Developing Information Communication Technology (ICT) Standards for K-12 Schools in the Philippines

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This paper will present:

- ICT role in a learner-center environment

- Need to develop ICT curriculum standards

- Technology integration practices in Philippine education

- Some Philippine government initiatives

- Requirements for effective ICT implementation in schools

- Potential challenges in its implementation.

Curriculum Standards

Country : Common reference tool and a defined
              framework for national testing

Teachers: Design tool for curriculum, instruction
              and assessment

Students: Clear performance expectations

Process of Integrating Standards into the Curriculum Consists of Four Steps:

1. Developing a curriculum framework in the context of standards-based reform
2. Selecting a curriculum-planning model that further articulates the standards-based reform outlined in the framework
3. Building capacity at all levels of the educational system
4. Monitoring, reflecting upon, and evaluating the curriculum as teachers implement it in the classroom

(Pattinson & Berkas, 2000)

ICT Curriculum Standards

Instructional materials integrating ICT in Philippine schools will be created based on these standards. Curriculum content will be developed after carefully selecting and analyzing the standards to be met. Educators should refer to the targeted skills for each content area and grade level as they plan and implement their classroom activities. Instructional activities and assessments are to be selected and designed through which students can demonstrate mastery of standards

Current ICT Integration in the Philippines

Philippine Department of Education has policies on the use of ICT.

These are:

1. Technology must be studied first as a separate subject

2. The application of computer skills to the other learning areas is a curriculum policy

3. An education modernization program

Pedagogy Design + ICT Integration

The primary factor that influences the effectiveness of learning is not the availability of technology, but the pedagogical design for effective use of ICT. The computer should be fitted into the curriculum, not the curriculum into the computer. Therefore, effective ICT integration should focus on pedagogy design by justifying how the technology is used in such a way and why. Effective ICT integration into the learning process has the potential to engage learners.

ICT-Supported Education: Learner-Centered

- Active Learning

- Collaborative learning

- Integrative learning

- Evaluative learning

- Creative Learning

- Project-based learning

Government Initiatives

By end of 2009:

1. Provision of appropriate educational technologies to all public high schools
2. Provision of a computer laboratory with basic multimedia equipment to 75% of public high schools
3. Provision of electronic library systems to all public science-oriented high schools
4. Training of 75% of public secondary school teachers in basic computing and internet skills as well as in Computer-Aided Instruction (CAI)
5. Integration of ICT in all learning areas, when appropriate
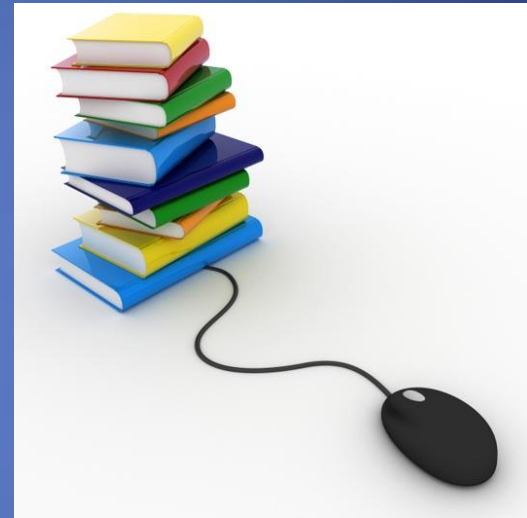6. Private sector support

Effective ICT Curriculum Standards

1. Implementation Plan

   Appropriateness
   Effectiveness
   Sustainability

2. Teacher Training

3. Technological Leadership

- *Appropriateness* refers to suitability in context. Factors to consider in choosing an ICT resource is the learning goal and objective to be met, the content of the material and its availability and accessibility to students. The most appropriate ICT tool does not need to be the most up-to-date or expensive available.

- *Effectiveness* refers to the extent to which stated goals and objectives are realized.

- *Sustainability* is defined as the extent to which the implementation of an ICT-based project (in the context of basic education) can continue after initial project funding or support has ended.

Challenges

1. Availability of Facilities

2. Teachers' Acceptance, Knowledge & Skills

3. Good Leadership

ICT Education

THANK YOU