Distance Learning for both online and offline environment in Nepal

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1-1. Introduction: Nepal

- Nepal is a landlocked country situated in South Asia, 66% of which is covered by hills and mountains, only 34% by lowland called Terai.
- Also known as land of Mt. Everest.
- Population of Nepal: 30 millions
- Politically, Nepal is divided into three phase of government:
  - Central government
  - State government
  - Local government
- Consists of 7 province, 14 zones and 75 districts.
Different educational infrastructures
- Facilities
- Learning materials

3 types of schools in Nepal:
- Government schools
- Community schools
- Private schools
: 32,000 schools

There are a few systems and technologies applied in education sector for teaching and learning techniques.

Lack of refresher training to teachers about teaching and learning techniques.
1-3. Challenges in academic institutes

**Current status**

**Analysis**

Nepal education

- Learning tendency among new generation is declining.
- Mostly, students do not like books or traditional way of learning.
- Global challenge: “Making student ready to learn”

**Challenges**

Future education

- Providing equal educational opportunities to each and every students in our country
- Making teaching/learning method effective using ICT
- To implement U-Learning method in 9 schools

**Vision & Resources**

- If we really want to make our teaching and learning system effective:
  - Imagination + Innovation = Imaginnovation
  - Technologies:
    - UBL & UBT
    - Related equipment

**Expected achievement**

**Pilot schools**

- Implemented in 9 schools
- Selected 37 schools from 3 municipalities within 2 districts.
- Making people loving new technology.
- Success rate: more than 80%
2-1. UBL technology on secondary schools in Nepal

- UBL technology can provide quality education services because it is an electronic education service with rich media.

- It is an affordable way to for students to get skill education and can be used both in online and offline mode.

- Discussion with teachers, academician, and other related stakeholders such as Mayors in municipalities, it has been very useful and effective method in context of Nepal.
3. Implementation in real fields.
   - Rural area
   - Urban area
3-1. Capacity building: Objective of ULTP & Results

- The main aim of capacity building program is to provide right learning services to secondary school by teacher themselves.
  - Total amount of trainees: 61 teachers from 48 schools
  - Government schools: Three municipalities of Kavre and Sindhuli districts: 2 Kavre + 1 Sindhuli district.
  - 11 schools included private, community and government types.

- The main objective of ULTP is to develop and implement teaching and learning methods in selected 48 schools and more government schools to enhance the innovation skills.

- All participated Teachers understand this technology:
  - How to assemble the all devices?
  - How to run the devices & systems?
  - How to develop the contents?

- More than 80% teachers are now more or less able to implement this teaching and learning technology tools in their schools.
3-2. UBL System used (Included contents development)

- Now they are going to implement this technology in Computer Science, Mathematics, Science and English subjects.
- Conduct training in KUIT Park, Panauti and TU ICTC, Pulchowk: 3 days each.
- Introduction of Technology, Installation of Technology, and Use of Technology (with practical) – 2 days
- Teach to school’s teachers for the development of content with practical studies. (For implementing UBL based on teacher made contents)
- Handed over as many UBT system to them to give a pre-test.
- Delivered U-Learning Box with server and wireless AP to them to implement UBL on their class.
3-3. Build a HUB in KUIT Park & TU ICTC

- UBL System and UBT Platform, R&D Lab Implementing Technical Office already developed in KUIT Park and in TU ICTC – Co invested by KU, TU in Nepal and NSDevil, CUE in South Korea.
- Setup required UBL System for ULTP for teachers and for R&D.
- ULTP Training Hall managed in KUIT Park and in TU ICTC.
- Implemented 3 times ULTP.
- KUIT Park Finishing School is going to setup Central Hub Center – Co-invested by KU in Nepal and NSDevil South Korea.
4. Result
For quality education, IT in teaching and learning method plays major role.

According to our research among 9 model schools, UBL & UBT have been one of best suitable technologies on teaching and learning and assessment.

Now, local government (municipalities) have also realized the positive outcome of this technologies.

Three municipalities have already approved for the implementation of this technology. They are:

- Kamalamai Municipality for 14 Schools
- Namobuddha Municipality for 11 Schools
- Mandan Deupur Municipality for 12 Schools

Technically, Kathmandu University and Tribhuvan University are going to support them with the help of NSDevil and Jinju National University of Education.

UBL experts implements the technology with coordination and agreement from municipality mayors who are the leader of these programs.
4-2. Success factor

- Before using UBL&UBT, by old existing system usage rate and satisfaction rate were low (around 20%) and using UBL&UBT the satisfaction rate of students were over 80%.

- Teacher’s satisfaction has increased than with existing teaching and learning process.

- Students have been interested and motivated about teaching and learning based on UBL & UBT than existing (small amount of PC, books) methods.

- Class environment has been very good and proactive.

- The content included audio, video and text depending on the subject’s lessons, it has made it more interesting.

(On going R&D) Individual opinion: Students learning level has increased after implementing these project.
4-3. For the future: Cooperation and Coordination

For regular supervision, monitoring and research we need following cooperation and coordination:

- Create a wide south Asian team together with EEO BULT Project (India, Bangladesh, Bhutan, Maldives, Sri Lanka and Nepal)

- Conduct regular meeting among team members for progress status and to solve the problems.

In context of Nepal, this project (EEO BULT) is getting popular gradually.

Many local governments are convinced about this project for teaching and learning method for quality education.
Feedback Result about U-Learning Technology (%) out of 61 Participants

- U-Learning System knowledge gained teachers: 86.9%
- Improved quality of teachers and students for EEO (Quality Education): 100.0%
- Effective teaching and learning methods for schools: 100.0%
- Enough training period for implementation: 14.8%
- Not enough period of training (need 7 days): 85.2%
- Provide UBT System soon for Implementation: 100.0%

Feedback Result about U-Learning Technology (%) = 61 participants
5. Appendix

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We are being changed any places to future education environment.