LEARNING TEAMS TO SUPPORT
CHILDREN'S LEARNING AND WELLBEING

October 2024

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Introduction

Learning team approaches aim to leverage different roles within education systems and re-think how actors might work in new ways with each other and with those outside the education system to support children's learning. There is evidence to suggest that collaborative practices can have significant benefits for student learning, retention and progression, as well as teacher wellbeing and motivation, community ownership of policies, developments and targets, and improved governance at local, district and national levels (Akyeampong et al., 2023; 2019; The Education Commission, 2019). Therefore, learning teams may be one response to current low learning levels in many schools and districts across the Global South.

The four case studies in this report were developed as part of research that took place between March-September 2024. The research aimed to deepen understandings around what prompts, informs, enables and sustains the design and establishing of learning teams, or new collaborative practices between different groups of relevant actors in education.

These cases build on earlier work undertaken by the Open University and Learning Generation Initiative, who have been collaborating around learning teams since 2017. Most recently this work generated a typology and database of learning teams in the Global South together with a pilot case study of a learning team in Ghana (Buckler et al, 2022). These collective outputs offer insights into the formation and function of learning teams and will inform future research in this area.

Case Study Summaries

The report contains four case studies of learning teams from Nepal and Kenya. Each case study considers:

- the real-world improvement the team came together to pursue;
- the origins and prompts within the local and national context that influenced the vision for the learning team;
- the process of initiation of the learning team;
- the practices and evolution of the learning team including key incidents which have shaped the working of the learning team;
- what was (or is) the influence and impact of the learning team: system, team and student learning;
- what can be drawn from this example to help us understand how learning teams can be supported and sustained in different contexts.

Table 1 provides an overview of each case study.

Table 1: Case Studies Summary

Country	Case Study Name	Brief description and outcomes of the learning team approach
Kenya	A LOT-Change	Professional mentors, counsellors, community leaders, teachers, school leaders and parents in a learning team to empower adolescent learners in Korogocho and Viwandani informal settlements, Nairobi. A learning team approach resulted in greater shared responsibility for adolescent girls and boys' behaviours and learning across school leaders, teachers, parents and key community members. A noteworthy success was the improved communication between parents and their children.
Kenya	Tayari	An early childhood initiative involving collaborations at multiple levels including between teachers, community health workers and parents in Laikipia, Siaya, Nairobi and Uasin Gishu. Collaboration between education and health staff lead to demonstrable improvements in young children's participation in Early Childhood Centres, and parents recognised the value of a combination of education and health support.
Nepal	Textbook free Friday	An initiative of the Mayor in Kathmandu Metropolitan City (KMC) to improve learners' practical skills and enhance community bonds. Organic learning teams involve schools, parents, the local community, skill training provider organisations, a university and KMC. Although still in its early days the Textbook free Friday approach is opening up school classrooms, bringing in vocational trainers who have prompted a shift in teaching practices resulting in greater student engagement and enhanced parental interest in their children's schooling.
Nepal	Rupantaran	A participatory action research project at one secondary school to catalyse innovative equitable pedagogical approaches. Dynamic networks involved parents, the wider community, students, teachers, university and school managers and government policy stakeholders. The collaborative focus on creating and sustaining a viable school farm resulted in learners' and teachers' skill development, boosted integration of the school and the community, and supported community income generation.

Research Design

The case study research was designed by researchers from The Open University (OU), the lead research organisation, and co-researchers from Kathmandu University (KU), Nepal, and Education Design Unlimited (EDU), Kenya, at a three-day, in-person workshop. The specific methods for each case study were determined by the focus, nature, scope and activity of each learning team. These methods are summarised in the case studies. However, all case studies employed a common methodological approach developed using an activity theory perspective and analytical frame.

Activity theory represents an evolved set of ideas, based on the work of Vygotsky (1978), Leont'ev (1981), and others, that connect subjects, objects and mediating artefacts. This aims to support understandings of how human activity is socially situated, and explore the complexity of human actions and interactions, taking histories, culture, tools and language into account. It enables insights into how individuals influence society, and how society influences individuals (Engestrom, 2001) to 'dispense with the individual/social dualism' (Warmington et al., 2004: 1.4.2).

Engestrom (2001) sets out five key principles of contemporary activity theory. These include the activity system as the prime unit of analysis (i.e., each part of the system is only understandable when considered within the whole system); a principle of 'multi-voicedness' (p.136) to emphasise different and diverse perspectives and positionalities, and how these can be both a 'source of trouble and a source of innovation' (ibid); historicity and the importance of considering how activity systems evolve; contradictions within the system (the prompt for which might come from an influence outside the original system) which drive evolution; and transformation, when the evolution leads to a reconceptualisation of the object and motives of the system.

Activity theory supports deeper understanding of learning teams because of its emphasis on exploring how people work together, the intended purpose of and motives behind the collaboration, and how these change over time (Warmington et al. 2004). Activity theory focuses on the practices through which learning occurs in these collaborations and surfaces the contradictions which are generated by working across traditional horizontal and vertical role boundaries (Daniels et al., 2007). It suggests that individuals can go beyond their current role and competencies by negotiating the use of others as a resource to align in a joint activity and in so doing transform the object of the joint activity (Edwards, 2005). The research questions for these case studies were developed to signpost and surface the deeper understandings of learning teams enabled by an activity theory framing.

Research Questions

- How can the expertise of diverse actors be harnessed within learning teams to address complex and persistent challenges in children's learning?

- What contradictions, which arise from professional and personal differences, cultivate or inhibit innovative practices within learning teams, in service of children's learning?

- How do wider systems respond to the innovative practices of the learning teams?

Identifying Learning Teams

Drawing on our extensive database of learning teams examples, and core concepts of activity theory, we established seven learning teams criteria. They served a selective, rather than evaluative purpose (i.e., the criteria do not necessarily mean a learning team will be successful) and were used to choose the four examples of learning teams to research for this phase of the study.

(1) **Learning teams recognise that achieving goals within SDG 4, involves consideration of other goals within the SDG framework.**

Learning teams take a holistic view of what needs to be in place for all children to engage in quality learning.

(2) **Learning teams value and leverage the skills, knowledge and expertise of different team members in pursuit of these goals.**

Learning teams recognise that no one person can provide everything a child needs to learn and thrive.

(3) **Learning teams are situated within the histories and values of their context.**

There is no single model of a learning team, nor can successful learning teams necessarily be replicated in a new context.

(4) **The shared focus of learning teams, and roles within them, may shift as the team and context evolve.**

Evolution of learning teams is a positive and generative feature, in response to team learning as well as contradictions within the team. Members may move between periphery to centre as a result of the evolution.

(5) **Learning teams do not need to be co-located in time, place or space.**

Learning team members may not meet or work directly with everyone else in the team, but the activity is collectively upheld in service of the shared purpose of more engaging and meaningful learning for young people.

(6) **Learning refers to both the overarching goal (children's learning) and the expansive learning within a team, in support of this goal.**

In learning teams, members are open to reflecting on and developing their individual and collective knowledge and skills.

(7) **Teams and their members might have cycles of activity and dormancy.**

Learning teams are not necessarily bounded by the time-lines of funded projects.

Key Findings and Reflections

The cases shared here illustrate the diversity of learning teams found within public education systems of the Global South. Critically all four cases are situated in under-served communities with poor public resources and structures in rural, urban and peri-urban areas. Educators and their partners are facing complex challenges in their education systems but drawing on innovative ways of working to facilitate movements towards equity and inclusion.

The cases vary widely in scale, ranging from an individual school (Rupantaran) to thousands of teachers (Tayari). However, in each case the ambition of the project, within which the learning team is situated, focuses on improvements in school participation – attendance, retention and learning, alongside other goals such as better family health (Tayari), enhanced learner resilience (ALOT-Change) or community development (Rupantaran). Thus the learning teams share a common objective, improving learners' development regardless of the age or school phase of the learner.[1]

In this collection the Textbook free Friday (TFF) case is distinct for the manner of its inception. This had no external funding or carefully constructed blueprint for implementation. TFF was initiated by a declaration from the Mayor of Kathmandu Metropolitan City (KMC) to promote practical learning, skills development and community engagement in the city's community schools. Its evolution and modes of working have emerged through tough experiences as the schools, in partnership with KMC and their communities, experiment with ways to deliver on the Mayor's manifesto. In contrast, the other cases were guided by external partners and benefited from new or additional funding.

Although there are structural and cultural differences between the case study settings, there are a number of similarities that will support cross-cultural borrowing from these cases to inform the design and working of learning teams in other contexts and possible adaptations at scale or system wide implementation. A number of interlinked common learning points stand out:

- Planning for learning teams needs to be localised and flexible;
- Evolution of learning teams can be messy, but is often productive;
- Tools, carefully developed and appropriate for the context, can facilitate collaborative working;
- New professional practices can be inspired through collaborative working, but these shifts require time, resources and support;
- Sustainability of learning teams is challenging, but longer-term commitment to collaboration is evident across the examples.

Planning for learning teams needs to be localised and flexible so that team membership and ways of working can adjust to take account of cultures, customs and existing structures and relationships within the context. In the Tayari case there was much negotiation to work through power struggles and conflicts between the different national bodies involved. In this case the coordination challenges were made more complex by different devolved structures for health, early childhood education and development, and primary education, as well as different levels of funding for early childhood programmes at each site. Both cases from Kenya illustrate how existing roles in schools and in community governance (shown in diagrams 2 and 6) form a foundation for the architecture of the learning teams. In the very different context of the Rupantaran case, existing social structures such as the School Management Committee, Dapcha Rural Municipality and the community Mothers' group, are core to the learning team at different stages of its evolution. In drawing on these existing structures, implementation of learning teams needs to be sensitive to the histories of actors' roles, possible conflicts and duplication, and willing to embrace different forms of knowledge including socially constructed local knowledge (Freire, 2017).

Evolution of learning teams can be messy but is often productive. Each of the learning teams portrayed in these cases went through a process of evolution, often as a result of critical incidents, challenges or a lack of alignment between different sub activity systems in the context. Evolution of team working was frequently evidenced by the development of multiple additional productive collaborations, as we see in the ALOT-Change case. Evolution here included changes in the division of labour - through bringing in additional team members

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[1] We draw here on Hedegaard's (2008) definition of child development as 'a qualitative change in his or her motive and competences' (p. 11).

(community gatekeepers), forming new collaborative spaces (with mentors and counsellors) and moving outside the original communities, thereby opening up further possibilities for sustainability of the learning team approach. Many examples of evolution within the case studies led to positive change and improved outputs for learners, but in some cases evolution led to confusion around responsibilities and reduced motivation across the team, as we see in the Rupantaran example.

Tools, carefully developed and appropriate for the context, can facilitate collaborative working. Many of the challenges experienced by these learning teams were resolved or at least moved forward by the introduction of shared tools. In several cases these included detailed Terms of Reference (ToR) for team roles (as in the Tayari case), in other cases tools included curriculum resources or protocols for the collaborative working. In Tayari ToRs were seen to be critical to make visible the boundaries that emerged in the initial stages of the collaborations, hence ToRs would not have been possible to devise effectively when the learning team was initially set up. Similarly, the need for specific curriculum documents in the Textbook free Friday case only emerged as teachers and external trainers experienced negotiating through their different approaches, values and norms.

New professional practices can be inspired through collaborative working, but these shifts require time, resources and support. The Textbook free Friday case study draws our attention to the difficulties of disrupting habitual practices and embedded roles, and the tensions this change can provoke in participants. Many teachers in the Kathmandu schools perceived the value for their students of the activity driven life skills programmes introduced on Fridays but were anxious about their capability to support this programme. They were also deeply concerned about the potential impact of this innovation on their ability to deliver the formal academic curriculum in the absence of any clear guidance on the linkages between the two curricula. However, the imminent availability of tools (a curriculum design and associated resources) to support the skills activities promises to address these issues and enable the teachers to expand their identities to embrace new pedagogic approaches and curriculum areas.

Successful expansion of teachers' domains of practice is seen in the Tayari case where they learnt to model appropriate heath practices in their classrooms. This was so successful that learners shared these new routines with their families and caregivers, boundary crossing between sites. Teachers learnt these practices through joint working with community health professionals. This teacher–health worker collaboration also embraced use of a shared health and education referral system which strengthened teachers' capability to provide support to learners and their families. This was possible because the responsibility for Early Childhood Development in Kenya is devolved to County level and key County personnel were members of the Tayari learning team community.

Development of new practices beyond the school compound is seen in all the cases, perhaps most strikingly in the Rupantaran example. Here the school farm facilitated boundary crossing between actors in the school and the community through providing a third space in which the different perspectives of teachers, parents and other community members were able to come together in support of both learners and community development. Through this collaboration teachers expanded their repertoire of practice and drew on the socially constructed knowledge of the community. Members of the community, either directly or through their children, learnt new farming skills which enhanced their economic position.

Sustainability of learning teams is challenging, but longer-term commitment to collaboration is evident across the examples. In three of these cases the learning teams were part of a time bounded larger intervention, the fourth project is still underway and evolving. In each of the three completed projects new practices were sustained once project funding ended: improved school-community relationships and community skills (Rupantaran); changed ways of working within ECD teams (Tayari); and shifts in relationships including how school leaders engage with parents and caregivers and continued support from local community leaders to parents (A LOT-Change).

The continuation of these practices was strengthened in case where the learning teams were integrated within existing government structures as in the Tayari case or where new practices are institutionalised in existing job roles. Without formal institutionalization, many positive changes brought about by these innovative projects can disappear over time. The Rupantaran case illustrates the need for strong leadership, in schools, communities and district authorities, to work towards embedding the team working within current structures.

Learning Team Benefits and Outcomes

A range of outcomes across these cases arise directly or indirectly from the successful collaborative work through learning teams. Most visibly multiple actors demonstrated changed ways of working, some of these have been institutionalised in formal ToR and procedures, as with the Early Childhood Development (ECD) officers in the Tayari case. Teachers involved showed changes in their practices including pedagogic practice shifts in the Nepal cases. In all cases shifts in social practices were noted: parents engaged in improved dialogue with their children in ALOT-Change; parents showing greater interest in their children's school activities in the Nepal cases; and parents in the Tayari case seeing greater value in sending their children to Early Childhood Centres in addition to improving their hygiene practices. School-community boundaries have become more permeable as a result of shared endeavours such as the Rupantaran farm; this initiative has evolved into a new joint action, a school partnership with the community women's group.

The direct influence of learning team working on student learning outcomes is harder to capture within the lifetime of these projects to date. However there is strong evidence from scholarship that each of the outcomes noted above is linked to improved student learning outcomes: enhanced physical and psycho-social wellbeing, improved parental interest in their child's schooling, more interactive pedagogies utilising authentic examples, and increased trust between school and community actors. Furthermore, the broader projects within which the learning teams were embedded all demonstrate improved learner outcomes in at least one of school attendance, school retention or transition, or attainment.

Learning team working is not without challenges. Not all tensions between different roles were resolved, as with the nutrition teams in Tayari, nor are all actors comfortable with what they see as a restriction on their autonomy, viz teachers in Textbook free Friday. Shifts in practice are sometimes fragile and not sustained beyond the formal project working (and external funding) and challenges remain in working across embedded government structures, as in Rupantaran. However the cases demonstrate that collaborative boundary crossing working is possible, can take multiple forms, and can lead to transformative outcomes for learners, schools and communities.

Introduction to the Case Studies

The research to inform these cases was conducted over a relatively short period and for the Kenya cases, after the end of the intervention. Nevertheless, they offer rich insights into the formation, working and evolution of learning teams and their associated impacts, some of which have been sustained after the end of the original project. Through the cases we are learning more about the characteristics of effective learning teams and how new practices are developed when working across traditional role boundaries in less well-resourced contexts in the Global South.

Information about each case is structured under the following headings:

- Executive summary
- Key insights from the case
- The ambition
- Situating the learning team
- Formation of the learning team
- Working of the learning team
- Evolution of the learning team
- System, team and student learning
- Outcomes and impacts
- Annexes

CASE STUDY
01

Kenya

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Advancing Learning Outcomes for Transformational Change Project (ALOT-Change)

Executive Summary

This case study explores learning teams within the Advancing Learning Outcomes for Transformational Change project (ALOT-Change) in two urban informal settlements in Nairobi, Kenya. The ALOT-Change design facilitated a holistic approach to supporting adolescent learners (aged 12–19) through engaging different stakeholders within the community as a learning team. Activities aimed to improve adolescents' learning and health outcomes, transition rates to secondary school, leadership skills and social behaviour.

The project, originally a part of the UK-government funded Girls Education Challenge (GEC) in 2013, first targeted girls only and then expanded to serve both boys and girls in 2016 after showing promising initial results. It utilised afterschool support and a life-skills mentoring program to empower learners directly, and supported parents with guidance and counselling along with subsidies to offset the cost of education. The project, led by the African Population and Health Research Centre (APHRC), was implemented in Nairobi Korogocho and Viwandani informal settlements by two organisations; one community-based organisation (CBO), U-Tena in Viwandani and one non-governmental Organization (NGO) Miss Koch Kenya in Korogocho.

The ALOT–Change learning team involved professional mentors, counsellors, the Community Advisory Committee (CAC), teachers and school leaders in addition to actors from the CBOs and lead organisation, APHRC. Mentors supported learners with building literacy and numeracy skills, as well as building their confidence and self-efficacy. Counsellors provided direct support to parents, providing them with safe spaces to discuss their challenges and a supportive environment to help them learn to engage with their young people, especially on sensitive issues like sexual and reproductive health. The CAC supplied guidance and support to the CBOs and were essential in ensuring that appropriate people from the community were engaged in the work. APHRC, the research partner, provided continuous support to the implementers and conducted research to bring evidence to the learning team that could be considered for the evolution of the work.

Collaboration among learning team members, both within and across roles, was ingrained in the project design and facilitated by the development of communication systems to support ongoing information exchange. And because these efforts were led largely by the local community, they were situated in a deep understanding of the intersectionality of the challenges faced in informal settlements and the ways in which this necessitates a more wrap-around approach.

The learning team membership and ways of working evolved over time through exchanges of information about the work and about the challenges that learners and parents were facing. These learnings helped to evolve the team, identifying gaps in teams' capacity and knowledge and bringing in new team members such as community gatekeepers, to provide insights and support which had been absent.

The collaborative approach generated multiple new productive connections across the team to create a circle of support for adolescent learners focused on academic and life skills learning, reproductive health and rights knowledge. This led to changes in attitudes and behaviours of learners and their parents/caregivers some of which have persisted beyond the conclusion of the project 2022.

A key lesson was that such an integrated approach, systematically enabling exchanges and collaboration reduces inefficiencies and enhances the impact (Abuya et al., 2022).

Key Insights from the Case Study

Lead with behaviour before belief. The belief on the value of each stakeholders' contribution to ALOT-Change came after the work was being implemented. While the learning teams were designed into the initial stages of the project, the evolutions of the project were made because the trust and belief in the unique contributions of each learning team member were developed throughout the engagement. As the impact on learners and parents became evident, learning team members became more engaged in the joint work and felt more ownership to continue it beyond their contractual obligations.

Involvement of community leaders - in a way that is appropriate in the specific context of the learning team - is key to sustaining impact. Throughout the project, chiefs and assistant chiefs were engaged in the ALOT-Change project. This allowed them to deeply understand the project as well as to see the impact it was having over time. After the official completion of the project, these local leaders in Korgocho and Viwandani have continued to provide support to parents who are struggling with their learners. They also continue to seek support from the community members tasked as counselors and mentors, as well as encouraging those learners who have moved on to pursue higher education to come back and participate in mentorship with younger learners in their communities.

Including learners themselves as members of the learning team enhances sustainability. Learners who had benefited from the A LOT-Change activities were encouraged to act as next generation mentors, thereby sustaining the activities and impact of the learning team working.

Invest in learning teams to create sustained impact. While some project activities may be difficult to sustain without ongoing funding, the fact that many relationships and support structures remained in place after the project funding concluded stands in stark contrast to most donor-funded projects in Kenya. Usually once the funding ends, the project closes completely and the practices of those involved largely return to where they were prior to the project commencement. However, in the case of ALOT-Change, the relationships between learning team members and the mindsets of seeking support remained beyond the project's completion, signalling that learning teams are a powerful mechanism for building a healthier learning ecosystem in a sustainable way.

The Ambition

ALOT-Change aimed to improve enrolment rates and life outcomes for girls and boys ages 12-19 in two urban informal settlements, Viwandani and Korogocho, in Nairobi, Kenya. The aim was to keep learners in school longer and benefit from associated evidence-based improvements in life outcomes including improving health, delaying early marriages and births, and addressing poverty. These efforts were aligned with a number of Sustainable Development Goals (SDGs), including SDG 1 (End Poverty), SDG 3 (Good Health & Well-Being), SDG 4 (Quality Education), and SDG 10 (Reduced Inequalities).

Although numerous initiatives had been implemented in Kenya to address challenges for learners at this level and some had demonstrated impact, there was still a gap for the most marginalised children. In Nairobi, data from the time of the initial project launch indicated that pupils who live outside informal settlements areas had higher rates of both primary school completion and transition to secondary school (92 per cent and 72 per cent) compared to their counterparts resident within informal settlements (76 per cent and 46 per cent) (Admassu, 2013). With approximately half of the learner population in informal settlements failing to transition to secondary school, there was a need for new approaches to supporting these learners.

The ALOT-Change project, aimed to address the disparities in outcomes for both girls and boys in informal settlements by taking a holistic approach to supporting learners and their caregivers through:

- Improving transition rates to secondary school
- Enhancing life skills, motivation and self-confidence among learners
- Building learners' learnership skills
- Engaging parents, caregivers and community leaders to provide greater support for learning

Situating the Learning Team

Learners in Kenya's informal settlements face a variety of challenges. These communities are characterised by poor infrastructure, poor supply of basic necessities such as electricity, water and sanitation, overcrowded homes and schools, insecurity, and increased numbers of out of school children. In addition, youth in these areas tend to display low aspirations and expectations (Kabiru, Mojola, Beguy & Okigbo, 2013).

Educators in these communities are challenged by a similar lack of resources to support their work, with few government-owned schools available to serve the community leading to overcrowded classrooms. Parental involvement has been shown to be low in urban informal settlements: a study by Oketch, Mutisya, and Sagwe (2012), examining parental aspirations as a mechanism of parental involvement showed that parents living in informal settlements have lower aspirations for their children's educational attainment when compared to those who live outside these areas. The study went on to highlight that despite the lower aspirations, parents in informal settlements nevertheless aspire for higher levels of educational attainment for their children than their own levels of education. According to baseline studies for the ALOT-Change project, the parents in Viwandani and Korogocho mirrored this evidence. Furthermore traditionally, parents and caregivers show little engagement with formal education of their children. Many appear to see their role in the learning process as limited to ensuring their learners are present at school facilities and school fees are paid.

From another perspective, educators can become demotivated by a perception that despite their best efforts, learners may not succeed in reaching secondary school and succumbing to poverty-related issues that inhibit their full potential and opportunities for social mobility.

In an attempt to provide innovative solutions to overcome these barriers, APHRC piloted a three-year intervention project from 2013 to 2015 through the Girls Education Challenge in collaboration with two partners, U-Tena and Miss Koch. This initially aimed to generate evidence on approaches to improve learning outcomes and transition to secondary school among girls aged 12-19 years. In 2016 APHRC and its partners, drawing on the achievements and the lessons learnt from the pilot study and a long history of work in sanitation, women's rights and more, implemented a second phase project at larger scale in the same sites, now addressing both boys and girls in these communities.

With this deep understanding of the local needs connected to education and learning, the project designed a more holistic approach from the outset. ALOT-Change worked to provide both educators and learners with support from community-based organisations (CBOs) and community leaders who could enhance the work happening in schools through afterschool programs and targeted mentorship and counselling.

Formation of the Learning Team

Teachers and schools were recognised to be at the centre of the learning process and all efforts were designed to ensure that learners could get the most out of these school-based engagements. The learning team was therefore designed to give the teacher additional support from parents and caregivers, CBOs and community members so that teachers' work and lack of resources would be eased by sharing the responsibility of improving learner outcomes. The project had a clearly defined Theory of Change, created by APHRC, which set out their aim for how the holistic approach would lead to better outcomes for learners and communities (see Figure 1 below).

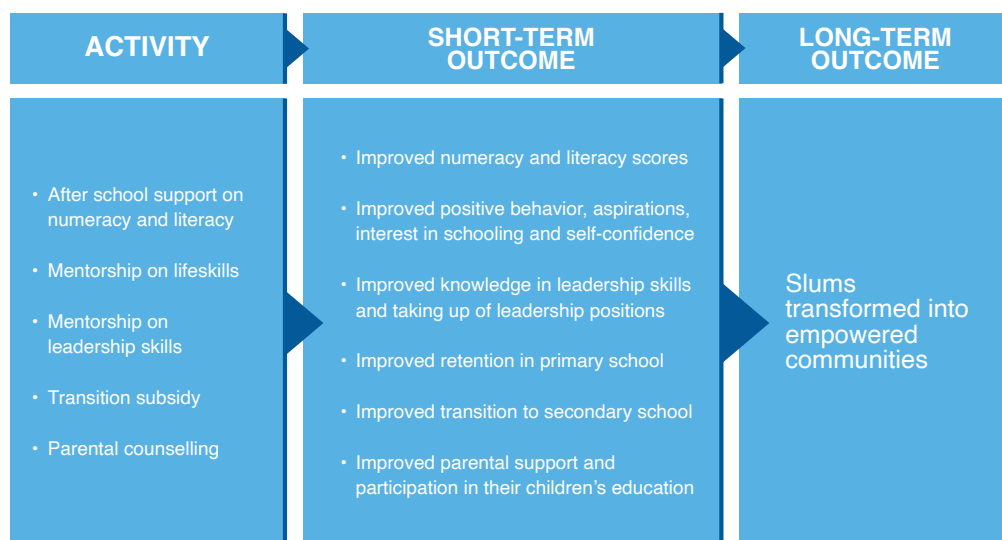| ACTIVITY	SHORT-TERM OUTCOME	LONG-TERM OUTCOME
• After school support on numeracy and literacy • Mentorship on lifeskills • Mentorship on leadership skills • Transition subsidy • Parental counselling	• Improved numeracy and literacy scores • Improved positive behavior, aspirations, interest in schooling and self-confidence • Improved knowledge in leadership skills and taking up of leadership positions • Improved retention in primary school • Improved transition to secondary school • Improved parental support and participation in their children's education	Slums transformed into empowered communities

Figure 1: ALOT-Change Theory of Change, APHRC (2016).

APHRC continued their ongoing engagement with the two key organisations, Miss Koch and U-Tena, who had participated in the original GEC project. Additionally, the new iteration of the project in 2016 began by selecting representatives from the community who would specifically support the ALOT-Change project. According to a representative from U-Tena, this extended community engagement was a result of learnings from the initial project. The Community Advisory Committee (CAC), which provides oversight to all projects being implemented in the community, were tasked with identifying the best people to be part of the project in terms of providing support directly to the learners as well as to the parents and caregivers of the girls and boys involved in the intervention. The project design included an element of mentorship for the learners, creating opportunities for weekly mentoring sessions between professionally trained mentors and the learners. A rigorous and competitive selection process was led by the CAC to identify the community members who would be most effective in supporting the youth in this area. Additionally, parents living in these environments devise coping mechanisms to mitigate the challenges that come with slum life and need support to better engage in their children's growth and learning. Therefore, professional counsellors specifically supported the parents. Counsellors and parents met monthly to discuss challenges parents encounter with their children and how to overcome them. Again, a rigorous process was employed to ensure that the counsellors had appropriate skills and understanding of the local context in the informal settlements to be able to effectively support parents.

The project was structured so that the mentors and the counsellors would meet with the CBOs providing afterschool programming to the youth, sharing insights from their experiences with learners and parents to bring their learning back into the project working and evolve the project as needed.

While each individual member of the learning team had a unique responsibility, their efforts were aligned through the program design to ensure that they were all moving towards the same outcome. Members of the learning team did not necessarily identify themselves as a part of a team, however this did not appear to impede the joint working, both that in the project design and collaborations which emerged later. As one learning team member indicated, "We were doing as per how the project was designed and therefore, we could not alter anything since we wanted to support the project team to achieve its objectives and goals". Initially, it was this intentional design that led to the formation of the learning team.

Working of the Learning Team

The roles of the learning teams were clearly defined through the project design. However, the ownership of the activities of the learning team enhanced and evolved as the community started to understand the importance and benefits of the project to their children and themselves. The diagrams below provide an overview of the learning

team members and the relationships among those members (see Figures 2-4). In some instances, the relationships were defined by existing structures in education (Figure 2) and in others the relationships were intentionally designed into the project approach (Figure 3). Additionally, Figure 4 (p21) shows the evolution of the learning team and the new relationships that were created as a result of the learning team's efforts. The roles of the learning team are outlined in the section below.
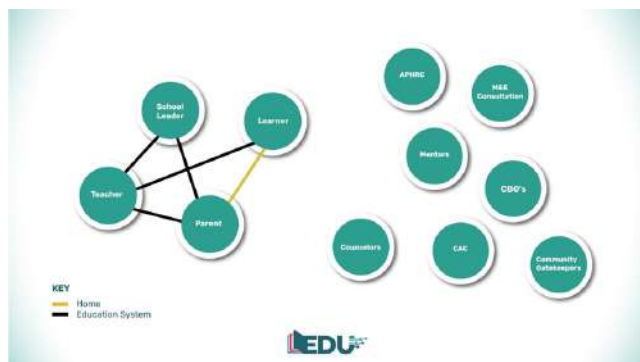

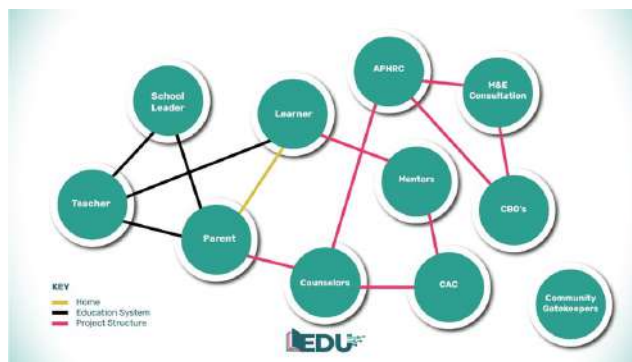*Figure 2: Existing home and school relationships*

Figure 3: Addition of ALOT-Change Project-Based Relationships

Community-Based Organizations (CBO)

The CBOs, Miss Koch and U-Tena, were responsible for providing the after-school programs in collaboration with the trained mentors. The organisations provided homework support and life skills training was provided through trained mentors at centres in the community. APHRC provided the organisations with resources and materials and they were given ongoing support by APHRC as they implemented the programs. The CBOs were also responsible for engaging learners during school holidays, to support ongoing learning and help learners remain focused as opposed to engaging in potentially dangerous activities while schools were closed.

The CBOs also collaborated with APHRC and a Monitoring and Evaluation consultant to collect data and feedback from key stakeholders within the project. Over time, the organisations also began to engage directly with community gatekeepers who had nuanced information about the learners and their circumstances that might be contributing to any challenges with engagement in the program.

The ALOT-Change project was closely aligned with the missions of the CBOs and they had seen firsthand the impact through the initial project, hence these organisations were motivated to engage in the collaborative work.

Mentors

Mentors were selected from among the communities, with a goal of finding those who could effectively engage with the learners to motivate and inspire them to believe in themselves, believe in their ability to transform their futures and to support their development in literacy and maths. The mentors also ensured that the learners were able to access appropriate referral pathways when they had difficult issues that could not be handled by the parents (e.g., sexual health reproductive issues).

The selection of mentors was done collaboratively between the CAC and APHRC; mentors had to have completed secondary education and scored a mean grade of C+ or above. The organisations provided skills training to the mentors, this focussed on how to support learners to develop coping strategies to deal with the emerging demands and challenges encountered in their daily lives. Training included topics such as self -awareness and self-esteem, avoiding negative peer influence, relationships, sexual and reproductive health, HIV/ AIDS, effective decision making and career goals. Mentors continued to receive support from the two organisations and APHRC throughout the project.

Mentors were compensated for their time and were able to gain valuable skills through the training they received by APHRC. They were also motivated by their ability to contribute to community growth. *"As a youth in my community, I did not know how instrumental I was in transforming my community. I was very excited to be part of*

the team that mentored the learners. This opportunity paved the way for great things in my life. I am glad that I took part in this project". shared one mentor.

Parents

Parents in the ALOT-Change project were expected to move beyond their traditional role limited to paying school fees and ensuring attendance at school, and to take a more active role in their children's lives and education. Parents were sensitized to help them engage in more effective communication with their children, notice sexual and reproductive health and psychosocial issues and support with these, provide positive aspirations and work with their children on digital safety.

In the beginning, parents were motivated by the external expectation to align to the project structure, but over time their motivation shifted to be more intrinsic as this parent reflected, "When this project began, I was not so involved and I did not care very much about it until my child started telling me that I go to school every Saturday and we have people from the community teaching us. I was concerned because these were not trained teachers and this made me go to school to understand what was happening. This is when I was told about this project and since then, I have been fully participating and advocating for it whenever we meet with other parents". Parents were motivated to attend the counselling meetings especially when they experienced improved communicationbetween themselves and their children.

Counsellors

Counsellors, selected to provide guidance and support to parents of the learners, were asked to lead monthly parent meetings where parents could openly discuss their challenges and provide each other with peer support. During the parental sessions, counsellors were engaged to ensure a balanced environment and avoid any situations where one parent might feel superior to others, as all were equally part of the project. The counsellors moderated and facilitated the sessions, allowing any parent who wished to share their thoughts to do so within that safe space. However, these parents were not singled out as experts on the topic; they simply shared their perspectives and experiences.

Counsellors were paid professionals and as such, motivated by their professional obligations as well as by the opportunity to contribute to the overall growth and development of the communities. Given the rigorous selection process, they were also motivated to live up to the expectations that were set for them.

Educators

The school leaders took the lead in ensuring that the parents attended the meetings and they also provided a venue at the school for the learners to meet during the weekends. School leaders would attend meetings and trainings that were led by Miss Koch and U-Tena, to understand the project's successes and challenges and offer their support as needed. Teachers additionally would join the mentor trainings (also delivered by the organisations) and provide mentors with guidance on how to handle different types of learners.

Community Advisory Committee (CAC)

The CAC was an existing semi-fluid structure that was created prior to the ALOT-Change project. This group was formed and dissolved based on specific projects happening in the community, and the membership of the group could shift and change based on the focus of the project (i.e., sanitation versus education). In the case of ALOT-Change, the CAC was formed during the needs assessment process which shaped the development of the ALOT-Change project design. From the beginning, the CAC was embedded into the design of the learning team.

The CAC contributed human resources by conducting follow-ups within the community. The project provided transport and communication allowances, however due to budget constraints the budget structure was not well defined. The transport reimbursement was often repurposed as a communication allowance since the team did not require transport, given that they are from the local communities.

Despite this unstructured budget allocations, the CAC members were not discouraged, their involvement was mostly motivated by their connection to the project and seeing themselves as co-owners of the project, they were

happy to support the project without any additional allowances. *"The project belonged to us, it was our children who were benefiting from it and our support was not reliant on allowances but on the overall goal of developing our community"*, noted one CAC member.

Backbone Organisation (APHRC)

APHRC support was immense throughout the project. They provided extensive technical assistance, conducted significant capacity building, and established many essential systems. They were engaged with all learning team members directly, whether through implementation support or ongoing evidence generation activities.

There was no role conflict between APHRC and the CBOs, as the responsibilities were clearly defined: U-Tena and Miss Koch served as the implementing partners, while APHRC functioned as the research partner. Additionally, an M&E consultant acted as a bridge between the implementing and research partners. The systems that were put in place were well-designed and supportive.

Evolution of the Learning Team

Although each learning team member had a distinct role to play in the project, the project design also facilitated collaboration among team members. In the beginning of the project, mentors would meet with one another to discuss what they were hearing from the learners and how to address issues. Counsellors would also meet each other and share the questions they were receiving or the challenges that parents were highlighting. Because the mentors and counsellors are members of the same community, they would also meet informally – sometimes by chance, even passing on the road, and sometimes intentionally through a phone call or text exchange. After realising that there was a need to connect the dots between what mentors were hearing from learners and what parents knew, the mentors and counsellors decided to meet together with the parents to hear about their perspectives and share what they were hearing from the learners. This allowed for an open exchange of ideas and a more collaborative approach to problem solving. These gatherings across the three stakeholder groups would continue as needed, with mentors being invited to join the monthly meetings that counsellors were holding with parents at the schools.
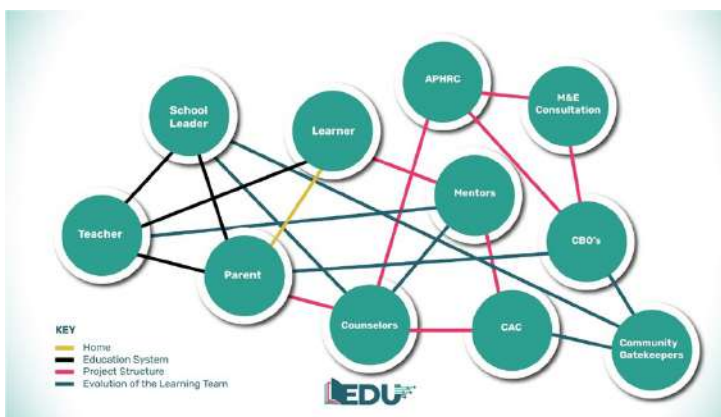

Figure 4: Evolution of the Relationships Emerging from the Learning Team

As the project continued the implementation activities, a new group came into play as an enabler. These were the gatekeepers of the community and represented the different communities within the villages. These community gatekeepers could be local administrators such as chiefs or assistant chiefs, or respected members of the community such as village elders. Although the CAC was very engaged in the work, it missed certain aspects of the project which needed additional support and follow up. For example, in the case of school attendance, the CAC was not privy to this detailed information on which learners were missing school. According to a representative from U-Tena, this extended community engagement was a result of learnings, *"Initially we had*

collaborated with the Ministry of Education and the Ministry of Health but at some point we realised we were missing the most important people in the community – the gatekeepers who understood the community dynamics and knew each and every person in the village". The community gatekeepers were key in ensuring and reporting whether a learner was attending school or has dropped out and general updates of parents and learners. This provided the learning team with essential information on how to target specific parents and learners to ensure support was equitably delivered.

Each learning team member was leaning into the unique strengths they brought to the project and leveraging their assets – whether physical or relational – to move the work forward. Although the ties among learning team members was not as strong after the project's official completion, there were still lasting effects from relationships and mindset shifts instigated during the ALOT-Change project.

System, Team and Student Learning

Overall, the project had positive effects on the beneficiaries, specifically the learners and their parents. Effects were seen on learners' literacy and numeracy outcomes, their self confidence and self-efficacy, their future life aspirations and their enhanced ability to effectively express, persuade and transmit their feelings, ideas and knowledge to their peers, parents and other individuals. Learners indicated that they also found their voice to talk to their peers and to try to influence them into exhibiting positive behaviours when it came to school and life choices. Because of the benefits they experienced through the ALOT-Change project, learners who had gone on to pursue higher studies were returning to participate as mentors in future cohorts, adding to the sustainability of the work.

Parents also learned valuable skills on communicating more effectively with their children as well as their peers. Parents highlighted being more involved in their children's lives and education as a result of being sensitised on the importance of doing so in the parental counselling sessions. In one focus group discussion, parents highlighted the shift in willingness to engage in certain conversations as well as to reach out to additional support systems. They indicated that prior to the ALOT-Change project, parents were very closed about the issues they were facing with their children because they feared that they or their children would be judged. After engaging with the counsellors through the project, they became more open to asking for support and guidance. Because the counsellors are from the local community, they still had access to these individuals and could go to them when needed.

During a focus group discussion, one parent shared her shift in belief about her learners' potential. She said that she and her peers were never really that concerned about their children's learning. They thought that even if they struggled to get their child through school, it wouldn't really translate into a better life. However, through ALOT-Change they were able to see the learners doing well and even being awarded scholarships to pursue higher learning, and parents' mindsets shifted. Because of this shift, they began seeking more support from the school and to their community leaders to help their learners to improve their school and life outcomes. This parent shared, *"I did not imagine that my son would be in second year of university doing an engineering course. I didn't know that someone from my community could do this".*

The learning team members also indicated that they benefited from the program by skills learnt during training sessions and exchanges with others within the learning team. There was a general sense of appreciation for the unique value add that different learning team members contributed to the overall success of the project, and a desire for those diverse contributions to continue.

The progress made during the ALOT-Change project ignited the community champions to go beyond the scope of the project to inform other members of the community outside of the project about the ALOT-Change work and its impact. This prompted these other community members to want to also engage in similar type activities, hoping they would see the effects of this work on their children and communities as well. Other project beneficiaries reported passing down the knowledge they had gained to other community members who are not enrolled in the project.

The project prompted few system changes possibly due to weak public structures in these contexts which lead to the absence of stakeholders from the either the Ministry of Education (or its agencies) and the Ministry of Health in the project design. However the working of the A LOT-Change learning team was able to resolve one tension around ownership of learner attendance data and subsequent actions. Prior to the project absences of a week or more would be reported directly to the Sub-County Education Officer (Ministry of Education) and dealt with at a level removed from the local community. The increased collaboration between schools and the community in this project resulted in a change in practice; the information was now provided directly to the learning team within the local community. The learning team were now able to own this data and the authority and motivation to work jointly with families and schools to improve specific instances of learner absence.

Outcomes and Impact

In some aspects, collaborations fostered within the learning teams had longer lasting effects beyond the scope of the project. One key aspect was how school leaders were approaching parental engagement. A learning team member indicated, *"There was a shift in how they (school leaders) were engaging parents. They were able to create more trust-based relationships outside of school and this carried over to the school environment"*. Although the CBOs were already engaging parents and empowering them prior to the ALOT-Change project, this learning team approach allowed for school leaders to see how effective this approach was and emulate it in their work. The final A LOT-Change evaluation examined a number of impacts arising from the programme and concluded that collaborative working across different sectors and groups of actors reduced inefficiencies and resource wastage associated with programme fragmentation (Abuya et al, 2022).

One of the key unintended effects of the ALOT-Change project was that overburdened parents from these communities began to realise that they are having their own mental health challenges, and this is impacting their learners. Many of these parents, because of the stresses associated with poverty, were struggling themselves and did not realise the depth of their pain or its impact on their daily functioning. Even for those who did realise they needed help, they didn't know where to go or how to get support, who to trust, or how to avoid judgement. Because the learning team opened up an opportunity for them to get support from the counsellors through this structured approach, many had the opportunity to pursue that support without judgement. This had noticeable effects on the broader community. A senior local administrator from Viwandani remarked, *"As the A-LOT change project was under implementation, there was less criminal activities in the area and since parents received counselling, low rates of domestic and children-parent strenuous relationships were reported. They were very minimal"*. Given the counsellors were members of the community who remained beyond the scope of the project, parents could continue to seek their support.

ALOT-Change Annexes

Annex 1: Methodology

The empirical research for this case study operationalised the activity theory methodological framework developed collectively by the research team. It employed a qualitative approach to gain a comprehensive understanding of the ALOT-Change project and its learning team member interactions The research was structured around four primary methods: a literature review, program documentation review, focus group discussions (FGDs), and key informant interviews (KIIs).

Literature Review
A review of existing literature was conducted to provide a theoretical and empirical foundation for this case study. The review focused on reports and blog posts that addressed the key themes about learner outcomes in informal settlements and challenges faced by learners and families in these communities. Additionally external sources that referenced the ALOT-Change project were reviewed. The findings from this review informed the development of the research instruments and provided context for interpreting the program's outcomes.

Program Documentation Review
In addition to the literature review, program documents such as implementation reports, monitoring and evaluation data, and policy documents were analysed. This review aimed to capture how the program was designed, executed, and monitored over time. A content analysis was conducted to identify key themes, trends, and gaps within the program's execution. These insights were cross-referenced with the qualitative data from interviews and focus groups to assess the relationship between program intent and implementation.

Focus Group Discussions (FGDs)
Focus group discussions were conducted to gather insights from a diverse group of participants involved in or affected by the program. Two focus groups were held (one in each location), each comprising 6-8 participants representing the community advisory committees, mentors, counsellors and parents. A semi-structured guide was used to facilitate the discussions, focusing on perceptions of the program's effectiveness, challenges encountered, and suggestions for improvement. Each session was documented with detailed notes and audio-recorded with consent from the participants.

Key Informant Interviews (KIIs)
Key informant interviews were conducted with the implementing partners, Miss Koch and U-Tena, who had direct involvement in the program's design, management, and evaluation. These in-depth interviews followed a semi-structured format, allowing flexibility for interviewees to elaborate on key issues. Topics covered included program objectives, implementation challenges, and lessons learned. The interviews were recorded, transcribed, and analysed alongside focus group data to triangulate findings and explore differing perspectives. As additional questions emerged during the case study development, these experts were also re-engaged as needed to provide additional context to the workings of the learning team.

Data Analysis
Data collected from the literature review, program documentation, FGDs, and KIIs were analysed using a combination of thematic analysis and descriptive statistics. The qualitative data from the focus groups and interviews were coded thematically, identifying recurring patterns, discrepancies, and outlier perspectives. Quantitative data, primarily from the program documentation review, were analysed descriptively to provide background and contextual support for the qualitative findings. This triangulation of methods allowed for a richer, more nuanced understanding of the case study's focus.

Ethical Considerations
This study adhered to strict ethical guidelines. Informed consent was obtained from all participants, who were assured confidentiality and the right to withdraw from the study at any time.

Limitations
This field research took place after the end of the project so it was possible to locate all the stakeholders involved, in particular no interviews with teachers or school leaders were undertaken. The timing of the research also prevented any ethnographic type observations of the working of the learning teams or their legacy collaborations.

CASE STUDY
02

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Kenya

Tayari

Executive Summary

The Tayari Early Childhood Development Programme in Kenya, named after the Swahili word for ready, was a four-year initiative focused on early childhood development and education (ECDE). The Ministry of Education (MoE) implemented the program with technical assistance from the Research Triangle Institute (RTI), an independent nonprofit research institute, ensuring the effective delivery of its objectives. Tayari aimed to equip children, especially those from under-resourced environments, with the necessary literacy, numeracy, social, and life skills to ensure they were prepared for the transition to primary school.

The program was active from August 2014 until March 2019. Tayari focused on pre-primary schools within both public institutions and low-cost private learning centres, known as Alternative Provision of Basic Education and Training (APBET) centres, across four counties in Kenya: Laikipia, Siaya, Uasin Gishu and Nairobi. The Tayari program implemented a comprehensive approach to early childhood education, with four interconnected components.

The first component focused on enhancing instructional quality through interactive teacher training and ongoing support. Master Trainers from RTI, MoE and Teacher Service Commission (TSC) trained Sub-County ECDE Coordinators, who in turn trained and supported ECDE teachers. This cascade approach resulted in the training of over 4600 teachers, 100 ECDE coordinators, and 20 national and county officers.

The second component aimed to improve key health practices among learners by implementing a childcare intervention that included deworming, provision of supplements and hygiene guidance. Community Health Volunteers (CHVs) and Community Health Assistants (CHAs) were trained and supported by Sub-County Directors of Health to use ECDE centres for health interventions, leading to the training of over 350 CHVs and CHAs. Additionally, over 4500 integrated health registers (record books that could capture both health and education data about learners) were distributed.

The third component focused on providing learners and teachers with child-centred teaching and learning materials. These materials, co-created by the Kenya Institute for Curriculum Development (KICD), RTI and a national steering committee, were designed to strengthen teacher practice and learner engagement. Over 240,000 workbooks, 8000 teacher's guides, and other learning tools were printed and distributed to over 2000 schools.

Finally, the fourth component utilised ICT to monitor and support classroom activities. Sub-County ECDE Coordinators used tablets to observe classroom lessons and record their observations, providing immediate feedback to teachers and uploading data to a cloud-based platform for real-time decision-making. The data from these monitoring efforts was also utilised by RTI and the steering committees for program evaluation.

The Tayari program employed a multi-tiered approach to ensure effective implementation and achievement of its objectives. The program established learning teams at three levels: National Steering Committee, County Steering Committee, and teacher clusters. These teams collaborated closely to design curriculum materials, address challenges, and provide ongoing support throughout the project's implementation. The National Steering Committee, as the highest decision-making body, provided strategic guidance and oversight. The County Steering Committees played a crucial role in coordinating activities within their respective regions, while the teacher clusters facilitated direct support and collaboration at the grassroots level. RTI acted as a key enabler of information flow between and within these groups, and Heads of Institutions (HOIs) played a critical role of coordination among learning team members operating at a school level. These collaborative structures ensured that the learning team members' unique contributions to the project could be optimised and the program's resources and expertise were effectively utilised to achieve its goals.

Designed as an RCT, the various arms of the study proved to be effective to different degrees. With a lens specifically to the work of the learning teams, the collaborative structure was lauded by participants and resulted in greater clarity of roles and strengthened relationships. Notably, stakeholders credit Tayari for the counties' decision to invest more in ECDE teachers by focusing on formalising the professional requirements for teachers at that level as well as investing more in training, coaching and mentorship. The program also strengthened the

role of sub-county ECDE coordinators as instructional leaders to the teachers and enabled the HOIs to take more community-based approaches, connecting diverse stakeholders to engage in ECDE.

Despite its significant impact, the Tayari program faced challenges upon its conclusion. One of the major hurdles was sustainability. The National and County governments struggled to maintain the program's operations and continue providing the necessary support to schools and communities. While the lack of sustained funding and institutional commitment posed a significant threat to the program's long-term impact, the design of the learning team approach facilitated impact beyond the scope of the project.

Key Insights from the Case Study

Stakeholder mapping can ensure the appropriate people are in the learning team. Diverse stakeholders with a collective wide range of skills can contribute to a more holistic approach to learning and development. By incorporating insights from different sectors, such as education, health, and community services, learning teams can address multiple aspects of the learner's well-being and education simultaneously.

Foster strong collaboration within the learning team: For effective coordination, collaboration among stakeholders is essential. It ensures that all parties are aligned in their efforts, facilitates the sharing of resources and expertise, and promotes a unified approach to addressing challenges. By working together, stakeholders can achieve better outcomes and enhance the overall effectiveness of their initiatives.

Tools such as Terms of Reference support alignment of efforts across different stakeholders within a learning team. Tools can help to resolve tensions over responsibilities ensuring equitable participation and preventing any single entity from dominating discussions or decision-making.

Leverage existing structures: Leveraging existing structures is crucial for the effectiveness of learning teams, as it allows for seamless integration, reduces redundancy, and enhances resource efficiency. This approach builds on established relationships and frameworks, ensuring continuity and sustainability. It also promotes quicker adaptation and scalability.

Localize learning teams: It is vital to ensure that learning teams are established at the grassroots level (teacher and community level), rather than solely at high policy-making tiers. By focusing on grassroots formation, teams are better equipped to address specific community needs and challenges. This bottom-up approach promotes more effective and relevant solutions, as it leverages local knowledge and insights. Consequently the team working is more likely to be valued by community members. In this example parents perceived higher value in the ECDE centres when they experienced their children receiving combined learning and health support.

Plan for sustainability: The Tayari project highlights the critical need for early and strategic planning for the sustainability of learning teams. To ensure long-term impact, it is essential for stakeholders to collaboratively develop and implement sustainability plans well before the project's conclusion. This can include integrating the costs of maintaining these teams into existing budgets, fostering local ownership, and establishing clear roles and responsibilities that persist beyond the project's lifespan. By doing so the dissolution of learning teams can be avoided to ensure that the benefits of the approach continue to be realised.

The Ambition

Aligned with the Tayari project's objective, the learning teams aimed to equip children, particularly those from under-resourced backgrounds, with essential literacy, numeracy, social, and life skills to prepare them for primary school. The program was focused on pre-primary education in public institutions and low-cost private centres (Alternative Provision of Basic Education and Training - APBET) across four counties: Laikipia, Nairobi, Siaya, and Uasin Gishu. These counties were selected by the Ministry of Education (MoE) because of their diversity in terms of both geography and socioeconomic status. Laikipia represented the Arid and Semi-Arid Lands, Nairobi represented urban low-income communities, Siaya represented the Lake region and rural communities, and

Uasin Gishu was chosen for its relative middle-income status. As Tayari was designed as a research study to determine the impact of the approach on different groups, the diversity of these locations would allow for an exploration of the scalability of the approach for other parts of the country.

Tayari was also designed to explore what effects providing a health intervention alongside an education intervention would have for participation and improved learning outcomes at the ECDE level. As such, not all communities within the study had a health component to their study arm. This case study explores the specific arm of the study where a health intervention was implemented, and where SDG 3 (good health) was pursued alongside SDG 4. While the impact on participation (positive) and on learning outcomes (no effect) are notable for the project, this case study looks specifically at the interactions of the diverse members of the learning team when health actors are integrated into an education activity.

Situating the Learning Team

In Kenya, ECDE is devolved and managed by the counties, unlike primary education which falls under the jurisdiction of the National Government. This creates a unique management structure for ECDE centres and primary schools, as the schools hosting ECDE centres are overseen by the National Government and the Teacher Service Commission (TSC), the institution responsible for hiring teachers, including the head of the institutions (HOIs). The HOI, therefore, holds authority over both the primary school and the ECDE centre.

Kenya provides two years of pre-primary education to children ages four and five. The purpose of these years are to build readiness for primary school. While these years are compulsory within the current Competency-Based Curriculum system (or CBC, which began in 2017 and operates a 2-6-3-3-3 system) and the previous 8-4-4 system (which ran for 32 years, from 1985 to 2017), there is inequitable engagement in ECDE based on geography, gender and socioeconomic status.

Because the system is devolved to the counties, there is a high degree of variability in terms of both resource investment and quality of ECDE across the country. Because of this variability, many families question the value that ECDE can provide for their learners. Additionally, family circumstances such as parent literacy, poverty and other risk factors can impact family choices about what type of care and learning to invest in for their children. In a presentation on Tayari at the Comparative International Education Society (CIES) 2018 conference, RTI team members used the Nurturing Care Framework to share some of the factors influencing the communities that Tayari aimed to serve, and that the project aimed to counter (see Figure 1).
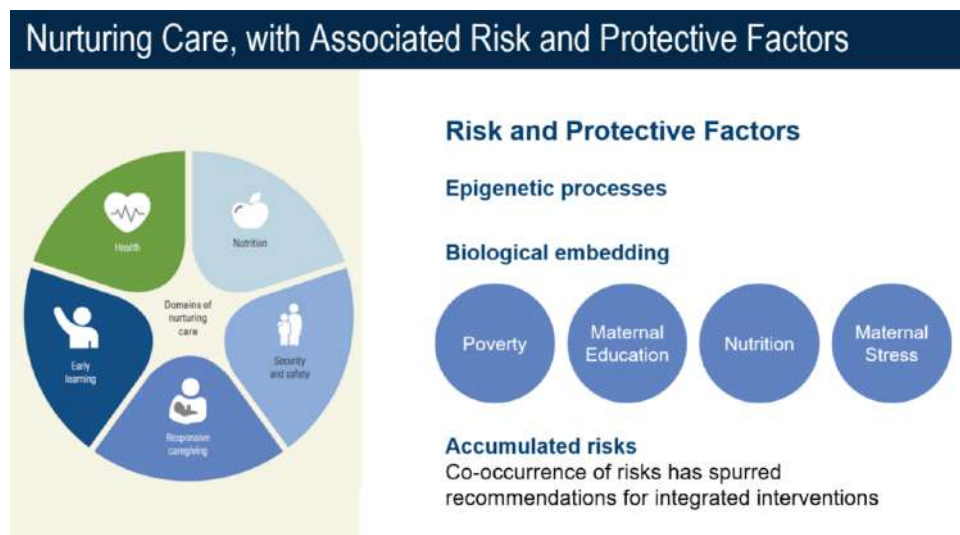

Figure 5: Risks and protective factors for Early Learners, Tayari Presentation at CIES 2018

Figure 1 also indicates the evidence-based need for an integrated approach, addressing the multiple factors influencing learners' development and readiness for school. With these goals in mind, the Tayari project and the learning team within it, were positioned to deliver more effective outcomes by addressing multiple Sustainable Development Goals (SDGs): SDG 3 (Good Health and Well-being), SDG 4 (Quality Education, and specifically SDG 4.2: Access to Quality Pre-Primary Education), SDG 6 (Clean Water & Sanitation), and SDG 10 (Reduced Inequalities).

Formation of the Learning Team

The Tayari project, funded by Children's Investment Fund Foundation (CIFF) and implemented by the MoE in partnership with RTI, had learning teams structured across three levels, each playing a distinct role in the program's implementation and oversight while working collaboratively to share resources, experiences, and solutions to challenges. These three levels formed a larger learning team, as the work of each level supported the ultimate goal of improving teaching and learning.

At the highest level was the **National Steering Committee**, which included representatives from the MoE, the Ministry of Health (MoH), the TSC and the Kenya Institute of Curriculum Development (KICD). This committee was primarily responsible for making policy decisions, providing oversight, and developing learning and teaching materials. As challenges arose in the early stages of the project, the committee met monthly to address issues and align the program with national policies. Once the program became more streamlined, these meetings shifted to a quarterly basis. The National Steering Committee also played a key role in aligning the solutions proposed by the lower levels with national education policies and ensuring consistency with broader governmental strategies.

The **County Steering Committee**, situated at the middle level, was composed of county-level representatives from the MoE, the MoH, the TSC, and the county departments of education and health. Co-chaired by the Ministry of Education's Permanent Secretary and the county's Chief Officer for Early Childhood Education, this committee provided direction and oversight at the county level. It worked closely with the national team, sharing resources and challenges faced during the implementation of the Tayari project. The County Steering Committee also directed the work of the Public Health Officers (PHOs) and supported the training and work of the community health workers, monitored the program's progress, supported teachers on the ground and ensured that their local solutions were communicated to the national level for alignment with broader policy frameworks.

At the grassroots level was the **Teacher Cluster**, which consisted of ECDE teachers working in a specific zone. Tayari harnessed existing structures for ECD professional learning, working through county and sub-county level ECDE coordinators. Hence it was the Sub-County ECDE coordinator who organised for the teachers to meet quarterly, either at the zonal or school level, to discuss their experiences with the Tayari program, share insights, and address challenges. The clusters provided a collaborative space where teachers developed local solutions to issues they encountered during implementation. These solutions, informed by hands-on experience, were shared with the County Steering Committee, which in turn worked with the national level to align the solutions with national policies. By regularly sharing experiences and challenges across the three levels, the Tayari program ensured that localised insights were taken into account while maintaining policy coherence at the national level, fostering both flexibility and alignment.

This multi-tiered structure allowed for an effective flow of communication and resources, ensuring that solutions developed at the local level were supported and reinforced by policy decisions from the national level.

Working of the Learning Team

The learning team consisted of multiple actors who engaged at the three levels mentioned in the previous section. The diagrams below show the relationships among those actors, some of which were defined by existing structures, some which were intentionally designed into the project approach and some new relationships or characteristics of relationships which emerged as a result of the learning team's efforts. Figure 6 shows the existing relationships from home, education and health system structures. Figure 7 shows the new relationships which were generated as a result of the Tayari project structure. Figure 8 (in the Evolution of the learning team

section) shows the additional connections that were formed or strengthened through the collaboration of the learning team. Where more than one line is indicated between two learning team members, this means that the new structure or evolution of the learning team meaningfully changed the interaction between those two team members, and they began to work together in new ways. The distinct roles of each learning team member are highlighted in the next section which discusses the evolution of the learning team.
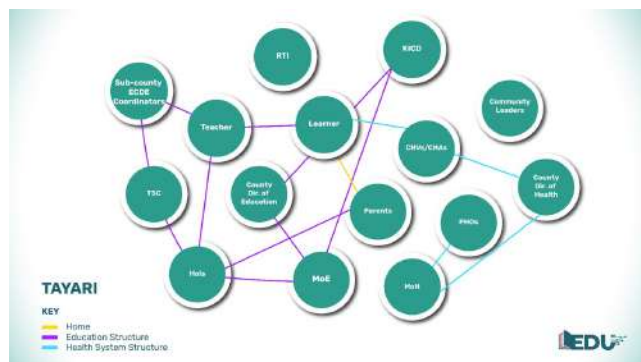

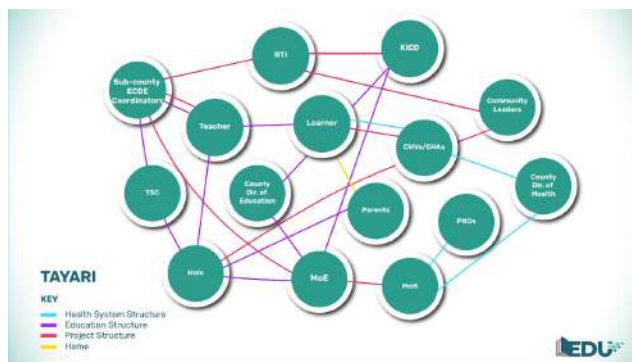Figure 6: Existing structures and relationships

Figure 7: Project structures and relationships

Collaborating with multiple stakeholders during the Tayari project presented challenges, given the complexity of the Kenyan education sector and the intricacies of its devolved health and education systems. The 2010 Constitution granted the TSC autonomy, while it continued to coordinate with the MoE. This arrangement, however, occasionally leads to power struggles. TSC officers, often serving as heads of institutions, are tasked with managing schools and providing instructional support to teachers, while the MoE officers focus on quality assurance, standards, and oversight, and are often engaging with teachers on quality of curriculum delivery. These overlapping responsibilities sometimes create friction between the TSC and MoE, and often complicate decision-making processes. These tensions were observed within the Tayari project and sometimes led to delays in project implementation.

It is worth noting that the inception phase of the Tayari program lasted from 2014-2015 to allow for the development of the learning team and to iron out issues emerging from this more collaborative approach. Despite the challenges, learning team members believed there was value in crossing boundaries to ensure a more aligned approach. According to one interviewee, *"Effective collaboration among key stakeholders, including the Ministry of Education (MoE), Teachers Service Commission (TSC), and the County Department of Education, fostered stronger working relationships between these groups, which typically experience coordination challenges due to their overlapping roles, often leading to conflicts. This was made possible through stakeholder mapping conducted at the project's inception".*

Unlike lower primary schools, ECDE settings posed distinct challenges due to the varying ages of the children and their diverse welfare needs. This also added complexity to the management of ECDE programs. For example, it took almost a year to align the project materials with the specific needs of ECDE, as the original books were not designed for young children and required substantial revisions. Likewise, in the area of numeracy, the use of manipulatives and other resources needed considerable adjustments. This required collaboration of multiple actors at the national level to work with RTI and KICD to develop quality, age-appropriate materials. Typically approval times for these materials can be daunting, lasting up to 2 years, however because KICD was a co-creator this time was significantly reduced and once created were approved quickly.

The health component of the Tayari project also presented particular difficulties as it was broad and complex, making it hard to navigate. Addressing these issues required close collaboration among several entities, including the County Department of Education, the TSC (which appoints heads of institutions who oversee ECDE centres), the MoE, the County Department of Health, and the MoH. *"Working with different actors required a lot of planning and consultation. Being a project that had both national and county people involved, it needed to have a proper thought process of how to approach the different issues that came up"*, shared one interviewee. Although the learning team was pre-designed as part of the Tayari project, it wasn't specifically developed to tackle these challenges.

In the health component of the project, further complications emerged during implementation. The project aimed to improve children's health by providing dewormers, supplements, and hygiene guidance. However, during the initial phase in one of the counties, Public Health Officers (PHOs, who are representatives of the Ministry of Health), were given responsibility for health interventions, following directives from the County Department of Health. This approach caused conflict with the county's nutrition team, which felt overshadowed and excluded from key responsibilities. PHOs were meant to provide oversight for the project while sub-county health officers would provide training and ongoing support for the CHVs/CHAs. This duplication of roles led to tension and conflict on who should be focusing on implementation. Although subsequent discussions with the County Health Officer and Director of Health led to PHOs assuming a more rounded role, the nutrition team still felt sidelined without a specific role outlined for them.

Evolution of the Learning Team

To address these challenges, the Tayari project proactively evolved their practices. One of the key tools instigated by the learning team was a clear Terms of Reference (ToR) for each department. The ToR defined each member's role within the learning team, ensuring equitable participation and preventing any single entity from dominating discussions or decision-making. This structured framework allowed for more balanced collaboration, with each stakeholder's voice being valued and heard. Relationships within the learning team evolved as follows, illustrated in Figure 8.
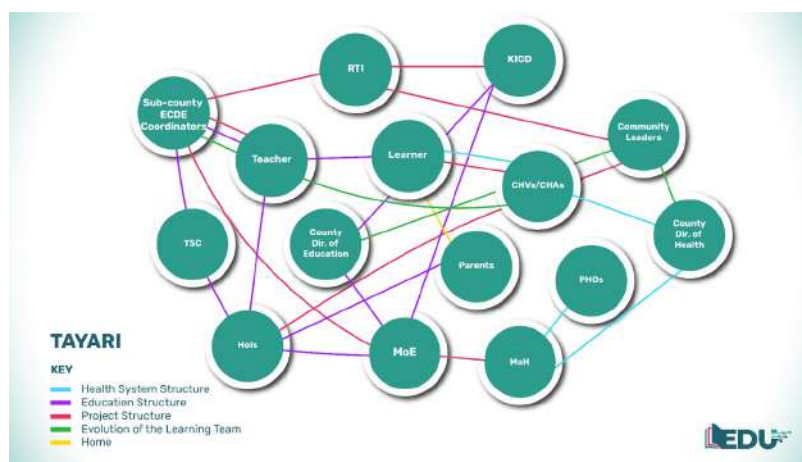

Figure 8: Evolution of the learning team

School leaders, also known as Heads of Institutions (HOIs), played a critical role in facilitating this collaboration at the school level. As key figures at the local level, they coordinated with both the education and health departments, ensuring that school-based health and education interventions were implemented smoothly. They also were essential in mobilising parents and community leaders and ensuring their understanding and consent to the project. Their participation also helped bridge the gap between the different actors involved, enabling better communication and fostering a more cohesive approach to decision-making. HOIs worked to ensure that feedback from teachers, parents and community members was shared with RTI, and utilised for decision making within the national and county level steering committees. HOIs ensured that the needs of schools and children were reflected in discussions, contributing to localised solutions that were better aligned with the realities on the ground.

Teachers directly benefited from the engagements with CHVs/CHAs as they modelled the health interventions with the learners. This provided the teachers with critical information on how to support their learners in the classroom and reinforce messages that were being shared in the community and via home visits. Additionally, CHVs/CHAs provided teachers with training on what to look out for and how to use the existing health referral

systems in case there was a need to provide support to the learner. Through this existing structure, teachers could report a learner's need for health-related support and quickly get access to a health facility. This strengthened teachers' ability to provide holistic support to learners and their families.

New practices and critical moments emerged throughout the project, particularly in terms of cross-sectoral collaboration. One such practice was the regular communication between education and health departments, facilitated by the RTI team. These occurred as regular in-person meetings as well as exchanges in WhatsApp Groups, creating space for interaction and information sharing. These consistent interactions helped to break down silos and foster a more integrated approach to child development. Another key moment came when tensions between the PHOs and the nutrition team were resolved through dialogue and clarification, highlighting the importance of clear roles and responsibilities in ensuring smooth collaboration.

System, Team and Student Learning

The improved working relationship between learning team members led to more effective management of ECDE programs within schools and generated a stronger integration of ECDE into the broader educational system.

The influence of the Teacher Clusters was especially significant. These clusters, organised by Sub-County ECDE coordinators but largely self-directed by the teachers, created a platform for teachers to collaborate, share experiences, and develop context-specific solutions to the unique challenges in their localities. Regular meetings fostered a culture of collective problem-solving, which not only enhanced teaching practices but also deepened community engagement and support for education. Teachers reported finding renewed joy in their work with young children, and as they saw the effectiveness of the new teaching methods, they began actively engaging students in more dynamic ways. A Tayari program manager shared: *"Before Tayari, teachers did not have a proper curriculum to use. The caregivers/teachers lacked the skills needed to support teaching and learning of young children".* This shift positively impacted learners' learning and engagement, with teachers embracing a more interactive and child-centred approach.

There were several spillover effects observed at the project level. One example of spillover effects into the community was the introduction of Tippy Taps, simple hand washing devices, which gained significant traction. Community members, including Sunday school teachers, began adopting Tippy Taps in churches, and even children started requesting them at home. This initiative unexpectedly prepared the community for the critical handwashing practices that became essential during the COVID-19 pandemic, demonstrating how a small health initiative could have far-reaching and unanticipated benefits.

Another spillover effect was to parents in the community. Many parents previously had questioned the value of ECDE, as is noted earlier. However, with the introduction of the health component in schools, parents saw greater value in the ECDE system as they knew their learners could get both learning and health support through the ECDE centres: *''In the community, the introduction of Tippy Taps gained momentum, with Sunday school teachers bringing them into churches and even children asking for them at home. This initiative couldn't have come at a better time, as it prepared us well for the handwashing practices that became essential during the COVID-19 pandemic'',* said a Tayari program manager.

Outcomes and Impact

The advocacy and improvements in ECDE staffing became a model for other counties, leading to a broader recognition of ECDE as an essential part of the educational system. Similarly, the introduction of capitation grants per learner set a precedent for how counties could better plan for and support early childhood education, significantly enhancing access and equity. These changes demonstrated the project's lasting impact on the system, influencing policy and practices beyond its initial scope.

Tayari's Impact Evaluation (2019a), conducted by APHRC, also noted that there were interactions between Tayari and non-Tayari schools. The report notes, *"Interactions between intervention and control schools in Tayari were*

reported by 65% of the ECDE teachers - they showed non-Tayari teachers how to develop and use Tayari materials. This happened due to the popularity of Tayari".

The Tayari project positively influenced gender inclusion and access to education. By adopting a per-child funding model, it ensured that every learner, regardless of gender, had equal access to resources and materials. This helped bridge gaps in early childhood education, particularly for marginalised children in pastoralist and arid regions, where education access is often limited. The enhanced teacher training also contributed to more inclusive and gender-sensitive learning environments, with teachers better equipped to address the needs of diverse learners.

Despite the project's successes, there were some trade-offs. While subsidies provided during the project's implementation strengthened the learning team and boosted resources, the counties were unable to match these resources once the project ended, limiting the project's sustainability. However, some key informants indicated that some of the practices of the learning teams were able to continue without additional investments, due to their integration into existing systems. One interviewee indicated, *"The sustainability of the learning team was ensured by the Tayari project's integration within existing government structures. Although the project has ended, ECD officers continue to train, monitor, and provide feedback to ECD teachers, even five years after its completion, as these duties align with their official roles".*

There were also several unanticipated effects that lasted beyond the scope of the project. The section below outlines key ways that the collaboration of the learning teams impacted ECDE implementation in Kenya.

ECDE Staffing: At the start of the Tayari project, many ECDE centres lacked dedicated teaching staff, relying on caregivers who were compensated mainly through parent contributions. However, advocacy efforts led to significant changes. Counties began including ECDE caregivers on their payroll, improving the stability and quality of early childhood education. This shift also influenced neighbouring counties, which adopted the practice, leading to a wider national recognition of the importance of formalised ECDE staffing.

Capitation: Initially, capitation planning for ECDE learners occurred at the County Executive Committee (CEC) level. However, the system was adapted to allocate funds directly to the ECDE level, with grants being provided on a per-child basis rather than per school. This enabled better budgeting and resource distribution based on the number of learners, improving access to early childhood education. Counties like Uasin Gishu implemented capitation grants as part of their budgeting, ensuring materials and resources were distributed equitably.

Teacher Training and Support: In pastoralist regions, many ECDE caregivers were initially unfamiliar with formal teaching methods. By the second year of the project, however, significant progress had been made. Caregivers were able to read and interpret the teacher's guide, demonstrating the impact of targeted teacher training. Coaching programs in arid and semi-arid counties, such as Laikipia, addressed the shortage of trained ECDE teachers, leading to sustained improvements in the quality of education provided to young children.

In conclusion, the Tayari project's collaborative approach, combined with its focus on stakeholder engagement, brought about systemic changes in ECD. These included staffing improvements, better funding models, and enhanced teacher support, all of which had positive spillover effects on the community. However, the reliance on external resources and the challenges of maintaining momentum after the project's completion highlights the importance of building sustainable systems that can endure beyond donor-funded initiatives.

Tayari Annexes

Annex 1: Methodology

This case study employs a qualitative approach, using project documentation and key informant interviews (KIIs) as the primary data collection methods. This dual-method strategy allows for a comprehensive examination of both the documented processes and the experiences of key stakeholders involved in the project.

Program Documentation Review

A detailed review of project documentation was conducted to assess the design, implementation, and outcomes of the initiative. The documents reviewed included project progress reports and relevant internal communication records. These materials were systematically analysed to extract information on project objectives, timelines, challenges encountered, and any adjustments made during implementation.

The analysis of the project documentation followed a content analysis approach. Key themes were identified by coding the data in relation to the study's focus areas, such as project effectiveness, stakeholder engagement, and sustainability. The document review provided both historical context and a baseline understanding of the project's operational framework, which was crucial for guiding the subsequent key informant interviews.

Key Informant Interviews (KIIs)

To complement the insights from the project documentation, key informant interviews were conducted with individuals who had significant involvement in the project. A total of 7 interviews were held with key stakeholders, including project managers, field staff, and external partners. These informants were selected using purposive sampling, based on their knowledge, role, and ability to provide in-depth insights into the project's execution and outcomes.

The KIIs followed a semi-structured format, allowing for flexibility in probing specific areas of interest while also capturing informants' personal perspectives and experiences. The interview guide covered themes such as project goals, major achievements, challenges faced during implementation, and reflections on sustainability. Interviews were recorded (with consent). Data from the interviews were then analysed thematically using a coding framework developed from both the project documentation and initial interview data.

Data Analysis

Data from both the project documentation and key informant interviews were analysed through thematic analysis. For the documentation, key themes were identified and compared against the qualitative data collected from the interviews. This process of triangulation allowed for the verification of documented events and provided deeper insight into the practical aspects of the project that may not have been fully captured in the official documents.

The thematic analysis of interview data focused on identifying recurring patterns, contrasts in stakeholder perspectives, and critical incidents that influenced the project's trajectory. Coding was done manually and verified by a second researcher to ensure consistency and reliability in the interpretation of findings.

Ethical Considerations

This research adhered to strict ethical standards. Informed consent was obtained from all interview participants, who were assured of the confidentiality of their responses and their right to withdraw from the study at any point. Additionally, project documents were handled in accordance with confidentiality agreements to protect sensitive information.

Limitations

This field research took place after the end of the project so it was possible to locate all the stakeholders involved, in particular no interviews with teachers or school leaders were undertaken. The timing of the research also prevented any ethnographic type observations of the working of the learning teams or their legacy collaborations.

CASE STUDY
03

Photo Credit: Gurubaa.com

Nepal

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Textbook free Friday

Executive Summary

The Textbook free Friday initiative in Kathmandu Metropolitan City aims to promote more holistic learning and skill development for grade 9 and 10 students in 56 community schools whilst also strengthening community bonds. The initiative focuses on encouraging experiential learning, more active pedagogies and preparing students for life post school. On Fridays students attend school without textbooks or bags, to engage in practical skill programmes such as mobile and electronic repairs, beautician training, culinary arts and house wiring and electricity. These programmes, led by in-school focal teachers working with external skills trainers, aim to equip students with real-world skills, promote localized education, and offer a break from an exam-oriented curriculum.

The Textbook free Friday (TFF) initiative was initiated in April 2023 by the Mayor of Kathmandu Metropolitan City following his election on a platform which promised to improve community schools. TFF's initial guidance to implementing bodies, the schools, was sparse and learning teams formed organically in service of the initiative's objectives. These learning teams involve teachers, students, School Management Committees (SMC), Parent Teacher Associations (PTA), skill training providers, Kathmandu Metropolitan City (KMC), and Kathmandu University (KU). Overall leadership is from KMC. To date collaborative working has involved team members coming together in bursts of collaborative activity in changing combinations to effect specific tasks.

Given the relatively low level of resourcing, results so far are significant. Students report enthusiasm for the programmes and that they are learning useful skills which they are deploying in situations beyond the school. Spillover effects include increased student attendance and parental interest in their children's learning. Teachers involved report extending their repertoire of teaching approaches and learning aids to include videos, simulations, and student-created materials for project-based and inquiry-based learning. The profile of some schools has been raised within their communities through inviting community members to occasional student organized events. However, participation of some learning team actors, such as the PTA or SMC, has been limited and school leaders are finding it difficult to exercise agency to improve TFF team working in the absence of adequate resources and tools and an opportunity to participate in TFF decision making.

The TFF initiative has numerous feedback mechanisms and these have indicated the need for provision of key tools, for example curriculum guidance for the skills programmes, professional development for focal teachers and strategies for effective engagement of the community. The need for these tools has emerged through the initial stages of team working. Further challenges result from tension between the skills programme and the traditional formal curriculum and from the lack of integration of TFF into core ways of working at school level, it remains a peripheral or 'add on' initiative.

However, despite these challenges there is widespread public approval of the TFF initiative as an education reform endeavour which is increasing school attendance and enhancing students' practical as well as generating greater trust between public schools and the communities they serve.

Key Insights from the Case Study

The organic emergence of the learning team involving schools, communities and local government entities under the TFF initiative showcases **how informal cross stakeholder collaboration can emerge in the absence of formal structures and guidance.**

Head teachers are critical to these learning teams but need resources and space to share their concerns and needs with the initiative leaders. School leaders who lack adequate resources and guidance will not be fully empowered to make decisions in support of learning team working within their schools.

It is important to provide meaningful spaces for student voice in the formation and functioning of learning teams.

Deepening team members' involvement, motivation and effective collaboration requires the introduction of tools such as curriculum guidance and professional development. The need and format of these tools is not necessarily apparent at the start of the initiative and can emerge through the team working as in this case. More effective collaboration also requires spaces in which all team members can exercise their voice.

Involving parents in learning teams is complex and needs to take account of their multiple responsibilities. New ways are needed to involve parents in activities including the decision-making processes.

The Ambition

The learning team behind TFF aims to provide community school students with a well-rounded education that extends beyond theoretical knowledge. TFF aims to enhance holistic development, equip students with practical skills relevant to the job market and everyday life, such as agriculture, technology and entrepreneurship, reduce academic pressure, and cultivate creativity and innovation. TFF aims to address the Sustainable Development (SDG) Goal 4 - ensuring inclusive and equitable quality education and promote lifelong learning opportunities for students, along with elements of SDG Goal 8 (Decent work and economic growth) and SDG Goal 10 (Reduce inequality).

Situating the Learning Team

In line with government policy, community schools in Nepal offer free education to all students up to Grade 12. However, especially in urban areas, parents who are financially well-off, educated and with higher social status do not want to enrol their children in their local community schools. There is a strong perception that the teaching and learning activities of community schools are not effective. As a result, engagement of the full community with community schools is low and the majority of students in these institutions come from financially poor homes.

This situation is especially acute in KMC where the number of students in community schools is decreasing and community trust in the schools is very low. Lessons mainly comprise textbook exercises and lectures. On Fridays the half day of study is intended to be completed by the traditional practice of extracurricular activities, such as sports, quizzes, spelling contests, debate and oratory competitions and cultural programs. However, there are few resources to deliver these activities in community schools, unlike private schools, and many parents of community school students have the impression that their children do not need to go to school on Fridays.

Considering this situation the KMC Mayor expressed an ambition in his election manifesto to reinvigorate community schools to reduce the hierarchy between them and private schools. His vision is for students to participate in activities according to their interests on Fridays, and for teaching and learning of various subjects studied on other days of the week to be enlivened through project work, practical exercises and other student-centric approaches which connect theoretical or abstract knowledge to practical skills. This approach aims to help all students, regardless of their backgrounds, to develop useful life skills, entrepreneurial thinking, and critical and creative thinking by providing opportunities to learn by doing. When he was elected, TFF was conceptualised and launched.

The core idea of TFF is that students attend schools on Fridays without textbooks or bags. The TFF focus is on shifting from teacher-centric to student-centric approaches and connecting knowledge to practical skills. Emphasis is placed on developing teacher capacity, involving stakeholders in planning and implementation, and utilizing community knowledge. Additionally, there is an emphasis on learning beyond the classroom and developing schools as places of learning beyond the formal curriculum.

In the first phase, at the beginning of 2023, there was minimal preparation: KMC Education Department simply asked community schools to conduct various skill-related activities in the school on Fridays. Schools began the activities as per their experiences and available resources, drawing on the skills and expertise of their existing teachers. Later, KMC prepared a guideline named Skills in Education and formally launched the program in 56 community secondary schools focusing on the students of Grades 9 and 10. On Fridays, students in these participating schools engage in various practical activities and short-term courses designed to enhance their life skills and prepare them for the real world. This provides a break for students from the traditional, exam-oriented curriculum and promotes localized education and connection to the community. There are 10 programmes available:

- Beautician and Hair Styling
- Mobile and Electronics
- House Wiring and Electricity
- Fashion Designing and Tailoring
- Culinary Arts
- Plumbing
- Agriculture and Urban Farming
- Fine Art
- Computer and Electronics
- Carpentry and Wood Carving

A school can select skills programmes to offer depending on the interest of their students. The most popular programmes are Beautician and Hair Styling, Mobile and Electronics, Culinary Arts and House Wiring and Electricity.

Formation of the Learning Team

The initiation of TFF in KMC was a top-down approach, driven by the city administration. Key stakeholders include the Mayor, City Council Members, and city officials who provide strong leadership and visibility on a city-wide scale.

While TFF clearly aligns with the learning teams criteria, there was no deliberate intention to create learning teams under the TFF initiative; learning teams and sub-teams formed or emerged organically and are not necessarily obvious to team members. As one headteacher commented: *"We don't know where the learning team is".*

In the school, large numbers of teachers are involved, including the focal teachers who are responsible for the different skill programmes. Most importantly, in the school, there are groups of students as per their interest and capability, for example groups studying house wiring, plumbing, beautician and hairstyle, and others. Each group works with a focal teacher. The school-based team also includes the head teacher, who perceives they have responsibility for TFF in their school.

Schools hire individual trainers from technical skills providers. These experts co-teach the skills programmes with regular teachers. The various skills training provider organisations, and some individual trainers, are linked to the programme schools by KMC. Recently, Kathmandu University has become involved in the TFF initiative. Their role is to prepare the curriculum for the skills programmes in partnership with KMC. KMC's Education Department also provides local government-level support with programme procedures and resources including funding, personnel, infrastructure, and publicity.

Parents are involved informally through supporting their children and encouraging them to attend the sessions (Friday attendance in community schools has been traditionally low). A parent of the children of Fashion Designing and Tailoring commented, *"I also support my daughter in preparing the shopping bag. I have provided an old Sari for my daughter to practice her tailoring skills"*. Two specific formal community teams are involved: School Management Committees (SMC) and Parent Teacher Associations (PTA). These groups are intended to contribute to the management of the TFF initiative at school and community level. Local community members are also involved in the programme, attending and supporting events.

Working of the Learning Team

The working of this loosely structured learning team is explained under different subheadings below.

School Focal Teacher and Student Participation

For each skill offered in a school, there is a focal teacher who is responsible for that skill's programme. The focal teachers framed their role as both facilitator and collaborator with various TFF stakeholders. They engage in joint working with school administrators, parents, fellow teachers, skills providers, students and even stakeholders in KMC. The object of this joint working is the preparation of a plan for the running of the specific skills programme within the school.

Challenges to this joint working include insufficient time for the focal teachers to undertake this activity in addition to their regular teaching duties and a lack of resources, including an absence of specific curriculum documents to guide the school sessions. However, at a local classroom level, focal teachers report listening to students' views on TFF and trying to incorporate these into the organization of the skills programmes, emphasizing the role of students as team members.

School Leader Participation

School leaders perceive that they are solely responsible for the effectiveness of the programme in their schools, and indicated that collaborative working with KMC is limited. A head teacher shared:

"There is not much discussion about the Textbook Free Friday program with KMC. KMC has sent the program and budget. The task of the school is only to implement it. We are not so much involved in the decision-making process. We will find and hire skill trainer searching the market and friends consulting. It is necessary to purchase the materials according to the program. Due to the delayed budget from KMC, many problems have to be faced".

Another headteacher commented that *"KMC calls periodic meetings of the head teachers to know the effectiveness and difficulties faced by the schools, focal teachers, and skill training providers. Sometimes, they come to school and ask students about the program and their learning"*. Thus although there appears to be consultation over what is going well, and what is proving more problematic, school leaders have less input into how challenges might be overcome and the conceptualization of new ways of working.

Discussion of TFF was rarely initiated by headteachers within their own schools; analysis of staff meeting agendas and minutes revealed few mentions of TFF. School leaders demonstrate little agency in relation to the initiative, perhaps overwhelmed by the multiple implementation difficulties such as teacher motivation, inadequate infrastructure, limited budgets and an absence of equity in student participation – not all students are given the opportunity to participate in the specific skills programmes as this headteacher comments:

"There is a problem with the program of textbook free Friday. All the students in the class do not get the opportunity to participate in the specific skill program. We generally ask them to participate in the program to play in the ground, go to the library, and read a book or you can do anything you like for those who do not get the opportunity. They do not get any guidance from the teachers. They do what they like".

Participation of Parents and the Community

Parents are enthusiastic peripheral members of the learning team, contributing materials for the practical sessions but rarely able to visit the school in person due to other commitments: *"I am interested in going to the school. But I have a fruit shop in the market and [find it] difficult to manage time to go".* Several parents spoke of more actively supporting their children's learning since the advent of the TFF, as this parent recounts, *"I am very happy with the Textbook Free Friday Program. My daughter did not like to go to school. Now she started to take beautician training in school and then happily started going to school. She has also used the skill of threading with my sister. I am proud to see her skills develop. Due to my busy schedule in the household, it will be difficult for me to visit schools regularly. However, I will spend the evening time with my daughter talking about the activities conducted in the school".*

Community participation in the learning teams is through the SMC and PTA. When asked about the role of SMC and PTA of the school, head teachers shared that currently these groups were dormant partners in the learning team; there was no established practice of regularly discussing the Textbook Free Friday deeply in meetings with either the SMC or the PTA. However, SMC or PTA members spoken to in this research indicated they were aware of the TFF initiative and were willing to contribute as verified by some of the head teachers, for example: *"SMC and PTA are responsible for the program. They are involved as per the need. In the case of a specific agenda related to the program, they provide certain decisions. Recently they decided to purchase materials for the house wiring learning group".*

There appears to be more informal community involvement, as described by this school focal teacher, *"Six months ago our Culinary Arts group students organized a food festival in the school and invited the community. More than 300 community members came to the food festivals and encouraged our students".* This type of community engagement was a new activity for the school.

Participation of Kathmandu Metropolitan City (KMC)

KMC's role is primarily as initiator, funder and overseer of the TFF initiative. Thus it prepared guidelines for the TFF incorporating the vision of the Mayor. It allocated a budget for the TFF for the first time in the fiscal year 2023 and according to the TFF program coordinator the budget has been doubled in this fiscal year as the programme is expanded to 87 schools. Finally, in response to feedback from schools, KMC is preparing the curriculum for 15 different TFF programs for Grades 4 to 10 in association with Kathmandu University School of Education. In relation to the TFF learning team KMC's main role is to facilitate connections and dialogues between various stakeholders including the community. In this role it organized a curriculum validation workshop in July 2024 with focal teachers, external expert trainers and students alongside KU.

In conclusion, learning team working in TFF is still highly emergent; ways of working are being developed along with specific roles and tools. Currently team working within TFF is characterized by brief periods of collaborative activity between changing combinations of people to undertake specific tasks, for example setting up the skills programmes, holding the Food Festival or provision of resources by PTAs. Key moments in this learning journey are described below.

Evolution of the Learning Team

From a perspective of the learning teams within TFF two key moments have informed their development. Firstly the realisation, through feedback loops from schools, that teachers were finding it difficult to enact the skills programmes and utilise an interactive pedagogic approach. This prompted the addition of a new partner into the learning team, Kathmandu University School of Education. They are currently developing tools – curricula - to support more equitable delivery of the skills programmes and initiating a professional development programme for focal teachers, 'Teacher College' to enhance teachers' skills and capabilities.

Secondly, again in response to feedback, the development of policy relating to community engagement in the TFF initiative is a key moment in the evolution of TFF. This includes stronger links with manufacturing and skills-providing organisations who will provide more resource for specific skills programmes.

These moves towards provision of more tools (curricula, TPD and policy texts) to enhance roles within the learning team perhaps indicate the limitations of expecting sophisticated organic ground level growth of the programme when initiated from high level stakeholders without clear terms of reference for different actors and ways of working ('division of labour' in activity theory terms) to structure learning team interactions. School leaders and SMC/ PTA members' limited ownership of the initiative has constrained extensive generation of new practices in the initial stages of TFF but the advent of these tools promises to support greater collaborative working by different combinations of actors.

System, Team and Student Learning

Mutuality with a system involves interconnectedness, mutual benefits, balance, and sustainability. In the context of TFF there is the interconnectedness between and among the system elements. The key emphasis is the mutual benefits between KMC and the various community schools within the KMC. The intervention of the KMC has influenced the schools and community and the changes that occurred in the schools and community directly influenced the visibility of the KMC. Though there are multiple voices related to TFF both the KMC and the schools and community have obtained benefit.

System Learning

At this stage of implementation it is unclear how much impact the TFF initiative has had on pedagogy and relations between teachers and students in lessons outside the Friday skills programme. Focus teachers heavily involved in TFF report widening their use of pedagogic approaches and resources for learning but this may, as yet, be restricted to the Friday skills programme. In particular, as this headteacher comments, articulation with the formal curriculum appears weak, *"Textbook Free Friday is based on skill development. The program has done well in terms of skills. However, it has some limitations. Mainly, it has been difficult to link it with the formal curriculum"*. This view was endorsed by focal teachers, *"A big problem of textbook-free Fridays is the disconnection of the content with the formal curriculum of the school. Though students are happy in the program there is no proper linkage between the practical activities conducted in the Textbook Free Friday with the formal curriculum"*.

A headteacher commented further, "I have seen that there is a problem of collaboration among various stakeholders such as students, teachers, parents, school management committees, Parent-teacher associations, training provider organizations, and the Metropolitan City. I should increase my leadership capacity to work in a coordinated manner". A third of the focal teachers surveyed (N=68) shared his view that there was a challenge of coordination in TFF. Further ethnographic research is needed to make visible the tensions between different stakeholders and to identify under what conditions collaboration is working effectively.

Team Learning

Focal teachers report learning various hands-on skills through working in close collaboration with the external skills trainers. However, they still felt in need of skills training, as well as additional materials. One focal teacher remarked, *"I have not obtained any sort of training to lead as a focal person for the assigned program of textbook-free Friday. I lead the house wiring group of students. I do have not sufficient practical skills. I fully depend on the facilitator/ trainer provided by the KMC. When he is absent from school I face challenges to run the session"*.

Similarly, whilst expert trainers have learnt skills to work within the structures of schools, they too feel the need for additional training and resources. A trainer of Beautician and Hairstyle said, *"I am a trainer of Beautician and hairstyle. School is supportive and students are eager to learn. The key problem is the management of proper space in the school. We need a separate and well-managed wide room to facilitate the learners. There are 30 students in my group. I have faced difficulties in conducting practical work in a large group"*.

More positively, focal teachers report that since they have become focal teachers they have increased the number of alternative resources they use with their students; videos and simulations, library books, real-world objects, interactive whiteboards, and social media platforms. Project-based and inquiry-based learning techniques were

reported to be used by over three quarters of the focal teachers surveyed. Feedback from students during focus group discussions confirms the use of project-based learning and that they find this an effective method for their learning.

Student Learning

TFF focuses on improving the vocational and life skills of students. There is ample evidence of the positive impact on students and their enthusiasm for the programme as this student comments, *"I am involved in the group of house wiring. I have learned so much content of electricity from my science book. I had a problem understanding the concept of an electric circuit in my course. But, when I was involved in the house wiring classes I learned practically. Now I know the true meaning of an electric circuit. I support my father in his work. He is working as an electrician".* The introduction of these practical activities has also led to spillover effects such as improved student attendance. One student reflects, *"I don't like to go to school on other days but I am happy to come to school on Friday. I am in the beautician group. I have learned beautician skills. I enjoy learning by doing. I have also used the skills I have learned. I sent my sister-in-law to the wedding party with make-up. My sister-in-law was very happy".*

Participation in the programme has also helped students to develop other skills such as self-efficacy, as this student indicated: *"My parents run a fruit shop. I also help. I used to miss a lot of school until I had a bookless Friday afternoon. I didn't like going to school, but now I miss going to school. I am in the Plumbing group. I have learned a lot of theoretical and practical knowledge. When we had a problem with the school's water supply, I learned more from the group by solving it together with my friends. My self-confidence has increased and I can do something now".*

Headteachers and parents provide additional endorsement of student learning. One headteacher observed: *"Textbook free Friday's work is meaningful. Students have learned by doing. Their attendance rate has also increased".* Parents also described their children's new skills: *"My son has developed plumbing skills. There was a problem in the kitchen water supply with leaking water. He said he has the skill of solving the problem and he solved it. I became happy. My son shares the activity done in the school with us at home".*

However not all parents were convinced that their children's learning was progressing as they would like, one commented, *"In comparison to other days, my son will be happy to go to school on Friday. However, only happiness does not matter, [we also need to be confident that] he will learn something from the program".*

As learning team working evolves the need for new partners, such as Kathmandu University, becomes apparent. However, it is important that there is sufficient flexibility to introduce these new team members without disempowering existing team members.

Outcomes and Impact

Results for TFF so far are noteworthy, in spite of the low levels of resourcing and relative newness of the programme. Students are more enthusiastic about school and are learning skills that are recognised as valuable within the community. Stakeholders report additional benefits including increased student attendance and parental interest in their children's learning. Teachers report extended repertoires of teaching approaches and learning aids to include videos, simulations, and student-created materials for project-based and inquiry-based learning. The profile of some schools has been raised within their communities through inviting community members to occasional student organized events. Impacts have been limited by weaker than hoped participation of some learning team actors such as the PTA or SMC, and the challenges for some school leaders to improve TFF team working in the absence of adequate resources and tools, and limited agency in relation to higher-level TFF decision making.

Textbook free Friday: Annexes

Annex 1: Activity Theory as a Lens of the Case Study

Activity theory, originating from the works of Lev Vygotsky and Alexei Leontiev, provides a robust framework for understanding human activity in its sociocultural context (Lemos, 2017). This theoretical lens is particularly well-suited for analyzing the Book Free Friday program of Kathmandu Metropolitan City, as it offers a nuanced perspective on the interplay between individuals, artifacts, and the broader sociocultural milieu. Activity theory posits that human activity is not merely a series of individual actions but a complex, mediated system involving (a) Subjects - individuals or groups engaged in the activity, (b) Objects-the targets of the activity, (c) Instruments-tools or artifacts used to mediate the activity, (d) Conditions-the environmental factors influencing the activity, (e) Rules -the cultural norms and expectations guiding the activity and (f) Motives-the underlying goals or purposes of the activity (Engeström,1987; Sannino, 2014; Lemos, 2017). These elements interact dynamically within a sociocultural context, shaping both individual and collective behavior.

Activity theory considers how the program operates as a complex system, rather than a series of isolated events (Leont'ev, 1978; Yrjö ,2001). It emphasizes the role of artifacts (books, materials, etc.) in shaping the activity. Likewise, it highlights the influence of cultural norms, values, and historical context. It also identifies the evolving nature of the program and its participants. The theory supports to identification of the key elements such as subjects, objects, instruments, conditions, rules, and motives as described above. It also analyzes the mediated relationships like how cultural norms influence participants' engagement with skill development. It also considers the broader sociocultural context providing the answer to questions like how the program aligns with the government's educational goals and how the program contributes to broader social and economic development. It also helps to examine the dynamics of change explaining how the program has evolved. What factors have influenced its success or challenges? What are the potential future directions for the program? By applying activity theory to the Book Free Friday program, researchers can gain a deeper understanding of its impact, identify areas for improvement, and inform future initiatives aimed at promoting literacy and education in Kathmandu.

Kathmandu Metropolitan City's Textbook Free Friday initiative, while seemingly counterintuitive, aligns closely with the goals of SDG 4: Quality Education. TFF encourages a mindset of lifelong learning, recognizing that education is not confined to formal settings or textbooks. Through the help of skills-learning students obtain inclusive and equitable quality education and promote lifelong learning opportunities. Additionally, TFF can foster a sense of community and encourage participation in local events and activities (Boeren, 2019).

Annex 2: Methodology

Researching the effectiveness of the implementation of the Textbook free Friday program covering the perception and practice of multiple stakeholders is a complex task. Hence, as per the nature of the purpose and research questions of the case study a mixed method research design was adopted. Due to the time constraints and the nature of the problem, parallel or concurrent mixed method research was used to answer the research questions i.e., both the quantitative and qualitative data were collected simultaneously. Surveys (quantitative) were used to gain insights into the general experience and opinion of the Program Focal Persons at school level and interviews, focus group discussions and observations (qualitative) were employed to understand the reasons behind opinions and to explore experiences in-depth. For the quantitative data a cross-sectional survey was carried out with the 68 school focal teachers of 41 schools (there was more than one focal teacher in each school). For the supplementary qualitative data, key Informant Interviews (KII) were held with various stakeholders, i.e., 5 focal teachers, 3 head teachers, and 3 parents, of the purposively selected three schools of Kathmandu Metropolitan City (KMC). In addition, three student focus group discussions were also conducted in each school. Complementing this school-based field work, an interview was undertaken with one representative of the TFF of KMC to understand KMC aims, motivations and ways of working in TFF. Additionally, meeting minutes and other related documents of the program were also visited to know the institutional management of the program. Ethical approvals were sought from Kathmandu University ethics board. Limitations included the time-frame of the research which limited the potential for extended ethnographic observations in the schools, which would have provided richer insights into the day-to-day dynamics of the programme in different classes and contexts.

CASE STUDY
04

Photo credit: UNICEF Nepal

Nepal

Rupantaran

Executive Summary

This case study features the Rupantaran project at Janahit Secondary School in Dapcha Rural Municipality, Nepal. Janahit School is an action school of Kathmandu University, which led the project between 2016-2023. Rupantaran, meaning transformation, introduced transformative and contextualized collaborative pedagogical approaches through a core activity of a community farming initiative that was co-managed by the local school: the farm work was shared by teachers, students and community members. It aimed to develop the capacity of school staff and local stakeholders to improve the quality of teaching and learning by making lessons more practical and connecting them to issues with clear relevance to the students' lives - in this case, farming. Collaboration was central to the project design, but also central to the project's parallel participatory action research (PAR) study which engaged school managers, teachers, students, parents, the wider community and government policy stakeholders in the iterative development of innovative strategies to improve and develop the farm and its associated learning potential.

The Rupantaran Initiative formed a learning team in the design of a wider project (also called Rupantaran) funded by the Norwegian Government and implemented by Kathmandu and Tribhuvan Universities.[1] However, the team evolved through cycles of the PAR. The final team involved teachers, students, parents, community members, Dapcha Rural Municipality (DRM), the school management committee, the researchers from Kathmandu University and the Mothers' Group. DRM provided resources and support, even after the project funding ended, and continues to provide financial inputs for the farming activities. While the intensity of activities is lower than during the funded phase, many interdisciplinary curricular processes at the school still centre on the farm, and both teachers and students had stories to share in the development of this case study.

The formation of the learning team was simultaneously pre-planned and emergent. The project plan initially included Kathmandu University (KU) researchers, headteachers and teachers. Since PAR was the chosen method, and farming and ecosan[2] were predetermined components, it became necessary to involve parents, community members, and the School Management Committee (SMC) for support. To bring these stakeholders together and provide financial backing, DRM was also approached.

The exploration into the process and the outcomes of the initiative brought some insights around the positive impacts of the learning team approach. Farming provided students with practical experience, teaching them essential skills such as crop plantation and harvesting. Teachers incorporated elements of the farm into their lessons, bridging the gap between theory-heavy classroom learning and real-world practical skill development. Both teachers and pupils reported higher levels of interest in school, more regular attendance, and improved student retention. The head teacher reported pedagogical shifts among staff, including more creative methods and higher levels of motivation for their work. The initiative increased community engagement, especially among parents who became interested in the activities and also bought the produce. In addition to agricultural skills, students developed entrepreneurial skills, with some starting domestic mushroom cultivation projects, and selling their produce locally and supplementing household incomes.

When the funded component of the project ended, the farm faced challenges with maintaining a constant supply of seeds, fertilizers, and tools. Reduced funding and more limited availability of students aggravated the challenges. The project relied on consistent support from local and student labor which petered out when the project was completed. This raised questions around sustainability, however, stakeholders felt that the commitment to collaborative working, the knowledge and skills acquired by students, teachers, and community members and the ability to generate income through farming had a valuable longer-term impact.

Key Insights from the Case Study

It is important to consider different team members' motivations for engaging in a learning team, and these do not necessarily need to be financial. For example, in Rupantaran teachers felt a sense of pride working with academics from the University, and local farmers saw the project as a way to learn new skills.

When these motivations are disrupted, it can have serious impacts on members' commitment to and engagement with the team.

When the object of the team addresses multiple SDs, opportunities for diverse expertise and membership are encouraged and advantages of the learning team can be clearly articulated to communities to enable wider support. The emphasis of Rupantaran on nutrition and sustainable farming, as well as learning, was key to broad community engagement: the combination of farming and learning as objects of the learning team connected everyone in the community.

Investing time and energy into sustained community engagement is essential. Their concerns may be different to what is anticipated, and their concerns may evolve as the learning team develops.

Tools such as shared documents, workshops and reporting mechanisms can facilitate accountability and sustain motivation.

Positive reinforcement from external stakeholders can sustain motivation for working as a team. The newspaper article, visits from the Municipal Office, and the knowledge that other local schools were developing similar learning teams had a lasting impression on community members.

A supported parallel PAR process intensified engagement with the learning team, giving members a focused and supported means of reflecting on the team's success and challenges, and collectively fostering and trialing innovative practices.

If a learning team is resource-intensive, the removal of funding for these resources can have serious consequences for sustainability, however successful the team-functioning is, and regardless of the widely perceived benefits of the learning team.

While evolution of learning teams can be productive, disruptions to the leadership and membership of the team need to be carefully managed to hold the team together beyond the disruption.

The Ambition

The Rupantaran project was set up to 'transform' education in a rural area. It aimed to catalyse improvements in the quality of teaching and learning at the basic education level through contextualised collaborative pedagogical approaches that shifted learning away from a heavy emphasis on theory and towards more practical experiences. It also aimed to strengthen the capacity of a range of stakeholders at the local level establishing dynamic networks for introducing and sustaining transformative and contextualised educational programs, and enhancing social equality. By centering a school in the initiation of a community farming programme, Rupantaran engaged with SDG 2 (the improved nutrition elements), and the ecosan element also incorporated SDG 12 (Responsible Consumption and Production), in addition to its primary focus on improving the quality of teaching and learning for economically poorer students (SDG 4).

Situating the Learning Team

Community public schools in Nepal have a reputation for delivering a lower quality education. This is especially the case in the rural areas rather than in towns and cities. Financially well-off parents tend to send their children to private English schools in their areas and some families even migrate to the cities for what is perceived to be

higher quality schooling. It is not uncommon to see a public school teacher dropping their child at a private school for the day and continuing to the public school where they teach. Though educating a child at a public school has future benefits such as government scholarships, these schools have low enrolment, particularly in rural areas.

Dapcha Rural Municipality and the Janahit Secondary School are not exceptions. Prior to the launch of the Rupantaran learning team, learning achievement of the students as shown by School Leaving Certificate (SLC) examination data was below average. Teachers were perceived to have limited motivation for professional development. Classroom teaching was heavily theoretical with traditional assessment schemes. Extracurricular activities like annual sports week, quizzes, spelling contests, debate competitions, and others were organised as routine, but with little enthusiasm and engagement was low. Students did not show interest in school, and parents had the impression that their children need not go to school. The school was losing students and its reputation. The stakeholders did not have a growth attitude and blame culture was common.

Against this above backdrop, the school was waiting for some kind of intervention. The Rupantaran Project was well-timed with social worker Mr. Mohan Shrestha's strong zeal to bring changes to the schools in his area. The Vice Chancellor of Kathmandu University, a medical doctor, was familiar with Mr. Shrestha and Dapcha due to the Kathmandu University's outreach hospital running there. The two communicated, and there was a verbal agreement that the Project would adopt Janahit Secondary School as its action school. The project team and Mr. Shrestha visited the place and this coming together was the start of a new story for the school and community.

The decision to select Janahit School was also guided by practical concerns for the Project such as proximity for the researchers. A Rupantaran researcher said: *"We needed a school that we would be able to visit in a one-day trip. We also tried to find a community familiar with and open to KU. Our previous VC's connection was also important. And our connection to the Steering Committee's chairperson was instrumental in us choosing that particular community and that particular school".*

Formation of the Learning Team

The initiative was driven by a collaborative effort of the project team and the local stakeholders and involved teachers, parents, the School Management Committee (SMC), and DRM, the local government. These stakeholders were actively involved in the decision-making process. The creation of a Participatory Action Research (PAR) team helped bring all sides together to co-design activities with input from all parties, including Norwegian partners and community members.

However, the formation of the PAR team was not easy. The PI of the project recalled that at one point, they thought of moving out of the site to adopt another school. Another researcher expressed their concerns about the chances of pulling together a successful learning team at the start: *"There was a lot of divisiveness among the school staff. There were quite a few ex-principals among the staff, all of them were locals so there were small groupings, and power struggles all the time. The school didn't have much in the name of resources, financial or otherwise, and there wasn't much practice regarding planned teaching".*

At the start, some teachers were resistant to the project. They were suspicious that the researchers were only interested in using them for research purposes and it was unclear to them how they and the students would benefit. They were also skeptical about the aims and potential success of the project and concerned about the additional work burden. Additionally, the headteacher who welcomed the project was replaced by another headteacher who had not engaged with the project's conception and the spirit of collective motivation that had inspired it.

However, over time the team became more connected and committed. The new head teacher engaged more directly in the project activities in the second and third years and this helped to increase teacher engagement and confidence in the project. The project also brought significant resources to the school to set up the infrastructure of the project, and existing power struggles seemed to settle under the participatory leadership of and mutual respect for KU. Finally, the inclusive management of the learning team and engagement with the PAR helped local stakeholders to feel confident that the project could be tailored to the school's needs. The emphasis of the

transformative learning central to Rupantaran was for students to learn in situations that simulate real life: the value of the gardening initiative for project-based learning and for community development was mutually recognized across the learning team.

Working of the Learning Team

As outlined in the section above, the project researchers, the teachers, parents, community members, and school leaders were the key members of the learning team. This section outlines different ways of working and learning across the team.

Rupantaran aims to create contexts that enable students to learn in situations that simulate life. It was decided that, in this context, farming would be the best way to facilitate such learning. Land was taken on lease from a local woman and then leveled using heavy machinery to ensure it could be farmed productively and efficiently. This marked the beginning of a large-scale agricultural effort within the school grounds.

In addition the team focused on preparing the land for high-value crops like kiwi. This involved soil testing, fertilization, and the establishment of irrigation systems. These infrastructural developments were a major leap forward for the school, transforming barren land into fertile ground. The initial efforts were not just about building a farm; they were also a means to engage the school and the local community, teaching them about the potential of agriculture. Local parents and teachers with agricultural experience were drawn into the project during this phase, contributing their expertise. *"We needed a farm that would teach practical skills while also generating income for the school",* said a local participant.

A key objective of the project was to foster greater involvement from parents and the local community in the school's educational and agricultural activities. Initially, there was some resistance from parents. Many parents saw the farm as an unnecessary distraction from their children's studies. However, through sustained engagement and communication, the project team was able to shift these attitudes. The project team recognized early on that parental engagement was critical for the farm's long-term success. They began by conducting home visits to meet with parents and explain the goals of the project. These personal interactions helped build trust and understanding, which in turn led to greater involvement from parents. *"Parents used to avoid parent-teacher meetings. So, we did home visits to all of the students' homes", recalled one teacher. As a result, parent-teacher meetings, once sparsely attended, saw a dramatic increase in participation, with some meetings being "full to the brim with parents".*

Tunnel farming and mushroom cultivation were decided upon by the learning team as the initial farming activity because they were seen to have educational value, as well as offering a reliable way to grow crops year-round, irrespective of the weather conditions. The introduction of tunnel farming enabled the school to continue agricultural production during the harsh winters and the monsoon season when outdoor farming would have been challenging. By allowing for off-season cultivation, the school could maintain a steady production cycle, which provided a sustainable income for both the school and local community members. The success of this in the first year was key to convincing parents of the project's value.

As parents began to see the tangible benefits of the farm - both in terms of income generation and the educational development of their children - they became more involved in its activities. Some parents contributed labor and materials, while others helped with the logistics of running the farm. The project's emphasis on collaboration extended beyond the school walls, with community members stepping in to assist during key moments. For example, the project had built urine diversion toilets to produce fertilizer, the supply of which ran low during the COVID-19 lockdown. As one of the researchers said: *"Since there weren't any students using the toilets our fertilizer tank ran dry. But nearby parents and other community members got together, collected urine from their homes and added it to the fertilizer tank".*

Membership of the learning team was not limited to the parents of students but included local farmers, women's groups, and other stakeholders. The project became a community effort, with everyone working towards the common goal of improving the school and creating a sustainable agricultural model.

The entire setup was designed with sustainability in mind. The school farm was created to support agricultural ventures, as well as introducing sustainable practices like organic farming and the use of locally sourced materials. A core part of the farm project's success lies in its emphasis on involving students in hands-on, practical learning. From the start, the farm was not merely an agricultural endeavor but an educational tool. Students were encouraged to take part in various stages of the farming process—from planting seeds, tending to crop, to harvesting the produce. The aim was to give students an understanding of how agriculture works and how it can be applied in real-life situations. Regarding this a former student said, *"We did a lot of work in the farm with the teachers. Teachers used to provide assignment based on the field work. We learned practical and life skill through the project"*.

The teachers played an active role in guiding students during these activities. A local curriculum development workshop was conducted to support the teachers to develop a Janahit curriculum to be used every Friday, which included topics such as ecosan, garden, mushroom farming, beekeeping, planting, irrigation, composting and fish farming. By engaging students in farming, the school was able to instill in them a sense of responsibility and ownership over their work. One teacher mentioned, *"Students used to help with planting, watering, and weeding... I used to demonstrate planting, digging, watering, and they used to copy me"*.

In summary, the project successfully created a learning team centering parental and community involvement in the school's educational and agricultural activities through sustained engagement and communication. This led to tangible benefits, such as improved parent-teacher meeting attendance and community support during challenging times, making the project a collaborative community effort.

Evolution of the Learning Team

As the project neared its conclusion, the management of the farm was gradually handed over to a local women's group. This transition was an important step in ensuring the long-term sustainability of the farm. The women's group, consisting mostly of parents and community members, took over the day-to-day operations of the farm, including the cultivation of crops, management of livestock, and sale of produce. The agreement between the school and the women's group was designed to be mutually beneficial. Under the terms of the agreement, the women's group would manage the farm's operations and share 50% of the profits with the school. This revenue-sharing model ensured that the school continued to benefit from the farm's income, while also empowering local women by providing them with a source of livelihood. *"They share 50% of the farm yield with the school,"* explained one of the project leaders.

The women's group also took on the responsibility of maintaining the farm's infrastructure, such as the kiwi vines and the mushroom tunnels. The project team emphasized the importance of preserving the farm's assets, ensuring that the school could continue to benefit from the farm's operations even after the project formally ended. *"The deal was that they should preserve the school's plants and the space"*, said a teacher involved in the project. This handover represented a significant step in the project's sustainability plan. It also demonstrated the power of community-driven development and the mutual commitment to gender equality, with local women taking on a leadership role in managing a key community resource.

System, Team and Student Learning

It was widely felt that Rupantaran's aim to develop the students' critical thinking and problem-solving skills by allowing them to engage directly with the challenges of farming was realized. The students were taught the importance of sustainable agriculture, the benefits of organic farming, and the role that agriculture plays in food security and the local economy. This experiential learning model had a deep impact on students, fostering a stronger connection between their studies and real-world applications. *"Learning by doing was much better,"* a current student reflected.

Highlighting the changes that took place in the students, an assistant at the school said, *"Before, they [students] didn't have any interest in farm, urine collection and field activities. Now, they plant some things from time to time,*

and collect fodder too. They also tried to farm mushrooms in their own home as well. They learned to love plants." The Accounts teacher also highlighted how his students learned accounting and numeracy concepts through the farm-based activities.

Despite their initial concerns, teachers gradually opened up and even kept in touch with the project after it ended, signalling a shift in attitude and enhanced commitment to working in a team of professionals extending beyond the school. Stressing the teachers' pedagogical changes, one of the researchers explained, *"The teachers have changed in micro, meso and macro ways. I saw their motivation in wanting to improve their work and their technical skills. They demonstrated and used many best practices in their own classrooms. The teachers also showed their transformation in their presentations".* The teachers also felt that engagement with the farm had enriched their own learning about agriculture and sustainability: *"In this farm run, there are various mini-projects, such as a fishery, pig-farm, kiwi, mushroom, tunnel farming. We have been converting urine and ash as fertilizer for the plants and didn't use any pesticides. This gave us good yields and the taste was also better. I also became involved in kiwi farming as well. We learnt from the technical trainer provided by KU and learnt all about kiwi cutting and fertilizers and all that".*

While the school sought local farmers' advice and engagement, members of the community felt that their own farming knowledge and skills had developed through engagement with different experts in the project. One SMC member said: *"I would like to thank the KU team for providing us with this opportunity. We only had traditional teachings from our elders, not this kind of occupational and profitable type of farming".* Referencing the sustainable practice of using ash from cooking fires as a soil amendment, to reduce reliance on chemical fertilizers, a Grade 7 student said, *"I requested my father to prepare the same kind of set-up in our home. He is positive, hopefully, we will begin it soon in our home as well".* One of the researchers also reported an increased awareness of and care about environmental issues among children in the community: *"One small project I did was related to saving the habitat spaces of birds. Now you know that village kids used to use slingshots to kill birds all the time. But the students later on shared in their reflection that they've started putting out water bowls and seeds on their home's rooftops for the birds".*

Finally, the PhD students who had been engaging with the PAR as part of their data generation were enthusiastic about the opportunities to have learned not just from existing data, but from the real-world experiences of helping a school improve.

Mutual learning with a system involves interconnectedness, noticed benefits, tensions, contradictions, balance, and sustainability. In the case of the Rupantaran Project, key system learning is visible in the life skills of the students, pedagogical shifts of the teachers (including being more open to new initiatives and collaboration) and shifts in the relationship between the school and the community. Teachers noted how the community members now see that the school is open to learning from them – shifting norms in relation to perceived expertise: *"This farm has enabled the local representatives to take different steps to support the local population, distributing plastic, chickens. I believe it is because of the farm and the learnings of the students".* This was a novel initiative for the context, attracting government and media attention. Teachers also shared how *"the message reached the municipal offices, even the Agriculture Officer came here and observed once, and we featured in an online news called portal EduKhabar".* A member of the SMC said that other local schools had started to copy the initiative.

Outcomes and Impact

While some stakeholders discussed negative effects, including concerns about academic impact, teacher dissatisfaction, and short-term focus, the case study research suggests that most people felt that the Rupantaran project in Janahit School led to positive effects such as increased student engagement, enhanced creativity, and improved community connections. Many students became more interested in their studies, knowing that their work on the farm directly influenced the success of their school and community. The head teacher verified this with data from the school and project: *"Based on our initial needs assessment report, we have seen some remarkable changes. First, in student enrollment, we saw a huge positive difference. Even in our second year, student enrollment had jumped by 60-70. Another was KU's name, people heard that KU was working on that school, so they wanted to send their child there. The drop-out rate also decreased a lot because of our regular communication with the parents".*

Additional stakeholders suggested that spin-off effects included increased interest in experiential learning, development of a new curriculum, and community-based education initiatives and early signs of improvements in students' exam scores. To comprehensively claim these impacts, more specific and comprehensive data generation and analysis would be necessary, but the stakeholders indicated positive improvements in these areas.

All stakeholders reflected that the project is less active now than during the funded period, but researchers from the PAR also referenced the sustained human resource: *"Regards to visible things like those fishes and gardens, yes, those things are fickle, here today, gone tomorrow. But the human capital development aspect of this project, this is one area that won't fizzle out like the others. Now, they're working on contacting alumni of that school who are currently holding big positions, for example Ministry of Finance secretary, another KU's PhD scholar is also from the same village. I also happen to know that they have nearly NPR 2.5 million worth of funds just sitting there waiting to be used."*

Another PAR researcher discussed the sustained legacy of parental involvement in school activities: *"One MPhil student's thesis was on parental engagement and because of the project one drop-out student actually returned to the school. Our initial study also showed that parental engagement was very low, but now many parents engage in school activities these days".*

One of the former students during the focus group discussion shared, *"We have made a team of our colleagues and started to farm Mushroom. Local people buy the Mushroom. We have earned money from the farming".* Regarding this, the member of the school management committee happily shared that he had bought mushrooms from the student team. A teacher also reflected on the success of the mushroom farming extending into the homes of community members. The mushroom farming project not only contributed to the school's income but also provided the community with a valuable skill, leading to a ripple effect of agricultural entrepreneurship among local families. However, in the focus group discussion for this case study, it was not clear if these activities had continued.

Challenges with Sustainability and Resource Management

Despite its many successes, the farm project was not without challenges, particularly in terms of resource management and long-term sustainability. One of the most significant hurdles was maintaining a steady supply of necessary inputs, such as seeds, fertilizers, and tools after the funded period. The farm required regular investments in these areas to remain productive, but the school often struggled with limited funding. Some teachers lost interest after the project ended, while others tried to find creative solutions to keep the farm running, such as sourcing seeds from local farmers or relying on community donations. However, as the headteacher hinted, it was not easy to force the teachers to carry out this additional extra work of finding funds, as well as keeping the farm going, without any financial incentive. During the funded period the teachers felt proud to be part of a team that was collaborating with a university and hoped to learn from the KU colleagues. When the KU members left the learning team, participation lost its appeal, and some teachers began to resent the expectation that they would do it for free. New teachers, who had joined the school after the funded period had ended had limited awareness of the farm.

The involvement of students, while essential to the farm's operations, was also limited by their academic commitments. Students could only dedicate a certain amount of time to farm activities without it interfering with their studies. This presented a challenge in terms of maintaining the farm's productivity throughout the year, as one teacher noted, *"The farm regularly needs seeds, instruments. Students can only do so much",* but it also indicated weaker than hoped-for links between academic and practical learning which the learning team was meant to stimulate.

The lack of funds seemed to initiate a downward spiral of decline for the farm: fewer resources and the disruption to the membership of the learning team meant fewer people engaged. This meant that the land deteriorated and became harder to farm, putting more people off from engaging because the outputs were less certain. One community member who had been hired to work on the farm felt that the project started with a good intent and was a space for learning but things changed. He explained: *"When I used to work here, we used to have different kinds of vegetables. But now, it looks neglected. There are a lot of weeds. I have to remind the people time and again*

to remove the weeds and spruce up the space". In the focus groups, community members expressed sadness at the decline of the farm: *"These days the plants don't look so good. A lot of the spaces need clearing, weeding and sprucing but it doesn't happen".* He saw the farm losing what it had, and also that he had lost his engagement with it. He felt an emotional attachment to the farm because his sons showed that they had learnt through the garden, but wasn't sure how to reconnect with the new learning team structure.

Another challenge was ensuring commitment to collaboration and collective motivation once the research team (core members of the learning team, and drivers of the PAR element) had left. While the project had created visible changes in the community - such as increased parent involvement in school activities and improved student retention - there were concerns about whether these changes would be sustained after the project ended. This disruption to the membership and leadership of the learning team also seemed to lead to confusion as to people's roles: *"It used to be a team effort, but now that we have divided the responsibility, others stopped looking after the farm".* One teacher substantiated that the farm is less visited by the students since the funding ended: *"I teach during the morning and no I haven't seen students cutting fodder because we already have placed Mothers' Group on the farm to take care of the farm".* The messaging around the key object of the learning team, and the mutual benefits for different members of it, also seemed to have been lost, leading to suspicion around the motivations of some team members. One student said: *"We know that this was meant to be a break from theory and books, but we also heard that the school takes good vegetables and just uses the students to weed the farm".* In another focus group, one of the teachers reported that some parents had complained about misusing the student's time.

The handover to the Mother's Group intended to support sustainability, but the researchers expressed concern about whether the process of handover had been sufficient, and whether the change in leadership led to the stagnation of innovation in the learning tea*m: "Leadership matters in these things, and it's also such that sometimes the community puts such a person in charge that there won't be any new developments worth working on because the new person is busy just acclimatizing to the community".* Another researcher felt that despite the obvious successes of the initiative and the expanded learning that was evident across the student, teacher and community cohorts, the management of the project and perhaps the limited support for teachers prevented meaningful longer-term changes, especially in relation to bridging the gap between theoretical and practical learning: *"Yes, there were many minor instances of changes and improvements. But what happened was those changes weren't institutionalized. I saw that school leadership mattered a lot in sustaining these sorts of changes. Even the local government appointed the teachers from our school as trainers in their local-level teacher training events. But translating professional and skill development to everyday teaching is a different matter altogether".*

A member of the SMC offered a more sympathetic perspective: *"Before, everybody, parents, teachers, school used to get together to work on the farm. This year [the difference] it might be because of the heavy monsoons and landslides everywhere. Also, the responsible team, they might not have had enough time to give to the farm due to different circumstances".* However, another SMC member suggested that the challenges were linked to the fact that when the KU team, teachers and students were centrally involved in the leadership of the initiative, teaching and learning were at the heart of everything it did. While it was not implied that the Mothers' Group were deliberately excluding a focus on teaching and learning, it was simply not in their core remit as an organisation: *"they work under a contract, and it is money first, human capital second".*

Despite all of this, many stakeholders remained hopeful that the human capital development achieved through the project would have lasting impacts, even if the physical infrastructure faced challenges. The skills and knowledge gained by students, teachers, and community members during the project were expected to have long-term benefits. As the teacher who talked about fickle infrastructure continued: *"But the human capital development aspect of this project, this is one area that won't fizzle out like the others".*

Rupantaran Annexes

Annex 1: Activity Theory as a Lens of the Case Study

Activity theory offers several advantages for studying the Rupantaran Project at Janahit School program. It considers the program as a complex system, rather than a series of isolated events (Leont'ev, 1978; Yrjö ,2001). It emphasizes the role of artefacts (books, materials, etc.) in shaping the activity. Likewise, it highlights the influence of cultural norms, values, and historical context. It also identifies the evolving nature of the program and its participants. The theory supports to identification of the key elements such as subjects, objects, instruments, conditions, rules, and motives as described above. It also analyzes the mediated relationships like how cultural norms influence participants' engagement with skill development. It also considers the broader sociocultural context providing the answer to questions like how the program aligns with the government's educational goals and how the program contributes to broader social and economic development. It also helps to examine the dynamics of change explaining how the program has evolved. What factors have influenced its success or challenges? What are the potential future directions for the program? By applying activity theory to the Book Free Friday program, researchers can gain a deeper understanding of its impact, identify areas for improvement, and inform future initiatives aimed at promoting life-linked learning and collaboration between school and community. Rupantaran Project, if implemented sustainably, can foster a sense of community and encourage participation in local events and activities (Boeren, 2019).

Annex 2: Methodology

Researching the effectiveness of the implementation of the Rupantaran Project covering the perception and practice of multiple stakeholders is a demanding task. Hence, as per the nature of the purpose and research questions of the case study, interviews/FGD/observations to understand the reasons behind experience and opinion were conducted. Key Informant Interviews (KII) with 1 Headteacher, 1 Farm help and parent, 3 researchers, and 4 FGDs with students (2), teachers (1) and SMC members (1) were conducted. To know the details about the program, the project report prepared by the KU was also consulted. Ethical approval was sought from Kathmandu University Ethics Board. Limitations of researching the Rupantaran case study include the fact that the project is currently in a very different stage, compared to its early days which were considered to be more successful by many stakeholders. Perspectives on current management and functioning of the learning team are likely framed through this comparison. It was also not possible to interview or include several of the members of the original learning team (such as the head teacher who was central to its initiation).

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[1] Innovations in teaching and learning through contextualized approaches to increase the quality, relevance and sustainability of education in Nepal
[2] Ecological Sanitation: a process that extracts and recycles nutrients from waste materials.

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