

Competency-Based Teacher Training to Facilitate ICT-Pedagogy Integration

(Country Case Study – Nepal)

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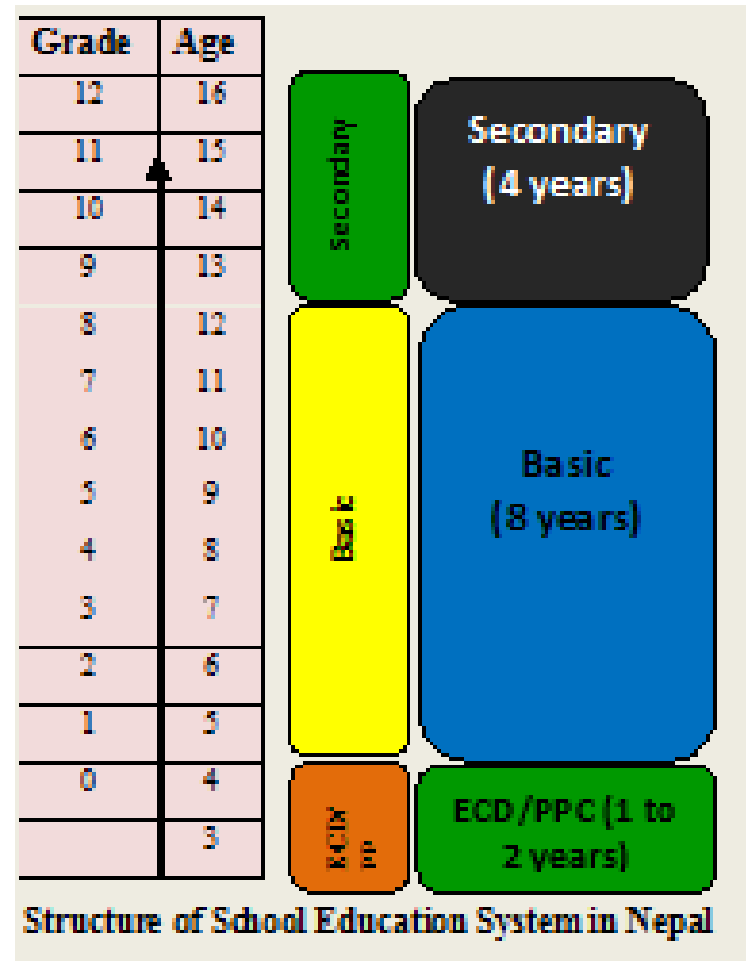
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Nepal



School Teacher Student

- **Schools**
 - Basic **34,806**
 - Secondary **8,825 +**
- **Teachers**
 - Basic **240,032**
 - Secondary **116,074**
- **Students**
 - Basic **6,170,668**
 - Secondary **2,635,160**



School Teacher Student

- **Female teachers**

- Basic 38.8%
- Secondary 16.9%

- **Net Intake Rate (NIR) in Grade 1 (2014)**

- 93.0% (92.7% for girls and 93.3% for boys)

- **Students (community schools)**

- Basic 84%
- Secondary 78%

- **GPI**

- Basic 1.03
(1.09 at community and 0.77 institutional)
- Secondary 1.04
(1.12 at community and 0.79 in institutional)

- **STR**

- Basic 26
- Secondary 23

- **Students/School**

- Basic 179
- Secondary 102 (9-10)

Background Support Studies

1. Country Background Report 2014

- ICT policy, provision and practices in Nepalese education, teacher preparation and existing facilities, overview of Nepalese education system, school level national curriculum, assessment practices, teachers and teacher training, and ICT in education.
- Desk review and small scale field study for triangulation

CBR to understand policy, programmes and existing condition in order to set entry requirement and plan further support and activities.

Background Support Studies

2. Nepalese Teachers' ICT Readiness Survey – V1

- UNESCO survey tool
- 201 teachers from 25 schools of 5 districts
- This survey pointed out positively in some of the surveyed components.
 - Teachers' reach to the internet, 63.2%
 - Digital resources to use in classroom from MOE (8.5%), fellow teachers (30.8%), random websites (29.4%), open educational resources (49.3%), self developed (20.4%)
 - Teachers' responses on the use of computer for classroom teaching : daily 3% , at least once a week 14.4%, at least once a month 11.9%, rarely 27.9%, never 42.8%

Background Support Studies

2. Nepalese Teachers' ICT Readiness Survey – V1

– Pedagogical practices

- Lecturing with textbook - 80%
- Lecture with other teaching materials created or adapted (e.g. worksheet, game, e-course, movie, etc.) **never used** - 48%
- Collaborative learning **never used** by 35%,
- Project-based learning **never used** by 36%
- Real-world problem solving **never used** by 34%

This indicated that traditional approaches are prevalent in Nepalese school classroom and ICT use is less.

Background Support Studies

3. Nepalese Teachers' ICT Readiness Survey – V2

- V1 survey comparatively positive findings due to two ICT focussed schools in the survey
- V2 national ICT competency standards focused survey (school and teacher readiness)
- 10 districts, 51 schools (rural urban, community institutional) and 517 teachers
- School - availability of required resources and use of ICT
- Teachers - all the indicators in the NCED's teacher ICT competency standards

Where there were skills combined together in teacher competency indicators, these were broken down.

Background Support Studies

3. Nepalese Teachers' ICT Readiness Survey – V2

– School

- Electricity - 82.4% , backup provision was in about 1/4th (mostly institutional schools).
- Landline telephone - 58.8%
- ICT devices - 76% (15 out of 16 institutional schools)
- Internet facilities in the schools - 49% (3/4th of institutional schools)
- National ICT policy only in 4 (7.8%) and 6 (11.8%) schools own
- School budget and its share in the ICT - 1.51% of the school budget for ICT including hardware purchase

Though two third of schools have basic ICT support facilities, their use low - teachers (25.5%) and students (23.5%)

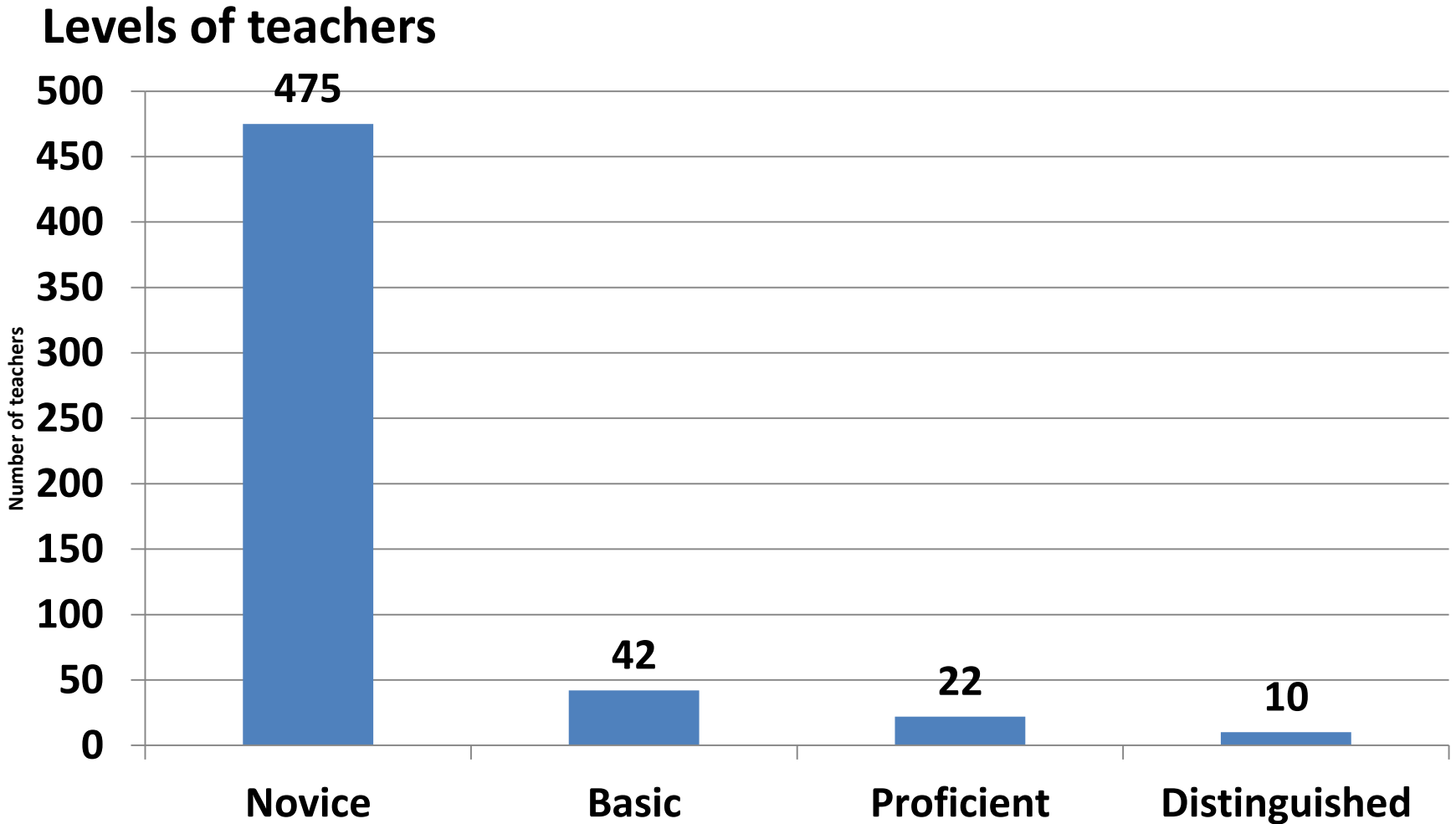
Levels of teachers

3. Nepalese Teachers' ICT Readiness Survey – V2

– Teacher

- Basic - 58 indicators
 - Proficient - 21 indicators
 - Distinguished - 16 indicators
- in each of 6 performance categories.
- criteria for each of the competency level 80% of the learning objectives/tasks

Levels of teachers



Levels of teachers

3. Nepalese Teachers' ICT Readiness Survey – V2

– Teacher

- Novice, Basic, proficient and distinguished levels - 475 (91.9%), 20 (3.9%), 12 (2.2%) and 10 (1.9%)
- Basic level 58 skills and teachers below basic 475
 - 4.6% teachers scoring none
 - 36.9% score 1-5
 - 12.6% score 6-10,
 - 14.9% score 11-20,
 - 25.9% score 21-40, and
 - 5% score 41-58.

This shows teachers below basic (i.e. novice) can be at the different levels

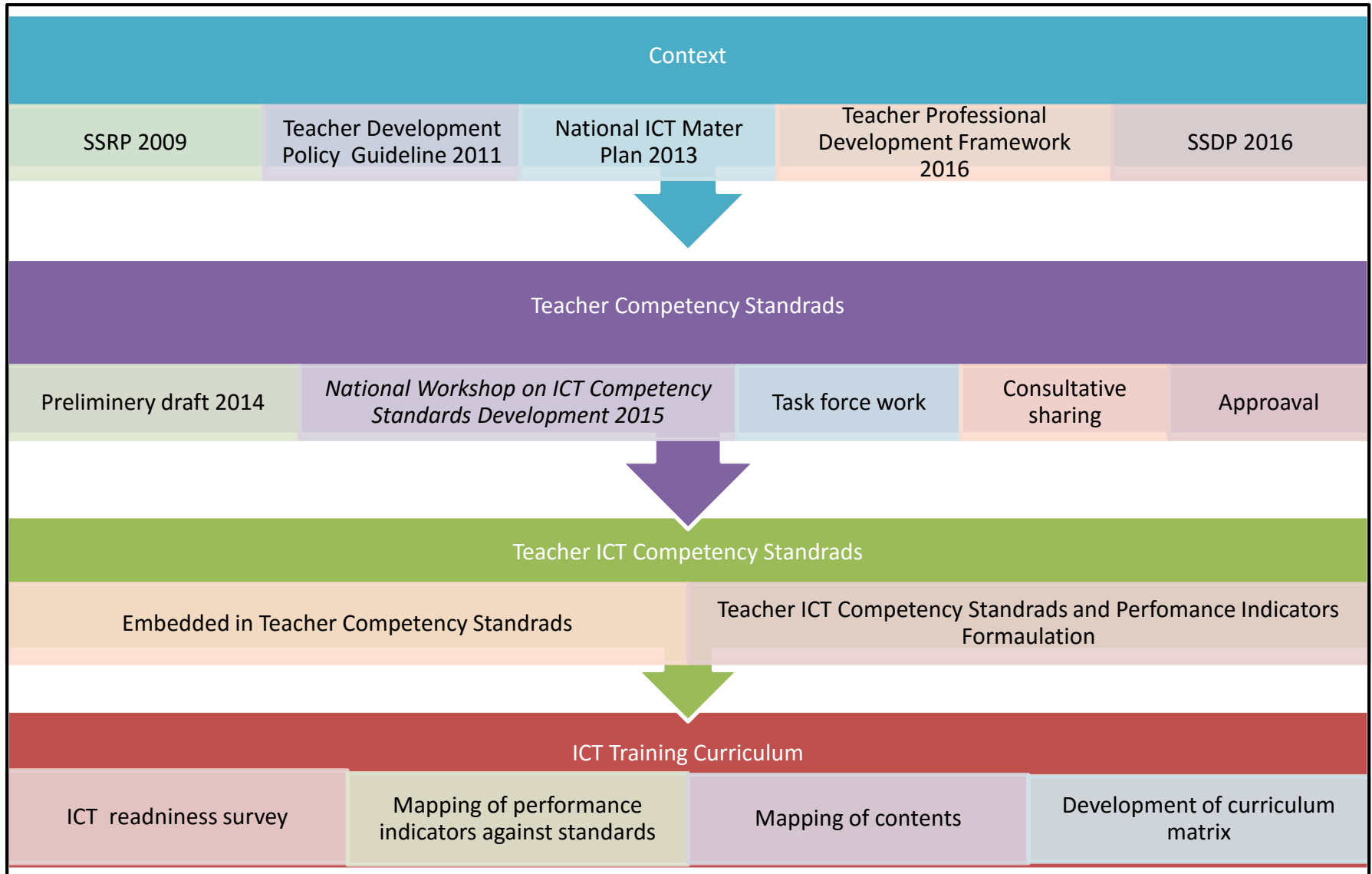
Background Support Studies

Readiness Surveys Suggestions

- 1) support schools at least to reach at minimum requirement level
- 2) provide different packages basic and proficient
- 3) select teachers by pre-testing and provide appropriate training package (homogeneous)
- 4) national IT policy awareness to the teachers
- 5) embed monitoring and technical backstopping

Teacher Training Development for ICT-Pedagogy Integration

Teacher Training Development Procedure



Development of ICT Competency Standards for Teachers

- 2014 – KSA
 - Broad and core competencies
 - Knowledge, Skills & Performance, Attitudinal competencies
- Reorganizing and restructuring (international frameworks)
 - 8 category and 3 levels (basic, proficient and distinguished)
 - Process: conceptual understanding, domains standards performances
 - Similar process in ICT competency standards development

(Details in NCED presentation)

Teacher Competency Standards (Nepal)



Content Knowledge



Pedagogical Knowledge



Knowledge about children/learners



Learning environment and classroom environment



Communication and collaboration



Continuous Learning and Professional Development



Legal bases and professional conduct



ICT competencies

Aligning ICT Competencies with Teacher Training Curriculum

- 3 year B. Ed. and 9 semester B. Ed. in ICT Education recent in FOE, TU
- NCED Basic ICT Education package
- Integration of ICT competencies in teacher training curriculum ongoing in NCED
- Recent workshop: Mapping of standards performances and drafting of curriculum content

(Details in NCED presentation)

Impact and issues

Impacts

- Curriculum developers and course teachers of FOE:
Useful
 - good flow of students
 - highly demanded by the university colleges
 - practical oriented and computer lab - ensure skill development
 - job opportunity for the students

Issues: ways to integrate ICT in the classroom pedagogy and improve quality of education; widen the course and maintain the quality.

- NCED basic level ICT training package piloting: trainees perceived training would be helpful to improve their classroom teaching learning.

Impact and issues

Issues and Suggestions

- *ICT competency standards in pre- and in-service.* pre-service courses of FOE, TU not adequately aligned

NCED and FOE jointly develop curriculum and maximize synergy

- *Transfer of officials involved in the ICT program development*

Inducting new members and orient on time; overlap working for some time; and establish process of sharing of progress and event reports within NCED

- *Mixed ability group of teachers in the training*

Teacher entry assessment and provide appropriate training package

Impact and issues

- *School readiness before teacher training*

School also need to be supported and ICT environment created

Match with SSDP plan of establishing ICT learning centres in model schools and establishing at least one model schools equipped with ICT facilities in every constituency

- *Transfer of training skills in the classroom is low.*

Embed training follow up and technical backstopping with the NCED training provision.

Next steps

- In addition to NCED suggestion/presentation
 - NCED and University team finalize teacher training curriculum
 - Review and revise school and teacher readiness survey from to adapt as assessment form to assess entry level
 - Plan training with MOE/DOE ICT support plan/program
- Promote ‘national teacher competency standard’ as core and mandatory in teacher education, training, licensing and selection

Thank You