In 2012, OLE Nepal made special efforts to expand the reach of its digital library, *E-Pustakalaya*, while increasing both the number and variety of its collections. Offline digital library servers were installed in 38 additional locations in 14 districts this year -- 22 of these were schools where OLE Nepal had expanded its laptop-based education project in partnership with Nepal Government's Department of Education, while 15 were schools with existing computers in a lab setting, and one was a public library. (see appendix for installation details). These new installations take the total locations with offline *E-Pustakalaya* servers to 77 in twenty-four districts. As of December 2012, *E-Pustakalaya* boasts a collection of over 4000 books, educational videos, audio books, school wikipedia, learning games, dictionary etc that can be accessed from the Internet or through local offline servers installed in schools and community libraries without Internet connectivity.

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 offline servers at schools and community libraries. Many schools that already have computers realize that a little extra investment on an offline 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 searchable digital repository.

OLE Nepal also made notable changes in the technology and interface of the *E-Pustakalaya* with the aim to enhance user experience. The library server operating system was successfully upgraded, while additional features such as user reviews, book ratings, personalized bookshelves have been incorporated into the design.

The activities associated with developing *E-Pustakalaya* this year were content acquisition, library management system maintenance and enhancement, new content creation, *E-Pustakalaya* expansion and a survey. Listed below were the project outcomes grouped according to the activities associated with the project.

A. Content Acquisition:

- The content acquisition targets set for the year 2012 in all the ten areas of the *E-Pustakalaya* content, have been met.
- The growth of the library has been possible with the collection of publications from our partners and regular contacts.
- A considerable amount of resource was spent in scanning and formatting books manually for the contents that were not available digitally.

- Continued literary works from *Kauwa Prakashan*, *Sisnu Pani Nepal*, *Rato Bangala Kitab*, *Gorkhapatra Sansthan*, *Nepal Academy*, *NESCHIL* and research journals from *Digital Himalaya* have been received.
- New categories such as cottage and small industries, music and sports were added to the repository. Cottage and small industries includes different industrial schemes and informative guides for the promotion of small scale products and cottage skills in local communities.
- Books from Mother Tongue Pipal Pustak (MTPP) series developed by the non-formal education support of UMN have been added. These books were developed to support literacy by easing the transition from oral communication to the conventions of print.
- Global sources of English language open content digital materials suitable for *E-Pustakalaya* have been identified in websites such as OAPEN Books and FreeBooks, and selected books were acquired and added.
- A total of 30 videos prepared by USAID that cover basic first aid procedures were added. More videos suitable for *E-Pustakalaya* have been collected and copyright permissions have been obtained.
- All the added materials in the public domain have been under creative commons license, or acquired under special permission from the copyright holder. There has been no reports or complaints regarding infringing materials.
- Members of *E-Pustakalaya's* Advisory panel have been contacted continuously for inputs regarding the content and quality of the learning materials.

The table shows number of digital content that were uploaded to *E-Pustakalaya* in 2012

S.N.	Section	Acquired till 2011	Target for 2012	Acquired till 31 Dec 2012	Added in 2012
1	Art	36	10	51	15
2	Audio	302	20	328	26
3	Course-related Materials	337	75	570	233
4	English Literature	828	125	1029	201
5	Nepali Literature	740	125	924	184
6	Newspapers and Magazines	474	100	717	243
7	Other Educational Materials	519	100	817	298
8	Reference Materials	88	40	143	55
9	Teaching Support	326	80	610	284
10	Videos	80	40	120	40
	Total	3730	715	5309	1579

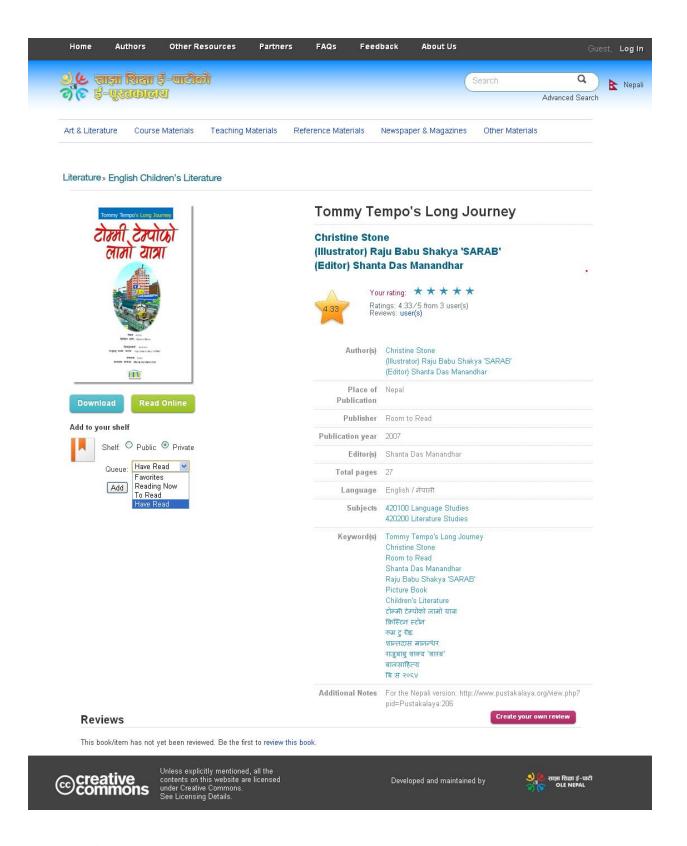
B. Content Creation

- With the help of authors and storytellers, audio recording of children's books were the highlight of new activities in *E-Pustakalaya* project. A total of thirty nine Nepali short stories and poems were recorded and added to the audio section. As narrated stories are appealing to children, there are plans to make more narrated stories, poems available.
- Photo essays and coloring books suitable for children of ages 10-15 years have been created and added to the repository.
- Two of the participants of our Young Adult literature workshop, Geeta Keshary and Laxmi Upreti, published their novels as part of OLE Nepal's effort to increase literary works for young adults.
- Over 50 lesson guides for teachers and students have been created that site resources within *E-Pustakalaya* for mathematics, science and English as per the national curriculum.
- Khan Academy videos that match Nepalese High Schools' mathematics and science curriculum have been selected. The videos will be uploaded and available in E-Pustakalaya soon.

C. Library System and Interface

- The library database system continuously requires replacing older publication version with new ones. Hence, regular contacts are made with publishers and authors to maintain the system. All feedbacks and queries are responded in timely fashion to keep the system updated and users informed.
- The server's Operating System (OS) was upgraded to Cent OS 6.2.
- Number of features have been added in the E-Pustakalaya's new interface to make the library more user friendly:
 - New arrivals or most read books can be featured on the main page and changed as per the need. This has added a new dimension over the previously static layout. In addition book covers are being added in the meta-data page, to make the pages more appealing to the users.
 - 2. Bookshelf: Users can use this functionality to prioritize books to read, tag books for future reference, share book lists among friends and other users.
 - 3. Book Review and Rating: Users can now write book reviews and rate them by signing on to their google, facebook, or twitter accounts.
 - 4. Partners Page: A page has been added with Information about the partners. The page contains a short description of the partner organization.

The following screen-shot of the new book page shows additional features as book cover, book rating, book shelf, book review and the feature to read online or download the book.



D. E-Pustakalaya Expansion

The *E-Pustakalaya* servers were expanded to 38 additional locations in 14 districts this year making the total number of *E-Pustakalaya* servers to 77. The expansion was supported by Air Asia X, Finnish Embassy, Good Neighbour International, Gorkha Foundation, NIBL, Nepali Library Foundation, Skoliev i Nepal, some individual donors and the schools themselves. A total of 13 schools arranged funds from the school budget for the installation of the library.

The expansion of *E-Pustakalaya* means that more and more students, teachers and communities have access to plethora of literature, educative reference materials and videos. It has also helped schools who already have computers make a good use of their resources with the installation of the *E-Pustakalaya*. There has been conversations with the government of Nepal for further expansion of *E-Pustakalaya* in schools that have provision to buy computers through the government ICT in education programs.



E-Pustakalya for Adults - Dumre LSS, Gorkha



E-Pustakalaya for Kids - Dumre LSS, Gorkha



E-Pustakalaya for self reading - Solukhumbu



E-Pustakalya being used in classroom - Banke

Expansion of *E-Pustakalaya* entails informing the schools on the activities and cost of the *E-Pustakalya* installation, which is then followed by deployment after the agreement is signed. During the deployment of *E-Pustakalya*, the school infrastructure is observed and an interaction

between the teachers and community members are held regarding *E-Pustakalaya*, its usage and the pre-requisite for its setup. Infrastructure including the power outlets, status of computers, security, appropriate rooms that the school needs for *E-Pustakalaya* is assessed and the required software is installed in the computers. The server which is connected to all the computers in the school is installed with the digital library, which can be accessed without internet access. The server is also connected to a router enabling the Wi-Fi for laptop/mobile users.

After the installation, the teachers, community members and students are oriented on how to use the digital library, its various sections, and its benefits to the students, teachers and the community. It has been experienced that participants are able to get a good handle in navigating the *E-Pustakalaya* with hands on sessions during the orientation.

The online version of *E-Pustakalaya* has been constantly updated and the offline version deployed in various districts are updated in every 3 months during the school visits. Updating the servers is a very simple procedure where the user can plug in the USB drive in the server which is ladened with the updated version of *E-Pustakalaya* and the server automatically updates the repository.

E. *E-Pustakalaya* Survey

OLE Nepal has been constantly adding new materials to *E-Pustakalaya*. According to its online statistics, the number of views and downloads are increasing steadily. In order to gather feedback on the use of *E-Pustakalaya*, we visited few of our program schools where offline servers containing *E-Pustakalaya* had been installed.

A survey was carried out among students, parents and teachers in sixteen schools. We observed classes, interviewed and distributed the survey questionnaire for teachers, students and community members in order to receive feedback on the usefulness of *E-Pustakalaya's* content in their respective local communities.

- 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.

Districts	No. of Total students with access to <i>E-Pustakalaya</i>		Number of students surveyed	
Doti	3	361	16	
Dadeldhura	5	459	45	
Kapilvastu	3	884	33	
Makwanpur	5	901	55	

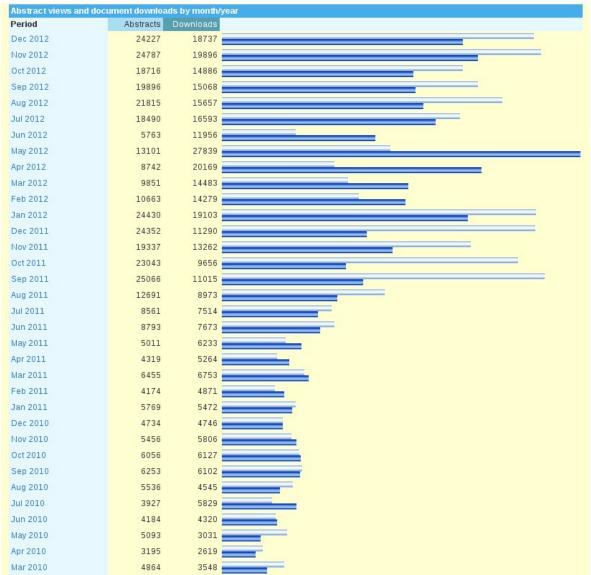
Table: Number of schools and students surveyed

Usage of E-Pustakalaya at Program Schools

Deployment of OLPC and E-Library programs in 38 location has provided *E-Pustakalaya* access to more than 14,143 students of these 38 location. 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.

Online Usage of E-Pustakalaya

The following table represents the number of online views and downloads of *E-Pustakalaya* when accessed on November 30, 2012:



(Accessed on 31 December 2012)

Appendix 1:

Offline *E-Pustakalaya* server installations in 2012

	Districts	Schools and Library Names	Student Number	Model	Sponsor					
1	Baglung	Ganesh SS Janata SS Mahendra SS Prithivi HSS Rudrepipal SS Trivuwan SS	286 125 235 125 149 391	Laptop Laptop Laptop Laptop Laptop Laptop	Finnish Embassy Finnish Embassy Finnish Embassy Finnish Embassy Finnish Embassy					
2	Banke	Gyanodaya HSS Janashakti LSS Nepal Rastriya LSS Sahid Smarak HSS	345 220 178 482	Laptop Laptop Laptop Laptop	Finnish Embassy Finnish Embassy Finnish Embassy Finnish Embassy					
3	Chitwan	Balkumari SS Nepal-Korea Wisdom HS	1400 187	Lab Lab	School School and local funds					
4	Dang	Gorkha SS Sister Home	1200 125	Lab Laptop	School and local funds School and local funds					
5	Doti	Masteshwor PS Mastamandu HSS Sunadevi HSS	77 395 301	Laptop Laptop Laptop	Good Neighbor International Good Neighbor International Good Neighbor International					
6	Gorkha	Dumre LSS	120	Lab	The Gorkha Foundation					
7	Gulmi	Arjun English School Gyanodaya HSS Himalaya HSS Janabodh HSS Mahendra Adarsha HSS Panchayan HSS Resunga SS Siddha Baba HSS	793 520 493 670 840 415 400 605	Lab Lab Lab Lab Lab Lab Lab	School and local funds					
8	Kavre	Shree Mahakali HSS Shree Ram HSS	850 390	Lab Lab	School and local funds School and local funds					
9	Lalitpur	Chandi Devi PS	201	Laptop	Air Asia X					
10	Nuwakot	Shree Gyanjyoti HSS	400	Lab	Nepal Library Foundation					
11	Parbat	Moti Community Library	N/A	Library	Nepal Library Foundation					
12	Rupandehi	Shantipriya PS	125	Laptop	Skoliev i Nepal					
13	Solukhumbu	Dudhkunda Himalaya LSS Garma SS Jana Jagriti LSS Pike HSS Swarnim PS	114 130 270 104 32	Laptop Laptop Laptop Laptop Laptop	Finnish Embassy Finnish Embassy Finnish Embassy Finnish Embassy Finnish Embassy					
14	Syangja	Ranabir Janahit HSS	450	Laptop	Nepal Investment Bank					