

Girls' Education Program

Room to Read's Climate Justice Clubs: Key Insights After One Year of Pilot Implementation

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Executive Summary

Room to Read's Climate Justice Clubs were designed to support participants to act against the detrimental effects of climate change in their communities. In 2023/2024, a pilot version of the program was implemented in Nepal and Vietnam. The pilot program was successfully delivered to almost one thousand adolescents across both countries. Several lessons emerged from the Research, Monitoring and Evaluation of the program.

Notably, the program was implemented with high levels of fidelity. Additionally, the program was perceived as well-differentiated, all planned activities were delivered as intended, the dosage was deemed adequate, the program was engaging to students and facilitators alike, and stakeholders across countries consider the Climate Justice Clubs a high-quality program. Stakeholders have identified promising behavioral changes among participants and their families. However, some areas of the program could benefit from revision. For example, facilitator training could target gender justice issues more thoroughly, and teachers could receive support to better implement hands-on activities. Also, the Climate Justice Clubs were created to provide opportunities for student-led activities and integrate activity-centered methodologies throughout the two-year curriculum, a break from traditional educational models in these school systems, which may take time to consolidate. Last, the sustainability of the program would be improved by building in-school capacity to deliver such an innovative program.

Learnings from the first year will inform the Research, Monitoring and Evaluation of the program for the second year. In year two, the team will place added focus on gathering information about effective activity-based methodologies and students' ability to use their knowledge for collective action.

Introduction

The climate crisis is severely affecting educational systems: teachers, students and the communities where they live. Climate change has been associated with an increased frequency of school closures, destruction of infrastructure, worsening conditions for learning (e.g., excessive heat), injuries and/or loss of life, and displacement (UNESCO, 2024). These disruptions inevitably affect the quality of educational experiences. In many countries, the climate crisis has been associated with lower educational achievement (e.g., Marin, Schwarz, & Sabarwal, 2024) and a reduction in educational attainment (e.g., Randell & Gray, 2019). Marginalized populations bear the greatest proportion of the detrimental effects of the climate crisis (UNESCO, 2024). A list of countries most affected by extreme weather events in 2019 reveals that the majority were low- or middle-income (Eckstein et al., 2021). Within these, marginalized groups, notably women, are likely to face greater difficulties in coping with the adverse impacts, deepening inequality. For example, climate change can lead to increased household chores, gender-based violence and early marriage (CAMFED, 2022).

In response, civil society and governments have started working towards “greening” the school curriculum as a means of addressing the profoundly negative impacts of climate change. International assessments are currently gathering information on climate literacy, and international organizations are increasingly focusing on green indicators (UNESCO, 2024). Increasingly, implementing organizations such as Room to Read have begun to administer climate education programs. Climate change education is designed to increase knowledge and attitudes related to mitigation and adaptation (UNESCO, 2024). For example, climate change programs can improve climate literacy and/or lead to increased environmental action. The OECD (2022) reports that attitudes towards the environment are strongly correlated with climate action, and that these attitudes are impacted by other factors such as socio-economic status and parental behaviors. Research shows, however, that climate literacy and environmental awareness alone does not always lead to behavior change (Kollmuss & Agyeman, 2002).

Research suggests that effective programs require much more than simply delivering technical skills and knowledge to support greener ways of life. To address the deeper roots of climate change, and its unequal consequences on different groups, programs should also focus on skills and knowledge that support social transformation (Kwauk & Casey, 2022). As Kwauk et al. (2022) explain, the skills needed to take on the

entirety of the climate crisis include the ability to address power imbalances across the lines of gender, socio-economic status, ethnicity and other characteristics that are disproportionately associated with climate impact. Just climate education needs to focus on institutional and societal change (JustEd, 2023), rather than simply creating climate resilient subjects. The curricular content of these programs needs to tackle the depth of the crisis and ensure that the content is relevant for learners (JustEd, 2023; Monroe et al. 2019). Teaching about the climate crisis must tap on the complex emotions that arise as we navigate it (Bryan, 2023). Additionally, programs need to be action-based, experiential, collaborative, interactive and fun (CAMFED, 2022; UNESCO, 2024). At minimum, climate programs need to be contextually relevant and provide opportunities and safe spaces to reflect upon complexities and contradictions related to environmental injustice (Kwauk et al. 2022; JustEd, 2023).

Room to Read's Climate Justice Clubs

In response to the climate crisis, and following best practices, Room to Read developed a comprehensive action-based and student-centered program that teaches climate literacy and climate justice to adolescents. The Climate Justice Clubs (CJCs) allow students to build knowledge on climate change and practice life skills. As an extension of Room to Read's life skills curriculum, the Climate Justice Clubs focus on developing participants' life skills and on basic concepts, knowledge, and skills regarding gender, climate change, and climate justice. The aim is for participants to be better equipped to make informed decisions and work on solutions to mitigate climate change and its impact on their community.

Across all countries of CJC implementation, the intended student outcomes of the program are the following:

1. Increased knowledge on climate change, climate justice, and the intersection of climate and gender
2. Improved confidence in making informed decisions on mitigation and adaptation strategies to address climate change
3. Increased engagement with the climate crisis, by sharing the gender and climate change information they've learned with their peers, families, and others in the community

In 2023, Room to Read began implementing the pilot version of the program in Nepal and Vietnam, both which are among the 15 most affected countries by extreme weather events in the 2000-2019 period (Eckstein et al. 2021). The two-year pilot CJCs

focus on grade 7 and 8 students. CJC's curriculum was developed by Room to Read's Girls' Education and Gender Equality (GEP) Global Team and was designed to be relevant to the lives of the participants, technology-based and interactive. The program also includes parental and community engagement activities.

Nepal

In Nepal, the program is being implemented in 12 schools in the Banke district, to girls only. Clubs are voluntary and implemented after-school. The pilot program includes 26 sessions (13 sessions per year), delivered by Room to Read's Social Mobilizers in collaboration with secondary school teachers. Sessions are conducted twice per month, over a 7-month period, and last roughly 45 minutes each. The program is benefiting approximately 620 girls.

Students are also expected to participate in exposure visits – or visits to the communities to enhance their understanding of the contents delivered through the CJCs. In particular, the exposure visits will enable students to discuss the community's action plans with the local climate change committees. CJCs also provide opportunities to analyze local policies with the concerned authorities during the visits. Visits are planned for the second year of implementation (2024/2025).

Vietnam

The CJCs in Vietnam are being piloted in two schools in the Vinh Long Province, an area severely affected by salinity intrusion and landslides, both related to climate change. The program is being implemented in coordination with the Vinh Long Department of Education and Training and the Vung Liem Bureau of Education and Training and is benefiting 269 students. Clubs are implemented as in-school activities yet remain voluntary.

In Vietnam, the program is delivered to all students, irrespective of their gender. Biology and Geography teachers deliver the program in groups of 15-30 students. The pilot program also includes 26 sessions (13 sessions per year), and four *Club Activities* per year. Club Activities are sessions wherein students develop climate action plans and gain hands-on experience using their learned skills. Teachers and students facilitate club activities and provide unstructured opportunities to discuss, learn and share about climate change. In addition, every year, students are expected to lead a community campaign. For example, at the end of the first year, a summer camp was organized to gather all CJC students. During the camp, CJC participants shared with other students what they had learned throughout the year and presented their climate actions.

Methodology

The purpose of this study is to identify and describe the key learnings emerging from all the research, monitoring and evaluation (RME) activities conducted around the Climate Clubs in Nepal and Vietnam, during the program's first year of implementation (2023/2024).

To that end, the team reviewed and extracted unique findings from the following material:

- Monitoring data, captured through our Program Implementation Monitoring
- Monitoring data, captured through complementary tools designed to support the Climate Clubs
- Baseline evaluation data, collected in both countries using Room to Read's Climate Literacy and Gender Justice Assessment
- Fidelity study for climate implementation (Nepal)
- Deliverables created by country teams, based on independent inquiries to students, social mobilizers, teachers and families about their opinions and experiences with the program

After reviewing the material, the team used closed coding to identify whether the results were related to (a) adherence, (b) dosage, (c) quality, (d) engagement, (e) uniqueness, (f) outcomes and/or (g) sustainability. The team chose these categories because first-year RME efforts were largely geared towards understanding Fidelity of Implementation of the CJs and the program's potential to improve outcomes sustainably. After categorizing the data, the team summarized the main findings under each category.

Key Findings

Adherence

Adherence refers to the extent to which the intervention conforms to the protocol (Hoque et al., 2008). Based on our review, adherence was generally high for both countries, as all program activities (material development, training, session delivery, etc.) were delivered, and attendance levels were high. All teachers and facilitators received the intended training, and training was well received by participants. Student attendance was above intended levels across both countries, for sessions and activities. Attendance levels also surpassed the intended thresholds for the yearly campaign in Vietnam, with 68.5% of the female participants taking part in this activity (out of an intended minimum of 50%). Barriers to higher levels of attendance were related to the timing of the activities (e.g., during exams) and the fact that activities were planned during weekends, conflicting with other extracurricular activities and limiting students' transportation options.

Most teachers felt 'very confident' in their ability to deliver the sessions and felt that they had enough time to facilitate them. However, teachers did not feel equally prepared across all content areas. In Vietnam, while more than 86% of teachers felt prepared to teach climate-related topics, less than 30% felt so in relation to gender and gender justice² topics. In addition, some teachers indicated the need for more coaching to deliver the program. This suggests that Climate Justice Clubs necessitate that teachers and facilitators allocate extra time to learn new content, methodologies, and preparation for the delivery of the sessions.

Other barriers to successful delivery of the program were associated with the content of the sessions, which was sometimes deemed difficult to understand and teach. Baseline data showed that climate literacy was difficult for most students across countries and genders. Teachers mentioned that gender-related content, technical climate vocabulary, and consistently creating linkages between the curriculum and students' lives were among the most challenging curricular issues. Other barriers to a smooth delivery included problems related to space and the availability of key resources. The activity-centered curriculum required additional space and materials, including electricity and lab equipment, yet these resources were not always available.

² Room to Read defines gender justice as "the equitable treatment of all people, regardless of gender, by addressing and dismantling the social, economic, and political inequalities that disproportionately disadvantage women, girls, and gender-diverse individual. It recognizes the fair distribution of resources and opportunities and responds and addresses historical and systemic discrimination."

Dosage

Dosage refers to the amount of intervention received by participants (Carroll et al., 2007). Most teachers felt that they had sufficient time to facilitate the sessions, yet there were mixed findings in relation to the dosage of the program. Overall, the frequency of the sessions was deemed adequate. While the sessions were longer than typical class units, students did not perceive them as too long. However, several facilitators mentioned that sessions tended to take longer than planned. In Nepal, almost half of the sessions took longer than expected. A few facilitators across countries reported that they had to skip some content or deliver it in a rushed manner, due to time constraints. It seems that activity-based pedagogy requires more time than is generally planned for. For example, in Vietnam, teachers mentioned that an activity involving creating models of soil, houses and trees took more time than expected. While this is not solely related to dosage, feedback suggests that a higher dosage could be helpful to effectively cover all the objectives in the curriculum, at a reasonable pace. Another solution raised by teachers and facilitators is to use technology to track time and better manage activities during sessions. There could be ways to increase time-efficiency as opposed to only making changes to the length and/or frequency of the sessions. Some teachers suggested changes to the methodology for more efficient delivery.

“Question and answer should be used, no need to work in pairs which takes a lot of time.” – Teacher in Vietnam

Quality

Quality or competence refers to skillfulness in the delivery of the program (Stein et al., 2007). The Climate Justice Clubs were perceived as high quality and relevant among all interviewed stakeholders. Teachers and facilitators appreciated that the sessions focused on people and communities, rather than technical aspects alone. The activities conducted during the sessions felt suitable for all students, and the environment was perceived as nurturing. The curriculum combined theory and practice and provided opportunities to learn about climate and gender justice, in interactive ways. Teachers appreciated the reliance on technology and overall, felt that the sequencing of the sessions was appropriate (from easier to harder). Teachers believed that despite initial challenges, the sessions provided opportunities to connect the content to everyday life and to integrate students’ voices and experiences. Overall, the program was perceived as rigorous and well designed.

“It seemed to be difficult in the initial days to bring examples of climate change from the local communities, but we discussed such notions in the preparatory sessions and collected local examples of climate and gender justice” – Facilitator in Nepal³

The quality of the implementation was somewhat diminished by the fact that students had to adjust to a new program and student-centered methodologies. Students were not always comfortable making decisions about a totally new content area. For example, in Vietnam, teachers reported that students were new to the idea of climate change projects, so their ideas were not rich and/or bold enough. They felt that grade 7 students were not necessarily old enough to choose good topics and be more independent learners. Also, teachers and facilitators noted some challenges in group related activities, which sometimes faced logistical challenges and led to some boredom among students.

Stakeholders, particularly teachers and facilitators, identified areas for improving the quality of the program. First, the timing of some activities, including the training of teachers and facilitators, could have been better scheduled considering other teaching commitments. Teachers and facilitators across countries felt that additional preparation for the sessions would have been helpful, particularly in relation to the setup of hands-on activities. Specifically, activities could have relied more on technology, as well as more colorful materials. Teachers and facilitators believed it would have been beneficial to get support from science teachers on technical areas and get supplementary material on gender topics. Finally, the curriculum could have benefited from more linkage to local contexts, including strengthening facilitators’ understanding of the impacts of climate and gender justice in their local communities.

Engagement

Engagement or participant responsiveness refers to the way in which participants are engaged by the program (Carroll et al., 2007). The engagement with the program was largely successful among all stakeholders. Teachers and facilitators found the content relevant, interesting, and thought that the methodologies were very engaging. There was high support for the program among parents, local leaders, head teachers and district authorities. This level of support was associated to a smooth coordination among different parties. Students were highly engaged throughout the program, except during the exams season. Suggestions to increase engagement include

³ Found in Gautam, S. (2024). FIDELITY STUDY FOR CLIMATE JUSTICE CLUB IMPLEMENTATION IN BANKE DISTRICT.

making concepts easier to understand and considering keeping the clubs at a size of 20 students or less.

Uniqueness

Uniqueness refers to the unique features that characterize a program (Carroll et al. 2007). The Climate Justice Clubs were perceived as very unique. Elements that stood out to teachers and facilitators include participatory and action-based methodologies, the effort to connect content to students’ lives, the opportunities to practice what was learned, and the interactive materials used in sessions and activities. For example, facilitators felt that the program was not just teaching “scientific things” but was human-centered, and relevant to the lives of participants.

“I thought that It was quite vast in the beginning as also thought that I could not have the perfect knowledge on climate change because it sounded very technical initially but later It became easier as I worked.” – Facilitator in Nepal⁴

Innovative and interactive methodologies included group discussions, role-playing, debates, lab activities, and reliance on technology. Another element that was perceived as unique was the training of teachers and facilitators. In Nepal, teachers appreciated the multiple peer learning and mentorship opportunities provided during the four-day training experience.

Outcomes

The program was designed to improve four outcomes among its participants: climate literacy, climate justice, life skills, and engagement with the climate crisis. The first three outcomes refer to knowledge, skills and attitudes, and the fourth outcome refers to behaviors; these outcomes are deeply interconnected.

Stakeholders identified several examples of behavioral changes among students who participated in the CJsCs. Facilitators and teachers mentioned that students have started planting trees at home and taking more care of the environment. Multiple students in Nepal reported setting up waste management systems at home, reducing plastic use and improving classroom and school sanitation. In Vietnam, students reported making fabric curtains for classroom windows from used cloths and green materials. Other students reported sharing learnings with families and community

⁴ From raw transcription collected as part of Gautam, S. (2024). FIDELITY STUDY FOR CLIMATE JUSTICE CLUB IMPLEMENTATION IN BANKE DISTRICT.

members, and multiple parents reported providing support to their children’s plans to live in a more climate friendly way. In Nepal, parents supported their children in organizing community awareness campaigns. Participants across countries reported changes in food-related habits, such as packing home-made organic meals or reducing the use of single-use plastic water bottles. Most stakeholders agreed that the CJsCs helped increase students’ and families’ awareness of climate issues. Stakeholders also noted changes in life skills’ levels among participants, particularly in leadership and critical thinking, which they largely attributed to club activities. In Nepal, it was reported that girls became more vocal and engaged in gender justice issues at home, yet it will take time to make meaningful changes in this regard.

“Few of them can do it absolutely [give a fight for gender justice] as they are facing the issue of gender violence in their family and raising awareness against it. A narrative which has been set that they are born to work in home only. They are knowing their roles clearly in society and having good leadership qualities⁵” -

Facilitator in Nepal

Quantitative baseline data collected on all students showed a statistically significant and positive correlation between life skills levels and gender justice, across both countries. Some headteachers also noted a higher interest and ability to act for positive change among participants. In addition, teachers and facilitators mentioned that there could be unintended positive outcomes associated to the CJsCs. For example, changes in life skills were associated with other changes, like an increased interest in extracurricular activities. Last, teachers and facilitators felt that some of the CJsCs content was related to the science curriculum, enhancing students’ learning outcomes in that subject.

Stakeholders noted challenges in relation to the ability to meet all intended and potential outcomes. For example, in Vietnam, teachers mentioned that there was no time to implement the first year’s final project due to exams and scheduling conflicts. They also mentioned that students could not develop projects for people other than their classmates.

Sustainability

⁵ From raw transcription collected as part of Gautam, S. (2024). FIDELITY STUDY FOR CLIMATE JUSTICE CLUB IMPLEMENTATION IN BANKE DISTRICT.

Stakeholders noted that the program may not be fully sustainable. Prior to scaling up, capacity building is needed at the school level, particularly around topics of climate justice education and strategies for facilitation. Teachers in Vietnam felt that it was difficult to add additional training to their existing schedules. Other stakeholders mentioned that the program requires additional resources for implementation, yet there was limited fundraising capacity. Lastly, in Nepal, most stakeholders mentioned that delivering a girls-only program was challenging, due to difficulties with engaging boys in classroom activities while the girls participated in CJC activities. Stakeholders maintained that boys would benefit from the program and that including all genders would increase support for and sustainability of the program.

Discussion

Room to Read's Climate Justice Clubs were designed to support adolescents to act upon the massive climate crisis that we are facing. In 2023/2024, Vietnam and Nepal began implementing the pilot version of the program. While there are some important differences in their delivery models and scale, our review suggests that overall, the pilot program is being implemented with good levels of fidelity. All activities have been delivered, the dosage is considered adequate, the program is deemed of high quality, it is engaging and perceived as unique and contextually relevant. Stakeholders have noticed important changes among students and their parents. However, our review also identified some gaps that need to be addressed in the second year of implementation.

Adherence could be improved by providing additional training to teachers and facilitators, particularly on gender justice related topics. Adherence would also benefit from targeted support on the more difficult aspects of the curriculum, and on supporting teachers and facilitators in preparing for hands-on activities, which may take longer than expected and may require additional resources. Importantly, such support needs to be provided at the right time and in a way that does not feel like an extra burden. Even with additional support, the program may need to revise the length of the sessions, which often run longer than expected. Providing additional support and adjusting the dosage would likely have a positive effect on the perceived quality of the program. The quality of the implementation would also benefit by identifying effective practices to transition from teacher-led to student-led methodologies, something that appeared to be challenging in the first year of implementation. Additional resources, including space and technology enablers, would benefit adherence, quality and the sustainability of the program. The sustainability of the program would also be improved by providing targeted support to schoolteachers and other personnel, who may need to carry the innovative Climate Justice Clubs forward. All the above would likely influence the ability of the program to yield meaningful and long-term outcomes at the knowledge, attitudinal and behavioral levels.

To support the pilot CJs during their second year of implementation, our Global Office's GEP RME team is planning to conduct additional activities. First, we will work towards strengthening the monitoring system, so we can learn more about the efficacy of our training model, students' experiences in the classroom, and their ability to utilize their new knowledge and skills beyond schools. We acknowledge that too often, climate programs emphasize individual action as opposed to the ability to organize and challenge systemic causes of the climate crisis (e.g., JustEd, 2023; Yliniva & Bryan,

2024). Room to Read's Climate Justice Clubs were designed to challenge this paradigm, yet we note that most changes identified by stakeholders relate to individual behaviors. Therefore, during the second year, we will focus on gathering evidence of collective and community action.

Part of our emphasis will also be in understanding the appropriate conditions for classroom activities, in terms of number of participants, materials, sequencing and relevance for students. Providing detailed insight into what works in implementing hands-on activities will be a priority. In addition, we will innovate in our measurement approaches. To date, the measurement of climate literacy, gender justice and life skills' levels has relied on a self-reported written survey, which may not be well aligned with the participatory and action-based methodologies guiding the program. Our team will work towards finding nuanced connections between knowledge, skills and practices, in ways that reflect the ethos of the Climate Justice Clubs. Last, via a quantitative endline evaluation, the team will corroborate whether the CJs participants improved their (a) climate literacy, (b) life skills and (c) gender justice awareness. We will also use our endline evaluation to test some gender-related hypothesis, such as whether girls hold higher environmental enthusiasm than boys (OECD, 2022). Examining gender differences in learning will be critical to provide more definite answers to the benefits and limitations of single sex versus co-ed environments for the CJs. We will also use our endline evaluation as an opportunity to understand the relationship between these three domains and their implications for the program.

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