# **Early Literacy and Numeracy Assessment Program**

### **Piloting process report**

VFS – virtual assessment team 7/27/2019



Early literacy and numeracy technology based virtual assessment program for early grades students

#### Introduction

The aim of the pilot was to examine early literacy and numeracy assessment tech based program and data collection instruments that will be used in the main data collection. It is important that any tools of data collection should have a pilot study 'in order to iron out any problems of overlap of categories In other words points out that the pilot study is trying to do two things:

First, to ensure data inform decision and plan intervention with respective school / teachers, and improve student learning outcome under realistic conditions.

Second, to get as much information as possible from the other person (VFS associates) those who all involved in the piloting process about how they interpret and react to the piloting of the overall early literacy and numeracy assessment program.

#### About Early literacy and numeracy assessment program

Early literacy and numeracy assessment program is design for early grade 2 and 3 students to assess their language and math skill and sub skill at the each stage of learning. Each subject has 3 main skill and 8 sub skills. The main feature/element of the virtual assessment program is technology based Gamification. This program will help students to overcome their fear about assessment or exam. And will support teacher to create the conducive learning environment and improve need base teaching and learning practice in the classroom and school (According to the first pilot version).

This program will ensure effective virtual field support through actual data base discussion with teachers and Head master to take data inform decision to build/improve early grades classroom strategy and ensure effective student learning outcome.

### Instruments/Tool

Technology based virtual assessments instrument assessed students for language and math subjects, and data collection were used in the pilot study. First, was language assessment tool with 15 multiple choice questions. Second, was math assessment tool with 15 multiple choice questions. This piloting was done by asking/guiding students according to instruction to attempt one by one question for each subject. The number of errors was used to measure the achievements of the students' accuracy in new technology based virtual assessment. Second, nature of virtual assessment with Gamification element was the one of the attractive

component. During the piloting process, we got an opportunity to discuss with students and teachers about technology based assessment tool, what are their expectations for further improvement of current version of assessment.

#### Pilot Study Procedures and methods of collecting data

We had collaboration with Jhunjhunu VFS team to plan and execute first version of early literacy and numeracy virtual assessment with class 2 and 3 students of 10 low performing schools in Jhunjhunu district. We had plan and executed 4 to 5 hours orientation for VFS team members to understand the overall early literary and numeracy assessment program and its objective, and further process to take this on ground with early grades students. After orientation VFS team prepared execution plan for 10 schools for 23<sup>rd</sup> and 24<sup>th</sup> July 2019. 10 + associates participated and successfully plan and executed overall process within 2 working days.

Technology based virtual assessment system helped us collect each student performance data with accurate and efficient through online system. Approximately we assessed 100 students in language and 96 students in math. We immediate found the error in data, especially differences of both subjects data with each questions/skill/sub skill. Post piloting we had learning consolidation process with our respective VFS team to understand the overall learning, challenges, and what specific things need to improve/change to make this program effective across.

#### **Learning from overall piloting process:**

A pilot assisted us to know how to work out the procedures of the main data collection and looking at anything needs to be modified or changed. It also helps to create new and important ideas to the format of data collection. The full benefits of conducting the pilot study can be seen after analyzing the data gathered from the pilot study. Such analysis will show how effective the program is.

- Students were feeling comfortable with the gamification version of the assessment
- All students were excited to play the game in the tablet
- Many students wish to attempt second round as well
- 95% students were confident during overall process
- Students were participated and highly engaged
- Some students want to take this at home to showcase their parents
- Upper primary students and teachers were also demanding for their class
- Teachers were more interested about data of student performance
- This program will help students to overcome their fear about exam or assessment

- According to dashboard per child aver. time to attempt 15 questions for one subject is 1 minute and 24 second.
- Math assessment consumed more time than language assessment
- Students those who were slow learner need assistance to attempt overall process.
- Students who are able to read took less time and those who are not able read took little more time
- Class 2 students were able to attempt pictorial based questions with multiple options
- Enrollment was less in early grades in compare to other classes in school
- Associates, teachers and students were happy with overall process

#### Challenges faced during process execution of virtual assessment with early grades students

- Internet connectivity was low, because that data synchronization was another challenge
- Selected 27 schools list was not updated. Therefore, last moment changes happened for more than three schools
- Enrollment in some schools was very less, therefore the investment of time and resources may little expensive
- Because of low enrollment, teachers prefer to combine 2 to 3 classes together in the 1 class
- In two schools teachers were pushed students very hard for virtual assessment
- Little difficult for 1 person to manage 30+ students in the classroom at one time
- In one particular high enrollment school teacher was not participative
- Transportation in rural area is little difficult to get vehicle to reach at place on time

#### Concerns and suggestions raised by VFS team during consolidation process

- Need to collect the data about each state and district internet company and facility with good speed
- Need to develop off line version of early literacy and numeracy assessment program
- Need some space between four given options, it will help student to think and select appropriate option for question.
- Need to balance between heavy text and pictorial based questions
- It will be a helpful, if an initial level VFS associate will conduct this process, and once teacher will familiar with the process then hand it over to them.
- Would it be a good, if will plan this kind of process periodically, it will help to build data base conversations with teachers.
- Allocate the schools to associates from the beginning it will help to build the relationship between associate, teacher and school.

# Some movement from virtual assessment piloting process with VFS team Orientation process with VFS team at PSL Baggar 22<sup>nd</sup> July 2019.









## Virtual assessment on field piloting with Junjhunu district Govt. primary schools 23<sup>rd</sup> and 24<sup>th</sup> July2019









### Consolidation of overall piloting process with VFS team

25<sup>th</sup> July 219









Thank you!!