

Evoke: LITERACY Leaders for Literacy Pilots

Summary Evaluation Report January 2019



All Children Reading: A Grand Challenge for Development













This Summary Evaluation Report was prepared by All Children Reading: A Grand Challenge for Development (ACR GCD) based on two pilot evaluation reports developed by Mthente Research and Consulting Services (Pty) Ltd, a South African consulting agency with extensive experience assessing learning programs in similar contexts. ACR GCD is also grateful for technical review and input by Dr. John Comings.



Contents

1.	Abstract
2.	Background 7
3.	Project Description
4.	Adaptation to Literacy 11
5.	Methodology 12
6.	Limitations
	Implementation
	Evaluation
7.	Findings 14
	Finding 1: Mixed improvement in 21 st century skills 14
	Finding 2: Significant improvement in Agency
	Finding 3: Radical change in knowledge of how children learn to read
	Finding 4: Benefits for both in-school and out-of-school youth 17
	Finding 5: Improved knowledge and application of digital literacy skills
	Additional Findings
8.	Recommendations 20
	Recommendation 1: Encourage application of research findings after the Project
	Recommendation 2: Adapt Evoke: Leaders for Literacy to engage youth in other contexts 20
	Recommendation 3: Invest in better ways to measure the impact of Evoke: Leaders for Literacy. 20
9.	Conclusion 21
10.	Annexes 23
	Annex 1: Evoke: Leaders for Literacy Missions
	Annex 2: Evaluation Instruments
	Social Innovator's Framework – Self-Response Questionnaire
	Social Innovator's Framework – Peer-Response Questionnaire
	Social Innovator's Framework – Professional Response Questionnaire
	Locus of Control – Self-Response Questionnaire
	Qualitative Instruments

Tables

Table 1: Description of 21st century and social innovation skill groups as described in the	
Social Innovator's Framework	7
Table 2: Evoke: Leaders for Literacy pilot demographics	12
Table 3: Example problem statements and proposed solutions (Pilot #2)	17
Table 4: Summary of quantitative findings for in-school and out-of-school groups (Pilot #1)	17
Table 5: Engagement Summary, Google Analytics	18
Table 6: Evaluation findings related to participant characteristics	19
Table 7: Approach to data collection for evaluation sub-question.	24

Figures

Figure 1: Image from "Andre's Story" 9
Figure 2: Evidence submitted via the online platform
Figure 3: Evoke: Leaders for Literacy online dashboard
Figure 4: Baseline social innovation scores according to professional ratings. (Pilot #1) 13
Figure 5: Endline in social innovation scores according to professional-ratings (Pilot #1) 15
Figure 6: Comparison of baseline and endline mean growth in social innovation skills
according to self-ratings (Pilot #2)15
Figure 7: Mean gains in LOC total score, Agency (Pilot #2) 16
Figure 8: Differences in mean growth in LOC total score (Pilot #2)
Figure 9: Evoke: Leaders for Literacy Missions and activity overview

Acronyms

ACR GCD All Children Reading: A Grand Challenge for Development **LOC** Locus of Control

SIF Social Innovator's Framework **WVSA** World Vision South Africa

edtech Education Technology

Definitions

Agency: Individual beliefs about success and how much control participants felt about specific events in their life (Measured by the Locus of Control)

Grit: Courage and resolve; strength of character

Professional: *Teacher, facilitator,*

or adult mentor

Creative Visionary:

One of the main skill groups in the SIF which includes: Imagination, Ideation, Vision and Courage.

Social Innovators

Framework: An educational model for understanding complex challenges, acquiring 21st century and socio-emotional skills and learning about the social innovation cycle through research from first-hand experience.

Deep Collaborator:

One of the main skill groups in the SIF which includes: Communication, Teamwork, Networking and Generosity of Spirit.

Empathic Activist:

One of the main skill groups in the SIF which includes: Leadership, Empathy, Transformation and Curiosity.

Systems Thinker:

One of the main skill groups in the SIF which includes: Problem Solving, Analysis, Aggregation and Critical Reflection.

Superpower:

Another name for the skill groups.

SUMMARY EVALUATION REPORT

Abstract

This report provides a summary of the evaluation report findings from the Evoke: Leaders for Literacy pilots in South Africa in 2017 and 2018.

Evoke: Leaders for Literacy (the Project) is a digital learning game developed by All Children Reading: A Grand Challenge for Development in partnership with Pearson, Project Literacy, and the World Bank under the family and community engagement focus area. The Project was adapted from Evoke, which was originally developed by the World Bank. It was designed to equip youth with twenty-first (21st) century and social innovation skills and to improve Agency to create solutions that address global grand challenges, beginning in their own communities.¹

The Project specifically focuses on **engaging youth** in the global grand challenge of **illiteracy** and builds on learnings from the World Bank's Evoke pilot in Colombia in 2016. It also focuses on context-specific adaptations to accommodate youth in low-resource settings. The Project was piloted in Thusalushaka, South Africa in 2017 (Pilot #1) and in Tembisa, South Africa in 2018 (Pilot #2). To understand how the Project impacted participants, Mthente Research and Consulting, a local South African firm, explored three key research questions:

1. To what extent does Evoke: Leaders for Literacy improve participants' 21st century and social innovation skills (Creative Visionary, Deep Collaborator, Empathic Activist, Systems Thinker, Grit, and Agency) as compared with the control group? 2. In what ways does Evoke: Leaders for Literacy improve participants' knowledge of how children learn to read as compared with the control group?

3. What are the relationships between engagement with Evoke: Leaders for Literacy and participants' learning outcomes, perceptions, and personal characteristics (i.e., gender, ethnicity, age, consideration of varying abilities, and second language acquisition)?

Key findings revealed statistically significant growth in Agency and Grit from Pilot #2 and statistically significant growth in three of four skill groups in Pilot #1. Sixty percent of Evoke: Leaders for Literacy participants in Pilot #2 improved Agency over time. Qualitative results revealed that participants in both pilots experienced a radical change in their perception of the importance of literacy. No significant growth was evident in the main 21st century skill groups in Pilot #2, but qualitative evidence does reveal improvement.

60% of Evoke: Leaders for Literacy participants in Pilot #2 improved Agency over time.

In Pilot #1, there were no significant differences in growth between male and female participants and both in-school and out-of-school participants appeared

to benefit from the Project. In Pilot #2, however, a significant difference, which requires more research, was noted between males and females in Agency and in the Systems Thinker skill group. The findings and related recommendations from Pilot #1 informed the implementation and evaluation of Pilot #2.

More information about Evoke: Leaders for Literacy can be found at <u>AllChildrenReading.org</u>.

1. "Evoke - An online alternate reality game supporting social innovation among young people around the world." Available at: <u>http://www.worldbank.org/en/topic/edutech/brief/evoke-an-online-alternate-reality-game-supporting-social-innovation-among-young-people-around-the-world.</u>

2 Background

The ability to read, write, and do math is necessary for all future learning, skills development, and employment. Yet worldwide, an estimated 387 million children and youth cannot read or do basic math, even though more than two-thirds of them have attended four or more years of school.²

Evoke: Leaders for Literacy builds Agency and leverages education technology (edtech) to support youth in tackling the global grand challenge of illiteracy by:

Improving 21st century skills.

The Project is designed primarily to improve the following skill groups, generally recognized as necessary for employment in the 21st century: Creative Visionary, Deep Collaborator, Empathic Activist, and Systems Thinker. The Project's 48 activities are also designed to positively impact Grit, Agency, and Digital Literacy (see Table 1).



Table 1: Description of 21st century and social innovation skill groups as described in the Social Innovator's Framework.

Building an understanding of social innovation.

The skill-building activities also leverage youth participants as social innovators. At the core of social innovation are new ideas that work to meet pressing unmet needs and improve peoples' lives.³ Youth are

2. "More Than One-Half of Children and Adolescents Are Not Learning Worldwide," Fact Sheet. (Paris: UNESCO Institute for Statistics, 2017). Accessed January 26, 2018.

uniquely equipped to approach entrenched problems in new ways, with energy and enthusiasm. Evoke: Leaders for Literacy gives youth support, through a trained facilitator, and builds teamwork to collaborate as change makers in their communities.

Teaching the importance of literacy.

The Project activities are designed to improve participants' operational knowledge of how children learn to read, emphasizing



the positive impact youth could have if they take on the role of helping children in their families, schools, and communities. The Project documents note this behavior change is critical to improving generational literacy and gives youth tools and ideas for how to get started.

Evoke: Leaders for Literacy was also designed to indirectly:

Improve early grade reading.

Through activities that build Agency and understanding of how children learn to read, the Project participants used human-centered design to identify a problem statement and develop solutions with primary school teachers, students, and community members that could address barriers and eventually improve early grade reading in the community.

Challenge power dynamics and raise the profile of youth as positive change makers.

Evoke: Leaders for Literacy builds Agency, which is the first critical step toward solving grand challenges. Although not specifically included in the curriculum, the Project youth were invited to speak with politicians and local non-governmental organizations to share the barriers they uncovered and demand that these be addressed. The youth were also invited to share their experience with the World Vision South Africa (WVSA) Board of Directors, who recommended that Evoke: Leaders for Literacy be integrated more broadly into WVSA area programs.

3. "Social Innovation," (Oxford University, 2007). Available at: <u>http://eureka.sbs.ox.ac.uk/761/1/Social_Innovation.pdf.</u>

Project Description



Figure 1. Image from Andre's Story

Evoke: Leaders for Literacy is the fifth iteration of Evoke and was the first to be managed outside of the World Bank; adapted to improve reading skills of early grade children, designed for younger pre-university youth and, optimized for low-resource settings. Based on the Social Innovators' Framework (SIF),4 developed by Dr. Barbara Freeman and Robert Hawkins, Evoke: Leaders for Literacy's 48 activities are each designed to build skills and accommodate different learning styles. Each Evoke iteration was anchored with a graphic novel to help youth connect with and understand global grand challenges.

Participants were placed on teams where they worked collaboratively online and in-person sessions. Participants remained on these teams for three months as they completed the activities individually and in teams, culminating in the development of a solution to a specific barrier to literacy in their community (see Annex 1: Evoke: Leaders for Literacy Missions). Participants read each activity prompt via the online platform and submitted evidence of completion in either a text message, uploaded photo, or video (see Figure 2).

Online discussion boards allowed teams to share ideas and facilitators to pose questions for participant discussion. As they progressed through the Missions, the experience shifted participants into players and motivated them through:

Engaged Storytelling: Each week revealed a new chapter of "Andre's Story."5

Building Superpowers: Players started by taking a Superpower quiz that helped them understand what skills and gualities they already possessed. Players then earned other Superpowers by submitting evidence for each activity. Point



Figure 2. Evidence submitted via the online platform.

growth, achieved by gaining new skills, was visible to other players through individualized online profiles.

Earning Evocoin: Participants earned virtual currency when they submitted evidence, tagged other participants' evidence with appropriate labels, and earned star ratings from mentors based on the quality of their submission. Award symbols, badges, and other immediate recognition elements were strategically placed to maintain high engagement.

4. Barbara Freeman and Robert Hawkins. "Evoke - Developing Skills in Youth to Solve the World's Most Complex Problems: The Social Innovators' Framework." (Washington, D.C.: World Bank, 2016). Available at: http://hdl.handle.net/10986/26106

5 . Kathleen Goonan. "Andre's Story." (2016). Available at: <u>AllChildrenReading.org.</u>

Shopping in the Marketplace: Items to help complete Missions could be purchased in the online marketplace with Evocoins. The marketplace included items appropriate for the context, such as children's books, mentorship, solar chargers, and power banks.

Ranking on the Leaderboard: Teams were competitively ranked on the Leaderboard based on the number and quality of their evidence submissions. The top three teams earned prizes to help them implement their proposed solution.

Tracking the Progress Bar: Team progress toward completing all eight Missions and their solution was tracked on a customized progress bar.

Social networking and discussion elements were designed to bridge the online and offline activities and served as a platform for collaboration, teamwork, and debate.

Following a human-centered design process, participants progressed from developing a problem statement to refining it, and from designing a solution to developing a full business plan to support the solution. As part of the final Mission, participants created an elevator pitch to communicate their solutions to their community and potential funders. Seed funding given to the winning teams, following the three-month pilots.



Figure 3. Evoke: Leaders for Literacy online dashboard.

Adaptation to Literacy

All Children Reading: A Grand Challenge for Development adapted three essential components of Evoke to address literacy:

The Story: Previous iterations of Evoke used graphic novels as a pedagogical tool to help youth connect with and understand grand challenges. ACR GCD developed "Andre's Story" to familiarize participants with the challenges associated with not learning to read. The story was then adapted to the South African context prior to piloting, by FunDza,⁶ a South African reading for enjoyment organization.

The Activities: ACR GCD embedded seven key literacy lessons⁷ in the activities to ensure youth understand how children learn to read and acquire operational knowledge of literacy. South African youth engaged with ACR GCD and Pearson South Africa to revise the previous activities and develop new ones. Changes were made to ensure interviews were conducted in groups and arranged by the facilitators with the

Pilot #1 Context

Limpopo has the lowest literacy rates in the entire country, and unemplyoment is very high.



primary school principals. Appropriate communication with parents and community members also helped build ownership of the Project. The skills built through each activity remained in accordance with the SIF. "Andre's Story" and the new activities were pre-tested prior to implementing the pilots.

The Online Platform: With an intention toward offering Evoke: Leaders for Literacy to other organization to take and run with on their own, modifications were made to improve the scalability and sustainability of the open-source online platform. The online platform was originally designed for access via personal computers (PCs) with regular access to Internet. Adaptations for the low-resource contexts in South Africa included: documenting and simplifying the coding so that technical support could be provided locally, adding Help functions to explain features of the online platform, and adding training for the facilitators on how to use the platform's Administration module. Five user guides⁸ gave facilitators standardized guidance on how to lead in-person sessions, bridge the online and offline activities, assist participants, and manage the online community.



Pilot #1 participant logging into the online platform.

^{6.} More information on FunDza is available at: <u>http://www.fundza.co.za/</u>.

^{7. &}quot;Evoke: Leaders for Literacy User Guide 3: Resources." (2017). Available at: https://s3.eu-west-2.amazonaws.com/acrevokedocuments/literacy/EVOKE+guide+3-resources-Feb+21+(1).pdf.

^{8.} Evoke: Leaders for Literacy resources, including the five user guides are available at <u>AllChildrenReading.org</u>.

5 Methodology

Two pilots were implemented in three sites in South Africa (Thusalushaka, Tembisa A, and Tembisa B) to test the efficacy of Evoke: Leaders for Literacy. Pilot #1 engaged both in- and out-of-school youth age 14–32 through a community center operated by WVSA in 2017. This first pilot informed changes prior to testing in Tembisa A and B in 2018 in partnership with Pearson South Africa. Table 2 includes pilot group characteristics, location, and demographics.

	Pilot #1 (Aug – Nov 2017)	Pilot #2 (March – May 2018)		
Location	Thusalushaka	Tembisa A	Tembisa B	
Participants	82 (58 f, 24 m) Age: 14–32 (in-school and out-of-school)	39 (27 f, 12 m) Age: 14–15	11 (6 f, 5 m) Age: 14–15	
Setting	Community Center	Secondary School	Secondary School	
Characteristics	Rural	Urban	Urban	
Access	Shared Personal Computers (PC)	Personal Tablets	Personal Tablets	
Existing Internet Access	No, Provided by the project	Yes, high speed	No, Provided by the project	

Table 2: Evoke: Leaders for Literacy pilot demographics.

To understand how the Project impacted participants' (a) 21st century skills, (b) social innovation skills, and (c) knowledge of how children learn to read, Mthente Research and Consulting, a local South African firm, explored three key research questions:

1. To what extent

does Evoke: Leaders for Literacy improve participants' 21st and social innovation skills as compared with the control group? 2. In what ways does Evoke: Leaders for Literacy improve participants' knowledge of how children learn to read as compared with the control group? **3. What are the relationships** between engagement with Evoke: Leaders for Literacy and participants' learning outcomes, perceptions, and personal characteristics (i.e., sex, ethnicity, age, consideration of varying abilities, and issues of second language acquisition)?

The quasi-experimental evaluation design included pre- and post-tests built from the SIF in a triangulated approach—self, peer, and professional questionnaires—as the basis for evaluating skill development. The analytics collected via the online platform were also used to track the development of 21st century and social innovation skills, and a self-report Locus of Control (LOC) questionnaire evaluated growth in Agency. Demographic questionnaires, focus group, and interview data also informed the results of the quantitative analysis. The instruments are included in Annex 2.

6 Limitations

Implementation

Although the eight Missions and 48 activities remained the same in both pilots, fidelity of implementation was low. In Pilot #1, facilitators conducted in-person sessions and gave support as requested by the participants. In Pilot #2, the User Guides standardized the facilitators' support, the facilitators reported limited use of "Andre's Story" and its connection to the activities. Common limitations in the pilot contexts included access to high-speed Internet, availability of computers, disruptions due to holidays and school schedule conflicts, resource limitations, and low digital literacy. Bugs in the online platform caused implementation delays, hindered mentor engagement and limited server capacity prevented uploading videos and photos. ACR GCD, Pearson, Pearson South Africa, and World Vision South Africa invested significant administrative and in-kind resources to support the pilots. **The technical support burden and high-speed Internet access required to prepare for and implement these pilots is not replicable in a scalable or sustainable way.**

Evaluation

The sample population included in the pilots is too small to be representative of in-school or outof-school youth across South Africa, and, therefore, this report does not attempt to draw concrete comparisons between the pilot sites, present generalized results, or effect sizes. For this reason and the short implementation period (three months), this report does not include the long-term impact of the Project on individual skill growth or impact on reading in the surrounding community.

Results varied between the pilot sites, which were likely due to variances in age groups, school status, availability, and access to other skill-building opportunities. Variables tracked via the online platform such as: points accumulation and progress toward completion are not included in this summary but can be found in the Evaluation Reports. Additional research is necessary to determine the resources needed for optimal fidelity in any context and to validate the evaluation instruments.

"We as humans must work together. We can share ideas with each other, to uncover resolutions to the challenges that communities face."

Evoke: Leaders for Literacy participant

9. "Evaluation Report: Evoke: Leaders for Literacy Pilot #1." (All Children Reading: A Grand Challenge for Development, 2017).

7 Findings

Finding 1: Mixed improvement in 21st century skills

Pilot #1

Statistically significant improvement was evident in three of four skill groups (Creative Visionary, Deep Collaborator, and Systems Thinker) for participants in Pilot #1, according to the professional-ratings (see Figures 4 & 5).⁹ In contrast to the more mixed results for the SIF self and peer ratings, the



Figure 4: Baseline social innovation scores according to professional ratings (Pilot #1)



Figure 5: End line in social innovation scores according to professional ratings (Pilot #1)

10. "Evaluation Report – Evoke: Leaders for Literacy Pilot #2." (All Children Reading: A Grand Challenge for Development, 2018). *Note that Grit was only measured by a single question in Pilot #1. Teamwork skills challenged participants at baseline, but responses at endline revealed pride in team cohesion and growth in the ability to communicate with team members and persons in authority.

professionals' ratings clearly show significant increases when rating the Participants. Data from student interviews, case studies, and focus group discussions supports the quantitative findings that Evoke: Leaders for Literacy participants improved their 21st century and social innovation skills. Participants articulated improvements in their employability skills including Aggregation, Communication, Empathy, Leadership, Collaboration, Critical Thinking, and Digital Literacy. Participants also demonstrated an entrepreneurial perspective aligned to social innovation skills. However, there was no statistically significant improvement in the crosscutting Grit skill.

Pilot #2

Data from Pilot #2 revealed the opposite story, with statistical improvement only in Grit, according to the self-ratings. However, no significant improvement was evident in the other four 21st century skill groups (see Figure 6). The professional ratings revealed a more positive picture, with 60 percent of the Project participants showing improved 21st century skills, compared to 41 percent of the control group.¹⁰

The qualitative data revealed improvement across each of the 21st century skill groups. Many participants made the link between the skills they developed and the application of those skills to their lives, which may indicate that participants internalized the skill group beyond the task-based nature of the Project. For example, the Deep Collaborator skill group includes skills such as Teamwork and Communication. These skills challenged participants at baseline, but responses at endline revealed pride in team cohesion and growth in the ability to communicate with team members and persons in authority.



Mean Growth in Social innovation slills (Pilot #2)

Figure 6: Comparison of baseline and End Line mean growth in social innovation skills according to self-ratings (Pilot #2).

Finding 2: Significant improvement in Agency

Statistically significant growth in Agency was evident in Pilot #2 (see Figure 7). The 12 items on the Locus of Control questionnaire measured the participants' Agency, or perceived control over their life and future. According to their own self-ratings, 59.5 percent of the participant group improved Agency, compared with only 29.2 percent of the control group. This was an improvement over Pilot #1, where no statistically significant growth in Agency was evident.

Qualitative data from both sites revealed improved confidence in applying skills. Participants were eager to tackle literacy issues and apply what they learned. Skills such as communication, courage, empathy, and



Figure 7: Mean change in LOC total score, Agency (Pilot $#_2$).

imagination improved as the participants gained confidence and the ability to express their ideas in an open forum. Courage was very well articulated at baseline and changed somewhat from taking a principled stand to allowing other views to be considered.

Finding 3: Radical change in knowledge of how children learn to read

Participants in both Pilot #1 and Pilot #2 experienced a radical change in their understanding of barriers to literacy in their communities and their own potential to address these barriers in meaningful ways. Evoke: Leaders for Literacy was not designed to improve participant literacy, but to improve their knowledge of how children learn to read and to underscore the unique supportive role participants could play. Improved knowledge of how children learn to read was only measured qualitatively. At baseline, the Project participants had a very limited understanding of the concept of literacy. Most of the responses indicated that literacy consisted of the ability to read and write and some understood literacy as the knowledge of English, since their classes were taught in English. At endline, participants expanded their definition of literacy to include the ability to understand what is read and written in any language. Participants also named many barriers to literacy identified through their research. Examples of problem statements and proposed solutions by participant teams in Pilot #2 are described in Table 3.

Problem Statement	Proposed Solution
Learners' motivation to read is low and the primary schools do not have books.	Reading Marathon: Primary school students enter a competition to read the most books and win prizes.
Many learners are struggling to read and do not receive support from their parents.	Reading Clinic: Primary learners reading abilities are assessed and then paired with a secondary school tutor.
When the language of instruction is different than learners' home language they often do not understand the lessons.	LitApp: A multilingual app available on tablets to assist teachers and learners during lessons.

Table 3: Example problem statements and proposed solutions (Pilot #2).



Finding 4: Benefits for both in-school and out-of-school youth

Pilot #1 engaged in-school and out-of-school youth, allowing for comparison between the two groups. The in-school and control group participants were in Grade 9 for the duration of the Project. Ten participants from the out-of-school group left school in Grade 10, two in Grade 11, and 35 finished Grade 12. In general, the data suggests that Evoke: Leaders for Literacy is beneficial to both in-school and out-of-school participants. A summary of the findings is included in Table 4.

Instrument In-school vs Out-of-school		Control vs In-school	Control vs Out-of-school	
Locus of	Differences in	Differences in	Difference in mean gains are significant $(p \le 0.05)$.	
Control	mean gains are	mean gains are		
(Agency)	not significant.	not significant.		
SIF-Self	Differences in	Differences in	Differences in	
	mean gains for all	mean gains for	mean gains for all	
	four Skill Groups	three Skill Groups	four Skill Groups	
	are significant	are significant	are significant	
	$(p \le 0.05)$.	$(p \le 0.05)$.	$(p \le 0.05)$.	
SIF-Peer	Differences in	Differences in	Differences in	
	mean gains for	mean gains for all	mean gains for all	
	all four Skill	four Skill Groups	four Skill Groups	
	Groups are not	are significant	are significant	
	significant.	$(p \le 0.05)$.	$(p \le 0.05)$.	
SIF- Professional	Differences in mean gains for all four Skill Groups are significant. $(p \le 0.05)$	Differences in mean gains for all four Skill Groups are significant $(p \le 0.05)$	Differences in mean scores at baseline for all Skill Groups.	

 Table 4: Summary of quantitative findings for in-school and out-of-school groups (Pilot #1)

"I was unemployed before Evoke, but I am now working for a clothing store as a sales assistant. Evoke helped me get the confidence to be able to communicate with people I don't know."

> Evoke: Leaders for Literacy participant

The out-of-school group appears to have greater gains in each of the skill groups, however the quality of their proposed solutions was lower than the in-school group, as determined by the external panel of judges at the end of the pilot. One explanation for the significant differences between groups on the Locus of Control could be that the out-of-school group was older, more independent, and already feeling in control of their future. The out-of-school group spent more time (2.42 hours per day, on average) using the computers and the online platform, while the in-school group spent 1.93 hours per day (on average) after their school day ended. Followup surveys with the out-of-school participants revealed that after the Project about half of the respondents either found employment or returned to school. More research with a larger group of participants and longer time frame is necessary to explore these findings.

Finding 5: Improved knowledge and application of digital literacy skills.

In Pilot #1, participants accessed the online platform at a rural community center via PCs. Participants in Pilot #2 accessed the online platform via personal tablets during in-person sessions with facilitators two to three times per week. Participants did not access the online platform on their own time due to the high cost of data. Two thirds of the participants in Pilot #1 self-rated their digital literacy (computer skills) as medium or better, however the facilitators noted that they devoted more than half of their time to supporting participants' computer use. Both Pilot #2 schools were part of South Africa's Technology-Enabled Schools program and nearly all participants in Pilot #2 rated their classrooms were equipped with interactive whiteboards and designed to have high-speed Internet, although not reliable. Although the evaluation was not designed to compare the two pilot groups, the Engagement Summary in Table 5 appears to show that Pilot #2 participants completed activities more efficiently. More research is necessary to better understand the causal relationships.

Most participants, across both pilots, noted either improved digital literacy or a recognition of their digital skills as an asset that could be taught to others. Engagement with the online platform improved participants' digital literacy most in Pilot #1, where differing levels of digital literacy provided an opportunity for participants with more advanced skills to teach less digitally-literate participants. More digitally literate participants tested their skills through different means of interaction with the online platform (i.e., uploading videos, using spreadsheets, and word processing often overshadowed by SMS).

Additional Findings

Questionnaires were administered to all participants in Pilots #1 and #2 to determine the effect of specific participant characteristics on the Project outcomes and to answer Research Question #3: What are the relationships between engagement with Evoke: Leaders for Literacy and participants' learning outcomes, perceptions, and personal characteristics? The findings are summarized in Table 6.

Engagement Indicators	Pilot #1	Pilot #2
Average number of activities/evidences completed per user (includes only the individual, non-team activities)	11 of 14	14 of 14
Average online engagement per user during the Project (three months)	23.59 hours	18.10 hours
Average online session duration per user	30 minutes 6 seconds	20 minutes 29 seconds
Average number of site visits per user, per week	2	3.5

Table 5: Engagement Summary, Google Analytics.

Characteristic	Pilot #1	Pilot #2
Sex Sex	Males and females benefitted equally well, no differences based on sex were detected.	Significantly higher growth in Agency for females. Significant differences between male and female scores for the Systems Thinker skill group.
Leadership Role	Team captains accumulated significantly lower points than other participants. This appears incorrect and is likely due to an inssue with the algorithm.	Team captains performed significantly lower than other participants; this appears to be an unresolved bug in the online platform.
Language	English as the language of instruction during the Project had no effect on participant engagement, even though none of the participants spoke English as their first language. Many noted, however, that the facilitators provided helpful explanations in their local languages.	English did not appear to influence participant engagement. However, facilitators or peers often explained complex concepts around social innovation in their local languages.
Age	Both the top teams and the three lowest scoring teams came from the youngest age group. This suggests that Evoke: Leaders for Literacy can work for the complete age spectrum as tested for this report.	Participants were either in Grade 10 or 11 and the scoring was similar regardless of age. However, links to employability were less evident because the participant group was much younger than in Pilot #1.

Table 6: Evaluation findings related to participant characteristics.

8 Recommendations

Recommendation 1: Encourage application of research findings after the Project

Agency is the first critical step to acting on grand challenges, but more needs to be done to sustainably create solutions. Through Evoke: Leaders for Literacy, youth interviewed teachers, learners, and parents in their community and designed solutions appropriate for the context. Empathy for learners' situations and challenges was almost immediate and transformed many of the youth participants into literacy advocates in their communities, schools, and families in three months. During interviews, many Evoke: Leaders for Literacy participants stated a desire to become teachers and even more said they would support their siblings and eventually their own children in learning to read. With a massive shortage of teachers needed to meet the Sustainable Development Goals by 2030, trained youth have the potential to help close the gap.¹¹ Additional support is recommended for the Project participants to refine and implement the best solutions, apply what they learned to other contexts and challenges, and amplify their voices.

Recommendation 2: Adapt Evoke: Leaders for Literacy to engage youth in other contexts

The Project can easily be adapted other contexts or challenges. The most logical recommendation is to adapt the Project to train teachers about literacy and how to teach literacy in their classrooms. The Project can also be adapted for the early childhood development context, encouraging teachers to innovate to accommodate the learning styles of all their students. To adapt Evoke: Leaders for Literacy to the diverse South African context, ACR GCD engaged youth participants to review "Andre's Story" and illustrations, the activities, and online platform.¹² Evoke: Leaders for Literacy was designed for low-resource settings and further adaptation is recommended to create an optimized mobile application that functions offline and uploads data when connected to wireless internet.

Recommendation 3: Invest in better ways to measure the impact of Evoke: Leaders for Literacy

Limitations with the self-reported and external nature of the instruments used to evaluate the Evoke: Leaders for Literacy pilots resulted in a lack of understanding of the true impact of the Project. With a scalable, well-designed online platform, task-based assessments could be administered directly via the online platform, providing concrete instead of subjective or self-reported measures. For example, short pop-up quizzes could easily be added to understand operational knowledge acquisition related to the challenge itself. Recommendations to improve assessment of the Project's impact include:

Placing more emphasis on the professional ratings: Future studies should place more emphasis on the ratings of professionals (teachers, facilitators), the self-reported questionnaires, as these show the most valid results.



Evoke: Leaders for Literacy youth working with primary schools students to implement the Reading Marathon

In the next 14 years, 24.4 million primary school teachers and 44.4 million secondary school teachers are required, according to the UNESCO Institute for Statistics (UIS). Accessed January 26, 2019. <u>https://sdg.uis.unesco.org/2016/10/05/closing-the-teacher-gap-almost-69-million-new-teachers-needed/</u>.
 "Summary Report: Evoke: Leaders for Literacy Contextualization Workshop." (2017). Available at <u>AllChildrenReading.org</u>.

Testing operational knowledge growth quantitatively: This evaluation only tested operational knowledge growth through individual and focus group interviews. Testing growth in operational knowledge of how children learn to read quantitatively, such as through quizzes on the platform, would help better articulate the Project's impact.

Validating the questionnaires: The results presented in this report are not generalizable due to the small sample size and variations in fidelity of implementation. Creating objective instruments that can cover the underlying skills constructs and testing them in a wider variety of groups internationally would help to validate them for broader use.

Continuing to use both qualitative and quantitative measures: Both pilots were implemented in South Africa. Under these circumstances, qualitative approaches gained more relevant information on participant skill growth.

Conclusion

Evoke: Leaders for Literacy appears to have the intended effect on participants' 21st century and social innovation skills, and their operational knowledge of how children learn to read, especially when considering the qualitative findings. Apparent behavior changes in the youth participants included: taking on leadership roles, exploring new areas of employment, improved communication with peers and professionals, and collaboration with authority figures to address problems in their community. Eradicating poverty in all its forms and dimensions, including extreme poverty, is the greatest global challenge and an indispensable requirement for sustainable development.¹³ Now more than ever collaboration to overcome the world's grand challenges is critical. To achieve the Sustainable Development Goals, it is imperative that communities and especially youth, who comprise more than half of the world's population, be leveraged as social innovators in the global action plan to eradicate poverty.

"Like many countries facing literacy crises, the problem has been recognized and plans to mitigate the situation are in place, generated mainly by adults. However, engaging skilled youth in the formation and implementation of any mitigation plans activates their Agency and leads to high levels of engagement to improve the situation in their community."

Claudia Regnart, Pearson South Africa

13. "Transforming our world: the 2030 Agenda for Sustainable Development." (United Nations, 2015). Available at: http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E.



CAnnexes

Annex 1: Evoke: Leaders for Literacy Missions

	Mission Title	8	Activity Overview	Skills Focus
1	5	Ask questions and do research	Interview literacy experts, teachers, parents, early grade	Critical Thinking, Research, Interviewing, Analysis
2	-?	Build under- standing of local literacy issues	students, and business leaders in their community.	Analysis, Teamwork, Interviewing, Courage, Empathy
3	(C)	Define the problem	Identify the barriers to literacy,	Research, Reflection, Leadership, Analysis
4		Brainstorm a Solution	then develop a problem statement and Solution.	Ideation, Imagination, Transformation, Problem-Solving
5	<u>© ©</u>	Get feedback	Return to the community, present the Solution, and ask for feedback.	Communication, Vision, Critical Reflection, Generosity, Imagination
6		Analyze and refine your Solution	Revise the Solution, build a prototype, and test with community members.	Transformation, Vision, Analysis, Networking
7		Create measures of success	Develop a business plan to include a vision statement, funding plan, success metrics, risk analysis, and communication strategy.	Analysis, Ideation, Teamwork, Communication
8		Present your Solution	Develop and present your Solution to the community. Build a network, collect feedback, refine the pitch and make future plans for the Solution.	Empathy, Courage, Communication, Analysis, Ideation

Figure 9: Evoke: Leaders for Literacy Missions and activity overview.

Annex 2: Evaluation Instruments

Participant responses were evaluated against the absence or presence of the Key Qualities for each skill. Each of the evaluation questions and associated data collection instruments are outlined in Table 1 and the instruments follow.

Ev	aluation Sub-Question	Data Instrument(s)	Data Providers	Key Performance Indicators (KPIs)
Qı	Implementation (Inputs and Activities) What resources are utilized during the implementation of Evoke: Leaders for Literacy?	Project records and documents	Facilitators (N=2)	Qualitative review of the resources required for the successful implementation of Evoke: Leaders for Literacy in a more urbanized school-based setting.
Q2	Outputs What external factors have direct influence on the planned implementation schedule?	Occurrence log	Facilitators (N=2)	Qualitative review of the occurrences and a summary of the common themes.
Q3	Outputs How does participant contact time (dosage) with Evoke: Leaders for Literacy influence the Project's outcomes?	Attendance records EVOKATION ¹⁴ results	Facilitators (N=2) EVOKATION adjudicators	Number of days absent per participant; Average EVOKATION results for each team.
Q4	Outputs Has the Project been adequately adapted to eliminate or reduce the cultural bias of the content for the South African environment?	Case studies	Evoke: Leaders for Literacy participants (N=6)	Qualitative analysis of the responses to the survey questions.
Q5	Outcomes How do demographic profiles affect the participants' outcomes?	Demographics forms linked to: Individual participant analytics; Selection of the exceptional project(s); Focus groups	Participants (N=39) Control group (N=26)	Correlation analysis of the demographic information to the analysis of the 16 key skills and the four key qualities associated with a social innovator; Qualitative information sourced from the focus groups that will provide insight into the participant skills development process.
Q6	Outcomes To what extent does Evoke: Leaders for Literacy, as implemented, improve social innovation skills?	Self-Response Questionnaire; Peer-Response Questionnaire; Professional Questionnaire; Locus of Control Questionnaire; Case Studies; Focus groups	Participants (N=39) Control group (N=26) Professionals (N=2) Evoke: Leaders for Literacy Participants (N=6)	Regression analysis of each of the 16 key skills and the four key qualities associated with a social innovator; Qualitative information sourced from the focus groups and case studies before and after Mission 2 (M2), Mission 4 (M4), Mission 6 (M6), and Mission 8 (M8) activities that will provide insight into the 21c skills development process.
Q7	Outcomes What are the quantifiable participant skill development trends over the duration of the Project?	Game analytics	20% of participants (N=8)	Trend analysis of the game analytics from the Evoke: Leaders for Literacy online platform.

 Table 7: Approach to data collection for evaluation sub-question.

14. EVOKATION is a quantitative measure captured via the online platform. It measures progress toward developing a solution through Evoke: Leaders for Literacy's eight Missions and 48 activities.

Social Innovator's Framework – Self-Response Questionnaire

The following are statements about yourself.

Read each statement carefully and rate on the scale, which statement you prefer. Sometimes your answer will be on the left side (1 or 2), sometimes on the right side (6 or 7), and if you are not decided, somewhere in the middle (3 to 5).

There are no right or wrong answers. **It's about getting the right picture of who you are and finding the right position for you on your team**. Your answers remain anonymous, so you don't have to state your name.

PARTICIPANT CODE:	DATE:		

Item	Left Extreme	Likert Scale	Right Extreme
1. When I'm faced with a new problem, I usually	try to stick to what has worked before	1 2 3 4 5 6 7	enjoy trying new solutions
2. When there is a new topic in school, I	really like to get as much information as possible	0 0 0 0 0 0 0 1 2 3 4 5 6 7	sometimes get annoyed by too much information
3. When I see a friend perform well at a task	I'm really happy for her/him	1 2 3 4 5 6 7	I sometimes get jealous
4. Meeting new people in my community	happens to me often and I enjoy it	0 0 0 0 0 0 0 0 1 2 3 4 5 6 7	is not so important to me
5. Unfamiliar situations	are exciting and I always enjoy them	1 2 3 4 5 6 7	are exciting and also a little frightening
6. To solve a problem, I think there	is usually an easy solution	0 0 0 0 0 0 0 1 2 3 4 5 6 7	are often many aspects to consider to find a solution
7. It's better to	go with the ideas of the majority	1 2 3 4 5 6 7	hold on to your own ideas
8. Younger people usually	have difficulties understanding what I try to say	0 0 0 0 0 0 0 1 2 3 4 5 6 7	can understand me easily

Item	Left Extreme		Like	rt Sca	le				Right Extreme
9. When I work in a team, I think	that I lose too much time because of the others	1	2	3	4	5	6	7	that I benefit from a common effort
10. When I work in a team, I think	our strength as a team is greater than my own	1	2	3	4	5	6	7	everyone is as strong as the weakest team member
11. Other people usually	have similar arguments as I have	1	2	3	4	5	6	7	have arguments that are hard to understand
12. Complex and difficult problems	annoy and bore me	1	2	3	4	5	6	7	make me energetic
13. A good leader	decides for the team	1	2	3	4	5	6	7	lets the team decide
14. When I need new information	I usually ask other people	1	2	3	4	5	6	7	I usually search for it myself in newspapers, the Internet, or similar sources
15. If a task is very difficult	I think it's best to try different strategies	1	2	3	4	5	6	7	I think it's best to try harder with my strategy
16. If a person tries to achieve a goal	he/she can best rely on himself/ herself	1	2	3	4	5	6	7	he/she needs others to achieve that goal
17. One should trust	one's own ideas	1	2	3	4	5	6	7	other people's ideas
18. Other people's emotions (such as happiness, anger and fear)	are often hard to understand	1	2	3	4	5	6	7	are usually easy to understand
19. If I see a problem in my community,	I think it's my responsibility to help it	1	2	3	4	5	6	7	I find it too difficult to do anything about it
20. Good ideas come	almost automatically	1	2	3	4	5	6	7	mostly when I see and learn new things

Item

21. Think of a <u>new project</u> that you are involved with. When you work in a team and you need to produce a final presentation, what do you think are important skills?

Please look at the following qualities and rank them from most important to least important.

being very creative
being a good collaborator
being a good thinker
being a very active team-member
following things through to the end

22. Which of these qualities do you master the best?

Please rank them according to your own personal abilities.

I'm very creative I'm a good collaborator I'm a good thinker I'm an active team-member I'm good in following things through to the end

23. Look at the following 17 strengths; choose five that describe you the best:

Choose five out of 17.

imagination thinking broadly ideas collecting forward thinking thinking deeply courage leading communicator caring team-player change networking curiosity sharing grit solving problems

Social Innovator's Framework – Peer-Response Questionnaire

The following are statements about one of **your peers**.

Read each statement carefully and rate on a scale from 1 – "I totally disagree" to 7 – "I totally agree," how much you think the statement is applicable to this peer.

There are no right or wrong answers. **It's about getting the right picture of who your peer is and finding the right position for him or her on a team.** Your answers remain anonymous, so you don't have to state your name.

PEER'S NAME:

PARTICIPANT CODE:

DATE:

Item	Left Extreme	Likert Scale	Right Extreme
1. He/She is someone who	I totally	1 2 3 4 5 6 7	I totally
enjoys exploring new solutions	disagree		agree
2. He/She often has new,	I totally	0 0 0 0 0 0 0 1 2 3 4 5 6 7	I totally
interesting ideas	disagree		agree
3. He/She inspires and motivates other people	I totally disagree	1 2 3 4 5 6 7	I totally agree
4. He/She explains even	I totally	0 0 0 0 0 0 0 1 2 3 4 5 6 7	I totally
difficult things well	disagree		agree
5. I think he/she works well in teams	I totally disagree	1 2 3 4 5 6 7	I totally agree
6. He/She thinks his/her	I totally	1 2 3 4 5 6 7	I totally
ideas are the best	disagree		agree
7. He/She tolerates unfamiliar	I totally	1 2 3 4 5 6 7	I totally
problems well	disagree		agree
8. He/She takes the needs and ideas of other people into consideration	I totally	0 0 0 0 0 0 0	I totally
	disagree	1 2 3 4 5 6 7	agree
9. He/She asks around to get help	I totally disagree	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	I totally agree

Item	Left Extreme	Likert Scale	Right Extreme
10. He/She thinks he/she must be the dominating person on a team	I totally disagree	1 2 3 4 5 6 7	I totally agree
11. He/She asks the right questions	I totally disagree	1 2 3 4 5 6 7	I totally agree
12. He/She seeks feedback from others	I totally disagree	1 2 3 4 5 6 7	I totally agree
13. He/She often tells interesting stories	I totally disagree	0 0 0 0 0 0 0 1 2 3 4 5 6 7	I totally agree
14. He/She sometimes thinks too simplistically	I totally disagree	1 2 3 4 5 6 7	I totally agree
15. He/She presents well in front of class	I totally disagree	0 0 0 0 0 0 0 1 2 3 4 5 6 7	I totally agree
16. He/She cares about the chemistry in a team	I totally disagree	1 2 3 4 5 6 7	I totally agree
17. He/She is a "we"-person and not a "I"-person	I totally disagree	0 0 0 0 0 0 1 2 3 4 5 6 7	I totally agree
18. He/She is not afraid to approach difficult and complex tasks	I totally disagree	1 2 3 4 5 6 7	I totally agree
19. He/She jumps on the first source of information and thinks that a problem is solved by it	I totally disagree	0 0 0 0 0 0 0 1 2 3 4 5 6 7	I totally agree
20. He/She is a good connector in a team	I totally disagree	1 2 3 4 5 6 7	I totally agree
21. He/She is a good listener	I totally disagree	0 0 0 0 0 0 0 1 2 3 4 5 6 7	I totally agree
22. He/She enjoys talking to people he/she doesn't know	I totally disagree	1 2 3 4 5 6 7	I totally agree
23. He/She sees setbacks as motivation	I totally disagree	1 2 3 4 5 6 7	I totally agree
24. He/She easily asks other people for help	I totally disagree	1 2 3 4 5 6 7	I totally agree

Item	Left Extreme	Likert Scale	Right Extreme
25. He/She stands up for others	I totally disagree	1 2 3 4 5 6 7	I totally agree
26. He/She gives good feedback to others	I totally disagree	0 0 0 0 0 0 0 1 2 3 4 5 6 7	I totally agree
27. He/She follows through on his/her offers to help	I totally disagree	1 2 3 4 5 6 7	I totally agree
28. He/She would be a good teacher	I totally disagree	0 0 0 0 0 0 0 1 2 3 4 5 6 7	I totally agree
29. One can count on him/her to hold a team together, even when things get difficult	I totally disagree	1 2 3 4 5 6 7	I totally agree
30. He/She is open to being criticized	I totally disagree	0 0 0 0 0 0 0 1 2 3 4 5 6 7	I totally agree

31. Which of the following qualities do you think he/she masters the best?

Please rank them according to his/her personal abilities.

very creative good collaborator good thinker very active team-member follows things through to the end

23. Look at the following 17 strengths; choose five that describe him/her the best:

Choose five out of 17.

- imagination thinking broadly ideas collecting forward thinking thinking deeply courage communicator leading team-player caring networking change curiosity sharing solving problems grit

Social Innovator's Framework – Professional Response Questionnaire

The following questions concern statements about one of **your students**.

Read each questions carefully and rate on a scale from 1 - "I totally disagree" to 7 - "I totally agree", how much you think that the statement is applicable to this student.

This test is anonymous, so you don't have to state your own name.

EVOKE USERNAME:		DATE:					
	di	isagr	ee <		ag	ree	
Item	total!	mosth	stights	undecided	stightly	mostly	totally
1. The student is someone who enjoys exploring new solutions.	•	•		•	•	•	
2. The student often has new and interesting ideas.	•			•	0	•	
3. The student deals well with complex and new ideas.	•	•	•	•			
4. The student only sees problems when he/ she hears new ideas.							
5. The student explains difficult things well.	•	•	•		•	•	•
6. The student preparest and tests ideas to see what outcomes emerge.							•
7. The student gets things done by actively working with others.		•	•	•			•
8. The student finds it difficult to assess other people's ideas constructively.	•		•			•	•

	d	isagr	ee 🗸		ag	ree	
Item	totally	mosth	stights	undecided	stights	mostly	totally
9. The student would be a good teacher.							
10. The student is good at analysing problems and their underlying issues.	•	•	•	•	•	•	•
11. The student has difficulties in translating solutions from one field to another.	•		•	•	•	•	•
12. The student can easily draw graphical representations of a model and its components.	•						
13. The student asks around to get help.	•	•	•	•	•	•	•
14. The student considers how the individual or a team could have acted differently if they could redo their work.	•						•
15. The student reflects on decisions.	•		•		•	•	•
16. The student acknowledges that there are not always easy solutions.	•						•
17. The student is an active member in his/ her community.	•	•	•	•	•		•
18. The student stays motivated if others don't fulfill their tasks.	•	•	•	•			•

Locus of Control – Self-Response Questionnaire

The following statements concern your beliefs about **success in general**. They *do not* refer only to your present situation.

Read each question carefully and rate on a scale from 1 - "I totally disagree" to 7 - "I totally agree," how much you think that the statement is applicable to you.

This test is anonymous, so you don't have to state your name.

PARTICIPANT CODE:		DATE:					
	d	isagr	ee <		ag	ree	
Item	totally	mostly	stightly	undecided	stights	mostly	totally
1. The main difference between people who make a lot of money and people who make a little money is luck.							
2. If you know what you want out of a job, you can find a job that gives it to you.	•	•	•	•	•	•	•
3. It is possible to learn the right skills you need for life.	•	•	•	•	•	•	•
4. Achieving a goal is mostly a matter of luck.		•					
5. People have more influence on the world than they think they do.	•	•	•	•	•	•	•
6. If I do my best I can learn the skills to become successful.	•	•	•	•	•	•	•
7. Who you know is more important than what you know in securing a good job.			•				
8. Internet allows everyone to achieve what they want to.			•	•	•		•

	di	isagr	ee		ag	ree	
Item	totally	mosth	stights	undecided	stights	mosth	Lotally
9. People are born with the skills they need.							
10. Making money is primarily a matter of good fortune.	•	•	•	•	•	•	•
11. People who perform their jobs well, generally get rewarded.	•	•	•	•	•	•	•
12. My personal fate is determined by others.	•	•	•				

Skill	Qualitative Questions	Key Qualities	Mission(s)	Superpower
Imagination	In your opinion, what is the most significant social challenge facing your community? How can you influence a solution to the challenge that you have identified? What changes will take place in	Possesses a willingness to dream of untried solutions	MISSION I: Ask questions and do	Creative Visionary
	2 your community in the next five years? Why?		research	
Ideation	What issues are your peers mostly concerned about? Are they valid complaints/concerns and how would you address them?	Possesses ability to research and generate new ideas then busingtown	MISSION 2: Build under- standing of local	
	4 If you had a 10-minute meeting with the mayor of your community, what would social issue would you discuss to convince him/her to rethink the community's priorities?	brainstorm to improve them	literacy issues	
Vision	5 If you had sufficient resources to start one project in your community, what would it be?	Sees possibilities and opportunities		
	6 Tell me how you would go about implementing the project that you have identified.	where others see barriers and failures		
Courage	7 Tell me about a time when things didn't go the way you wanted (such as a project that didn't turn out as you had hoped). How did you respond to the outcome?	Asks difficult questions, faces up to complex realities, is brave enough to experiment		
	8 Describe a situation where somebody was clearly attempting to stop you from doing something positive (such as volunteering in the community). How did you react to the situation?	even if it goes against convention		

Skill	Qualitative Questions	Key Qualities	Mission(s)	Superpower
ork Commication	 Have you ever had to convince team member(s) of the merits of your viewpoint? How did you do it? Tell me about a time in which you had to use your verbal communication skills in order to get an important point across. How did you do it? Give me an example of a time when you were able to successfully communicate with another person even when that individual may not have agreed with your views. Tell me about an idea you had that required collaboration with your 	Listens intently, empathetically, and respectfully with full attention to others Understands that he/	MISSION 3: Define the problem MISSION 4: Brain- storm a Solution	Deep Collabo- rator
Tcamwo	 required collaboration with your team members to implement. How did you do it? Give an example of when you had to work with a team member who was difficult to get along with. How/why was this person difficult? How did you handle it? How did the relationship progress? Describe a situation where you had a conflict with another individual, and how you dealt with it. What was the outcome? How did you feel about it? Describe a situation where others you were working with on a project disagreed with your ideas. What did you do? 	that he/ she cannot act alone, appreciates the skills others bring to the team		
Networking	 How can other people help you? How can you help other people? Can you tell me about a time when you had to ask for help from another team or community member? How did you go about it? 	Seeks feedback from team and broader social network, connects and engages with community		

Skill	Qualitative Questions	Key Qualities	Mission(s)	Superpower
Generosity of Spirit	 How have you helped others at school or in your community? Do you devote time to helping other? Describe the volunteer work that you do in your community. 	Shares time and resources willingly and is grateful for the support received	MISSION 3: Define the problem MISSION 4: Brain- storm a Solution	Deep Collabo- rator
Problem Solving විට්	 What do you do when you need to make an immediate decision but don't have much data available? Describe a situation where you have sought the help of others to make a decision. Was there a positive outcome for the decision-making process? 	Takes on unfamiliar problems, experiments with possible solutions, learns from mistakes and continues to explore	MISSION 5: Get feedback	ریاری Systems Thinker
Analysis	 What steps do you follow to study a problem before making a decision? Why? Tell me about a time that you were confused by a team member's input to a solution. What steps did you take to clarify things? 	Considers the interrelated factors to a problem and uses human- centered design to visualize cause-and- effect	Analyze and refine your Solution	
Aggregation [K⊄	 Tell me about a time when you had to make a decision with multiple sources of information (some of it conflicting with each other). How did you handle it? What is the most difficult decision you or your team had to make? How did you arrive at your decision? What was the result? 	Uses multiple sources of information to gain awareness and understanding of issues		

Skill	Qualitative Questions	Key Qualities	Mission(s)	Superpower
Critical Reflection	 27 Share an example of a time when you were given new information that affected a decision you had already made. How did you proceed? 28 Do you review your own and your team's progress to the objectives of the Missions? - How? 	Sets aside time to question, analyze, and reconsider individual and team ideas	Control Contro	Systems Thinker
Leadership	 Tell me about a time that you were responsible for completing a Mission task. How did it make you feel? Describe a leadership role of yours (school or community-centered). What was your experience of this role? What are the greatest obstacles your team has faced in building/growing the team? How were those situations resolved? 	Motivates through passion and commitment	MISSION 7: Create measures of success	Empathic Activist
Empathy	 What do you do when another Agent comes to you with a problem he or she is experiencing? Describe a time when you had to deliver difficult or unpleasant news to someone. How did you go about it? Tell me about the last time you got annoyed with a team member during a Mission. How did you deal with it? 	Shows respect and sensitivity to other people's lives and experiences		

Skill	Qualitative Questions	Key Qualities	Mission(s)	Superpower
Transformation (←	Tell me about the time(s) you have taken the initiative at school or in your community to change a situation.	Is proactive and shows commitment, engages the community to create change they believe in	MISSION 7: Create measures of success	Empathic Activist
	Describe a situation where you needed to persuade someone to accept your point of view or convince them to change something.			
	Describe a time when you received criticism for an idea that you had. How did you handle it?		MISSION 8: Present your Solution	
Curiosity	 Tell me about something you have taught yourself in the last six months. How did you go about learning this new field of knowledge, skill, or idea? What was the result? 	Is interested in other peo- ple, seeks to understand different experiences and perspec- tives		
	What topic(s) excite you (outside of schoolwork)? What have you done to understand and familiarize yourself with the topic(s)?			
	40 Have there been changes in your community over the past year? What brought about these changes?			
Grit	Give me an example of when you had a setback at something you had spent a lot of time on or a project that you had worked hard on. How did you deal with it?	Demonstrates courage and resolve; has strength of character.	MISSION 7: Create measures of success	Cross- cutting
	42 Have you been faced with hurdles while trying to achieve a goal? How did you overcome the obstacles?		MISSION 8: Present your Solution	5