** The Kernel density function assessing overlap in the propensity scores of the treatment and control group<sup>1</sup>

- 1 For the propensity score matching analysis, we used the Kernel density function to assess the overlap in distribution of child characteristics between Lusaka and Central province. It is an important assumption of the difference-in-differences analysis that children between the treatment and control group are comparable. Matching analysis can make our impact estimates more robust. The propensity score matching technique produces propensity scores; they reflect the likelihood that children attend a school in Lusaka based on their background characteristics. Based on the propensity scores, we weigh the untreated children to match those children in Lusaka province. The distribution of the propensity scores derived from the child characteristics is presented in figure 1, which indicates a strong overlap in child characteristics between the treatment group and the control group. We lose only one observation because of not finding an appropriate match.

## The Catch Up socioemotional learning research

### Research Question

Does TaRL, as a methodology, including features of learning through play, contribute to socio-emotional learning?

### Intervention

Learners in the treatment group were exposed to the Catch Up program and trainings on learning through play and socioemotional learning were provided for teachers, headteachers and education standards officers, district and provincial education leaders, followed up by coaching and mentoring visits. During the visits, education leaders were re-oriented, and teachers were coached on the importance of the learning through play process. Emphasis was placed on discussions regarding the importance of intentionality and consciousness of SEL skills during the playful numeracy and literacy lesson delivery in TaRL.

### Methodology and process

Data of children in grades 3–5 were collected from a treatment group (Lusaka province) and a control group (Central province) using the ISELA at two different points in time (February and November 2022). The initial target was to conduct 3,000 learner assessments on SEL in 100 schools (50 in Central province and 50 in Lusaka province). Selection of schools was random but stratified by community and government schools, with the aim of selecting an equal sample of boys and girls and across grades. On one hand, community schools are supported by a community and well-wishers and also are run mostly by volunteer staff with a few government teachers (Zambia Open Community schools). On the other hand, government schools are owned by the government with full support of the ministry of education; their staff are all government employees. The Centre for Promotion of Literacy in Sub-Saharan Africa (CAPOLSA) led the data collection in the two phases of the research.

	Baseline study	Endline study	D'Sa & Krupar (2019)
Self-concept	0.92	0.91	0.91
Stress management	0.75	0.75	0.70
Empathy	0.70	0.69	0.69
Perseverance	0.79	0.68	0.77
Conflict resolution	0.73	0.70	0.78

- **Table 3:** Internal consistency reliability of the five SEL domains and comparison with findings of D'Sa and Krupar (2019)

### Comparability of samples

In February, CAPOLSA initially assessed 2,619 learners. These learners were tracked in the endline study. In November, CAPOLSA was able to assess 1,977 learners, using the same research instrument as in the baseline study. The sample (N=1,951 learners) used for analysis of the data includes two observations per child, one at baseline, and one at endline.

### Internal reliability of the scales

The internal consistency reliability of our study as compared to the study of D'Sa and Krupar (2019) is shown in Table 3. Cronbach Alpha was run to check for internal consistency. This statistic reflects the quality or reliability of a scale. It indicates to what degree questions in a scale reliably measure the same underlying concept consistently (e.g., whether respondents responded to the questions in a consistent manner). As a rule of thumb, the statistic should be equal to or above 0.7 to conclude reliability. We find similar reliability in the baseline study and endline study. The domain of perseverance is only marginally below the threshold and still provides satisfactory internal consistency. These findings and conclusions are in line with D'Sa and Krupar.





● **Figure 2:** Cohen's d measure of standardized effect sizes

## Preliminary findings

This study utilized Cohen's d to assess the effectiveness of the Catch-Up intervention program on socioemotional learning in primary school students. Our analysis was conducted using a difference-in-difference analysis using multi-level regression, with baseline and endline studies conducted to capture the impact of the program. Our models were designed to capture effect sizes beyond 0.15 standard deviations, ensuring that our analysis only accounted for significant changes in the outcomes of interest. The results of our analysis indicate that the Catch Up intervention had a positive impact on the students' socioemotional learning, particularly in the areas of empathy and conflict resolution. The findings in the figures below demonstrate the results.

Learning through play and SEL are common concepts in early childhood education but are still uncommon practices in primary education in Zambia. The Catch Up remedial program provides an opportunity for learners in primary education to benefit from its activities with their characteristics of learning through play. The

findings of the research study in Lusaka province (treatment group) and Central province (control group) on the contributions of Catch Up to SEL indicate a positive and significant impact on two of the five SEL domains. Controlling for the baseline study, and including demographic characteristics in a multilevel regression analysis (including gender, age, grade, home language, and parents' reading skills), learners improved their skills in empathy and conflict resolution. The estimated effect sizes are small to moderate in magnitude and range from 0.2 to 0.3 standard deviations. The largest impacts are found in the community schools, with 0.296 SD with regard to empathy and 0.340 SD with regard to conflict resolution.

Two other domains, self-concept and stress management, moved in a positive direction, but the effect sizes are so small (less than 0.15 SD) that we cannot claim them to be significant. The research would benefit from longer exposure time and evaluation of the SEL domains, as the Catch Up Lusaka program ran for only nine months effectively in the schools.

## Discussion

From previous studies, conducted mainly in India, it is known that Teaching at the Right Level significantly improves literacy and numeracy when well implemented. Besides level-based activities focused on increasing numeracy and literacy, the classroom methodology embraces learning through play in many of the learning activities. Through its bundle of activities, TaRL provides learners with opportunities that increase interaction, the ability to express oneself, opportunities to persevere through a difficult task, opportunities to lead others, interpersonal skills, intrapersonal skills, cooperation skills and prosocial behavior. In Zambia, school leaders and teachers are encouraged to ensure that Catch Up lessons are delivered in a playful manner by introducing them through the 7 C's framework. Learning through play practices were equally followed up in schools in Lusaka province during mentoring and coaching visits for purposes of

strengthening the use of a learning-through-play methodology in primary schools.

The Catch Up program, using teacher professional development to promote remedial teaching with characteristics of play, has the potential to contribute significantly to socioemotional learning. Although the mainstream curriculum may impact SEL in some ways, the Catch Up program helps to make the SEL outcomes intentional and deliberate by strengthening SEL-focused learning through play teaching processes. Findings from the research study conducted in Lusaka and Central province in 2022 indicate that Catch Up contributes to SEL in the domains of empathy and conflict resolution. The possible reason for the performance of learners in the two domains could be the ability grouping of learners in TaRL, which encourages equality among different grades and strengthens the spirit of cooperation and prosocial behavior and less of competition. This condition has the potential to reduce bad conflict and also increase empathy. However, this argument is subject to further investigation in the possible scale-up.

## Conclusions and recommendations

From the findings of this study, the Catch Up methodology has the potential to build SEL competencies in learners with increased exposure and strengthened coaching of teachers on intentional ways of building SEL skills during Catch Up lessons.

The study will need scaling up to investigate the potential of Catch Up in building SEL skills with additional adaptations of measures and contextualization of the implementation of SEL.

Education policy makers may need to consider making the cultivation of SEL skills in primary education more explicit and intentional. This has the potential for reducing negative developmental outcomes. By the time of adolescence, learners can acquire competencies that enable them to explore the stress and storm that come with this phase in their lives while at the same time getting the most out of their primary education.

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