Digital Learning Activities for Grade 5 Science

OLE Nepal has completed the development of interactive digital learning activities designed to promote awareness in agriculture, food security and nutrition amongst school children. This set of thirty activities were developed with support from UN World Food Programme (WFP), and are correlated with the Grade 5 “Science, Health and Physical Education” subject prescribed by the national curriculum. Keeping in mind the worldwide demand for such learning activities, OLE Nepal developed the activities in both Nepali and English language versions. The activities have already been integrated in OLE Nepal’s larger E-Paath activity suite, and distributed to all OLPC program schools.

Given the major role that agriculture plays in our society, younger generations of Nepalis must be agriculturally literate so that they can make informed and responsible decisions with respect to the agriculture industry. Furthermore, this knowledge will be key in building their appreciation for nutritionally balanced diet as a necessity for their own physical and mental development. Modern agricultural practices presented to school children in an exciting manner through practice could lay the necessary foundations to raise awareness and interest from an early age. This will not only reverse the negative attitudinal tendency towards agriculture, but also highlight the importance of agriculture to the entire economy.

Students will be encouraged to transfer the knowledge gained through these activities to parents and community members. It is hoped that they will apply their agricultural and nutritional knowledge and skills learned at school on their own farms and homes. The content will benefit children as the future food producers, and nurture a better respect for land and agriculture, and make them more aware of the importance of nutritious food.

Hands-on activities could include planting and nurturing a tree, germinating a seed. The learning activities coupled with clear instructions and training to teachers on hands-on agricultural and environmental practices will enhance students’ appreciation of the role of proper agricultural procedures in increasing productivity, but also the importance of diversified food types to meet the nutritional needs. We envision that including an agriculture component as well as a hands-on approach will help forge a more harmonious relationship between the children and their environment. In addition, these activities will also teach students to transfer the knowledge gained through these activities to parents and community members, applying their agricultural and nutritional knowledge and skills learned at school on their own farms and homes.

These activities also address the issue of food insecurity – availability, accessibility and utilization, and are accompanied by teachers notes detailing how to integrate the lessons and exercises in classroom teaching, along with suggested practical hands-on activities children can do outside the classroom. These suggested hands-on activities could include planting and nurturing a tree, germinating a seed. The learning activities coupled with clear instructions and training to teachers on hands-on agricultural and environmental practices will enhance students’ appreciation of the role of proper agricultural procedures in increasing productivity, but also the importance of diversified food types to meet the nutritional needs. We envision that including an agriculture component as well as a hands-on approach will help forge a more harmonious relationship between the children and their environment. In addition, these activities will also teach students to transfer the knowledge gained through these activities to parents and community members, applying their agricultural and nutritional knowledge and skills learned at school on their own farms and homes.
students areas such as the important role of hygienic preparation and handling of food in minimizing malnutrition, as well as the various nutrients contained in different food types and their importance in our bodies. This is especially important of the growing penetration of unhealthy ‘junk’ food culture even in rural areas.

The activities are divided into 3 categories - core science topics embedded with agricultural practices, environmental issues and their relations to agriculture, and health and hygiene. The activities that demonstrate correlation between core science concepts and agriculture include kitchen garden, life processes of a plant, plants and animals. These activities encourage children and teachers to explore the world outside of the classrooms and tryout the theories studied in the classroom.

The environment focused activities try to instill in children a sense of appreciation for forest and wildlife. In addition, these activities make students aware of severe consequences of negligent behavior towards nature. The interactive health and hygiene activities encourage students to practice clean hygiene and take up better eating habits.

OLE Nepal’s curriculum experts worked closely with agriculture, and food and nutrition experts to ensure that relevant topics within these areas were presented to students at a level that was appropriate to their level of understanding. Input and advice were also sought from experts from the Curriculum Development Center (CDC) to ensure close alignment with the national curriculum framework. Such alignment with the national curriculum was deemed necessary to increase the likelihood of the activities being used regularly by teachers and students in daily classroom teaching-learning process. A special addendum to OLE Nepal’s regular training on ICT-based education was introduced to help teachers understand how best to utilize these newly developed activities.

Progressive Education Skill Development Program

OLE Nepal conducted the first Progressive Education Skill Development Program on July 18 - 29. The program held at OLE Nepal’s premises in Sanepa was attended by sixteen teachers from Pathshala Nepal, Triyog High School, Brihastapi Vidhyasadan, Malpi Primary School, Shuvatara School, Columbus School, Neelgiri School and Sanskar School. The ten day program was designed by OLE Nepal to help teachers develop the skills necessary to deliver effective teaching through experiential learning methodologies.

Progressive Education is a pedagogical movement that emphasizes student-centered learning, with focus on the student’s needs, abilities, interests, and learning styles. Students are encouraged to become active and responsible participants in their own learning. This program was designed not just to build teachers’ confidence in implementing Progressive Education which ultimately helps them to create confident learners, but also to build teachers’ ability to use Information and Communications Technology in the classroom teaching.

Similarly, a five-day long program was also successfully completed at Malpi International School in Panauti, Kabre on August 26-30, 2011. A total of 24 teachers from the school were assisted by OLE Nepal’s facilitators Mrs. Kamana Regmi and Mrs. Usha Joshi in the program.

During both training programs, it was encouraging to see participants’ enthusiasm in sharing their ideas and experiences and discussing various strategies to make learning fun and meaningful for students.

Few of the remarks from participating teachers:

“Students will feel the difference when I introduce the child-centered approach I have learned.”

“I was surprised to find that we can make science teaching so effective and easy through E-Pustakalaya.”

“I think doing activities in a collaborative way will bring a difference in the learning process of children”

“ICT programs have novelty value which is interactive with audio and visual effects. This excites students and enhances their interest in learning.”

“The PESDP has cast a new outlook in my personality and has given positive vibes for my teaching methods which will surely bring a great difference in the way I teach.”

“A group dynamism which makes children involved in critical thinking.”

“Role play is one of the best strategies for learning/teaching.”

Instructional Skills Workshop

OLE Nepal’s four teacher trainers participated in the Instructional Skills Workshop (ISW) held in Kathmandu on August 16 - 18, 2011. The peer-based workshop was organized by Children of the Mountain (CoTM) and facilitated by Mr. Peter Hatherley-Greene, who is a long time ISW trainer based in Dubai. The workshop involved three ten-minute “mini-lesson” cycle per participant and allowed immediate written, video and verbal feedback for the instructors. The planning of the mini-lesson required executing six vital components of teaching and training namely bridging-in, expressing outcome, pre-assessment, participatory learning, post-assessment, and debriefing.

The workshop provided OLE Nepal’s trainers an opportunity to re-examine OLE Nepal’s approach on the training processes. It was intriguing to find a great convergence in the ideas and the methodologies on how ISW and OLE Nepal conduct the trainings with both focusing on providing each participant with opportunities to participate in and reflect on instructions from the experience and perspective of a learner. ISW’s approach on micro-teaching and multi-layered feedback technique was found unique and effective by OLE Nepal’s trainers.
Training in Belbas, Tanahu

OLE Nepal’s trainer, Tikaraj Karki, and technical support staff, Aman Maharjan, visited Shree Siddha Beni Lower Secondary School in Belbas, Tanahu on August 23 - 25, 2011 to observe classes and provide feedback and support to the teachers. The team also updated laptops and school server with the latest E-Paath activities and E-Pustakalaya content. Mr. Gobinda Pokhrel, trainer from Educational Training Center (ETC) Tanahu, also joined the OLE Nepal for the in-school training. A total of 10 teachers from the school participated in the in-school training.

OLE Nepal and ETC Tanahu trainers had conducted an initial teacher training at the school on May 15 - 21, 2011. Rabobank and their clients in cooperation with MeetIn had provided 50 laptops to the school and partnered with OLE Nepal to implement the program including teacher training, equipment and local network installation, monitoring and support.

E-Pustakalaya Update

We have added a special feature on the E-Pustakalaya to showcase selected authors and other creators. This module will highlight authors who have contributed their books and other works to E-Pustakalaya. The page currently displays a picture, short synopsis about the author, a column displaying all their works available in our library and their contact information. This module has been created from scratch and integrated with our core system.

Furthermore, we have improved the video module in E-Pustakalaya. The video module is now completely integrated within the core e-library infrastructure. In future, video section required a separate login name and password. Video section now contains fields that will help proper attribution to the source of the work thus, ensuring that no copyright violations occur. The video section currently contains several videos from the Khan Academy, with the value add coming mostly from the offline installations of E-Pustakalaya. All these videos are licensed under creative commons. These videos are very helpful for children wanting to learn basic mathematics and science.

The E-Pustakalaya Advisory Panel met on August 2, 2011 at the OLE Nepal office to review the progress of the digital library and give suggestions and guidance on future direction. One of the agenda items was completing the Young Adult Literature creation project that OLE Nepal had started late last year. While four novels have already been created and submitted, the Panel decided to give the remaining writers till September to submit their works. All the submitted work will be reviewed by the Panel and digital versions will be uploaded to E-Pustakalaya.

For the first time, the number of abstract views crossed the 10,000 mark this August, with the total views reaching 12,691. This, along with nearly 9,000 downloads, clearly indicate the growing popularity of E-Pustakalaya. More and more people are now realizing that there is something interesting available for everyone at pustakalaya.org. Considering that these numbers don’t even include data on offline access of E-Pustakalaya in close to forty schools, it is safe to say that a significant portion of Nepalis are finding the digital library valuable.

We would also like to remind our readers that E-Pustakalaya also has a facebook fan page with over 500 fans and a twitter account. This has enabled us to stay in touch with our users and receive timely feedback. Our twitter link is http://twitter.com/epustakalaya and you can find us by searching E-Pustakalaya on facebook.

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<td>Bairab Aryal</td>
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<td>Practical Action</td>
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<tr>
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<td>Save the Children USA</td>
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*Does not include the downloads from the offline servers in our program schools*
Farewell:
OLE Nepal recently bid farewell to a number of its team members, including interns and foreign volunteers. Amongst those leaving was Mr. Rajeev Adhikari, who had been associated with OLE Nepal since its inception. He was mainly looking after government relations and capacity building efforts. Similarly, software programmers Sudaya Maharjan, Anup Shakya and Anu Sapkota ended their terms as part of the content development team after the completion of grade two to six content.

Also leaving were foreign volunteers Grant Cox from Australia and Peter Gijsels from Belgium, both of whom made significant contributions in the development of digital content. Grant had come to Nepal as an Australian Youth Ambassador for Development (AYAD) volunteer. OLE Nepal also bid farewell to interns Sandesh Pathak, Aayush Onta, Swikriti Bashyal and Sashwot Pokharel, who have gone abroad for further studies after completing almost one year of internship at the organization.

OLE Nepal would like to take this opportunity to thank all of the outgoing members for their tireless efforts throughout their tenures and wish them success in their future endeavors.

New Interns:
OLE Nepal recently welcomed the new batch of interns to help implement its various projects. The internship program is considered to be a great opportunity for young high school graduates to learn a variety of skills while making significant contribution to OLE Nepal’s programs in ICT-based education. The interns are involved in a wide range of tasks including scanning and editing books in E-Pustakalaya to traveling to remote areas of the country on school support. They could be required to help out trainers during the teacher training programs or to help network engineers in setting up networks withing and between schools. They become experts in laptop repairs, and some of them also get involved in programming and hacking. No matter what they do, the ten month internship program at OLE Nepal will undoubtedly be an invaluable experience that can prepare the interns for future challenges.

Brief backgrounds of the three current interns who joined OLE Nepal from June 2011 onwards:

Aman Maharjan completed his A-Levels course from Buddhanilkantha School. He is particularly interested in drawing and is very fond of music. He is an enthusiastic member of the E-Pustakalaya team and has lately been working on Nepali translations on Sugar Labs activities. He has been a part of an in-school training in Tanahu and is an integral member of the laptop maintenance team.

Kayomars Bilimoria Puri is a high school graduate from Rupy’s International School. He enjoys music and is interested in a variety of sports such as basketball and football. He is a member of the E-Pustakalaya team and has also worked on Nepali translations on Sugar Labs activities. Furthermore, he is a dedicated member of the laptop maintenance team.

Bikash Bhusal finished his high school from Malpi Institute. He is interested in Djing, traveling and playing football. He has worked on Nepali translations on Sugar Labs activities and has helped out in the Progressive Education Training conducted in the office. He is also a member of the E-Pustakalaya team and is very efficient at repairing laptops and their power adapters.

OLE General Assembly 2011

The 2011 General Assembly of the Open Learning Exchange OLE, “Persuading to Scale: growing billions of great learners with powerful innovations,” will be held on September 26-29 in Mexico City. With nearly two billion children under the age of 15 in our world, most of whom have little or no access to education, quality basic education for all is a necessary part of the broader solution to the many issues facing our world today. How do we achieve Quality Universal Basic Education? The evidence is clear that traditional education systems around the world are failing to meet the basic learning requirements of our children. Thus simply doing more of the same will not achieve the goal of a good education for everyone. Thousands of learning innovations are being promoted across the globe today, with varying effectiveness. However the benefits of these innovations often remain concentrated among a few, privileged groups, increasing the divides between us rather than reducing them. Even the most effective of these innovations for learning can be permanently sidelined by cultural differences, financial, technical, and political barriers. The challenge then is to help public, private and community leaders identify and bring to scale a mix of cost-effective learning innovations that enable all of our children to learn how to create healthy and productive societies in the 21st Century.

Participants will engage with leading educational innovators concerning ways they have attempted to scale their programs beyond a few. Each innovator will present a short, descriptive “trailer” of their solutions to this year’s challenge followed by small groups discussions raising questions for further exploration with the innovator. Throughout the assembly, participants will be encouraged to share their own experiences – their successes, failures and ideas about how to scale learning innovations in ways that billions benefit.

Upcoming Events

Office News

E-Paati is a set of curriculum-based interactive digital learning materials developed by OLE Nepal
E-Pustakalaya is OLE Nepal’s education-centered digital library consisting of books, reference materials, school wikipedia, etc.
E-Paati is the Nepali name for the XO laptops used in OLPC program schools

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