OLE Nepal Newsletter

साझा शिक्षा ई-पाटी
OLE NEPAL

We hope you enjoy this edition of *OLE Nepal Newsletter*, a bi-monthly email newsletter from Open Learning Exchange (OLE) Nepal. It provides current news and information about the organisation and its activities and will keep you up to date with OLE Nepal's work to provide high quality education for children in Nepal.

OLE Nepal's Implementation
An Inspiration for Others

OLE Nepal has been a global pioneer in the implementation of content-focused ICT-integrated education methodology using the One Laptop Per Child (OLPC) XO laptops. To observe how effective OLE Nepal's approach has been and to learn from what is being done in Nepal, a representative from the African Innovation Foundation - Angolan branch - visited Nepal. Murielle Mignot is a consultant specialised in helping philanthropic, development and human rights organisations develop their projects and strategies. She was hired by the African Innovation Foundation to look into the possibility of developing a programme very similar to the one being implemented in Nepal. The African Innovation Foundation was recently created by Angolan and Swiss Entrepreneurs engaged in promoting innovative solutions to social and development challenges faced by African countries like Angola, focusing on adaptation to the local context, ownership and sustainability.

Murielle was very encouraged and inspired by what she saw. She had come with a hunch and left convinced that a content-focused ICT integration approach is the most effective. Aside from the focus on content, she also agreed with OLE Nepal's approach with respect to teacher training (and refresher training) and continuous support to programme schools,

tight cooperation with the Ministry of Education and gradualism in implementation.

"I already had all those aspects in mind before visiting you, and to see the very concrete results you've already reached confirmed how crucial all these aspects are. It was great to see what the project the Foundation, including me, have in mind can be after [just] a few years of implementation. It is very promising and motivating and got me very excited about adapting your model to the Angolan context, hoping we will manage to find our own way and have a similar success," she said.

Murielle also had a chance to speak to the teachers at the two programme schools that she visited in Kavre and Lalitpur. The conversations were very insightful. They claimed that E-Paath helps them explain things to the children better since it makes things more realistic, allowing the children to better visualise what they are learning, moving them away from rote learning and practices that encourage greater understanding. All the teachers agreed that the introduction of the programme had made the children more

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motivated, enthusiastic and active, which in turn has been motivating for the teachers. Children enjoy the classes more because they are more lively and they can do exercises on their own. Thanks to the software and the self-evaluation that is part and parcel of doing the exercises on the laptop, children are also less afraid to make mistakes, they said.

The introduction of the laptop with OLE Nepal's software has changed the teacher-student relationship, because it makes the students more confident and creates more familiarity and personal attention. There was a new teacher in Sringeri School in Lalitpur who

had not been trained by OLE Nepal but the students had managed to teach him how to use E-Paati and E-Paath, and we watched in amazement as he taught an almost perfect ICT-integrated class in English. He later felt no qualms in telling us that the students had been his teacher in this regard. This change in paradigm is significant as it transforms classrooms from scary dictatorial settings to a place where the students and teachers are co-collaborators in the children's educational development.

The teachers, in whose classrooms the programme has not been introduced, were very keen on it, there was wide agreement that the programme is really effective as a teaching as well as learning tool.

Murielle thus went back convinced of the merits and effectiveness of OLE Nepal's approach, ready to give a very positive response to her colleagues at the Foundation.

E-Pustakalaya Development

OLE Nepal's implementation model focuses on the creation and distribution of content. A digital library, in this case *E-Pustakalaya* (E-Library), is an integral part of this model. *E-Pustakalaya* is envisioned as a common resource of a variety of educational texts and reference materials, not unlike any physical library. Its User Interface (UI) development is also inkeeping with this vision.

From the perspective of usability, OLE Nepal has been working continuously to make the UI more user friendly and content easier to find and use. The development started by putting together the components of the library information system, namely Fedora Commons and Fez, so as to function as a complete library. Many modifications to the front-end have been made to streamline the interface to make it more usable, specifically for children. It would be worthwhile to mention here that although the library is available and relevant to people of all ages, it is focused in terms of its interface on its usability from a child's perspective, and this has been the major driving force in terms of its development. The pointers in this piece may come in handy to those who would like to build similar educational libraries of their own.

At a glance, the objectives that have driven the development of *E-Pustakalaya* are as follows:

- To make the library resemble (to the extent possible) a physical library, in terms of ordering and grouping of content

- To make a variety of content (e.g. Novels, Textbooks, Audio, Video, Magazines) available, and have interface options (specifically in terms of language) to view them in

- To streamline the user interface to ease access to required information with minimal point and click effort

- To provide online and offline access at partner schools to the available content

- To allow for easy tagging, searching and linking of content

- To make the content downloadable for offline reading

E-Pustakalaya New Layout

E-Pustakalaya has been developed to group content according to subject or type, in the same way that physical libraries group books into chambers/racks, with each rack/chamber holding books of a specific subject with a separate area for reference materials, newspapers and magazines. This helps to organize content as well as to reduce the time it takes readers to find an item of their interest. Additionally, to prevent the endless spawning of new groups that would clutter the interface with a long list, the entire library has been limited to seven overarching sections that are broad enough to cover any material that can be added there. These include: Literature, Art, Course-related Materials, Reference Materials, Teaching Support Materials, Newspapers and Magazines, Other Educational Materials. Each section is further divided into sub-sections and each sub-section in turn contains the items that users can watch/listen online or download for offline reading.
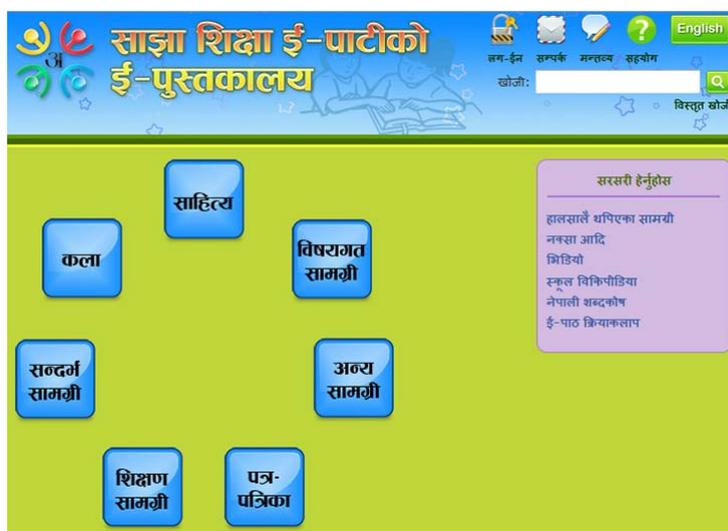
There are several ways in which items can be found on *E-Pustakalaya*. A user might browse through the different categories and titles within each section; browse recently added and other items such as videos, dictionary and maps through direct links on the homepage; or do a keyword search for items they are looking for based on the title, author and subject.

The keyword search is made possible by the facility of metadata management on the library system. Managing metadata fulfils two goals: it provides additional information about the object when browsing new items and allows users to search for items based on keywords that they have been tagged with in the metadata.

All of the above features are already available on *E-Pustakalaya*. The E-Pustakalaya technical team has been working on improving the UI to provide users with an even richer experience. The current development will be completed

by the end of July 2010 and will include the following changes:

The navigation that links to each of the seven sections has been enhanced so the links now have been enlarged to reduce the difficulty in pointing to and clicking on an object.

Additionally, the link buttons now have three distinct states: Normal, Hover and Active. The normal state is when the button is not associated with the list view underneath; the hover state is the mouse pointer is moved over a button; and the active state is for the respective section displayed in the list underneath. This makes it easy for children (with little or no knowledge of web browsing) to use the library.

The list view of items inside each section or subsection has been altered to make it less confusing. The default interface contains a lot of information and poses a difficulty in usability for children. Additionally, some of the data in the default layout is confusing because of the absence of labels to describe them. Text labels have thus been added to make the information more readable, and the listing has been modified to un-clutter the page.

The Metadata Page, that displays relevant metadata for each item and provides options for reading/ watching/listening, has been modified to display the name of the item, the author, pdf icon, and download button more prominently so as to engage users.

The overall interface has been designed to be compact to be suitable for the screen size and resolution of the XO laptop (i.e. 800x600 pixels). Unnecessary components have been removed, the navigation bar merged into the header/banner, and the color scheme and layout changed to create a pleasing interface.

A new video management and display interface has been developed so that the videos are now part of the main cataloging system. The new interface also allows easy management of videos and display of video metadata.

The development of E-Pustakalaya is an ongoing process and additional changes and features will continue to be added in the future.

OLE Nepal in ICT in Education Workshop

Nepal Government's Ministry of Education, in collaboration with UNESCO, organized a four day workshop from June 22 to 25 to start the process of developing an "ICT in Education" Master Plan for Nepal. The workshop was conducted by ICT in Education experts from UNESCO Bangkok who had come to Nepal at the request of the Ministry.

The workshop was designed for policy makers and stakeholders and was attended by over thirty officials from MoE, DoE and other line agencies. OLE Nepal was the only NGO that was invited to attend the workshop, which we view as a recognition of our contribution to integrating ICT-based education in daily teaching-learning practices. It was reiterated at the conference that the key word in ICT in Education is Education. The framework prepared during the workshop can be a great starting point in preparing a comprehensive Master Plan for integrating ICT in Education.

Through this workshop, the Ministry has demonstrated its serious commitment to introduce ICT to improve various aspects of education including teaching-learning methods, education

ICT Master Plan workshop: Group discussion

content, delivery, assessment, and administration. High level officials at the Ministry have recognized the potential ICT has in preparing the skilled human capital needed to build a prosperous nation and compete in today's global market. This workshop is a clear indication of the Ministry's interest in taking a comprehensive approach to integrating ICT in our education system.

From OLE Nepal's perspective, the workshop could not have come at a better time. Having successfully completed a two year OLPC pilot project where OLE Nepal worked with various bodies within the MoE to deliver quality education

using interactive digital materials and trained teachers, it was time to shift focus towards introducing changes in the larger national education plans and policies to scale the use of ICT in our public schools. OLE Nepal had already started looking into how the demonstrated success of the pilot implementation could be used to convince the policy makers to introduce ICT-based teaching-learning approach in the national education plan. OLE Nepal has pledged its support to the Ministry in turning the workshop outputs into a concrete Master Plan that can help improve our education system and produce able and skilled human resources.

Farewell to Bryan W. Berry

Bryan Berry, former Technology Director and co-founder of OLE Nepal, has taken leave from OLE Nepal. Bryan has been an indispensable part of this organization, although he worked mostly as the Chief Technology Officer, he wore different hats as needed.

When Bryan first arrived in Nepal in 2006, OLPC was nothing more than a loose group of volunteers. He immediately recognized the need to give it more structure and started organizing and identifying resources needed to form the organization. He quit his job in the US foreign services in 2006 to dedicate full time to OLE Nepal.

While at OLE Nepal, Bryan worked tirelessly to garner support from key individuals and organizations both in and outside of Nepal and played a key role in raising the initial funding to get the organization off the ground. He also established connections with various international communities and successfully recruited a number of international experts to come work in Nepal to fill the areas where we were lacking local expertise. Once the organization was on sound footing, Bryan went on to take the role of the CTO, where he planned and managed the technical aspects of laptops, servers and networks.

Bryan will be missed for his vision and hard work and for his innate ability to inspire people around him. We wish him luck in the future.

Other Developments

Curriculum Review Workshop

A two-day curriculum review workshop was held on June 11-12 with officials from the Curriculum Development Centre (CDC). The agenda included a) following-up from an earlier discussion in February over creating detailed year-long ICT integrated courses in each of the primary grades and b) reviewing the new E-Paath software created by OLE Nepal. The year-long courses are being envisioned as guides to teachers on how to integrate the different media available to them (E-Paath, textbooks and other interactive methods) to effectively impart knowledge to their wards. A sample has been partially completed for Grade 3 English and was reviewed by the CDC officials present. In general, they were very satisfied with the structure and the efforts in making it easy to use, with symbols being used to make it effective but space and time efficient. They felt the same structure would be effective for Math and Nepali classes as well. They then reviewed E-Paath activities within their own subject of specialty over a day and a half together with OLE Nepal's curriculum development team. Feedback received was positive and our curriculum developers and software programmers will now take their feedback into consideration and make appropriate changes.

E-Pustakalaya Updates

OLE Nepal is moving ahead with plans to make audio books for its E-Pustakalaya. The first audio books will be made with poems by Ram Babu Subedi and stories by Dhruva Ghimire, both prominent writers in the world of Nepali literature. OLE Nepal is also working on hosting a writer's workshop to develop fiction for young adults in Nepali. New additions in the pipeline include works by Madhusudan Ghimire, Boond Rana and Gopal Parajuli.