Assessing the Impact of Trailblazer Labs
A New Model for Education in Rural Meghalaya

Authors
Ben Bradbury, Divine Dkhar, Nagakarthik MP, Abhijit Sinha

Special Thanks To
Tulnam Laloo, Paul Murphy, Hridya Syamala Jairam, Dr Deepu Rathi, Ramkumar Sathurappan, Ganesh Iyer
I. Executive Summary

In 2021, the Smart Village Movement in collaboration with UC Berkeley leveraged its triple helix model of innovation (Appendix) to pilot alternative education models in Rural Meghalaya with the Government of Meghalaya, Salesforce, Sauramandala Foundation and Project Defy. The goal of this pilot was to improve the resilience and economic potential of rural communities. The first Trailblazer Community Lab was opened in Sohram, June 2021, followed by Nongwah in August 2022. More information on the beginnings of this program is documented in the Appendix. Since the pilot, the Government has expanded this program to 20 more villages; rebranded the spaces to Chief Minister Youth Centers; and is initiating the next phase of opening 30 more centers. For an overview of the journey up until now watch the video documentary here: https://youtu.be/bzqvLAVbZ8

This paper was commissioned in January 2023 to understand the first two centers’ impact on their communities and provide recommendations to improve opportunities and support the scaling of this program. From this study we have identified several key strengths and opportunities:

Strengths:
1. The Nook is valued by the community and awareness is growing through word-of-mouth.
2. Positive feedback from learners, with 55% learning a new skill and 39% referring the program to more than 5 people.
3. The program is effective at increasing soft and technical skills. Nearly half of the learners completing the program have since applied their newly acquired skills with several creating businesses.

Opportunities:
1. Increase awareness by collaborating with key community stakeholders and test a referral program to invite past learners.
2. Refine branding and messaging to reach the target learner demographic.
3. Seek to drive community ownership of the Centers, which we see as critical to sustainably scaling the program across all rural communities in Meghalaya.
4. Determine the most significant barriers for learners to participate in the Nook, and identify countermeasures.
5. Define the viability of individual centers by aligning on cost per learner benchmarks with the Government.

We have also identified key quality metrics to monitor performance amongst the 50+ learning centers and have recommended a data collection plan to track these metrics. Ultimately, we are encouraged by the initial results in this study and excited by the potential that these centers have to revitalize rural areas. They play an important role in helping close the educational and economic divide between urban centers.
II. Background:

Context

Rural Meghalaya suffers from what is known as the “urban-rural divide” of economic opportunity in India. The lower quality of education is a contributing factor and a consequence of this divide. In 2020, the Government ordered lockdowns to curtail the COVID pandemic that left many students in rural communities at home without the educational tools (i.e. computers, tablets, and connections to the internet) that many students in the wealthier cities could use. These lockdowns also revealed that students in richer areas had families and communities more invested in their education than those in the poorer rural areas.

Rural students face various challenges in accessing quality education, including financial costs such as expensive public transport and topography that makes commuting difficult. Additionally, some families rely on subsistence farming and low wages - for example, the average monthly income of a family in Sohrrarim is ₹4,731 (~$60USD). This financial barrier may force interested learners to prioritize daily wage activities over investing in education or professional growth.

The Importance of Self-Directed Learning for a new model of education

In traditional education Development models, the Government and/or NGOs build a new school in a village and supply it with the requisite curriculum, instructors, and materials. This requires a large upfront investment, with the hope that “if we build it they will come”. Given both the variety of career interests and low population density within these rural communities, adequate interest in such centers may not be immediate and may not be fully realized. Additionally, there might not be employment opportunities for these students in their village. This “brain drain” exacerbates the “urban-rural divide” that these initiatives were intended to address.

Self-directed Learning (SDL) complements centralized mainstream learning models with early-stage decentralized self-discovery and skill development. The process of SDL begins with identifying the needs specific to the community and provides several key benefits:

A. **Learning for All.** With SDL, everyone can learn a different skill at different levels, leveraging the resources that are locally available and facilitators who can help learners identify skills, find resources, and plan their learning. This flexible approach, in contrast to the segmented approach of mainstream education, allows SDL to fill a wide range of *early-stage* learning needs and interests with less upfront investment.

B. **Ownership of Interest** - People in a rural village do not often have the luxury to think about what they want to learn. Learning is driven by necessity and societal expectations. And students are often forced to commit to a career path before discovering if they truly enjoy it. SDL puts the onus on the learner to discover, own, and nurture their interests.

C. **Find Success (or clarity) Early On** - With its Design-centric approach, SDL guides students to commit to short (90 day) goals. Success is thus found in completing a project
much sooner (as opposed to semester, or year-long, projects). And this gives learners evidence to support if they enjoy this skill and want to continue to get better at it.

D. **Conscious Career Selection** - This is where SDL greatly complements mainstream education. SDL centers do not provide highly specialized certifications or degrees. Rather, students that have experienced SDL will enroll in Colleges and trade schools because they are making a conscious career choice. This contrasts with many students who selected an education solely for the job.

E. **Entrepreneurship and Local Economic Development** - SDL seeks to stimulate entrepreneurship that grows the economic pie for the entire village. Learners learn skills that not only help them become more employable, but also to become business owners - creating new economic value for their village..

The Specifics of SDL, as applied in this pilot, are detailed in the Appendix. However at a high levels, there are nine elements the SDL deployed

1. **Outreach and sensitisation** - the SDL team engages the community by listening to what their needs are and inviting them to the program.
2. **Early Projects** - lasting 2-4 weeks, these projects introduce interested community members to the program and provide the community tangible examples of the benefits.
3. **Exploration** - Each cohort of learners begins the program by exploring a variety of topics, including the one that they may initially be interested in. This phase helps each learner identify a specific skill to become better at.
4. **Goal Setting** - In this element, each learner sets a three month goal to develop their skill. These goals are focused on a specific idea, such as writing a short story, baking a cake, or building a chair.
5. **Design Week** - once the Goal is set, the learners spend a week creating different prototypes for their ideas and planning their project.
6. **Building Cycle** - lasting the rest of the learning cycle, this phase consists of the learners working to accomplish their goal.
7. **Exhibition** - At the end of each cycle, the learners showcase their work to the village community.
8. **Community and world View** - Through the cycle, SDL leaders facilitate activities and discussions focused on creating a sense of community amongst the learners and expanding their world view.
9. **Social Well-being** - Learning a specific skill is secondary to increasing the emotional and mental-wellbeing of each learner. To this end, SDL leaders take special care to support each learner. Emotional learning, the breakdown of gender stereotypes and improved relationships with family are a few of the many other benefits of SDL that we do not have time to expand on this paper.

For more information on philosophy and principles of Self-directed Learning, we invite the reader to explore the alliance for Self-Directed Education at [https://www.self-directed.org/](https://www.self-directed.org/).
Pilot
In 2021, the Government of Meghalaya partnered with UC Berkeley to execute the smart village project. To facilitate the ‘open innovation’ model propelling collaborations, a network of companies from the Berkeley Innovation Forum explored propositions to participate in with Berkeley and Smart Village Movement in Meghalaya. Salesforce, being one of the members, provisioned a fund to support the initiative and enlisted the NGO United Way to streamline the financial resources with ground support of Sauramandala Foundation. The goal of this pilot was to improve the resilience and economic potential of underserved rural communities, by creating spaces for learning and self-improvement. The first Trailblazer Lab was operational in June 2021, in Sohramir, and the second was opened in Nongwah in August 2022.¹ The vision of this public-private Pilot is to prove a concept that would then be scaled and wholly supported by the Government of Meghalaya. In the Fall of 2023, the Government of Meghalaya began scaling and rebranding this concept with the creation of 20 Chief Minister Youth Centers (CMYC).

<table>
<thead>
<tr>
<th>2021 - 2022 Pilot</th>
<th>2023 - 2024 Scale: 20 CMYC</th>
<th>2024 - 2025 Expand 50</th>
<th>2025+ Systematize</th>
</tr>
</thead>
</table>

Pilot Objectives:
- Bridge rural-urban educational and digital divide through sustainable tech-driven interventions
- Introduce practical and exciting learning
- Standardize upskilling process for rural children, youths, and teachers
- Prevent potential negative activities

Key Project Activities for Pilot
- Formulate MOUs; identify Locations & centre selection
- Assess potential partners & define requirements for community impact
- Community studies to identify interests and mobilize support
- Establish field-level operations
- Lab refurbishment, design, infrastructure setup

The Approach of the Nook
The Nook, is the central SDL element in the Trailblazers Lab that was piloted (and subsequently the CMYC being rolled out). It embodies the belief that a quality learning environment fostering personal and communal growth addresses various challenges. Moreover, it claims conventional education in Meghalaya and beyond fails to empower individuals, hindering problem-solving and fulfillment. Access to schools alone cannot resolve the education problem. Instead, an accessible, empowering education is essential. An environment promoting psychological safety, critical thinking, collaboration, and friendship shapes a child’s beliefs, aspirations, and ability to create and thrive. By embracing self-directed learning, the Nook places emphasis on skills like identifying learning needs, engaging in activities, collaborating, and evaluating progress.

Beyond the Nook, each center hosts a Library and Community Sports programs. Started in 2023 in the first scale phase, sports are used as an outreach tactic across the 20 centers. A community

¹ See the Appendix for more information on the stakeholders; the pilot locations; and the program structure and history.
person is hired to mobilize the community for Football, Chess, and Ultimate Frisbee. Creating leagues from these centers is a long-term goal. The library is co-located in the Nook and targets a younger age demographic, specifically children and mothers.

**Staffing**

Two people are needed to run each center - one for engaging communities (Community Fellow) and one to manage projects within the space (Innovation Fellow). Nook Fellows help learners by exploring skills and seeking answers to problems together in a participatory way. They also provide emotional support for interpersonal and life challenges, developing empathy and understanding of the community. A guiding principle of the program is that emotional support is more critical than technical support, so that learners can often find solutions by themselves. Ideal candidates possess potential, empathy, communication skills, and average computer/internet skills.

A Nook Fellow is expected to stay for 18-24 months and to achieve their potential after 2 cycles, or 6-8 months. It takes time to build trust with the community and develop expertise as a community builder and educator. Ideally, local community members are groomed to become Nook Fellows when the team moves on to other projects.

However, finding talent to fill the role of Nook Fellow has been a major challenge. There is a lack of human capital within the state to support a project of scale, as evidenced by the considerable time for capacity building and orientation with the current team. Recruitment efforts for the pilot identified ideal candidates were more inclined to work in the Government or office jobs. This challenge will need to be addressed for this project to scale successfully.

**Capacity**

Each Nook can enroll 60-70 Learners per year in the core program. With the Sports and Library programs, participation at each Chief Minister Youth Centre (CMYC) is expected to be about 150 learners per year. (Initial plans anticipated 4 cycles of 35-40 learners per nook per year. However, each Centre now aims for three cycles of 35-40 learners each, using the gaps for preparation and induction activities.) See the Appendix for more information on the program structure for these cycles.

### III. Impact Study Methodology:

We used three techniques to evaluate the impact of this pilot:

1) **Community Satisfaction Survey** - to assess the level of awareness, engagement and support amongst the community. Both the Sohrarim and Nongwah village clusters were surveyed\(^2\). 250 usable responses were collected from the 738 households in the eight villages of the Nongwah cluster, resulting in a 95% level of confidence.

\(^2\) See the Appendix for the full list of questions and villages surveyed.
Assessing the Impact of Trailblazer Labs

with +/- 6% margin of error. 266 responses were collected from the 816 households in the eight villages of the Soharim cluster, resulting in a 95% level of confidence with +/- 5% margin of error.

2) Learner Self-assessment - Given the variety of skills taught and the fluid nature of the program, its true impact on the lives of each learner is difficult to measure and quantify within a short period of time (< 2 years). However, we piloted an approach to understand the impact of the program on the learners and monitor its success in a controlled manner. The result was a 4-part diagnostic survey to gauge their perspectives in four key areas: Liking, Aptitude, Self-esteem, and Technical application. In other words, we wanted a repeatable measurement to know, “did the learning LAST”. (This survey was administered separately from the community impact survey.)

The survey was given to all 32 learners who had completed a cycle in Sorharim and Nongwah, with the help of block coordinators. In addition, a control group of 34 individuals who had just enrolled in the next cycle were asked the aptitude questions.

The survey aimed to gather information on how much learners enjoyed the program, what aspects they found most valuable, the confidence in their ability to learn, how the program affected their self-esteem and standing in their career or community, and whether they applied their training technically. By conducting this survey, we hope to gain a better understanding of the program’s impact and identify areas for improvement in future cycles.

3) Business assessment - Using information collected from stakeholder interviews and CMYC enrollment results, we evaluated the program costs and identified key performance indicators to evaluate the viability and feasibility of the CMYCs. This will be discussed in the “Operational Viability Assessment” Section.

IV. Community Impact

Awareness

The largest opportunity is to increase community awareness of these centers, as the majority of the population is unaware of the Nook. Only 41% +/- 5.9% of the Sorharim village Cluster and 25% +/- 2% of the Nongwah village cluster are aware of the Nook in their respective communities (Figure 1).

Figure 1: Awareness, support, and engagement as a % of total population (Households)
However, when those unaware were then given a brief description about the Nook, 73% expressed interest in visiting the Nook (Figure 2).

**Figure 2:**
*Based on our description of the Nook, how interested are you in visiting the Nook to learn more?*

Unsurprisingly, awareness was highest in villages closest to the Nook. 80% of respondents that either participated or visited one of the Nooks lived within 1 Km of them (Figure 3). One exception is the village of Niamsang, located 10 km from the Nongwah Nook, which was home to several learners.

**Figure 3:** *Awareness Rates by Distance (Km) from Center:

Word of mouth is the single largest driver of awareness, far outpacing messaging from Nook fellow or village leaders (Figure 4). Of those who are aware, most describe the Nook as a place for providing training and many emphasized the “learning, and/or self-learning” aspect of the space. Others emphasize that it is free, while others mention their positive experience. Given the variety of recollections, there is an opportunity for the Nook to develop a clearer image through marketing. Formulation must remain mindful when emphasizing different dimensions of the space’s value to different segments of the population.
Assessing the Impact of Trailblazer Labs

**Sentiment**

80% of those who are aware of the Nook also are in favor of its operation. This is based on the composite average of four survey questions to gauge sentiment (Table 2). Moreover, 71% selected “we need to keep it”, when asked “How important is it that this Nook continues to operate”, and 50% were “very likely” to recommend the Nook to someone else.

<table>
<thead>
<tr>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How Valuable do you feel the Nook is for your village?</td>
<td>Wasteful</td>
<td>Not Valuable</td>
<td>Not Sure</td>
<td>Valuable</td>
<td>Very Valuable</td>
<td>4.2</td>
</tr>
<tr>
<td>2. How Happy are you with the presence of this Nook in your village?</td>
<td>Very Unhappy</td>
<td>Unhappy</td>
<td>Neither Happy or Unhappy</td>
<td>Happy</td>
<td>Very Happy</td>
<td>4.1</td>
</tr>
<tr>
<td>3. How important is it to you that this Nook continues to operate?</td>
<td>We could do without it</td>
<td>Unsure</td>
<td>It is nice to have</td>
<td>We need to keep it</td>
<td>We need to keep it and make it even better</td>
<td>4.0</td>
</tr>
<tr>
<td>4. How likely would you be to recommend this Nook to someone else?</td>
<td>Not Likely</td>
<td>Unsure</td>
<td>Likely</td>
<td>Very Likely</td>
<td>I have already told people about it</td>
<td>3.7</td>
</tr>
</tbody>
</table>

Total Perception: 80% Favorable (4.0/5.0 scale) 4.0

These results underscore the strong perceived value proposition that the Nook delivers to the community and the potential for it to become an institution of learning and empowerment within the village.

**First Impressions**

Each respondent was also shown a picture of the Nook then asked to select from the following list of words what they thought best described the Nook’s appearance (they could also provide their own words):

- Fun
- Different
- Inviting
- Educational
- Confusing
- Uninteresting

“Different” and “Educational” were the most common words selected (Figure 5). However, those who were unaware of the Nook were three times more likely to think that the Nook looked “confusing”, and half as likely to find the Nook to appear “inviting”. This underscores the opportunity for the centers to clarify their brand within the community by visually emphasizing the attributes that they want to be recognized for contributing to rural students’ access to quality education.
**Feedback from Participants**

33 people indicated that they had enrolled and participated in one of the Nook training programs. All enjoyed their time at the Nook and more than 87% either “Agreed” or “Strongly Agreed” with statements about the effectiveness of the spaces (Table 2). While we expected a bias towards “Agree”, we were positively surprised to see the high proportion of 37% Strongly Agreeing with these statements.

As Table 2 indicates, 45% of learners strongly agreed that they improved their ability to interact with others and 36% strongly agreed that this program gave them the confidence to apply their new skills in their village.

It is important to note that twenty-four (73%) of the respondents were either still in the program, or had completed it within the last three months. Therefore, we could not reliably determine any sign of decay in satisfaction level as time passed.

This data suggests that the program is effective in developing crucial soft-skills of communication and confidence, beyond the technical skills motivating the learners to enroll and learn.

Lastly, more than half of the learners also discovered a new skill that they did not expect to learn when they joined the program (Figure 6). This indicates that the Nooks are successful in nurturing a culture of curiosity by making learning fun and encouraging learners to explore new interests.
Assessing the Impact of Trailblazer Labs

V. Impact on the Learners - Testing the LAST model

Liking

Overall, this program is highly liked by those who completed it. (Reinforcing findings from the community survey)

To evaluate their liking for the program, learners answered seven questions on a 5-point scale. As community members tend to answer survey questions favorably, we only counted those who "strongly agreed." We also included a "control" question, "I did not enjoy my time in the program," to detect respondents who "strongly agree" to all questions by default, eliminating four learners.

Nearly all learners felt that the program helped them identify and learn new skills, provided a positive, safe, and supportive environment, and enabled them to both receive and offer support to other learners (Figure 7). Additionally, almost half of the learners expressed an interest in re-enrolling in the program.

When asked about what they enjoyed most about the program, 59% of learners selected a skill they had learned, while 41% referred to an aspect of the learning environment or process. Regarding potential improvements, 38% said "nothing," with the remaining responses falling into categories of A) increasing awareness of the program (16%); B) bringing in trainers with more experience in a particular skill (13%); and C) providing more resources and workshops (34%).

Learners were also asked to rank five key elements of the program in order of importance to their learning. "Supplies used to create and learn" was deemed the most important element (Figure 8). Interestingly, learners were divided on the importance of the Nook Fellows, with 17 ranking them as the most important to their learning and 11 ranking them as the least important. Similarly, there was a division between learners who felt that collaboration with peers was most
important vs. least important to their learning. This may reflect different learning styles and varying levels of collaboration and guidance needed for different projects. This conclusion highlights an opportunity for Nook Fellows to be mindful of their impact on each learner.

When asked what skills they had learned, 80% of learners reported learning two or more skills. Baking was the most frequently mentioned skill (60% of respondents), followed by tailoring/weaving (38%), and computer basics (31%).

Aptitude

A segment of 25 questions were adapted from Swapma Naskar Williamson’s (2007) self-rating scale of self-directed learning (1) to assess improvement in Learners’ confidence in directing their learning and collaborating with others (Table 3). For each question, learners were asked to rank how often each statement applies to them on a 5-point scale (5 = Always; 4 = Often; 3 = Sometimes; 2 = Seldom; 1 = Never). The scores for each question were summed into sub-scores and then a total score, with a maximum of 120 points. These questions were also administered to a comparison group - villagers who had just enrolled in a learning cycle.

Initial findings: The mean score of the Learner group was not found to be statistically significant from the comparison group. Moreover, there was little variation between responses to many of the questions - the average score was 116/120 (a 97% score!) and “Always” was selected 86% of the time. We suspect this is due to survey fatigue, positive response bias, and co-correlated questions.

However, 12 questions showed the greatest variation of response both within and between the Learner group and the Comparison group. In this subset, the Learner group scored greater than that of the Comparison group (Table 3). This suggests that the program may help learners in key aspects of self-directed learning. However, more replicates are needed to verify the reliability of this assessment.
Table 3: Twelve Self-Assessment Questions with a Statistically Significant Difference between the Learner and the Comparison Groups.

1. I identify what I need to learn
2. I am responsible for my own learning
3. I am able to plan and set my learning goals
4. I like to participate in group discussions
5. I regard problems as challenges
6. I consider teachers as facilitators of learning, rather than providing instruction only
7. I find both success and failure inspire me to further learning
8. I value feedback from others to improve my learning
9. I monitor whether I have accomplished my learning goals
10. My interactions with others helps me to identify what I want to learn
11. I find it easy to work in collaboration with others.
12. I enjoy seeking people in my village who can help me.

Self-Confidence

We also wanted to understand how this community-based program impacted the Learner’s perception of employment potential, self-esteem, and civic engagement (2). Responses to the twelve questions were collected on a 5-point scale (strongly agree → strongly disagree). The percent of learners who selected “strongly agree” with each statement are summarized in Figure 12.

Fig 11: Percent of Learners who “Strongly Agree” for each of the Following Statements

<table>
<thead>
<tr>
<th>Statement</th>
<th>% who strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am more connected to my family.</td>
<td>96%</td>
</tr>
<tr>
<td>Learning feels more like a collaboration than a competition</td>
<td>93%</td>
</tr>
<tr>
<td>I am more likely to be creative when problem-solving</td>
<td>93%</td>
</tr>
<tr>
<td>I am more likely to reflect on how I do my job</td>
<td>89%</td>
</tr>
<tr>
<td>My sense of purpose in life has increased</td>
<td>86%</td>
</tr>
<tr>
<td>My satisfaction with life as a whole has increased</td>
<td>86%</td>
</tr>
<tr>
<td>I am more likely to collaborate with others when solving</td>
<td>86%</td>
</tr>
<tr>
<td>I have developed more relationships with others in my village</td>
<td>86%</td>
</tr>
<tr>
<td>My skills have increased in communicating with others</td>
<td>82%</td>
</tr>
<tr>
<td>I have developed greater initiative</td>
<td>79%</td>
</tr>
<tr>
<td>I am more likely to be open to new ideas</td>
<td>75%</td>
</tr>
<tr>
<td>My job opportunities have expanded</td>
<td>48%</td>
</tr>
</tbody>
</table>

Fig 10: Self-Assessment Total Score: Distribution of Learner and Comparison group score (% of total possible score)

- Learner mean: 58.3
- Comparison mean: 56.2
- Learner Std. Dev: 2.5
- Comparison std. Dev: 3.4
- T-test P-value (two-tail): 0.01
Assessing the Impact of Trailblazer Labs

Nearly all learners strongly agreed with feeling more connected to their families and that learning feels more collaborative than competitive. Moreover, more than 80% of learners strongly agreed that their sense of purpose of life had increased and that they had developed more relationships with others in their village. Finally, nearly half of learners strongly agreed that their job opportunities had expanded.

These results provide qualitative support that the Nook is achieving one of its goals: to improve the emotional well-being and connectedness of the learners to each other and their community. Lastly, we observed that four questions were highly correlated with others and can remove them in future assessments. See the Appendix for the list of eight questions that will be kept.

Technical Application

Finally, we assessed the Learners’ perceived level of technical proficiency using four open-ended questions and a forced rank of four statements. The statement "I feel confident applying what I learned" ranked first, while the statement "I can teach someone else what I learned" ranked last.

In addition, 50% of the surveyed learners reported that they have utilized the skills they learned in the program, with some even starting their own businesses. Furthermore, 53% of learners received feedback from others on the use and practice of their skills.

Two-thirds of learners expressed that they require further training in specific aspects to become more proficient in their area of interest. These results underscore the opportunity to provide additional learning cycles and opportunities for learners to both refine their skills and translate these skills into viable business opportunities. Moreover, there is an opportunity for some of these learners to become specialists in specific skills so that they can then teach others in their village.
VI. Operational Viability Assessment

Capacity and Costs

We partnered with Sauramandala Foundation to analyze actual costs, expected capacity and coverage for the CMYC. CMYCs are expected to host 120-150 participants across all activities, with the Nook expected to support 60-70 learners in a 12-month window. We estimate it costs 39Lakh to create and operate each CMYC in the first year. The cost drops to 27 Lakh, or 18,000 rs per participant, in year 2 and on (Table 4). This costs includes allocated administrative expenses to manage the program across the entire state.

Simplified model illuminates three key points of consideration:

1. **Government support**: The cost of 18,000 rs per learner is 2-3xs the per student expenditure for education in rural areas, BUT is at parity with expenditure in urban areas(3). This presents an opportunity for the CMYC to be a tactic for closing the educational investment discrepancy between rural and urban areas. However, the Government's level of commitment to fund this venture over multiple years will be critical for its success.

2. **Under capacity & Fixed costs**: Backing out monthly reimbursements, more than 90% of the costs are fixed (salaries, water, energy, internet, computers, etc.) and the centers are currently below the planned capacity of 150 participants per year. If we instead assume 100 participants per year, the cost per participant in Year 2 increases by nearly 50%. It will be important to track volume metrics, to identify centers that are operating under capacity over sustained periods of time.

3. **Early Saturation due to Low population density**: Each Nook is hyper-local, effectively reaching a population within a 2 km radius. The population within 2 km of the Soharim center numbered 328 households, or 1594 people. The population within 2km of Nongwhah numbered 480 households and 2807 people. So let us assume that a Nook in a rural village in Meghalaya will reach 2,200 people. Now because of how the program is structured, the Nook is most suitable for young people who have dropped out of schools (as they have the most time to attend). The primary school drop out rate was 17.69% in 2019 (4). Therefore, we assume 20% of the population, or 440 people in the village community would be the “ideal consumer”. At an enrollment rate of 40 people per cycle, and 3 cycles per year, the Nook could enroll all target consumers within 4 years, assuming a 100% retention rate.
Therefore, for these Nooks to be successful in the long-term, they will need to not only acquire learners, but also retain them. Learner loyalty and Repeat rates of engagement will be critical and consequently, the Nooks will need to remain relevant to loyal learners. An alternative approach could be to make the Nooks “Mobile”, moving the salaried personnel to new villages every 3-4 years, while letting community volunteers run the nooks going forward.

**Key Performance Metrics**

There are seven quantitative metrics that are relatively easy and incredibly important to measure:

1. **Registrations**
   People who register for the program, as measured by number of registrations. A healthy metric is more than 35 people registered, to fill the first cohort.

2. **Enrollments**
   People who enroll in the program. If Enrollments are less than registrations, then that Nook has a waitlist, or backlog of learners for the next cycle. At Least 25 learners should be enrolled per cycle, although ideally there would be 40 learners per cycle.

3. **Average daily attendance**
   To-date the average attendance rate for the CYMCs is 39%, implying that 61% of learners are dropping out of the program. Daily attendance should exceed 15 learners, to ensure a healthy group dynamic.

4. **Completion Rate**
   Learners who complete the program as a percentage of those who enroll. This should be measured both in total and by learning cycle, for each center.

5. **Utilization rate:**
   Learners who apply their skill post-program, as measured by the number of learners who start small businesses. For the two trailblazer labs, about 50% of learners have stated that they have applied their skills post-program and several have started their own businesses.

6. **Learning program Cycle time**
   The time it takes each center to complete each learning cycle. Ideally, the cycles are completed in 90 days. However, this time is impacted by holidays and monsoon seasons. Additionally, it has been observed that the first learning cycles take 1-3 months longer to complete given the factors related to start-up.

7. **Cost per Learner**
   The cost per center divided by the total number of learners who enroll each year.
Assessing the Impact of Trailblazer Labs

Preliminary Analysis of Performance from the 20 CMYCs

Data for these metrics are being collected from the first cohort of CMYCs opened in the Fall of 2022 (Table 5). Preliminary analysis shows that there are opportunities to improve enrollment rates for some sites and daily attendance across most.

<table>
<thead>
<tr>
<th>Region</th>
<th>Location</th>
<th>Households within 3 km</th>
<th>Date Center Opened</th>
<th>Date of First Cycle</th>
<th>Registered</th>
<th>Enrolled Learners</th>
<th>Average Daily Attendance</th>
<th>Completed Program</th>
<th>Applied Skills post program</th>
<th>Enrolment Rate</th>
<th>Attendance Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garo Hills</td>
<td>Rajek Agal</td>
<td>80</td>
<td>10/19/2022</td>
<td>11/16/2022</td>
<td>107</td>
<td>56</td>
<td>15</td>
<td>59%</td>
<td>2%</td>
<td>47%</td>
<td>30%</td>
</tr>
<tr>
<td></td>
<td>Bongpisongha</td>
<td>92</td>
<td>10/25/2022</td>
<td>11/15/2022</td>
<td>58</td>
<td>40</td>
<td>15</td>
<td>69%</td>
<td>30%</td>
<td>89%</td>
<td>38%</td>
</tr>
<tr>
<td></td>
<td>Suguin</td>
<td>150</td>
<td>11/19/2022</td>
<td>12/2/2022</td>
<td>54</td>
<td>20</td>
<td>6</td>
<td>37%</td>
<td>30%</td>
<td>59%</td>
<td>30%</td>
</tr>
<tr>
<td></td>
<td>Chhara Agal</td>
<td>270</td>
<td>10/19/2022</td>
<td>11/16/2022</td>
<td>28</td>
<td>23</td>
<td>18</td>
<td>82%</td>
<td>20%</td>
<td>82%</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>Rangma Badim</td>
<td>50</td>
<td>10/25/2022</td>
<td>11/15/2022</td>
<td>27</td>
<td>37</td>
<td>12</td>
<td>137%</td>
<td>32%</td>
<td>137%</td>
<td>32%</td>
</tr>
<tr>
<td></td>
<td>Dedenggre</td>
<td>200</td>
<td>11/8/2022</td>
<td>11/30/2022</td>
<td>24</td>
<td>16</td>
<td>6</td>
<td>67%</td>
<td>38%</td>
<td>67%</td>
<td>38%</td>
</tr>
<tr>
<td></td>
<td>Rabadern</td>
<td>52</td>
<td>10/25/2022</td>
<td>11/16/2022</td>
<td>51</td>
<td>55</td>
<td>9</td>
<td>65%</td>
<td>36%</td>
<td>65%</td>
<td>36%</td>
</tr>
<tr>
<td></td>
<td>Dohvargra</td>
<td>6</td>
<td>10/25/2022</td>
<td>11/30/2022</td>
<td>15</td>
<td>6</td>
<td>13</td>
<td>40%</td>
<td>217%</td>
<td>40%</td>
<td>217%</td>
</tr>
<tr>
<td></td>
<td>Dedigre</td>
<td>400</td>
<td>3/1/2023</td>
<td>3/31/2023</td>
<td>To be collected/added</td>
<td>To be collected/added</td>
<td>To be collected/added</td>
<td>To be collected/added</td>
<td>To be collected/added</td>
<td>To be collected/added</td>
<td>To be collected/added</td>
</tr>
</tbody>
</table>

To understand the impact of distance, we added “Number of Households within 3 km of center”. As Figure 13 indicates, there is a moderate relationship between daily attendance and population proximity. A more accurate analysis would be to map the attendance rate for each learner against the distance from their home to the CMYC. We recommend this analysis be performed in future studies.

Most of these centers have completed their first cycle and as they continue to operate, it will be critical to collect missing data and explore and test strategies to increase the targets and reduce the variability for these metrics. Indeed, these centers are actively iterating approaches to understand and drive awareness, reduce attrition, and escalate commitment.
Driving Awareness
The Centers are testing a variety of approaches to mobilization and sensitization in their communities including visiting schools; making announcements at churches; distributing pamphlets and talking to people at market days and community tea stalls; conducting orientation programs at CMYCs; going door-to-door and offering to fix things at these home with tools from the CMYC; Community events that include movies, games, and storytelling. Additionally, the centers call those who have expressed interest and also post frequent updates on social media and WhatsApp groups. Finally, the centers are beginning to showcase the projects that learners have completed in Experience Design events.

Identifying the Root-cause of Attrition and Re-engaging those Learners
Reasons for learner dropout include time constraints with tuition and church commitments, limiting their availability to Saturdays. Accessibility issues arise from long travel distances and safety concerns returning home late. Other responsibilities, such as caring for younger siblings, pose challenges in balancing home duties and attending the nook. Some prioritize employment over participation in the nook to support their livelihood.

In one-on-one conversations, staff explore the unique reasons for why a learner has dropped out. For instance, a dedicated learner had to balance school, tuition, and household chores. The Community fellow suggested she visit every Saturday if daily attendance was challenging. To re-engage dropouts, community fellows invite them to picnics and get-togethers, reinforcing their connection to the Nook. It is important to empathize with their circumstances and assure them of a welcoming space for their return.

Escalating Commitment
To escalate learners’ commitment, various strategies can be implemented. Facilitating goal setting provides clear objectives to focus on. Building a sense of ownership involves learners in decision-making and responsibilities within the learning space. Celebrating achievements and offering positive feedback boosts learners’ confidence. Sharing circles promote open communication and a sense of community. Providing guidance and support when learners face challenges ensures they feel supported. Exposure visits, collaborations, and finding opportunities outside the nook broaden their experiences. Finding market potential for their products motivates learners. Emphasizing quality over quantity and normalizing failures fosters a growth mindset. Nook fellows’ regular intervention aids project progress and understanding. These measures collectively enhance learners’ commitment and engagement.
VII. Recommendations

1. Increase Awareness within the community
This study uncovered the surprising result that the majority of the target populations in Sohrarim and Nongwah were still unaware of the Trailblazer Labs. This is especially pronounced in Nongwah, which has been open for only a year. As a countermeasure - and one that was recommended by many we surveyed - we suggest that awareness programs be designed and coordinated with community leaders. Moreover, the team should refine the messaging of its marketing to increase relevance to its target consumers.

It is encouraging to know that other channels and tactics for driving awareness and interest are being tested for the 20 new CMYCs. For instance, schools and churches are important hubs of activity within a community. It will be important to capture volume and impact metrics around these different tactics, to learn which marketing mix may be the most effective. Finally, it is encouraging to know that these learning centers are popular among those who are aware and this popularity should be leveraged to create a virtuous referral loop.

We piloted a control study to assess the development of the “self-directed learning skills” amongst learners and compare their response to those who had just enrolled in the next learning cycle. We learned that:

1. Those who have completed the program report being overwhelmingly satisfied with the program as a whole. However, the most important metric for satisfaction may be the program completion rate.
2. This program seems to be successful at building one’s skill in self-directed learning - The Learners scored higher on a self-assessment for self-directed learning than the comparison group.
3. Nearly half of the learners are applying what they learned. However, they realize that their skills are in infancy and they need more support and practice to get better.

This study should be replicated with additional cohorts of learners to validate these findings. Moreover, the assessment needs further iteration. In this first iteration, many questions we tested did not yield sufficient variation in responses - likely due to participants’ bias to select the most favorable response. Of the 61 questions, in the initial survey, we have selected 37 to use in future surveys. Future assessments should extend past surveys to more in-depth practicums that test skill proficiency. We also observed that questions that forced the participant to make tradeoffs (i.e. rank in order of importance) yielded more truthful responses than questions based on sentiment (i.e. responses on a 5-point scale).

Additionally, there is a need for digital maintenance of individual learner’s Portfolio:
Creating individual portfolios is an effective way for learners to document and showcase their projects besides the exhibitions. Portfolios provide a record of a learner’s journey, they allow learners to document their progress, reflect on their experiences, and track their growth and development over time. Project DEFY and the Sauramandala Foundation are currently developing a platform for these records.
3. Track Key Volume Metrics for Optimizing Performance

Seven metrics and preliminary thresholds have been identified, to measure the operational performance of each center:

1. Registrations
2. Enrollment (and enrollment rate, as percent of registrations)
3. Average daily attendance
4. Completion rates
5. Utilization rate - (learners applied skills post program)
6. Learning program cycle time
7. Cost per learner

Routinely capturing and analyzing this data will help leadership identify and study the most and least successful centers to uncover best practices and root causes for improvement opportunities. For example testing different approaches to mobilization/sensitization; sharing activities across Nooks; and learning how different Nooks re-engage learners.

4. Drive Community Ownership of Each Center, to achieve scale across the state.

As the centers enter their 3rd and 4th years, a center will have saturated its target market with all interested people having participated in a first learning cycle. Continuation of the center will depend on villagers finding value in continuing to come for multiple learning cycles. For the program to scale, Nook Fellows will need to transfer facilitation of these cycles to local residents and then move to the next community to plant the next CMYC.

In conclusion, we are excited to see the positive response from the Community on these centers and look forward to seeing what the future holds for this program and for the people in these villages.

REFERENCES


3. Per student expenditure on education in Urban areas is three times the expenditure in rural areas. Bharath Kancharla, FAQTLY. September 25, 2020.

APPENDIX

I. Triple Helix Model

II. Stakeholders

The Table below shows the key stakeholders and their involvement in the project. The Meghalaya Basin Development Authority is funding the Scale phase, paying for personnel and supplies, with villages providing the spaces. The project strategy, program implementation and facilitation is coordinated by the partners listed.

<table>
<thead>
<tr>
<th>Sponsor(s) &amp; Support</th>
<th>Trailblazer Labs</th>
<th>Chief Minister Youth Centers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Pilot - Sohrarim &amp; Nongwah)</td>
<td>(Scale Phase - 20 Nooks)</td>
</tr>
<tr>
<td>Project strategy &amp; scale</td>
<td>Meghalaya Basin Development Authority- Smart Village Movement and Salesforce - Funding Village - Community Halls</td>
<td>Meghalaya Basin Development Authority- under Smart Village Movement project- Funding Village- Community Halls</td>
</tr>
<tr>
<td>Implementation</td>
<td>Sauramandala Foundation - founder Nagakarthik Mp</td>
<td>Project DEFY - Abhijit Sinha Learning approach; Nook creation, staffing; Learning cycle implementation</td>
</tr>
<tr>
<td>Facilitation</td>
<td>Smart Village Movement &amp; UC Berkeley Proof of Concept; Community Mobilization; Evaluation;</td>
<td></td>
</tr>
</tbody>
</table>
III. Pilot History - How the Nook framework was selected

When the Government of Meghalaya engaged SVM and the Sauramandela foundation, the solution of Trailblazer labs had not yet been defined. Rather, the cross functional team combined participatory approach, design sprints, Human-centered Design (HCD), and public problem-solving to identify and evaluate the core problems to solve. Then through these lenses the team identified and evaluated ideas to test in the Trailblazers lab, for subsequent implementation in the CMYC package.

A participatory approach in the design of the TCLs in Meghalaya was crucial because it ensured that the perspectives and insights of various stakeholders were considered and helped foster a sense of ownership, leading to greater acceptance and buy-in for the initiative.

Design Sprints played a pivotal role in developing the TCL labs by providing a structured framework for rapid ideation, prototyping, and validation. This iterative approach was essential in refining the design of the labs, incorporating feedback from stakeholders, and ensuring that the final solution was well-aligned with the requirements and aspirations of the local communities. It helped the team deliberate on the different forms of the lab and eventually zero in on SDL as a method because of the aspects of choice and agency that it brings to the stakeholders over other forms of learning and Project DEFY as a partner to bring in their learnings from the Nook.

The Nook, a unique idea by Project DEFY, which comes with a design, a set of values and a method of deployment, ([https://projectdefy.org/nooks/](https://projectdefy.org/nooks/)). The Nook was created before the first implementations in Meghalaya, reducing some risk. However, it had not yet been tested in scale and offered in the form of a Youth Centre, in a Government collaboration.

Human-Centered Design (HCD): HCD principles were integral to the design of SDL labs as they placed the needs and aspirations of end-users at the center of the design process. This understanding facilitated the creation of solutions tailored to Meghalaya's specific context, ensuring that the SDL labs addressed the real needs of the communities they served. It also brought about aspirations from the community with the library, sports, and livelihood/entrepreneurship, which eventually made it part of the design of the space. As a solution to a problem statement, the labs emerged as a result of these processes.

Public Problem Solving: Public problem solving, combined with a systems lens, was critical in designing the SDL labs because it enabled a holistic understanding of the challenges faced by the communities in Meghalaya. By adopting a systems perspective, the design process accounted for the interconnectedness of various factors contributing to sustainable development, including adoption, ownership, and scale-up by the system. It allowed the design team to identify leverage points and develop solutions that addressed not only the symptoms but also the root causes of the problems.

The combination of participatory approach, design sprints, HCD, and public problem-solving with a systems lens significantly increased the chances of adoption and scale-up of the SDL labs. By involving stakeholders in the design process, the SDL labs became embedded in the local community and received support from key actors.
IV. Pilot Locations

Sohrarim Nook:
Sohrarim is home to a population of around 600 people, whose main source of income is farming. Since the agricultural sector in Meghalaya is informally organized, the income of the people of Sohrarim is erratic. This uncertainty in financial resources inevitably causes education and personal growth to be disregarded by the rural populace.

Sohrarim is also the primary location of some of SVM's pilot projects, such as Gramin Polyclinic Centre, Farmer Development Centre. SVM has a great rapport with the Sohrarim community.

Cluster size:
- 8 Villages, up to 10 km away from Nook
- 816 Households
- Population: 4,502
- Population within 2km: 1,595

Nongwah Nook:
Nongwah, a small village with a population of approximately 700, has a literacy rate of only 438 individuals according to the 2011 census. While agriculture remains the primary source of livelihood, the decreasing availability of cultivable land makes this dependence unsustainable. Therefore, alternative employment opportunities need to be urgently introduced to the community. However, despite the lack of training or upskilling providers within the village, Nongwah's location offers favorable conditions for large-scale intervention programs. The village is surrounded by 15 other villages within an 8 KM radius and has 15 schools nearby.

Cluster size:
- 8 Villages, up to 10 km away from Nook
- 816 Households
- Population: 4,502
- Population within 2km: 2,807
V. Cycles for Pilot Locations

The Table below summarizes key operational data for both Pilot Locations. Sohrarim was established first, nearly one year before the Nook at Nongwah. As one stakeholder mentioned, "we are building the plane as we are flying it" and for the first year many processes for the program were being iterated.

Both the number of cycles and the number of learners are expected to increase as staffing and learning cycle processes are standardized and the next cycles will commence in April 2023.

The core soft-skill taught across locations are communication, leadership, teamwork, creativity, work-ethic, time management, project management, and problem-solving. Common technical skills are computers, designing, and baking. Skills learned will vary by location, based on the interests of the learners and the structure of the local economy.

<table>
<thead>
<tr>
<th>Nook and Library Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sohrarim</strong></td>
</tr>
<tr>
<td>Date Nook Established</td>
</tr>
<tr>
<td>Total # of Learners</td>
</tr>
<tr>
<td>Date Library Established</td>
</tr>
<tr>
<td>Total Library Footfall</td>
</tr>
<tr>
<td><strong>Cycle 1</strong></td>
</tr>
<tr>
<td>Date Range</td>
</tr>
<tr>
<td>Duration, months</td>
</tr>
<tr>
<td># of Learners in each cycle</td>
</tr>
<tr>
<td>Core/ common Skills Learned</td>
</tr>
<tr>
<td>Additional Basic Skills per Cycle</td>
</tr>
</tbody>
</table>
VI. **Program Structure**

A concept by Project Defy, the Nook is a self-learning space. Each Nook is a physical space created with and within a community that needs it. It is provisioned with laptops, internet, tools and a culture of curiosity, creation and collaboration. At Nook, learners learn by designing projects based on their own needs and interests. Goals are broken down to milestones and milestones to projects. An alternate form of learning based on self design learning (SDL) system, the center offers and assists learners to explore and realize their creative thinking to create abstract ideas into reality.

Each Nook has a startup-stage, followed by a 90-day run cycles. These are outlined below and more detailed information, including instructions for the Nook Manager, can be found in the Nook Program Procedure.

**Startup: 14-day Sprint to Cultivate Interest**

The aim of early projects is to cultivate interest in the community for the Nook by demonstrating its potential. When a new Nook is created, it is an empty space with minimal furnishings and tools, making it challenging for people to comprehend its purpose. Early projects serve the purpose of showcasing what the Nook is all about and what can be done there, by providing practical demonstrations.

Early projects are engaging and enjoyable activities that can be completed within a 10-14 day timeframe. They are designed to be beneficial to the Nook and its learners, while also introducing unique concepts to the community. Therefore, it is crucial for early projects to be innovative and distinct.

Visitors to the Nook should be impressed by the early projects and exclaim, "Wow!"

**Day 1 - Team and Project Selection**
- The Nook Manager and Hopper invites people from the neighborhood to the Nook and explains to them the vision of the space. They ask them if they would like to help for the next 14 days and build some really cool things, forming a team from those that accept.
- The team then generates creative ideas for projects that must satisfy two conditions: A) Is it something useful for the Nook? B) Is it interesting enough to make people say “wow”.
- A shortlist of 4-5 ideas are then selected for projects and the group draws rough sketches for each. The team finds tutorials for how to build each project online.

**Day 2: Planning & Preparation**
- Projects deadlines are created; key steps are identified; and due dates are written for each step.
- Tool and materials are found. The team is encouraged to use what is available in the Nook and to find alternatives for expensive things. However, they can also purchase needed materials.
Days 3-14: Start building and follow the plan
- Speed is important and the Nook managers are encouraged to help the learners whenever they are stuck and to get their hands dirty.
- The point is to build the project to success.

Day 14: Launch Day
- Present finished projects for the official launch of the Nook in the Community.

Run: 90 - Day Programs

1. Exploration (3 weeks, 6-7 Sessions):
The idea behind the exploration stage of the Nook is to start breaking the conscious, or unconscious, societal and economic barriers to making one’s own choices and enable the learners to make their own choice of learning and skills that they want to pursue.

The Exploration Phase in the Nook is created with the specific purpose to introduce the idea of self-designed learning, with seven desired outcomes:

I. To introduce new skills and learning areas that the community are not familiar with before
II. To make learners aware of the problems that are present in the community & build the confidence within themselves to solve these problems
III. To introduce skills that will be useful in their goals during the cycle
IV. To introduce new and innovative ways to use the skills and learning areas, even if the communities are familiar with them before
V. For learners to explore what they like and what they are good at by experiencing different and new learning opportunities
VI. Incite learners’ imagination of what all is possible at the Nook and what all and more they could potentially do later on in the Nook
VII. To have fun

The important criteria or purpose of the exploration is to make learners enjoy the skill, feel challenged, and also succeed in small projects of the specific learning areas during the exploration phase.

The Nook Manager chooses different areas of learning and skills based on the local community’s needs and aspirations and also facilitates several compulsory sessions:

A. Basics of using computers and the internet, as many learners may not have experience with them. This includes topics like turning on/off the computer, creating folders, copying and pasting files, and using web browsers. We’ll also introduce the concept of the internet, using the analogy of a library.
B. **An email account** is required for signing up for online courses and communication, so we'll dedicate a session to setting up a Gmail account for those who don't have one.

C. **3D designing software**, to aid learners in visualizing their projects, specifically SketchUp. Designing with proper measurement is crucial for successful manufacturing or project completion.

The rest of the sessions are formed from conversation with the learners. Each session lasts no more than 2-3 days, with 3-4 hours per day. Sessions include a morning discussion, introduction to the skill set, research about the skill set, ideation, and drawing of what the learners will design during the exploration, creating the project, presentation, and closing circle. The thumb rule to session planning is: if the session is planned creatively, the pressure on the learners to be creative is less.

2. **Design (8-9 days):**
   Objective: The design phase helps the learner to connect their intrinsic interest, passion, or curiosity with the external needs of the community.

   Desired Outcome: The designing phase will help learners understand their goals better and break the goal down into milestones. It is conducted after the goal setting is completed, without the milestones being chalked out.

   Activities during this stage include:
   1. Helping the Learners identify the target audience for their project and talk to people in the community about it. (i.e. Interview at least 5 people)
   2. Exercises to learn the difference between judgment and observation.
   3. Secondary research on consumer needs.
   4. Distillation of the problem statement.
   5. Ideating different possibilities through which they can solve the problem.
   6. Drawing sketches of ideas with digital tools and getting feedback from others.
   7. Creating prototypes of the project they want to create in the next three months.
   8. Milestones - create weekly milestones for the next two months for their teams to work on and complete the projects.

3. **Goal Setting & Project Execution (2-3 Months):**
   Goal setting should be done around 3.5 to 4 weeks from the start. This final phase includes completing the projects and encompasses the following activities:

   A. Discussion with Nook Manager to clarify the “why” and supporting rationale for the goal.
   B. Creating a goal sheet for the team that includes team number, member names, goal, projects, milestones, courses & tools.
C. Tracking progress and providing feedback with a Cycle counter, weekly check-ins, monthly check-ins, and a final review in the last week.
   a. There is an internal review for only the Nook community (first 2 days of the final week)
   b. External review - final day is an Open House.

D. Selecting the next goals

VI: Learner Assessment

Before Survey: Given to the Learner, when they Enroll in the program.

Personal Information (5 Qs):
1. Name
2. Village
3. Program location & cycle date
4. Age
5. Gender
6. Skill(s) you wish to Learn

Learning Self-Assessment (12 Qs)
1. I identify what I need to learn
2. I am responsible for my own learning
3. I am able to plan and set my learning goals
4. I like to participate in group discussions
5. I regard problems as challenges
6. I consider teachers as facilitators of learning, rather than providing instruction only
7. I find both success and failure inspire me to further learning
8. I value feedback from others to improve my learning
9. I monitor whether I have accomplished my learning goals
10. My interactions with others helps me to identify what I want to learn
11. I find it easy to work in collaboration with others.
12. I enjoy seeking people in my village who can help me.

After Survey: Given to the Learner 90 Days after completing the program. 33 Questions.

Personal Information (5 Qs):
7. Name
8. Village
9. Program location & cycle date
10. Age
11. Gender
## Sentiment towards program (8 Qs)

1. Skill(s) Learned
2. This program provided me with the tools & training to develop my skill.
3. I felt safe to be myself in this space.
4. I would not recommend this program to my friends and family.
5. I want to re-enroll in this program in the future.
6. Please rank the following elements in order of importance for your learning (5 = Most Important, 1 = least important)
   - a. The Nook Fellows
   - b. The Learning Library
   - c. Collaborating with the Other Learners
   - d. The supplies used to create & learn
   - e. The computers and technology.
7. What did you enjoy the most about the program?
8. What do you think we should change or improve?

## B. Learning Self-Assessment (12 Qs)

1. I identify what I need to learn
2. I am responsible for my own learning
3. I am able to plan and set my learning goals
4. I like to participate in group discussions
5. I regard problems as challenges
6. I consider teachers as facilitators of learning, rather than providing instruction only
7. I find both success and failure inspire me to further learning
8. I value feedback from others to improve my learning
9. I monitor whether I have accomplished my learning goals
10. My interactions with others helps me to identify what I want to learn.
11. I find it easy to work in collaboration with others.
12. I enjoy seeking people in my village who can help me.

## C. Personal impact (8 Qs)

How strongly do you agree with the following statements, following your time at the Nook?

**Response Key: 5 = Strongly Agree; 4 = Agree; 3= Neutral; 2 = Disagree; 1 = Strongly Disagree**

1. My job opportunities have expanded
2. I am more likely to be open to new ideas.
3. My skills have increased in communicating with others.
4. My sense of purpose in life has increased.
5. I am more likely to collaborate with others when solving problems
6. I am more likely to reflect on how I do my job
7. I have developed more relationships with others in my village
8. I have developed greater initiative
D. Application of Learning (4Qs)

1. Rank the following statements (4 = most applicable to you, 1 = Least applicable)
   a. I can apply what I learned.
   b. I need to learn and practice more to improve in this skill
   c. I have applied what I learned
   d. I can teach someone else what Learned.
2. How have you applied these skills upon completing the program?
3. What Feedback have you received from others in the use of your new skill(s)?
4. What else might help you become more successful in your area of interest?

Original Survey questions for the Learning Self-Assessment (questions not highlighted were removed for future surveys)

<table>
<thead>
<tr>
<th>Awareness</th>
<th>1. I identify what I need to learn</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. I am able to select the best method for my own learning</td>
</tr>
<tr>
<td></td>
<td>3. I am responsible for my own learning</td>
</tr>
<tr>
<td></td>
<td>4. I am able to plan and set my learning goals</td>
</tr>
<tr>
<td>Learning Strategies</td>
<td>5. I like to participate in group discussions</td>
</tr>
<tr>
<td></td>
<td>6. I find practice with peers effective</td>
</tr>
<tr>
<td></td>
<td>7. I find learning from examples useful</td>
</tr>
<tr>
<td></td>
<td>8. I regard problems as challenges</td>
</tr>
<tr>
<td></td>
<td>9. I consider teachers as facilitators of learning, rather than providing instruction only</td>
</tr>
<tr>
<td>Learning Activities</td>
<td>10. I identify the important parts of the skills I need to learn</td>
</tr>
<tr>
<td></td>
<td>11. I am able to find resources to help me learn</td>
</tr>
<tr>
<td></td>
<td>12. I keep notes or a summary of all my ideas, reflections and new learnings.</td>
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<td>13. I am able to relate knowledge with practice</td>
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<tr>
<td>Self-Evaluation</td>
<td>14. I am able to identify where I still need to improve in what I have learned.</td>
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<td></td>
<td>15. I find both success and failure inspire me to further learning</td>
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<td>16. I value feedback from others to improve my learning</td>
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<td></td>
<td>17. I monitor whether I have accomplished my learning goals</td>
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<td>18. I find new learning challenging</td>
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<tr>
<td>Interpersonal</td>
<td>19. My interactions with others helps me to identify what i want to learn</td>
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<td>20. I need to share information with Others</td>
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<td></td>
<td>21. I find it easy to work in collaboration with others.</td>
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<td>22. I am able to express my views freely</td>
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<td></td>
<td>23. I am inspired by others’ success</td>
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<tr>
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<td>24. I enjoy seeking people in my village who can help me.</td>
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</tbody>
</table>