Pre-Service and In-Service Teacher Education in the Philippines

By Fabian C. Pontiveros, Jr. (Philippine Normal University)

Introduction

Technology has played an important role in education. If wisely use, it reduces operational cost while increasing access to quality education. In the Philippines various agencies or institutions employed technology in planning, implementing, and evaluating educational programs. The use of technology ranges from simple traditional approach to the more sophisticated one-way teleteaching and the more innovative-interactive two-way approaches like teletutorial, online teaching, and telematics.

The object of this paper is to present the system and mechanism of pre-service and in-service teacher education in the Philippine - with emphasis on the technology employed by the various education institutions.

Education Institutions in the Philippines

To be able to understand the present system and mechanism of teacher education in the Philippines, it is desirable that the reader be acquainted with the different education institutions - their roles and contributions - in promoting teacher education in the Philippines.

These education institutions, which are considered the pillars of teacher education, are working singly and collaboratively to upgrade the standard of teacher education in the Philippines.

The Philippine Normal University (PNU). A state university that is dedicated to teacher education, PNU was founded in 1901 during the American occupation in the Philippines. Its mission is “to provide professional, technical, and special instruction for special purposes; and progressive leadership in education.” Considered as the premier teacher education institution in the Philippines, PNU is active in both pre-service and in-service teacher education.

University of the Philippines. National Institute of Science and Mathematics Education (UPNISMED). One of the institutes of the University of the Philippines, UPNISMED is dedicated to science and mathematics education. UPNISMED, like PNU, is also active in both pre-service and in-service training of teachers but its scope is limited only to science and mathematics educations.
University of the Philippines Open University (UPOU). Formerly called the School of Distance Education (SDE) of the University of the Philippines, UPOU is the pioneer of distance education and online teaching in the Philippines. UPOU is active in post-baccalaureate or life long learning. With the installation of the Integrated Virtual Learning Environment (IVLE, under licensed from National University of Singapore), interactive online teaching has become more “real” and practical way of reaching learners in distant places.

Department of Education, Culture and Sports (DECS). DECS is an agency that is task by the Government of the Philippines (GOP) to provide basic education to Filipinos. It employs about a million elementary and high school teachers throughout the country. Although its primary role is “to provide basic education”, it is however, very active in in-service training of its teachers.

Commission on Higher Education (CHED). Formerly called the Bureau of Higher Education, CHED is task by the government to set up policy and standards for Baccalaureate and post-Baccalaureate degrees. It evaluates curricular programs of all higher education institutions and issue Permit to Operate to private schools that satisfies the standard. CHED has also the power to cancel permits and effect closure of private schools that violate policy, rules, and guidelines for quality education. In contrast with the DECS that is active in in-service training of teachers, the CHED is active in pre-service teacher education by way of setting up expectations, conducting conferences, consultations, and encouraging linkages or consortium among higher education institutions.

Department of Science & Technology (DOST). This agency is mandated by the government to “provide central direction, leadership and coordination of scientific and technological efforts and ensure that the results are geared and utilized in areas of maximum economic and social benefits for the people.” As education is one of the areas of concern of the DOST, this agency created a unit called Science Education Institutes (SEI), which is popularly referred to as SEI-DOST. This unit is in charge of promoting increase awareness in science and technology education. To achieve this task, SEI-DOST maintains 14 regional centers (one center per region) throughout the country. The leading teacher education college or university in the region, whether private or public, is usually chosen as the Learning Center of the SEI-DOST. These learning centers, officially called the Regional Science Teaching Center (RSTC), is in charge of conducting In-service training to science and math teachers in both the elementary and secondary levels. In-service trainings conducted by RSTCs throughout the country are done during summer vacations (April to May) to enable the teacher to attend a continuous training session. Funding from SEI-DOST that is intended for teacher training is channeled to these learning centers. Books and other instructional materials form part of the training package given by the RSTCs. In addition, SEI-DOST supports elementary and high schools all over the country by way of constructing science laboratories, and donating books and science equipment.
Private Colleges and Universities. Private teacher education colleges and universities, like the Ateneo system (Ateneo De Manila, Ateneo de Davao, Ateneo de Zamboanga, Xavier University of Cagayan de Oro City), De la Salle University (DLSU), Centro Escolar University (CEU), Silliman University (SU) of Dumaguete City, St. Paul University, University of San Carlos (USC) of Cebu City also conduct pre-service and in-service training of teachers. In-service training of teachers done by these private institutions are usually funded by the government through its agencies like CHED, DECS, and DOST.

Non-Government Organizations (NGOs). Private foundations and companies, like the Foundation for the Upgrading of Standard in Education (FUSE), the ABS-CBN Foundation, IBM Corporation, Educ Quest, People’s Television Network (PTV) and some other NGOs are active in helping promote quality education. Their involvement ranges from passive (cash or equipment donation) to the more active present roles of collaborating with government institutions in producing quality learning materials. One case in point is the Continuing Science Education for Teachers via Television (CONSTEL) project, which is a joint project of the PTV, FUSE, SEI-DOST, DECS, UPNISMD, and PNU. Another example is the Educational Television (ETV) project of the ABS-CBN Foundation and the DECS. ETV, which is owned and operated by the ABS-CBN Corporation, regularly broadcast educational TV programs in elementary science (SINE’SKWELA), elementary mathematics (MATH-TINIK), elementary history (BAYANI), values education (HIRAYAMANAWARI), and elementary English (EPOL/APPLE). Schedules for airing these educational programs for the elementary grades coincided with school hours. Thus, school principals or head teachers can prepare class schedules that match the airing schedules of ETV program.

Television monitor has now become a commonplace in many elementary schools throughout the country because of the ETV program of the ABS-CBN and the DECS. Local government units help the school in procuring TV sets. In Mandaluyong City, for example, the city government provided each classroom of the Mandaluyong Elementary School with a TV set.

Teacher Training Programs Conducted and their Mechanisms

a. PNU Programs.

In the pre-service component, PNU recently revised its teacher education curriculum and added two more courses: IT 1 and IT 2. IT 1 focuses on basic computer operations (DOS, WINDOWS, MSOffice programs) while IT 2 focuses on computer-assisted instructions (CAI). Also included in IT 2 is introduction to educational software programming (Visual Basic, Netscape Composer). CAI was used as an alternative mode in teaching some courses like Math, Science, Language, Arts, and History. Computer Assisted Science Experiments (CASE) was also employed in selected biology, physics and chemistry topics.
In the in-service component, PNU conducted seminars, workshops, short term and long-term trainings (leading to a master or doctoral degree). Being one of the RSTC identified by the SEI-DOST, PNU is regularly conducting summer training in Science and Mathematics (Project RISE) -in addition to its regular in-service trainings on Teaching Reading, Literature, and Special Education. Regional trainors in science, math, language, early childhood education, nonformal education, and other areas in basic education are trained at PNU. Educational training projects that are funded by CHED, DECS, SEI-DOST are usually channeled to PNU.

In implementing in-service trainings, various modes were used. The traditional face-to-face classroom interaction, the modular type (distance education), telemovie, and the Computer-Assisted Instruction (in CD-ROM format, not Online) are used either singly or in combinations.

b. UPNISMED Programs.
Like PNU, UPNISMED also uses alternative delivery modes in pre-service and in-service training programs. An example is the CONSTEL project. CONSTEL is an acronym for Continuing Science Education for Teachers via Television. It is a joint project of DECS, DOST, UPNISMED, PNU, FUSE, and Channel 13(People’s Television Channel). This program is aired through television (Channel 13) every Saturdays and Sundays.
DOST and DECS Regional trainors in the area of secondary science (Biology, Chemistry, and Physics) are also trained at UPISMED.

c. UPOU Programs.
At present UPOU offers 17 post baccalaureate programs and 6 non-formal courses. In teacher education, the following programs are offered:

   o Diploma in Science Teaching
   o Diploma in Mathematics Teaching
   o Diploma/Master in Social Studies Education
   o Diploma/Master in Language Studies Education
   o Doctor of Philosophy in Science Education

Four delivery modes were used. These are (1) Online, (2) Teletutorial, (3) Online with Face to Face, and (4) Face to Face.

In Online mode- student and faculty meet in a virtual classroom and discuss the modules via e-mails, discussion board or chat rooms.

In Teletutorial mode - students go to a learning center with a facility that allows many people to use a telephone line at the same time. Discussions are done through this audio link between students and tutor.
In Online with face-to-face mode - student and faculty meet in a virtual classroom and the student meet an assigned tutor once a month on a Saturday.

In face-to-face mode- students meet a tutor once a month on a Saturday to discuss course modules in a UPOU learning center.

In enrolling at the program, the following mechanisms were used:

1. Applicant obtains an Application form from any of the Six Learning Centers (LC) or the Office of the University Registrar (OUR). Application form can be downloaded from UPOU web site.

2. Fill out the form and mail or submit to the OUR or any LC, together with requirements listed in the application form. If qualified, applicant will receive admission notice.

3. Once admitted, applicant registers in the assigned Learning Center (instructions are given together with the admission notice)

a). Student can register online following this procedure;

i. Open the Course Web and choose a course. (There are 71 courses available for online learning).

ii. Choose a course by clicking on the button (circle) beside the listed course.

iii. Choose a tutorial arrangement (i.e. Online, teletutorial, Online with Face-to-Face, and Face-to-Face.

iv. Choose how the materials will be sent. There are two available options.

   Option 1 Pick up the materials at the nearest UPOU Learning Centers. These are (1) UP Open University Headquarter, Los Banos, Laguna, (2) Colegio de Sta. Isabel, Naga City, (3) UP College Baguio, Baguio City, (4) UP Cebu College, Lahug, Cebu City, (5) UP Mindanao, Tereza Milea Bldg., Inigo, Davao City.

   Option 2- Send materials through post or courier (shipping cost will be paid by the student)

v. Student fill up basic information and submit to the OUR or any nearest LC.
a. DECS Programs.

To update its teachers in the recent trends of teaching and learning, the DECS initiated several in-service training activities. The *Third Elementary Education Project (TEEP)* is a mass training for elementary school teachers nationwide. It is intended to enrich elementary teachers knowledge in both the content and strategies. The *Secondary Education Development Improvement Program (SEDIP)* is a mass training for high schools teachers in Science, Math, Technology and Home Economics (THE), English, Filipino, Physical Education (PE), and Values Education (VE). *SEDIP* is the successor of the *Secondary Education Development Program (SEDP)*, which was launched in 1990 and ended in 1995. This SEDIP project, which was launched in 1999, is the high school version of the TEEP.

In updating the teachers on the latest trends of teaching using computers and other telecommunication devices, the DECS launched the Modernization Program. This program consists of two phases. The first phase is the acquisition and distribution of hardware component (computers, TV sets, VHS players) and software (Educational CD and Tapes) and the second phase is the training of teachers. This program is handled by the *Center for Education Technology* of the DECS.

Another project, the Project in Basic Education (PROBE) is aimed at improving the learning proficiency in science, mathematics, and English of pupils in Grades 5 and 6 in the elementary level, and first year & second year in the high school level. This AUSAID funded project is considered the most successful in the Philippines as new and innovative training approaches were used. The PROBE program consists of four components: (1) Pre-service, (2) In-service, (3) Material development, and (4) Evaluation. In the pre-service component, 70 college instructors or professors from 14 Teacher Education Institutions (TEI) were identified and sent to Queensland University of Technology (QUT) in Australia for a six-month training on the latest trend in teaching Science, Math, and English. This core group of college professors is expected to influence their colleagues and thereby change the traditional lecture method with alternative strategies that are consistent with the *Constructivist view* of knowledge.

The second component (the In-service component) consists of selected elementary and high school teachers in science, math, and English. Like the first component, this group of teachers was also sent to Australia to learn alternative strategies in teaching.

The third component is geared on producing curriculum support materials (CSM) and in-service training package (INSET). Instead of buying foreign books for distribution to other schools, PROBE fellows (i.e. professors in the First Component) and In-Service Facilitators (ISFs, i.e. teachers who belong to the second component) produce the learning materials in a form that is easily understood and practically applicable in the local setting. Regional Learning Material Resource Center (RLMC) mass produce these CSMs and INSETs and distribute them to PROBE satellite
schools during in-service trainings conducted either by the PROBE fellows or the ISFs.

The fourth component is about the evaluation of the entire project. Australian experts on evaluating training programs came to the Philippines to evaluate the entire program. DECS officials, teachers, and students were interviewed. Written evaluation (checklist) was also used. The result showed that the project is successful. Because of this positive result, the project received additional funding from the AUSAID and a two and a half year extension was granted.

The PROBE project does not heavily employ high tech equipment, like computers and Internet, in training teachers. It is the innovative approach of “empowering” the teacher by asking them to develop their own resources and in localizing the material that made the project successful. As an output of the project, teachers now think of themselves not merely as classroom teachers, who used textbooks prescribed by the DECS as their bible, but as curriculum planners, agents of change, and facilitators of learning.

b. DOST Program.

As already mentioned, DOST collaborated with government institutions (PNU, UPNISMED, UPOU, DECS, CHED) and non-government institutions (PTV, ABS-CBN, FUSE, IBM) in facilitating in-service trainings of teachers. The CONSTEL project, mentioned earlier is a DOST funded project.

The yearly summer trainings in math and science via the RSTC in each of the 14 regions of the country is an initiative of the SEI-DOST. This yearly summer trainings made a great impact on the effectiveness of basic education teachers.

The Project Rescue Initiative in Science Education (Project RISE) - a project that aims to equip non-science major Science teachers (teachers who are forced to teach science but not prepared to teach the subject) in teaching science is an initiative of the SEI-DOST. This project, which was managed by the RSTCs in their respective region, started in 1998 and ended in 2000.

A relatively new project of the SEI-DOST, which was first piloted in Region 13 (Caraga Region), is the Mobile Information Technology Classroom (MITC). MITC is actually an air-conditioned bus that is equipped with laptop computers, LCD projector, audio devices, and TV-VHS set. The MITC project aims to bring Information Technology to teachers and pupils in the far-flung rural areas. Teacher-trainor aboard the MITC bus teaches both the elementary teachers and pupils the basic computer operations. Sets of Educational software package were introduced to both the teachers and pupils (in separate sessions). This project also aims to allay teacher’s fear about computers and to encourage her to consider it as an alternative teaching device.
Parents-Teachers Association (PTA) officials were encouraged to initiate the procurement of computers through voluntary contributions.

On Innovative Aspect of the Teaching/Learning Package.
Technology-wise, innovation in teacher training comes with the introduction of IVLE. IVLE is an enterprise wide e-learning management system specifically designed to empower lecturers, teachers, and trainers to manage and support teaching and learning over the web. The rich set of easy to use tools brings teachers and students even closer with constructive communication in a virtual world, IVLE, designed and developed by the National University of Singapore (NUS), was shared to UPOU and DLSU in the Philippines. It is an innovative program as it provides a wide variety of tools and resources that can be added to a course in addition to its ability to facilitate the organization of course materials on the web. It provides tools for discussion forum, online chat, automated quizzes, class distribution lists, electronic mail, lesson plans, automatic index generation, staff homepages, course calendar, subscription services, assignment repositories, templates, and much more (see IVLE).

Strategy-wise, innovations in the in-service training of teachers in the Philippines come with the use of constructivist approach in training. This strategy may be outlined as follows:

Step 1. Needs Assessment. Staff members (College Professors) from the Teacher Education Institution (TEI) conduct consultation with the target clientele (e.g. teachers from DECS) on their training needs. Clienteles are encouraged to suggest possible training program they think answers their need.

Step 2. Participation of the Target Clientele in Preparing Training Design. With the assistance of the staff members from the Teacher Education Institution (TEI), clienteles are encouraged to draft a training program that they believed would answer their need. (This strategy is based on the philosophy that target clientele knows what they need. They just don’t know how to address their need. This strategy is a way of teaching them how to “solve their own problem”. This strategy is anchored on the principle of life long learning which can be summarized by the maxim: “If you gave a man a kilo of rice, you feed him for one day. If you teach him how to plant rice, you feed him for the rest of his life.” Learning how to address ones own problem is life long learning.)

Step 3. Designing the In-service Training (INSET) Package. Curriculum experts from TEI review the proposed training program prepared by the target clientele and, after a series of brainstorming activities, comes up with a customized INSET package. The nature of the clientele, their prior knowledge and experience, school resources, and the primacy of the need are given due consideration in planning customized training program.

Step 4. Validating the Proposed Customized INSET Package. Another group of curriculum experts review the proposed customized INSET package for validation.
Length (in number of days or hours) and proposed training dates are included in the review. Clienteles’ preferred training dates is given due consideration. This second group of curriculum experts may propose amendments to the original plan.

**Step 5. Implementation of the INSET Package.** In-service training program is then implemented on dates and venue convenient to both the trainors and the trainees. During the entire training course, face-to-face interactive is the usual delivery mode. Traditional Lecture method is avoided. Instead, trainees are encouraged to engage in collaborative work and act as a team in solving problems or in preparing outputs. For In-service training where the trainees are expected to become trainors in their respective region, division or school, INSET materials prepared by the trainors usually contains the following features: (1) Facilitator’s Guide, (2) Presentation Plan for Facilitators, and (3) Master Set of Resources.

Facilitator’s Guide contains **Description, Rationale, Target Audience, Duration, Objectives, Preparation, Evaluation, Resource List, and Materials and Equipment Needed** as key features.

Presentation Plan contains (in matrix form) the sequence of activities, the time allotment for each activity, and author’s guide for the facilitators.

Master Set of Resources contains all the learning materials or inputs that will serve as the bases for participants’ construction of new knowledge.

**Conclusion**

Although a few universities, like UPOU and DLSU, are at the forefront of educational technology with the implementation of online teaching with IVLE, a greater number (95%) of Teacher Education Institutions (TEIs) in the Philippines are still using the face-to-face interactive mode of delivering INSET programs. Aside from financial constraints experienced by these TEIs, one main reason for negative or hesitant behavior of some college professors is their lack of adequate knowledge in information technology. A greater number of college instructors, especially the older ones, can barely use a word processor. Many administrators and college deans are not aware of the tremendous potential of online teaching in bringing quality education to remote areas. Thus, there is a need for a country-wide campaign on ONLINE TEACHING as alternative to face-to-face interactive mode in bringing quality education to the less fortunate learners in the less accessible areas.

Source: [http://gauge.u-gakugei.ac.jp/](http://gauge.u-gakugei.ac.jp/) 09/2001