

E-Pustakalaya Survey Report

December 2012

Background

Open Learning Exchange Nepal (OLE Nepal) ventured into the *E-Pustakalaya* project in 2008, following a belief that by providing freely accessible high-quality interactive teaching-learning materials along with an education-centered electronic library, we would be on our way in a major way towards addressing the problems of quality, access, and disparity in education within Nepal. In particular, an educational and widely accessible library like *E-Pustakalaya* will enable students, teachers and other community members in different geographic and economic locations to freely access the same high quality educational resources at their own convenience.

The Nepal Library Foundation provided OLE Nepal with a start up fund to set up the basics of the library and then additional funds from 2009 till date to grow the library further to be a robust and publicly available website and resource center. This fund has been instrumental in helping OLE Nepal turn *E-Pustakalaya* into a digital repository of over 4000 books that can be accessed from the Internet or through local off-line servers installed in schools and community libraries that are without Internet access. *E-Pustakalaya* allows users to browse through the library collections, search for specific items, read documents in the web browser, and download documents for later use. These books and documents provide invaluable resources to students, teachers as well as to the general reader.

The popularity of *E-Pustakalaya* is evident in the high number of downloads from its website as well as the increasing number of requests for installation of off-line servers at schools and community libraries. Many schools that already have computers realize that a little extra investment on an off-line server will provide instant access to a wealth of resources, enabling students and teachers to use the existing computers to read books, explore the school wikipedia, watch educational videos, and play learning games. Such access was unthinkable in these often remote areas where Internet access is either non-existent or excruciatingly slow. OLE Nepal's agreements with authors as well as partnerships with organizations such as Room to Read, the British Council, Practical Action, Rato Bangla Foundation, Nepalese Society for Children's Literature, Save the Children have enabled us to include many books and learning materials in this search-able digital repository.

Objective

We at OLE Nepal is constantly monitoring and evaluating the program schools to assess the usefulness of the materials in the *E-Pustakalaya* and get feedback from our users such as teachers, students and communities on what is best for them. Ensuring the materials in our database is useful in daily teaching-learning to gain knowledge, skills, as well as useful to learn

things about day to day activities has become our focus. With this objective, we carried out an evaluation survey to measure/assess the following:

1. Usage of *E-Pustakalaya* in schools
2. Usefulness of materials available in *E-Pustakalaya*
3. Ease at which materials can be found in *E-Pustakalaya*
4. Additional materials that users want

The *E-Pustakalaya* evaluation survey was conducted in sixteen schools in four districts, namely Dadeldhura, Doti, Kaplivastu, and Makwanpur, along with the evaluation of other program activities carried out in these schools. The survey was carried out during the months of August and September, 2012.

Study Design:

Qualitative data was collected in sixteen program schools where OLE Nepal has been implementing the laptop-based teaching-learning project in partnership with the Department of Education. (see *Appendix I for details on schools and year of implementation*). The report is based on the evidence collected from head teachers, teachers, students of different grades, School Management Committee (SMC) and Parent Teachers Association (PTA) and the communities and classroom observations. Focus group discussions, in-depth interviews and observations of students using the *E-Pustakalaya* were the ways information was collected for the evaluation.

The evaluation team spent two days in each school, conducting a total of 48 focus groups, 80 interviews and observing 32 classrooms. In total, conversations with more than 300 people involved in the project provided the information which is summarized in this report.

Analysis: All the qualitative data collected were categorised into different groups that the evaluation set out to measure. The information received through focus groups, interviews and observations were first tagged into these categories. The information in each of these categories were examined closely to find relationships and pattern within the categories. Patterns, relationships that were repeated several times by respondents were then refined to develop the key findings of the study.

Findings:

1. E-Pustakalaya Usage

- Students of all grades were found to have explored *E-Pustakalaya*, and have widely read Nepali books from the literature section. Art activity books were found to be especially popular among students in lower grades.

- Students said they enjoy going through books, newspapers, artwork activities and English language activities. Students were more inclined towards reading books that are in Nepali.
- Students use *E-Pustakalaya* mostly during English and science classes, and during lunch breaks and when teachers were absent.
- Teachers and parents observed that students' interest in reading have increased considerably. This was further verified by students' ability to name books found on *E-Pustakalaya*.
- Access to materials outside the curriculum has enhanced students' general knowledge.
- Eleven of the schools in this evaluation are in areas that speak a different dialect of Nepali. The words and the grammar they use in their language is different than the official Nepali language. *E-Pustakalaya* was found to have helped to improve students' fluency in reading and speaking Nepali. Both parents and teachers felt this as one of the biggest achievements of the program.
- Teachers in most of the schools have used reference materials from the *E-Pustakalaya* to enhance their teaching. They say they use the *E-Pustakalaya* for self study, to learn about literature, research about the subject matter that they were teaching, see life skill videos and to go through the *E-Paath* teachers notes.
- Teachers were very grateful that they had access to so many books for free.
- Some of the schools have allowed parents to use *E-Pustakalaya* during the evening or on holidays when children are not using it. This has created a positive attitude towards the program.

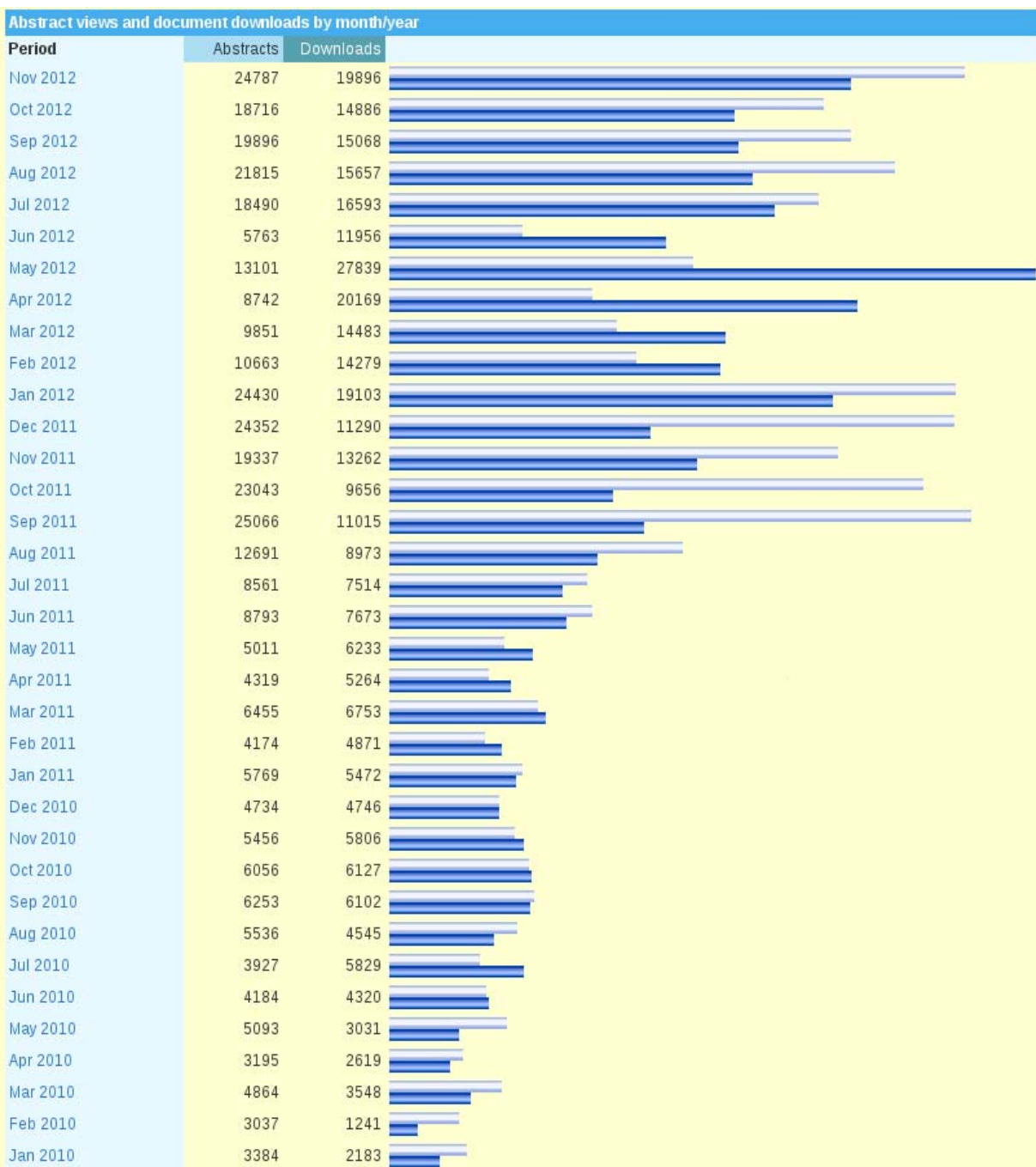
Usage of *E-Pustakalaya* at Program Schools

In the year 2012, OLE Nepal deployed its OLPC and E-Library programs in 35 schools of 12 districts. This provided *E-Pustakalaya* access to more than 11,000 students of these 35 schools. The evaluation survey was carried out in 16 schools, where 2605 students have access to the *E-Pustakalaya*. The survey included in-depth interviews with 32 teachers and 16 focus group interviews which 80 teachers participated. In addition there were approximately 160 community members who participated in the survey. The details are in the chart below.

District	No. of Schools	Total number of students with access to <i>E-Pustakalaya</i>	Number of students asked questions during survey
Doti	3	361	16
Dadeldhura	5	459	45
Kapilvastu	3	884	33
Makwanpur	5	901	55

Online Usage of *E-Pustakalaya*

The following table represents the number of online views and downloads of *E-Pustakalaya* when accessed on November 30, 2011:



2. Usefulness of materials in *E-Pustakalaya*

- Students and teachers both felt that the materials in the *E-Pustakalaya* were generally very useful in helping them to teach-learn concepts that are within the curriculum

- Students and teachers also found that books and other activities that are outside the curriculum helped enhance their interest in literature and general knowledge.
- Teachers felt that the *E-Pustakalaya* was specially useful for researching and preparing for their classes. It had helped them to make the lessons more interesting.
- Trained teachers were found to be successful in increasing interest amongst students for learning. These teachers had been making learning fun through *E-Paath*, *E-Pustakalaya* and other education materials.
- Few communities knew what was in the laptops and thought they were useful to both the students and the community. Some of the communities were found to have accessed the resources that was provided to the schools.

3. **Ease at which materials can be found in *E-Pustakalaya***

- Once the students were taught or shown how to access the *E-Pustakalaya*, most of them could easily navigate through sections and search for books, audio book and other materials without much difficulty.
- Students and teachers said that the sections and search facilities could be easily identified on the homepage. The categories highlighted have made it easier for them to look for more materials.
- Students could easily download books in their *E-Paati* laptops and read them later. Schools that allow students to take *E-Paati* home were found to have benefitted the most by reading at home.
- Teachers found it easy to navigate through *E-Pustakalaya* after they received series of training. They too had been downloading books to read it at home.

4. **Additional materials that users want**

- More audio-visual learning content appropriate for adult literacy.
- Content on different sports, general knowledge materials and innovations around the world.
- Materials that help to learn about cultures and practices in different countries.
- More short biographies of famous personalities.

Other Observations:

- The technical infrastructure of the *E-Pustakalaya* seemed simple enough for most schools to operate without much difficulty. The low-power server where the *E-Pustakalaya* is installed seemed to be working well in majority of the schools even after 3 years. Few schools have had problems with the wireless router ranging from damage to network wire by rodents to issues with power adapters.

Limitations:

- The videos run very slowly and with interruption in the *E-Paati* laptops. Hence, students were not able to view the videos as much as they would like. Nevertheless, in schools that have desktop computers, students and teachers were able to view the videos.

Comments from users and communities:

- A mother at Kapadigoan, Darelhura - "My kids used to tell me what they read in the *E-Pustakalaya*. After a while we parents usually dismissed them when they tried to tell stories that they had read, as we were busy with our work. I have realized that when we do this, our kids stop telling us what they have learned and stop sharing their views. **I think showing interest in what kids are learning is itself a big motivation for kids to be interested in learning**".
- "The textbooks, teachers' guides are all here. Even the Teachers' Regulations and Acts" exclaimed a teacher while being oriented on using *pustakalaya* in Banke District of Nepal.
- Tek Bahadur Dhimi, of Jana Joyti - Mustang: "Initially I thought that my son was wasting time reading something trivial for too long on the computer. When he began reading me the stories and rewriting the stories that he read, I realized that he was not wasting his time."
- Upon learning about thousands of books, school wikipedia, Nepali dictionary, English learning activities, the national curriculum-based "*E-Paath*" accessible locally at schools, the Resource Person from the Kavre District Education Office, Mr. Madhav Acharya, immediately proposed to install the digital library in at least couple other schools in the district. He further commented that the minimal cost of hardware and installation was nothing compared to what the school would gain from access to such wide range of learning materials. He later praised the *E-Pustakalaya* during his speech at Shree Mahakali Higher Secondary, Nayagaun, Kavre. Two other speakers including Constitution Assembly member Mr. Krishna Prasad Sapkota highlighted the benefits of installing *E-Pustakalaya* in the schools in their speeches.
- Siddha Beni Lower Secondary School, Belbas, Tanahu
 - Though the initial plan was to have only the students of grades two through six use laptops and use the content available in the *E-Pustakalaya*, teachers and school administration quickly realized the value of *E-Pustakalaya* and have now started to encourage students of grades seven and eight to access and read the materials available through *E-Pustakalaya* at least once a week.
 - Teacher Indrakala Naraa has been regularly reading college level materials regarding Education Theory and English that have been uploaded to the *E-*

Pustakalaya. She is very happy to be able to learn without having to leave her job or pay large amount of money.

- In the past if any teacher was sick or had taken a day off, students would have to sit idle during that class period. Now these “free” periods are utilized by having students read a book of their choice downloaded from the *E-Pustakalaya*. The school administration has now made this a policy.
- Saraswoti Primary School, Chasi, Doti
 - Students of grade five are given homework assignments where they have to read books downloaded from the *E-Pustakalaya*.
 - Teachers have mentioned that they regularly download “Shikshyak Monthly Magazine”. This magazine is specifically published for teachers and focuses on school education in Nepal.
- Sidhdeswor Lower Secondary School, Godavari, Lalitpur
 - After discovering that the *E-Pustakalaya* contains materials related to the nationwide grade ten school leaving certificate examinations (SLC) , elder siblings of the primary grade students have been coming to the school to read the materials as well as download and take the materials home. The *E-Pustakalaya* team continues to add new model question answer papers when they are released by the government before the SLC exams.

Future Considerations:

- **Add General Knowledge Materials:** Students seemed keen on gaining knowledge beyond what they study in their text books. Based on feedback from students, adding materials on sports, general knowledge, information on places, cultures and innovations around the world would retain students’ interest in the *E-Pustakalaya*.
- **Project to Improve Reading Habit in Students:** To increase the reading habits among all students of the program schools, teachers can incorporate reading assignments and discussions on different subject matter that will keep students engaged in learning new things. This may require a special training program for teachers, followed by regular monitoring and assessing the reading levels of students. It would be an interesting project to incorporate *E-Pustakalaya* in a large scale project to develop reading habit in our schools.
- ***E-Pustakalaya* Mobile Applications:** Develop *E-Pustakalaya* applications for mobile devices and/or mobile version of the website so that people using smartphones and other similar gadgets can access *E-Pustakalaya*. As the trend of using mobile devices

seems to be on the rise amongst Nepalese people in the country, this initiative could lead to rise in reading habits.

- **Childrens' Audio Books:** Addition of Nepali audio books as per the high demands of children from the surveyed schools, that will be recorded with the help of a few selected authors and storytellers.
- **Add Math and Science Videos:** Khan Academy videos on math and science which have simplified explanations is very helpful to high school students preparing for their board exams. But internet access is an issue in many areas in Nepal, hence we want to add these math and science videos in *E-Pustakalaya* which are loaded in the local servers at schools and can be used without Internet access.
- **Create a Teacher's Guide to E-Pustakalaya:** Finding books in *E-Pustakalaya* relevant to a particular class and subject area is very time consuming for teachers who are new to literatures. To assist the teachers in finding things that are relevant, a glossary books will be prepared so that teachers have an easy list of what books are relevant for each grade level for specific subject areas.
- **Authors' Profiles:** This is aimed at giving the readers a brief synopsis about the authors and their contributions to related fields.
- **Upgrading Maps:** The current map page in the *E-Pustakalaya* is a static map and we want to upgrade it with one that is more interactive where users can navigated it.

Appendix I: List of schools surveyed and year of implementation

	District	School	VDC	2009	2010	2011
1	Dadeldhura	Janajyoti LSS	Alital	Gr 2, 3	Gr 2, 3, 4	Gr 2 to 5
2	Dadeldhura	Janata PS	Kaipalmandu	Gr 2, 3	Gr 2, 3, 4	Gr 2 to 5
3	Dadeldhura	Samajee PS	Ajayameru	Gr 2, 3	Gr 2, 3, 4	Gr 2 to 5
4	Dadeldhura	Saraswati PS	Kaipalmandu			Gr 2 to 5
5	Dadeldhura	Selaling PS	Alital			Gr 2 to 5
6	Doti	Durga PS	Bel			Gr 2 to 5
7	Doti	Mahadev PS	Durkala			Gr 2 to 5
8	Doti	Saraswati PS	Chasi			Gr 2 to 5
9	Kapilvastu	Nepal Rastriya SS	Rajpur	Gr 2, 3, 6	Gr 2, 3, 4, 6	Gr 2 to 6
10	Kapilvastu	Pancha LSS	Baijalpur	Gr 2, 3, 6	Gr 2, 3, 4, 6	Gr 2 to 6
11	Kapilvastu	Mahendra PS	Taulihawa	Gr 2, 3	Gr 2, 3, 4	Gr 2 to 5
12	Makwanpur	Devi SS	Hetauda	Gr 2, 3, 6	Gr 2, 3, 4, 6	Gr 2 to 6
13	Makwanpur	Dibya Jyoti SS	Hatiya	Gr 2, 3, 6	Gr 2, 3, 4, 6	Gr 2 to 6
14	Makwanpur	Laxmi SS	Hetauda	Gr 2, 3, 6	Gr 2, 3, 4, 6	Gr 2 to 6
15	Makwanpur	Manakamana SS	Gadhi	Gr 2, 3, 6	Gr 2, 3, 4, 6	Gr 2 to 6
16	Makwanpur	Raj Devi SS	Hatiya	Gr 2, 3, 6	Gr 2, 3, 4, 6	Gr 2 to 6