Digital Classroom Playbook

Contents

Feasibility Phase

Typical Duration:

It is important to evaluate the Center/School objectively for considering implementation eVidyaloka Digital Classroom project. This would typically take 1 to 3 weeks, if the interested parties pursue actively

Bootstrap Checklist

1. Local partner available with substantial interests/stake in the Village
2. Broadband connectivity is available
3. Able to identify a local Class Assistant – part-time/full-time
4. Reasonable interest/support from the School Headmaster
5. Demographic data collection - Field Assessment Template

Criteria of the Target School:

1. Located in a rural Village
2. Has pucca classroom, with door and lock
3. Has Grades 5th, 6th,7th and/or 8th
4. Each Grade/Class has a strength/enrollment of 15 to 25 children
5. Broadband Internet connection is feasible

Business Case

Problem Statement:

<Please articulate the current challenges being faced and how this solution will help address the problem. Challenges could be around Shortage of Teachers, Interest levels of children in school, School functioning health etc. >

Desired outcome

<Please articulate what changes would you like to see in the School/Children>

6 Months, 1 Year, 3 Years

Engagement Terms

To ensure optimum value realization of overall investments of Donor's money and Partner's time and efforts, it is important to establish tangible and measurable operational metrics. These could be the driving factors for the involved organizations in making the program successful.

Two of the four measurable parameters of eVidyaloka model, depend on the partners involvement in the project, on an ongoing basis. They are:

Children Enrollment & Attendance

Digital Classroom Uptime (Sub parameter to Plan vs Actual Classes)

Detailed break of the numbers are provided in the below table:

Desired Children Strength (5,6,7,8)					Sessions Needs							
5	6	7	8	T	per Subject	No of offerings	T
<>	<>	<>	<>	<>	40	6-8	

Availability Details						Operating Efficiency		
Total Term (Days)	Holidays (Days)	Exams (Days)	Unforeseen Circumstances (Days)	Probable available days	Available Hours (avg 3 per day)	Center Availability 90% (Hrs)	Overall availability (80%) (Hrs)	Children Attendance %
200	40	25	13.5	121.5	364.5	328.05	291.6	80%

Decision

<Joint decision with decision notes from both eVidyaloka and Partners>

Setup Phase

Typical Duration:

- 3 weeks

Physical Classroom

Basic specifications

- 15'x 12' room size
- Minimum of 1 Window and a Closeable/Lockable Door
- Electric Power connection: Switchboard with Minimum of one 5 or 15 Amps Plug point
- Whitewashed for a positive learning ambience

Advanced specifications

- Color-washed for a Vibrant ambience
- Least external Sound/noise disturbances

Furnishings & Fixtures

- Lockable Storage
- Moveable Blackboard
- Children's work Display Canvas
- Table/Ceiling Fan with least noise levels
- Water Supply with Glass
- Minimum Stationary
  - Children's eVidyaloka Docket (Containing Worksheets etc)
  - Chalk and Duster
- Seating Desks – for a Capacity of 20 Children
  - 5 Monolithic Units in 5 rows, with 4 children capacity
  - 8 Dual seating units in 5 rows and 2 columns with 2 children per desk

Digital Classroom

- Know your equipment and its layout (Hardware)
  - LCD TV - 32/40", with VGA and PC In/RCA Inputs
  - CPU – 1.8 Ghz Dual Core, 2 GB RAM, 160 GB Harddisk, with min 4-6 USB ports, DVD R/W Drive, Audio Jacks (Mic and Speakers)
  - Camera – Microsoft LifeCam Cinema (Click HERE for Details)
  - External Speakers – Min 5W RMS - 2.1/5.1 Channel
  - Broadband Modem – 2 Nos (1 Backup)
    - Wired – Wi-fi supported, preferably with USB input
    - WiMax – BSNL Provided
- Things to be in your Computer (Software)
  - Non pirated – Operating System – Windows 7 – Home/Ultimate
  - MS Office
  - Antivirus
  - TeamViewer
  - Skype
  - Hangout
  - Browser – Chrome/Internet Explorer
  - LifeCam Software
- UPS and its maintenance
  - Specifications :
  -

Broadband Internet

- Identify the nearest BSNL exchange and know your SDE, JE and Lineman
- Recommended Broadband Internet Plans:
  - **Wired Broadband** – 2 MBPS Speed, 20 GB Download Limit, Approx Rs. 1300 per Month

- o **WiMax** – 512 to 1 MBPS Business plan, Unlimited Download, Approax 3500 per month
- Know your Phone number & Broadband Plan
  - o Application to Connection could be anywhere between 2 to 4 weeks
  - o It is recommended to apply the connection in the name of The Headmaster, for connections with the school. Payment of Bill would be discussed between the Partner and eVidyaloka
- BSNL User account – Log in id/Password
  - o Once connection is established, please create online user account, for ease of handling of the Bills and Plans
  - o http://selfcare.sdc.bsnl.co.in
- Bill payment
  - o Please note the Billing cycle period and pay by dates, which remains the same month over month.
  - o An ECS setup is encouraged to avoid disconnections and hence class disruptions
- Trouble Shooting Guidelines
  - o Maintenance planning forms a critical responsibility with the Partner
  - o Typical nature of problems are listed below, not necessarily fully exhaustive
    - Internet not working
      - Disconnection due to missed bill payment
      - Modem failure
      - Cable fault/cut between the BSNL Pole and the computer/ Splitter box
      - Cable fault/cut between Exchange and BSNL Pole – Minor
      - Cable cut to the Exchange itself (Backbone) – Major
    - Internet is not stable
      - Lose connection between the BSNL Pole and the computer/ Splitter box
      - Heavy rains and problem in the Exchange
    - Internet speed is slow
      - Please check the speed using www.speedtest.net
      - Internet speed of the other side (teacher) could be slow
      - Peak hour (Typically 6.30pm to 7 pm)
      - Download limit reached hence speed downgraded to 256/512 kbps.
    - Resolution
      - All the issues can be resolved by the local BSNL staff. It is important to report the issue immediately on detection, by lodging a complaint in the portal or by dialing 1500. BSNL has a healthy Service Level tracking system, once a compliant is registered
      - Please the JE visit the center once in a month, irrespective of issue and felicitate and highlight their importance to our project

School Engagement Guidelines

- Know your HM
  - It is important to place a formal request to the HM, seeking permission to setup the Digital classroom inside the school. Headmaster would typically get a consent from Block Education Officer or equivalent in the form of Noting in the request place.
  - Also seek verbal consent, for allowing a Class assistant in the school to operate the Digital Classroom and the Class assistant would be reporting to the HM on a daily basis, with respect to the Digital Classroom
- Obtain Enrolled Children data
- Obtain School Timetable
- Obtain School Holidays list for the year

eVidyaloka Engagement Guidelines

The typical value proposition of the engagement is described as below. The local Partner is the face of the project as far as the village and the school is concerned. The Digital Classroom will be managed and maintained by the Partner. eVidyaloka will handle the remote services covering the complete academic processes involved, end to end.

eVidyaloka will be onboarding the Center in My eVidyaloka 2.0, along by assigning a Class Administrator who will be the point of contact for the Partner for daily class operations. A provision to assign a Class Assistant will also be shared with the Partner, which would enable the Class assistant to access all necessary information regarding the Center.

Cost Sharing:

eVidyaloka is a fully non-profit organization and also doesn't charge any fees from the students for the services being offered. The following is a rough break up of the cost structure involved for the current Academic Year 2014-15:

One time setting up of a Digital Classroom – Rs. 53000

Operating cost of the Digital Classroom for the entire year: Rs. 1.5 Lakhs. This includes the Monthly operating expenses like Broadband, Class Assistant fees and Back end IT infrastructure, communication costs, People costs and other administrative expenses.

eVidyaloka is a fully non-profit organization and doesn't charge any fees to the children.

To keep up with the true spirits of Partnership and ensuring join accountability towards the children, eVidyaloka requires the Partner to mobilize a minimum of 15% of the total cost (Rs. 2 Lakhs). The components involved in sharing could vary as per the nature of specific center and partner and quite flexible.

People Resources

Class Assistant:

This is a key role in running and maintenance of the Digital Classroom and owned by the Partner. This resource should be hired and in place before the commencement of classes. For the detailed roles and responsibilities, please refer Class Assistant's Handbook.

Role of a Class Administrator

This is a very strategic role in the eVidyaloka side, where the individual plays the pivotal role in ensuring a constant engagement with the Teachers and the Class assistant. This role contributes significantly to the 4 Metrics against which the eVidyaloka Model is measured. For detailed roles and responsibilities, Please refer Section xx of Administrator Handbook

Operating/Run Phase

Once the Digital Classroom is setup it is good to do a quick verification of the below:

- Is the lighting sufficient
- Is the environment conducive for the Children to sit and learn
- Is the sound from speakers are audible enough in the classroom
- Are the wiring, UPS are kept away from access of the Children and safe enough for the Class Assistant to handle
- Is the height and angle of LCD display is comfortable for children
- Is the Camera covering the entire children in the Classroom
- Does the Class assistant know the Log in passwords of the Computer, Skype/Hangout, My eVidyaloka

The following section covers some key processes involved in running of the Classroom, typically by the Class Assistant.

<The processes will be elaborated more in details in the subsequent version of this document>

Digital Classroom Processes

- Daily
  - Pre Class
    - Chk Computer and Connectivity previous day evening
    - Log in to My eVidyaloka 10 mins prior Register presence and Get Children 5 mins prior as per the TimeTable
  - Initiation of class
    - If Teacher is Joining the Class within 5 mins, Report status in My eVidyaloka
    - Connect and say aside
  - During the class

- - - Be available for the online teacher, help re-convey things that are not clear both to the children and teacher
    - Offline Class
      - Scenario 1: Internet is not working
      - Scenario 3: Power is not there
      - Scenario 2: Online teacher didn't turn up
    - Post Class
      - Please have the children walk out in orderly fashion
      - Queue up the next slot children 5 mins in advance
      - If it is the last class for the day, please disconnect internet, shut down the computer and turn off all the electrical equipments, except UPS charging
- Administer a/an:
  - Help to keep the class in order
  - Activity
  - Worksheet
  - Assessment
- Homework handling
- Weekly Review with Admin
- Monthly Teachers Meeting
- Quarterly HM Reporting

Expected Operational outcome of the Digital Classroom:

- % of Classes – 90% Class Uptime, 80% Class efficiency
- % of Student attendance – 80%