



Internet Free Education Resource Bank IFERB Project October 2020- March 2021

Resources for Home Schooling & Distance Learning

End of Pilot Report

Souhaila Nassar Project Coordinator

Context and Overview

Lebanese Alternative Learning ("LAL") is an educational technology non-governmental organization founded in 2014 aiming to give every child access to quality education through digital. LAL believes that technology should be an equalizing force when it comes to education and should fill the gap between privileged and underprivileged access to learning. Therefore, LAL aims to provide free digital support resources for Lebanese public and private schools as well as educational centers, advocating for quality education and producing local content adapted to local contexts and curricula, the Tabshoura project www.tabshoura.com. LAL also provide an offline solution, Tabshoura-in-a-box to reach area with unreliable internet connection.

LAL also aims at providing digital development services to other organizations/institutions to help them scale their impact by transforming their static content into digital interactive programs. www.lal.ngo

LAL programs target children between 3 and 15, from KG to Grade 9.

Lately, LAL is working on completing elementary school and focusing on a teacher support program on remote pedagogy, as COVID-19 revealed the importance of empowering teachers for them to succeed in remote teaching especially in vulnerable areas.

In the context of a study conducted by LAL to better understand how vulnerable communities' teachers coped with education during COVID-19, we gathered the following information:

- O In a context where there is no internet and more and more restriction on electricity lately, it is impossible to provide synchronous teaching, or to send videos, even compressed. Uploads took a lot of time. Teachers and students faced too much trouble shooting. A lot of students do not have internet nor devices which caused a lot of dropouts.
- The most used device to communicate between teachers and students is mobile phones. Often parents own the phone and children have to wait for their father to come from work to access homework sent by the teacher in the afternoon, having to share that time with their brothers and sisters.
- The most used Apps to communicate with teacher is WhatsApp, or Telegram messenger (more than 80%). Note that very often parents have only subscribed to a WhatsApp bundle. So: Storage problem; Weak 3G/4G; Not enough megabytes.

- The communication between students and teachers was limited to sending traditional homework and answering some question if there was communication at all.
- Digital resources made available by international providers and shared by some schools were not easy to adapt to the actual curriculum. Very few teachers used them (Less then 2%).
- Parents were unable to help their children as most of them have insufficient education. Reaching KGs and elementary students was very difficult. Only 12% got access to education in Tripoli and Begaa.

This showed that we have to rethink our believes when it comes to digital education in emergency and provide teachers and students with internet free education resources, and tools to implement asynchronous digital learning.

The Internet Free Education Resource Bank provided by Education Above All, is one of the solutions to those challenges. It will give teachers resources to support their students remotely and bypass the lack of internet and devices.

Our beneficiaries were around a thousand refugee' children enrolled in non-formal education centers in remote areas of Lebanon: Aakar, Tripoli, Beqaa and Majd Al Anjar.

The age group varied between 4 to 8 years old. Around 200 students between 9 and 12 years, old benefited from the project as in introduction to Basic Literacy and Numeracy.

The 12 teachers and the 4 coordinators who participated in the projects work in those non-formal centers and most of them are refugees themselves.

Pilot Overview

LAL partnered with 4 NGOs to adapt, pilot, monitor and evaluate the impact of 12 IFERB resources. Those partners provide education to Syrian refugee children in the most vulnerable areas in Lebanon: Malaak center is located in Aakar, Jusoor in 2 different locations in Beqaa, Ruwwad Al Tanmiya in Tripoli and Social Support Society in Majd Al Anjar, near the Syrian border.

The work was divided in 2 phases

Phase 1:

- We worked with Malaak, Jusoor and Ruwwad Al Tanmiya, to select 12 resources, 12 teachers with sufficient digital skills to adapt and translate the projects into Arabic when needed.

- We onboarded the 12 selected teachers. With the support of Inspiration Garden, we organized a webinar to discuss the project's outcome, requirement, flow of work...
- With the coordinators and the school management, we identified and adapted 12 IFERB resources and translated them into Arabic. We decided to focus on Level 1 and work with students between 4 and 8 years old.
- We also felt the need to create a booklet to support those projects. LAL's project coordinator working closely with the teachers and coordinators of the centers developed a booklet that was printed and provided to the centers with a kit of stationary for each of the 200 students.
- Pilot
- Bi-weekly meeting were held to monitor the challenges as well as the progression of the project.

Phase 2:

Scaling by piloting the adapted resources with 5 more schools and around 800 students in the underserved area of Majd El Anjar.

The whole project was done remotely as the country undergone several lockdowns due to the COVID-19 measures. Workshops and meeting with the teachers were done through video conferencing.

Teachers reached to the students mostly using WhatsApp and Telegram messengers and communicated with parents through voice messages and some calls.

We at LAL never had the chance to meet our partners face to face and exchange with them which was one of our challenges.

The fact that the government imposed on all NGOs to teach specific non-formal programs developed by the Center of Education Research and Development in order to be accredited also gave us less flexibility and imposed more stress on the teachers.

You will find below a table of the adapted and piloted projects:

	Project	Level*	Adapted and contextualization**		
1.	الماء هو الحياة Water is life	1 & 2*	The project was adapted and then translated into Arabic and provided to teachers in a PowerPoint document.		
2.	حول العالم Around the world	1 & 2	Teachers were provided with oral guidelines to how they can easily implement the game with the students.		
3.	كيف نحمي أنفسنا من فيروس كورونا How to protect ourselves from Covid-19	1 & 2	The project was adapted and provided to teachers in a PowerPoint document.		
4.	أسلوب حياة صحي و سليم Healthy and Sustainable lifestyle	1 & 2	The whole project was translated into Arabic, adapted for the 2 levels, and delivered to teachers in a PowerPoint presentation document. Too many tables to fill. This might be confusing for students at the lower end of level 1.		
5.	حديقة الحيوان الخاصة بي My Animal Park	1 & 2	The project was adapted and provided to teachers in a PowerPoint document. Very interesting to adapt and facilitate as reported by the teachers.		
6.	مغامرات في مملكة النبات Adventure in the plant kingdom	1 & 2	The project was adapted and then translated into Arabic and provided to teachers in a PowerPoint document.		
7.	مطعمي المؤقت My pop-up restaurant	1 & 2	The project was adapted and provided to teachers in a PowerPoint document. Most of the students loved this project. In one NGO, some of the boys assumed that this is a project for girls (involving cooking) and were reluctant to participate. It was beneficial to give examples of simple common uncostly local dishes/ drinks that can be prepared from the food that usually exists at home, such as Lemonade, tea, Nescafe, breakfast beans, etc.		
8.	بطاقات الرياضيات Math cards	1 & 2	The project was adapted and then translated into Arabic and provided to teachers in a PowerPoint document. Some teachers and students viewed this project as difficult. Others prejudged the project as difficult, but when they implemented the adapted version, they enjoyed it. Adapting and simplifying this project consumed time. There are too many games, colors, and codes. It was simplified ensuring the facilitation of mathematical knowledge.		
9.	شجرة العائلة Family tree	1 & 2	The project was adapted and provided to teachers in a PowerPoint document.		
10.	بيتي في بلدي My home in my country	1 & 2	The project was adapted and then translated into Arabic and provided to teachers in a PowerPoint document. The project (My home in the universe) seemed dense as reported by the teachers especially that their students attend formal schooling in addition to the NGO activities. Hence, it was simplified to My home in my country.		

11.	الشخصية الورقية الخاصة بي – الحواس	1 & 2	The whole project was translated into Arabic, adapted		
	الخمس		for the 2 levels, and delivered to teachers in a		
	Make my Own Paper Character		PowerPoint presentation document.		
			The addition of the activity where students roleplay		
			doctors to check how healthy their family members are		
			was very engaging as reported by some teachers.		
12.	الجمال في الأشكال و القياسات	1 & 2	The project was adapted and provided to teachers in a		
	Beauty in shapes and		PowerPoint document.		
	measurements		In level 1, students who are 4 years old cannot perform		
			the same tasks as 7 years old. Using the ruler was		
			reported to be a challenge. This made the adaptation as		
			well as the facilitation a little bit challenging for students		
			in the lower end of level 1.		

https://drive.google.com/drive/folders/1zMRUfzlvukANmol 8 hFP2pZXetYnaUz?usp=sharing

^{*}Although the students were mixed (levels 1 and 2), level 2 students were BLN students. Hence, they were taught a higher version of the simplified level 1 projects. Teachers generally considered them (advanced) level 1 students regardless of their age.

^{**}All the PowerPoint documents of the adapted projects are uploaded to google drive.

Monitoring and Evaluation

Description of the monitoring and evaluation tools and indicators

Different monitoring and evaluation tools were used to check for all the indicators specified in EAA's monitoring and evaluation framework.

LAL's team relied mainly on google forms surveys to collect data from the teachers and parents/students. We found this method the easiest and most efficient to reach all the teachers and the biggest possible number of students. All the surveys are uploaded to LAL's folder on google drive. Following is a description of the developed surveys:

Survey # 1: Pre-pilot Teacher Survey – the purpose of this survey was to collect information about the teachers/facilitators/volunteers we were going to work with, such as whether they have prior teaching experience and whether they are familiar with PBL.

Survey # 2: Pre-pilot Community Survey – the purpose of this survey was to collect data about the parents and students such as whether education level, the electronic devices they have, etc.

Survey # 3: During Piloting – Parent/Student Feedback

Survey # 4: During Piloting – Teacher Feedback

Survey # 5: During Piloting – End of 1st, 2nd, and 3rd Month Students' Interviews: by the end of each month, the teachers interviewed around 10% of the students and recorded their answers on a google form questionnaire.

Survey # 6: Deeper Check-in with Facilitators – End line Survey # 7- End of Project Partner Survey – Coordinators

In addition to the surveys, biweekly meetings were conducted with the coordinators. In these meetings, we asked the coordinators about the challenges they are facing, how they are overcoming them, and how we (LAL and EAA) can provide any form of support.

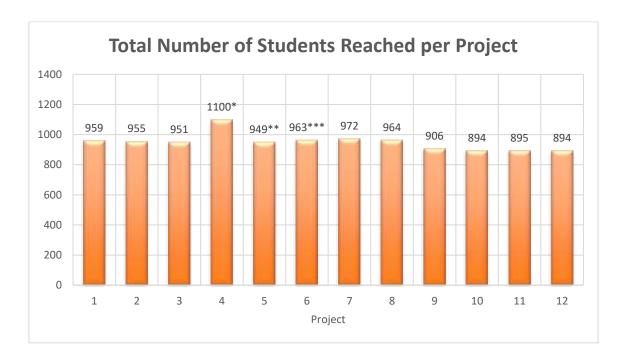
Furthermore, LAL's team followed up with the coordinators via WhatsApp almost on daily basis whenever needed.

Concerning students' assessment, a pre-assessment was conducted prior the beginning of the piloting phase and a post-assessment was conducted at the end of piloting 12 projects. More than 10% of the students underwent these assessments. The same students who were assessed in the pre-piloting phase were also assessed at the end of the piloting phase.

At the end of the piloting phase, LAL's team arranged for Reflection Land, in which the teachers and facilitators reflected on their journey and shared a few success stories with LAL's and EAA's teams.

• Weekly breakdown of the total number of students reached

Following is the total number of students reached in each project. It is noteworthy to mention that first the NGOs started implementing the projects on weekly basis (1 project/week). One project per week was very suitable as the students were overwhelmed with schoolwork and assumed that the project is extracurricular activity. However, two of the NGOs which comprise 5 schools, had no content to teach during the lockdown period in January and February. Hence, they heavily relied on IFERB project as their sole resource.



^{*} In this week, around 135 students dropped out because one of the schools was shut. At the same time, to compensate for this loss and maintain the average number of students expected to be involved in IFERB Project, the great coordinator of that NGO enrolled 140 new students from another school.

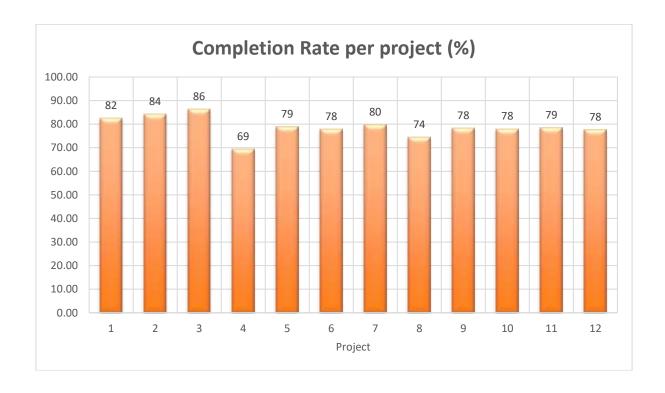
^{**} In week 5, a new school (Borderless) joined us with 76 students of level 1 and BLN students (advanced level 1). However, this number (76 students) is not included in the statistics of the report as they joined only for two weeks in the beginning of the lockdown period. This period was very confusing as schools

were unsure whether to open or close. Teachers facilitated the projects only during the lockdown days and returned to traditional teaching and school curriculum when students attended the school. A serious challenge faced with this school was that one of the teachers, who wanted to implement the projects, lacked digital literacy. Hence pursuing online learning was very challenging for her. To summarize, the students in this school were involved in PBL using OFERB resources only for two weeks.

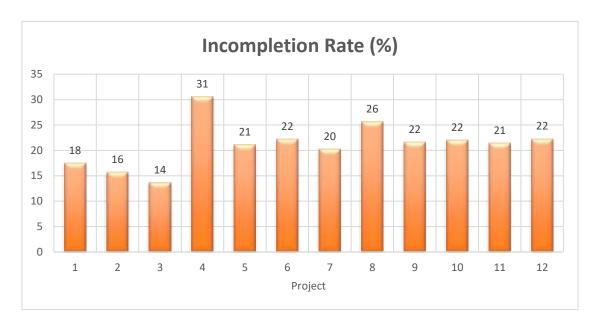
*** In week 6, another school joined us, Chania School with 73 students. Working with the teachers at this school was very challenging, yet interesting. Each teacher wanted to incorporate a particular project with his/her subject. While this seems great that teachers were mapping IFERB projects to their school curriculum, they found many of the projects irrelevant to their subjects and they could not pilot 12 projects, as agreed with EAA. They also could not conduct the assessment and fill the surveys due to many challenges: accessibility issues, being overwhelmed with the school curriculum, assuming that the monitoring and evaluation procedure were demanding, unfamiliarity with this new method of teaching, etc

• Completion rate

Following is the weekly breakdown of the percentage of students who have completed the projects. This figure represents all students who have *reported* completion regardless of whether they have submitted their work.



Following is the weekly breakdown of the percentage of students who have not completed the project for the week or who were absent during that week.



• Students/parents feedback

Following is the weekly feedback on projects from students and/or parents. The given percentages in the table indicate the percentage of students and /or parents who responded positively (agree or strongly agree) to the items in the table.

Week	Sample total (students)	I/my child enjoyed this project (%)	I/my child learned from this project (%)	The instructions were clear and easy to follow (%)	Average number of days needed to complete project (days)	I worked with my parent/ child on this project (%)	I was able to find everything I needed for this project at home (%)
1	47	91.3	93.5	93.4	3.3	91.4	65.2
2	60	98.3	98.3	100.0	3.6	83.3	91.7
3	38	97.4	100.0	97.4	2.9	76.3	71.1
4	19	94.4	94.4	94.4	2.7	83.4	100.0
5	20	89.5	100.0	100.0	2.5	68.5	84.2
6	15	92.9	100.0	100.0	2.7	71.4	92.9
7	18	100.0	100.0	100.0	3.2	50.0	94.9
8	23	82.6	91.3	95.7	2.8	69.6	91.3
9	27	100.0	100.0	100.0	3.0	74.0	92.6
10	14	92.8	78.6	92.8	2.8	57.1	85.7
11	19	100.0	94.7	78.9	3.2	73.7	89.5
12	37	97.3	100.0	100.0	3.6	75.7	94.6

Impact and Feedback

In this section, include evidence of impact from all quantitative sources as well as narrative accounts collected through surveys, focus group discussions or interviews conducted with a sample of students. Provide detailed feedback from all stakeholders on all aspects of the pilot. Wherever relevant, include vignettes and stories that will help situate and personalize the insights, challenges, and highlights shared. This section should, therefore, cover:

 Impact on student learning and growth through pre-post assessments (academic and life skills)

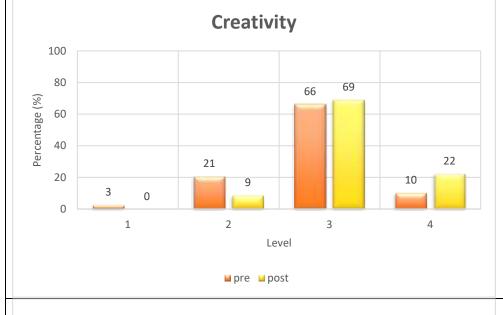
The pre and post assessments were conducted for the same students. The pre-assessment was conducted for 132 students. However, the post-assessment was conducted for 116 students because 16 students dropped out and 2 students could not be reached due to poor connectivity. The statistical data given below is limited to the 116 students who performed both, the pre and post assessments.

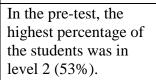
Academic Skills

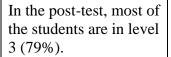
Based on the pre-post assessments, students' academic knowledge and skills improved. The average grade increased from 5.99 to 7.12 out of 10.

21st Century Skills

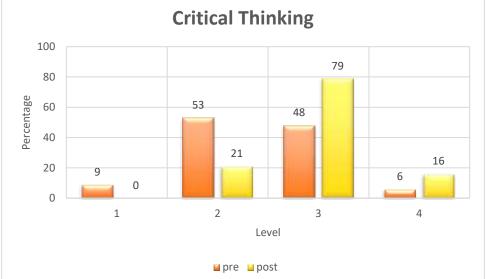
There is an improvement in students' level of creativity.
The percentage of students in levels 3 and 4 increased.







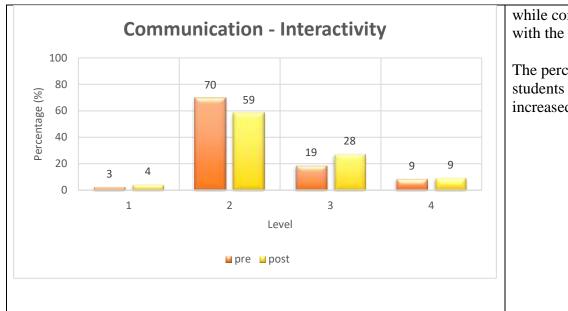
The percentage of the students in levels 3 and 4 increased.



Communication - Continuity in Speech Percentage (%) Level ■ pre ■ post

There is an improvement in the students' communication skills, i.e., continuity in speech. Some students who were in levels 1 and 2 in the re-test became in levels 3 and 4.

There is a slight improvement in students' interactivity



while communicating with the teacher.

The percentage of students in level 3 increased by 9%.

Impact on student learning and growth from qualitative data

The projects contributed to widening students' horizons. The new style of teaching and learning, project-based learning, promoted students' creativity and interaction with the surrounding environment. According to the facilitators' feedback in Reflection Land, students gained multidisciplinary skills and content knowledge. Students in the different participating schools developed communication skills. Most of the teachers reported significant improvements in students' organization of their verbalization of ideas and completion of statements in the WhatsApp voice recordings they sent. Many students were also creative in their implementation of the activities, such as in cooking, coloring and drawing.

Teacher/volunteer/facilitator feedback on overall pilot experience, student progress, and own professional development and growth

Most of the teachers said that they were concerned at the very beginning for 2 main reasons: 1) the new online learning/teaching environment and 2) the new method of teaching: Project-based learning over WhatsApp. Nevertheless, their concerns were diluted in the first 2-3 weeks. After this period, both the teachers and the students got used to the new learning method in the online setting.

In addition, all the teachers reported that they enjoyed the pilot experience. They all expressed their desire to pursue project-based learning using IFERB as well as their willingness to learn how to create their

own projects. Some of the teachers also reported that they learned content knowledge from the adapted projects. For example, one of the teachers said that she was happy to know the meaning of the colors in the Lebanese flag.

The facilitators who are practicing teachers said that they learned many skills which they integrated into their teaching with traditional school subjects.

Concerning students' progress, the teachers reported that the students' engagement and motivation were generally low in the first 2 weeks; however, they improved a lot one they were familiarized with each other and the learning environment.

- Program staff feedback on overall pilot experience, student progress, and own professional development and growth
- All the coordinators liked the piloting phase and highlighted the benefits that the teachers, students, and themselves gained. One of the coordinators suggested that the teachers who were participating in IFERB project provide professional development for the other teachers at the school regarding PBL and the implementation of IFERB projects via WhatsApp.
- One coordinator reported that IFERB projects were used in a school course titled life skills.
- LAL's team enjoyed being a part of IFERB project. Providing quality education for children in vulnerable communities has always been LAL's vision. The detailed monitoring and evaluation procedures enriched the knowledge and skills of LAL's participating team.
- Parent feedback on overall pilot experience, student progress, and other reflections.

In the beginning, some of the parents complained that the activities/ tasks requested from the students were for fun rather than for learning. Their conceptualization of learning seemed to be traditional, i.e., memorization, writing, and reading. However, after explaining the project-based learning methodology to them, their conceptualization of learning changed gradually. In the weekly survey, some parents added additional comments in which they mentioned how their children learned content knowledge, such as:

- تعلمت ريم بعض المصطلحات الجديدة و الأشكال الهندسية
- المشروع فكرته جديدة و ينشط الذاكرة بالمفاهيم الرياضية

Parents' comments also revealed that their children enjoyed the projects:

One teacher said that one of the mothers was so excited that she drew her own family tree and shared it with the teacher in addition to her child's family tree.

Other feedback from the parents was related to the stationeries. They expressed how their children lacked the basic materials needed to fulfill the simplest activities, such as white paper. Getting the stationeries and delivering them to the NGOs/schools was very challenging in the total lockdown period in Lebanon. However, although a bit late, LAL's team was able to ensure the stationeries for all the children.

 Teacher/volunteer/facilitator feedback on challenges faced during contextualization, implementation, and delivery of projects and any other challenges experienced

The major challenges faced by the teachers were:

- Some teachers were not used to online learning/teaching → LAL's team modeled how a lesson could be facilitated online.
- Some teachers were not familiar with PBL → LAL's team introduced PBL to the teachers and provided them with examples and support along the journey.
- Accessibility (lack of devices, poor internet connection, no electricity)
- Delay in receiving students' responses due to accessibility challenges > the teachers had to extend deadlines
- Communicating with students in the morning or at noon was not a good decision since at this time parents (who have the mobile devices) are usually at work → some teacher shifted their facilitation time to the afternoon period.
- Students were overwhelmed with schoolwork → Some teachers provided help in schoolwork prior starting the activities. Other teachers facilitated the projects in the last 3 days of the week (Friday, Saturday, and Sunday). The latter solution was very effective.
- Some of the parents thought PBL was fun but not academic \rightarrow however, they seemed to change this conceptualization after the teachers explained this new teaching methodology.

- Some parents and children did not know how to read and write → some teachers had individual follow up calls with these students.
- Lack of resources, even the most basic ones, such as paper → LAL's team provided them with stationery materials.
- Copying exercises from the mobile to a paper and them solving them was time consuming and maybe not very comfortable for the students → LAL's team developed a booklet that includes exercise for all the activities.
- Some teachers reported that they wanted to teach the whole project rather than the simplified and adapted 3-days project. The students of these teachers weren't receiving another form of learning.
- Some students moved from a refugee camp to another due to the adverse conditions, such as stormy weather. Others had to help their parents in agricultural activities, so they couldn't participate well in the activities.
- Not all the teachers were fluent in English language → LAL's team translated all the adapted projects in addition to two whole projects.
- Program staff feedback on challenges faced during contextualization, implementation, and delivery of projects and any other challenges experienced
- The plan was to start the piloting phase on the beginning of October but due to the breakout of COVID-19 in the country in addition to the revolution against corruption in the country, the opening of the schools was delayed to the beginning of November. Therefore, we couldn't finish piloting the 12 projects on the previously set date (Jan 15).
- The schools/ NGOs did not start the piloting phase on the same date. The reports were delayed sometimes. The baseline assessment reports were separate. When writing the final report, previously prepared statistics had to be adjusted to include all the average for all the schools/NGOs.
- The teachers found the implementation of the IFERB project in addition to the monitoring and evaluation procedures very demanding and time consuming. Thus, some adaptations were made: 1) LAL's team re-adapted the projects that the teachers didn't well adapt either to lack of experience or time constraints. 2) the projects were re-adapted to 3 days/week instead of 5 days/week. 2) the teachers stopped calling the students to ask them to fill the weekly surveys. 3) biweekly meetings were planned instead of weekly meetings. 4) the meetings were made with the coordinates not the teachers because the teachers were overwhelmed with other school tasks. And the coordinators communicated the agreed-on decisions to the teachers.

- One of the coordinators, who was very dear to LAL's heart, passed away by COVID-19 after spending a few weeks at the hospital. Her colleague continued the work that she was doing, but this was a bit challenging for him because he wasn't a part of the project from the very beginning.
- Due to financial limitations, one of the was schools closed. Hence, the students dropped out and teachers as well.
- Case studies summarizing success stories. The focus of these can be student growth in achievement and/or 21st century skills and growth in values and attitudes etc. as a result of implementing IFERB projects
- One of the mothers sent the teacher a message saying that her daughter didn't like school at all. Nevertheless, through IFERB PBL the girl changed her conceptualization of the school. She started to love and enjoy learning. The mother expressed her gratitude to the teacher.
- One child cried each time the teacher asked him to draw. Realizing that PBL should be fun, the teacher differentiated her facilitation of the projects. Instead of drawing tasks, she started sending him math-related tasks, which he enjoyed a lot.
- One student faced difficulty using the ruler in "beauty in shapes". The teachers tried to help him, but the child needed face-to-face support. Few weeks after the project ended, he sent the teacher a picture showing her that he now knows how to use the ruler! His elder brother taught him how to use it and he figured out that his mother was not teaching him to use it correctly.
- One student kept looking after their lentil plant which they planted for the plant kingdom project after the project was done and sent the teacher a picture of the plant after one week.
- One teacher said that that he felt very proud of one of his students: a girl who showed a high level of creativity in the pop-up restaurant. She included numerical values a lot in this project.
- One student kept looking after his lentil plant which he planted for the plant kingdom project. One week after the project ended, the student sent the teacher a picture of the plant to share with her his/her happiness with the growth of the plant.
- One student did not know how to count. With private follow up, the student acquired the knowledge and skills. The teacher also taught her the multiplication table which was required for formal schoolwork.
- Many of the teachers are proud of the progress the spotted in the students' communication skills.

- The teachers expressed their gratitude for EAA's IFERB because it was due to PBL of these resources that they were able to develop humanistic and friendly relationships with the students in the toughest times. One of the teachers said that she didn't delete the WhatsApp group though the project ended. Another teacher said that the students used to checkup on her if she was a bit late in sending the tasks of the day. Some students also requested that they keep calling the teachers from a while.
- Most of the students and parents requested that PBL of IFERB continues even after the piloting phase. One teacher wished to have PBL for summer activities.

Key Learnings

The alignment with the formal program they have to teach is essential. Teachers and caregivers working in NGOs in Lebanon are asked to complete a program provided by the Ministry of Education/Race program in order for the students to have their education validated. This program is rather demanding. Aligning the IFERB resources with this formal program will help the teachers

Adaptation of the projects depends on the needs and the level of the users. Teachers prefers to learn how to adapt projects and not receive already adapted projects. Therefore, a special focus should be put on the adaptation skills.

All the teachers and coordinators expressed their willingness to learn how to create their own projects. They also wished to be a part of any future project.