ICT-PEDAGOGY INTEGRATION AT MSU-IIT's COLLEGE OF EDUCATION
A Special Program

The Conceptual Framework

The national government's thrust in its computerization program for the public schools and for the New Teacher Education Curriculum is ICT4E (ICT for Education) rather than E4ICT (Education for ICT or ICT in isolation).

The Commission on Information and Communications Technology (CICT) is the Presidential arm for our national ICT Program. Ms. Melizzza Tan, the Head Executive Assistant of the Human Capital Development Group (HCDG) of CICT, stressed the need for the following, during the National Training Programme for Teacher Educators on ICT-Pedagogy Integration in the Philippines:

1. a master plan for **teachers' continuous education/training and application of ICT in education;**
2. a unified approach and framework in the **delivery of ICT for teachers**;
3. effective monitoring and evaluation on **how ICT is used post-training**;
4. institutionalizing **sustainability** of ICT integration into the curriculum.

Hereunder is HCDG's Table of Activities for Education showing the roles played by other groups in the pursuit of this goal of ICT4E.

Table of Activities in ICT for Education: other groups

	Educators Training	Applications Dev	Content Dev	Infrastructure Deployment
Elementary	• Intel Teach to the Future • MS PIL • WorldLinks/ SchoolNet/ FIT-ED • Camp@Apple • UNESCO workshops	• various OSS groups, Intel, MSU-IIT, UP, etc.	• DOST-SEI • DIWA & other commercial publishers • UP NISMED	
High School			• DOST-SEI • SEAMEO Innotech • UP NISMED • DIWA & other commercial publishers • Intel's skoool	• DTI's PCPS • GILAS • FIT-ED • SEAMEO Innotech • Smart Schools
Alternative Learning			• Don Bosco • SCL	
University			• UP • POSITIVE • commercial publishers	• own initiatives • university partners

Please take note that the College of Education (CED) and MSU-IIT are definitely involved in the first two activities, Educators Training and Applications Development. MSU-IIT, through CED,

is now an **outstanding university implementer of Intel Teach to the Future**. CED is the **only TEI in Mindanao** that is tasked to **conduct FIT-ED's World Links-Philippines Project**. CED is a partner of Microsoft and is tasked to conduct the Microsoft Office Specialist (MOS) Training. This proposed special program of CED is the realization of UNESCO's vision in its training program for Teacher Educators on ICT-Pedagogy Integration.

These concepts of CICT are echoed in UNESCO's *"Information and Communication Technologies in Teacher Education: A Planning Guide"*. According to this Guide, "experience has shown that a number of essential conditions must be met to successfully integrate ICTs into teacher education programmes". The table below briefly shows what these essential conditions are.

Table 2. Essential Conditions for Implementing ICTs in Teacher Education

Shared Vision	There is proactive leadership and administrative support from the entire system.
Access	Educators have access to current technologies, software, and telecommunications network.
Skilled Educators	Educators are skilled in the use of technology for learning.
Professional Development	Educators have consistent access to professional development in support of technology use in teaching and learning.
Technical Assistance	Educators have technical assistance for maintaining and using technology.
Content Standards and Curriculum Resources	Educators are knowledgeable in their subject matter and current in the content standards and teaching methodologies in their discipline.
Student-Centered Teaching	Teaching in all settings encompasses student-centered approaches to learning.
Assessment	There is continuous assessment of the effectiveness of technology for learning.
Community Support	The community and school partners provide expertise, support, and resources.
Support Policies	School and university policies, financing and rewards structures are in place to support technology in learning

Of the ten essential conditions, five (5) are boldfaced because these are the primary justifications for this proposed special program.

1. "**Shared vision** means that commitment to technology is systemic . . . Facilitating the integration of technology may require a change in policy or rules, and decision-makers have to be willing to look at the situation, forge compromises when necessary, and ensure communication among parties."
2. **Access** must be adequate and consistent across all the environments that are part of the preparation of teachers (General Preparation, Professional Preparation, Internship/Student Teaching, and First Year Teaching).

3. **Skilled Educators** should **model** and teach techniques for managing technology in the classroom, and from the first course taken by the First Year Education students, they should participate with and observe their mentors using technology effectively.
4. Timely **Technical Assistance** is imperative for faculty and students to feel confident that they can use technology in teaching and learning because the focus of the faculty member, in-service teacher and pre-service teacher (Education student) should be on teaching and learning, not on maintaining and repairing the technology.
5. The Institute top-level management's approval and recommendation of this proposed special program for approval by the Board of Regents (BOR) would be the basis for the needed **Support Policies** for this program's implementation and **sustainability**.

The Rationale

MSU-IIT's College of Education (CED) is one TEI in Mindanao that has been very active in ICT in education. Like other TEIs, it is mandated to adhere to the technology requirements of the ICT-intensive New Teacher Education Curriculum. It is a firm advocate of ICT-Pedagogy integration as envisioned by UNESCO, CICT, and CHED.

Section 1, Article IX, CHED Memorandum Order No. 11, s. 1999, provides that "a multimedia instructional center shall be maintained as a separate unit or as part of the library. It shall serve as a laboratory for the production of materials and educational media for instruction . . ." A TEI, therefore, is required to provide a multimedia center capable of producing educational/instructional media.

Area IX of the AACCUP accreditation instrument requires a computer laboratory, a multimedia center, and other laboratories from a TEI. Its various curricular programs require CED to provide ICTs/AV equipment in the following facilities:
1. four teaching laboratories of the Department of Science and Mathematics Education (DSME);
2. AutoCAD laboratory of the Department of Industrial Education Technology;
3. two Educational Technology laboratories
4. five Audiovisual Rooms

In compliance with these requirements and in order to ensure the successful implementation and sustainability of CED's ICT-pedagogy integration program, CED shall provide the necessary teacher training, technical/professional assistance in the production of instructional media, professional assistance in integrating technology in the curriculum. All these activities imply the need for the following:
1. access to the ICTs for teaching and learning;
2. provision of the necessary production supplies; and,
3. efficient delivery of services.

The ICT-Pedagogy Integration Program

CED's ICT-Pedagogy Integration Program is founded on the beliefs that:

1. use of ICTs in teaching and learning should be pervasive, hence, students should be able to observe their teachers modeling the use of ICT in classroom instruction "across all the environments that are part of the preparation of teachers", and should also be able to use ICT themselves in research, reporting, demonstrations, publications, and communication;
2. teachers and students will be encouraged to produce instructional media when technical/professional assistance is readily available, when they have access to the needed ICT/AV equipment and materials, and when incentives are given to authors of these instructional materials;
3. teachers and students will be encouraged to use ICT/AV media in teaching and learning when there is an efficient delivery of ICT/AV media utilization services, i.e., when there is a technical support staff to serve them.

CED's ICT-Pedagogy Integration Program shall undertake the following activities:
1. Implement the Action Plan on the infusion of ICT in CED's curricular programs
2. continue implementing the ICT training projects that CED has already begun
3. pursue the implementation of CED's Multimedia program which consists of three phases: Phase I (Training), Phase II (Production of Instructional Media), and Phase III (Utilization/Integration of Instructional Media)

The CED ICT4E Training Team shall train both pre-service and in-service teachers, including the General Education teachers in the design, production, and use of ICT. CED shall continue to maintain its linkages with DepEd, Intel Technology Philippines, and FIT-ED so that its pre-service teachers (Education students) would experience a true ICT4E consistently and adequately across all the environments that are part of the preparation of teachers, from College Freshmen to their first year of teaching.

Please refer to the next page for the **Conceptual Model of CED's ICT-Pedagogy Integration** Special Program.

Sustainability

In order to accomplish all these activities and attain CED's goal of infusing ICT in all its curricular programs, CED should take measures to ensure the sustainability of this program.

CED students do not pay for such ICT/AV media services upon enrollment. While the miscellaneous fees amounting to a meager Php220.00 include those for library, medical/dental services, ID, student publication, KASAMA, etc., there is none for ICT/AV media services. CED students are a special lot. They are expected to experience ICT integration in all their teaching-learning environments.

To sustain this special program, the charging of a fee for the ICT-Pedagogy Integration program is imperative. It is, therefore, proposed that CED students and those from other Colleges who enroll in the Professional Education courses shall be charged a fee of Php 200.00 per semester for this special program.
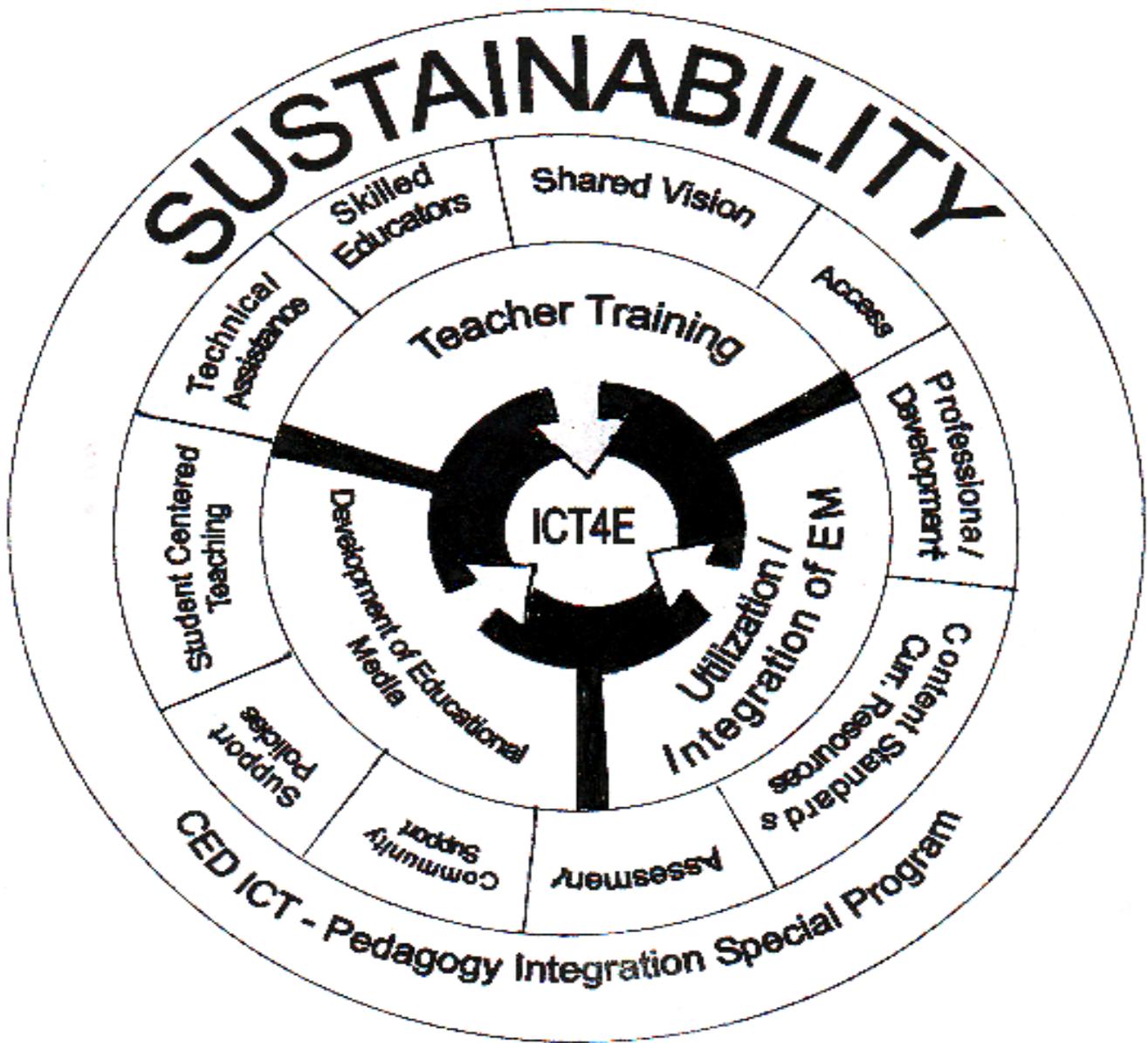
ICT-Pedagogy at CED: The Conceptual Model

In return, they shall enjoy the following for one whole semester:
1. training in Intel Teach to the Future Pre-service Program and Web-Enhanced Learning Activities: An Instructional Design Workshop
2. tutorial lessons in Microsoft Office Software
3. technical/professional assistance in the production of their presentation materials
4. use of the ICT/AV equipment in the classroom for reports, presentations, demonstrations, thesis defense, and watching of educational movies
5. pedagogy that is ICT-infused and teachers serving as their models
6. a student-centered learning environment

CED's faculty members can be provided with the human and non-human resources for an ICT-integrated classroom instruction. CED can provide the production materials and the technical/production staff, thus, removing the barriers to productivity.

CED's training activities can be subsidized and CED's ICT4E training team can be given incentive in the form of honoraria as facilitator, trainer, or coordinator.

The Proposed Implementing Guidelines

Appendix A presents the proposed implementing guidelines for this special program.

The Proposed Budget

The average student population of CED is about 1,400 per semester. A fee of Php 200.00 will generate funds in the amount of Php 280,000.00 per semester. This program is proposed to be a self-liquidating project.

Appendix B, the Proposed Line Item Budget, shows how the College share of Php 224,000.00 will be used. Below is the Summary of Expenses:

<div align="center">

S U M M A R Y   O F   E X P E N S E S

</div>

Technical/Production Staff	Php 68,225.00
Honorarium for Trainer/Facilitators/Coordinators . . .	51,500.00
Supplies for Production of ICT/AV Media	68,500.00
Printing of Receipt	2,000.00
Repair and Maintenance	32,500.00
Miscellaneous Expenses	1,275.00
	Php 224,000.00

<div align="center">

-oOo-

</div>

Proponent: Sonia M. Alensub, Ph.D.
                      CED AV Media Coordinator