# PROJECT STATUS REPORT (PSR)

07/01/2022 - 12/31/2022 - PSR-09550

## PROJECT SUMMARY

Operation number
GY-T1179

Suboperation number
ATN/ME-18964-GY

Project Name
Guyana's Learning Pods - Supporting Success in Education for Vulnerable Children

Team Leader
Vashtie Dookiesingh

Executing Agency
STEMGuyana Inc.

Purpose

## Project cycle

| Approval Date | Signature Date | First Disbursement Date | Last Disbursement Date |
|---|---|---|---|
| 2021-11-12 | 2022-01-19 | 2022-02-18 | 2025-01-19 |

## PSR SCORE


0 - 1 Red Flag
1 - 2 Yellow Flag
2 - 4 Green Flag

# LEARNINGS

## 1. Risk and Lessons

### 1.1. Risk

#### 1.1.1. What do you think is the biggest risk that threatens the achievement of the project objectives?

In my opinion, the most significant threat to the success of the project remains the potential for political or government-related risks. Specifically, if the government decides to prohibit our use of government facilities such as internet hubs, libraries, schools and local government offices from acting as free host locations for our pods, it could have a major impact on the program's success. To address this risk, our team plans to identify alternative locations, such as churches, community centers, or private homes. Additionally, we will strive to engage and educate government officials about the benefits of our program to help mitigate the potential for any government-related obstacles.

### 1.2. Greatest Achievement or Failure

#### 1.2.1. What has been the greatest achievement or failure in the last semester that affected the implementation of the project?

Over the past 6 months, our team has successfully achieved its goal of establishing 42 new Learning pod locations throughout various regions in Guyana, 2 more than our target. The process of coordinating these openings was a remarkable feat for our small team. One of our major findings is that the pods which are in schools perform significantly better and therefore along with the challenge of identifying suitable locations with the necessary facilities for our new pods, we also moved some of our existing pods into schools. The process of opening a learning pod includes seeking permission from schools, training club leaders, recruiting students, providing equipment and books, and ensuring that each location adhers to proper health and safety protocols. Despite these challenges, we take pride in what we have accomplished and are thrilled with the outcome.

### 1.3. Findings and Lessons

#### 1.3.1. What are the most useful findings and lessons from this project that when taken into consideration could improve the execution and results of existing projects and the design of similar projects in the future? A finding describes an action, circumstance or decision that was critical in determining the positive or negative evolution of the project (for example, switching from the development of a blockchain platform to a web-based shared database reduced the cost and time devoted to implementing the traceability capabilities required by the project). A lesson is a concrete, actionable proposal based on a finding that, in similar circumstances, would facilitate problem solving, risk mitigation, and the achievement of results (for example, Develop guidelines and criteria to identify candidates that could benefit from the implementation of a blockchain platform, and assess during the design if the selected project satisfies the criteria before committing to develop one).

The most important lesson we have learned thus far is to prioritize using school facilities as hosting sites. We have found that attendance is better and cancelation of classes minimized when the program is planned as an after-school activity on the school premises. Parents also seem to trust the locations more and teachers are often more comfortable in these environs. Additionally, we have determined that relationships are the key to success. It is important to establish nurturing relationships with all stakeholders--sponsors, partners, politicians, school cleaners, club leaders, parents, students and members of the diaspora. A third important finding is the criticality of identifying, recruiting and hiring candidates who not only possessed the necessary skills, but who also shared our vision, understood the mission, and were committed to ensuring the program's success. Fortunately, we were fortunate enough to recruit and hire an exceptional team of individuals who met these criteria.

## 2. Scalability and replicability

2.1. Scalability Plan

2.1.1. Now that the Project is in the execution phase, have you developed any concrete plan or action that will allow it to reach a greater number of users/clients/beneficiaries (or broader environmental or resilience to climate change and natural disasters impacts) in the future?

We are receiving increasing numbers of requests for learning pods in communities across Guyana and have opened 2 pods more than planned. However, we have decided that our next step will be the opening of STEM clubs, which are a lite version of learning pods. Clubs are technology focused, meet one day a week and while students focus on coding and robotics, they also follow the MOE's Science and Math curriculum. Additionally, next quarter, we will meet with school leaders to educate them on our lesson plans and to have them encourage more students to work from home on the plans and to aid in our recruitment of parents for our parent academy.

2.2. Costs and Partners to Scale

2.2.1. Now that the project is in the execution phase, do you know how much it costs to offer your product / service per user / client / beneficiary? Is this a factor that could affect reaching a greater number of users / clients / beneficiaries in the future? Has any public or private institution requested this information from you, looking for scaling or replicating the model / product / service?

After demonstrating the effectiveness of the program, we plan to offer a "turnkey" program for a setup cost of $700,000 and a monthly cost to STEMGuyana of $5 per students. The setup cost will cover laptops, tablets, books, graphogame, curriculum, scratch coding, robot kits, and other necessary resources. The revenue model includes a student charge of $25 per month, which would cover teacher, cleaner, snacks and STEMGuyana costs. The $20 to $25 month student revenue will include, $5 - $10 per student per month to STEMGuyana, $8 per student per month to cover teacher, cleaner and snacks and $7 per student per month to be generated for the program operator. Each learning pod can accommodate up to 24 students, and our goal is to have 100 paid learning pods, generating a monthly revenue of $12,000USD to $24,000 USD monthly for STEMGuyana. This revenue will significantly help in maintaining pods for vulnerable children. As the entire program is automated, we will only require 5 more Program Analysts {revised} to manage the expanded program. We can continue to expand under this model, with one additional program analyst being added for every 20 new pods.

2.3. Facilitating or Hindering Factors

2.3.1. Has any of these factors affected the number of users/clients/beneficiaries (more/fewer) reached by the project compared to what was originally planned (or environmental or resilience to climate change and natural disasters impacts)?

[Other]

Others, Which?

We have surpassed the number of planned learning pods and students.

2.4. Scalability Scope

2.4.1. How feasible it is that the organization could reach a number of users/clients/beneficiaries 5, 10 or 100 times the number originally planned in the project design, five years after the project ends?

[It could reach more than 100 times the number of users/clients/beneficiaries originally planned in the project design five years after its closure.]

2.4.2. How likely is the organization to reach that number five years after the project ends?

[Highly probable (above 90% chance)]

2.5. IDB Group business relation

2.5.1. Has a business relation been created with another part of the IDB Group different from IDB Lab?

No we have not.

2.6. Replicability Partners

2.6.1. Are you aware of any other entity at a national or international level that has copied / replicated completely or partially the business model of the project? Did you collaborate in the process with that entity?

[Yes]

If Yes, Explain

The Ministry of Education have had several unofficial discussions with STEMGuyana about providing the training and support services associated with rolling out STEM clubs in all of the primary schools. Our organizations have been unable to come to agreement on this as the ministry continues to change its mind as to whether it is willing to partner. STEMGuyana stands ready with the resources and capacity to deliver on this. The Department of Youth is also attempting to roll out STEM clubs in 3 or 4 regions of the country. STEMGuyana has provided training and equipment to the ministry to aid in this process. STEMGuyana is seeking a more solid agreement with this partner.

2.7. Replicability Scope

2.7.1. Number of users / clients / beneficiaries reached by entities that have fully or partially replicated / copied the business model / products / services implemented with the support of the project?

[Less than 2 times the number of users / clients / beneficiaries planned in the original project design]

2.7.2. Have you experienced, in the last year, significant expansion (50% or more) of the reach of the business model of the project beyond what was expected in the original project design (due to increasing of the organizational size, operational scope or geographic spread)?

[No]

If Yes. Explain

We have not expanded our reach beyond plan but we are managing more than 100 requests for expansion of our program. We have decided to expand to the STEM club model and make these locations self-sustaining by charging a small fee to our students.

2.7.3. Number of users / clients / beneficiaries reached as of the end of the year?

[Less than 2 times the number of users / clients / beneficiaries planned in the original project design]

2.8. Sustainability

2.8.1. How do you think the project will continue once the IDB Lab financing ends? Examples: it has identified external financing sources to continue operating, it has reached the breakeven point through the sale of services and products, it has obtained the support of public institutions or the private sector, it will adjust the business model to remain viable (via franchises, etc.)

STEMGuyana plans to build the capacity to fund the long term viability and expansion of the Learning pod program well beyond the 36 month evaluation and funding period sponsored by the IDB and other public and private partners. All of the below programs are targeted to students who do not meet the qualifications for college or have no interest in enrolling. They will also be young people who have been members of our STEM clubs or leaning pods. The sustainability program will have 3 components– National Drone Service - Citizens all around the country will be able to use our app to schedule drone services in any region (where we have a learning pod / STEM club). Students (older) in our program will be trained to build, maintain, and provide drone services to communities in which STEM clubs / Learning pods operate. A pilot program in 3 locations (Essequibo, Demerara and Region 9) have been targeted for the first pilot in late 2023. The STEMGuyana team will very soon begin work on building the drone building capacity. 50% of the revenue from this program will go toward the funding of the Learning pods program. Paid STEM Clubs - There is an overwhelming demand for the reopening of STEM clubs across the country for which parents are willing to pay. We are currently exploring using one day at each pod as a paid STEM club day. This program would

have a different club leader and the students would be a different target group–whose parents are willing and able to pay. The goal is to have the revenues from the STEM clubs support both the learning pods and the STEM clubs. Our goal is to open 50 STEM clubs by December 2023. (Video) Game support services - The goal is to train a batch of outstanding students to provide development support for a select gaming industry in the United States. I have already had preliminary conversations with an old friend of mine who is looking to Guyana because of its location, English speaking, oil industry and contacts he can trust within Guyana. I am in talks with him to create a learning plan so that we can also pilot this program. This would be an amazing program if we could make it happen.

**3. Implementation**

3.1. Facilitating or Hindering Factors

3.1.1. What specific aspects have (positively or negatively) affected the implementation of the project the most?

[Coordination with third parties, Complexity or breadth of the proposed activities, Quality of consultants / suppliers, Advantages or disadvantages of technology, Available resources, Changes in costs, Public recognition / award]

3.1.2. Explain in detail how these factors that you identified have made the implementation of the project easier or more difficult

Overall, the factors we have identified have made implementing the project easier for STEMGuyana. The organization has been fortunate to attract a high-quality leadership team comprised of young individuals who share the vision and mission of the project. The technology-integrated lesson plans we offer are unparalleled in their content, quality, and scope, creating a significant barrier for those seeking to replicate our program. Although we have had to pay our consultants a bit more than we had initially budgeted due to the high demand for quality workers in the marketplace, this additional investment has paid off in significant dividends. Additionally, we have dedicated substantial effort towards building bridges, creating networks, and strengthening relationships with our stakeholders, which has proven to be a valuable investment. We also believe that our rewards system has been very effective. Each month, we highlight and reward our club leaders, students, staff and online teachers who perform well. Finally, our marketing team has effectively communicated the uniqueness and quality of our program, strengthening our brand and increasing demand in the marketplace.

3.2. Novel Tecnologies Factors

3.2.1. If the project makes use of novel technologies or methodologies, what factors have facilitated or hindered the implementation of the technological solution initially proposed by the project?

[Data availability]

Others, Which?

We intend to implement an AI model which would offer customized lessons to students based on their performance on lessons and assessments over time. However, we will need to make significant changes to the way in which we collect lesson plan data to make this happen. This addition is still in the discussion phase.

**4. Development Outcomes (Quantitative)**

4.0 Has your project contributed to any of the following indicators in the last 12 months (last year)?

[4.2. Direct jobs generated by the project or financing]

4.2. Direct jobs generated by the project. How many people were directly employed as a result of the project funded by IDB Lab?

Total

72

Jobs created: number of men

15

Jobs created: number of women

57

4.2.2. Indicate which indicator in the results matrix is related to your answer, or how did you calculate this number?

We indicated the number of jobs generated. The categories include 42 club leaders, 5 project leads, 15 pod evaluators, 5 online teachers, 5 cleaners. The vast majority of the jobs created have been filled by women.

4.5. Data Source

4.5.1. What kind of verification sources have you used to report the data you provided in this section? (Please select all that apply)

[Administrative information]

**5. Development Outcomes (Qualitative)**

5.1. Target population identified in the design

Is the target population that was identified in the design being reached by the project? Select the target population actually reached by the project that was originally identified in the project design.

[Afro-descendants, Indigenous population, Poor/vulnerable/low income population, Child and young, Women]

5.2. Population served NOT identified in the project design

5.2.1. Select if there are Groups that were NOT originally identified in the project design but are being reached in the execution phase?

[None]

5.3. Facilitating or Hindering Factors

5.3.1. Factors that have affected (facilitated or hindered) reaching these groups, or the resilience/environmental impacts, in the numbers/dimensions that the project had originally planned.

[Quality of the product/service offered, Demand for the product/service (market needs), Difficulties or advantages related to the adoption of technology]

Others

The primary considerations for effectively connecting with our intended audience are network dependability and accessibility. However, in rural or remote regions, internet connectivity is often unreliable or absent altogether. We continue to closely monitoring the expansion of the NDMA network into indigenous communities, and intend to extend our reach to these areas as soon as connectivity becomes available.

5.3.2. Explain in detail how these factors that you have identified have affected the ability of the project to reach the groups (achieve resilience/environmental impacts) in the numbers/dimensions originally expected

Despite internet connectivity issues, STEMGuyana has been able to serve children from indigenous and rural communities across Guyana by provide portable wifi routers along with monthly data allotments each month. While not ideal, this plan allows us to serve indigenous communities in region 8 and region 1. Although internet coverage is spotty, there is significant cell phone coverage (94% estimated 2017), which allows our program access into some underserved communities.

## INDICATORS

Overachieved Achieved Pending In process Overdue

**C1:** COMPONENT 1: Upgrade of Digital Platform and Content

**Weight:** 30% **Qualification:** High Satisfactory


| | Indicators | Planned | Achieved | Status |
|---|---|---|---|---|
| I1 | | 5 ( 2025-07-19) | | |
| I2 | | 0 ( 2023-01-19) | Yes ( 2022-06-30) | |
| I3 | | 0 ( 2023-01-19) | Yes ( 2022-04-15) | |
| I4 | Automated tracking of performance participation and attendance metrics implemented | 0 ( 2023-01-19) | Yes ( 2022-09-09) | |

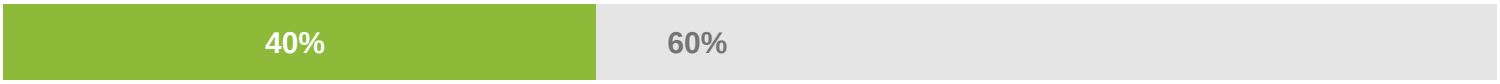
**C2:** COMPONENT 3: Scaling and Sustainability

**Weight:** 30% **Qualification:** High Satisfactory


| | Indicators | Planned | Achieved | Status |
|---|---|---|---|---|
| I1 | | 0 ( 2025-07-19) | Yes ( 2022-06-30) | |
| I2 | Independent evaluation of Learning Pod Model impact on participant learning outcomes completed | 0 ( 2025-07-19) | Yes ( 2022-09-09) | |
| I3 | STEM Guyana Plan for scaling and financial sustainability finalized and approved by Board of Directors | 0 ( 2025-07-19) | Yes ( 2022-06-30) | |

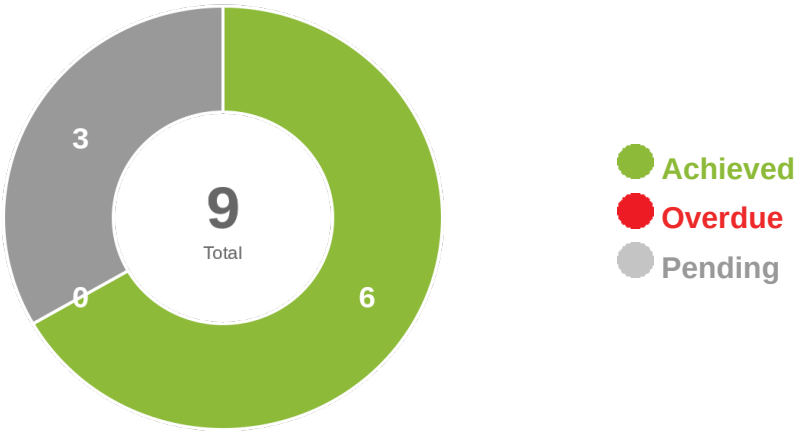
**C3:** COMPONENT 2: Expansion of Pilot

**Weight:** 30% **Qualification:** High Satisfactory




| | Indicators | Planned | Achieved | Status |
|---|---|---|---|---|
| I1 | | 1000 ( 2025-07-19) | 875 ( 2022-07-31) | |
| I2 | | 40 ( 2025-07-19) | 40 ( 2022-12-31) | |
| I3 | | 6 ( 2025-07-19) | 4 ( 2022-03-01) | |
| I4 | Number of total children who are girls from vulnerable households or communities enrolled | 500 ( 2025-07-19) | 506 ( 2022-09-09) | |
| I5 | | 500 ( 2025-07-19) | 125 ( 2022-09-09) | |

## MILESTONES




| Milestones | Achieved Value | Due Date | Achieved Date | Status |
|---|---|---|---|---|
| *Condiciones Previas / Prior Conditions | 1 | 2022-07-19 | 2022-02-19 | ✓ |
| *Design of new modules and upgrade of digital platform | 1 | 2022-07-19 | 2022-08-11 | ✓ |
| *Impact evaluation of learning outcome conducted | 1 | 2023-07-19 | | ••• |
| *Design of Projects and exercises for Math and English | 1 | 2022-07-19 | | ✓ |
| *Design/Implementation of Health and safety Protocols/equipment for locations | 1 | 2022-07-19 | 2022-06-30 | ✓ |
| *Design of Remedial and Literacy Program Structure and Content | 1 | 2023-01-19 | 2023-01-19 | ✓ |
| *Expansion of Learning pods to 20 | 1 | 2022-11-25 | 2022-09-06 | ✓ |
| *Establishment of Parent Academy | 1 | 2024-01-19 | | ••• |
| *Strategy/plan to achieve financial sustainability | 1 | 2024-07-19 | | ••• |