E-learning Outreach Program for Public Basic Education in the Philippines: An Action Research and Implications for Policy Formulations Towards Inclusive Education

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Abstract

The E-learning Outreach Program is a multisectoral, collaborative, and commitment-driven action research that focuses on providing innovative, useful and interactive information literacy coursework for public elementary pupils. It sets to benchmark from existing e-learning program initiated by Hope Street Foundation, a nonprofit organization that provides free cutting-edge e-learning cybrary resources for public elementary pupils in Makati City. From this model and through multi-stakeholders' approach, the research project embarked on a participative action research to evaluate, modify, enrich and strengthen e-learning outreach program available through "transfer of technology" and "sharing of technical, pegadogical and experiential resources" for the benefit of public elementary pupils. This is a 2-year project under the De La Salle University's Challenge Grant Research Program. The research project answered the following research questions:

- a) How do we create and sustain a workable, viable and sustainable Information and Communication Technology model (E-learning Outreach model) for public primary education?
- b) What are the best features and success stories of an E-learning Outreach initiative undertaken by non-profit organizations that can be replicated in primary public education?
- c) From assessing the impact, relevance, and strategic advantage of piloting an E-learning station catering to public kindergarten and public elementary pupils, how can there be a "transfer of technology" and "sharing of technical, pedagogical and experential resources" using a dynamic stakeholders' approach and public-private partnerships?
- d) What are the policy implications of the research project in supplementing the ICT4E (Information & Communication Technology for Education) initiatives of the Department of Education in line with its Education for All program and with the Millenium Development Goals of Universal Access to Education of the United Nations?

1. Internet for Education

Most studies reveal that Internet use is predominantly beneficial to education [1] [2] [3]. In the Philippines, there are few research works that delve with the use of technology and the Internet in higher education [4] [5] [6] [7].

In terms of digital divide in Philippine education sector, public elementary schools have not embraced the full benefits of Information and Communication Technology (ICT). Financial constraint and the slow implementation, it not the non-implementation, of government agenda for ICT in education are the two considerable reasons why basic education is far from having an ICT-enabled curriculum for pupils. Government's heavy spending on education is primarily directed on building classrooms and teachers' compensation and training. Unlike its counterpart in the private elementary education, some ICT provisions are provided like building computer labs for pupils, providing online materials for teaching, and creating an online library resource.

Only recently in 2005 that DepEd adopts the ICT roadmap for education. Dubbed as the "Five-Year Information and Communication Technology for Education Strategic Plan". This study is part of De La Salle University's Challenge Grant Program that aims to produce socially relevant research projects that "secure positive, meaningful, lasting and inclusive growth in society and contribute to nation-building..." [8]. The team has embarked on a 2-year project which started in 2013.



2. Objectives of the Study and Research Questions

The project was conceptualized to meet the following objectives:

- a. To establish an e-learning station in Hen. Pio del Pilar Elementary School;
- b. To conduct action research regarding the feasibility, implementation and outcomes of the elearning station
- c. To gather insights, reflections and feedback of stakeholders in the implementation and outcomes of the e-learning outreach station in Makati.

The paper aims to answer the following questions:

- a. How do we create and sustain a workable, viable and sustainable Information and Communication Technology model (E-learning Outreach model) for public primary education?
- b. What are the best features and success stories of an E-learning Outreach initiative undertaken by a non-profit organization that can be replicated in primary public education?
- c. From assessing the impact, relevance, and strategic advantage of piloting an E-learning station catering to public elementary pupils, how can there be a "transfer of technology" and "sharing of technical, pedagogical and experiential resources" using a dynamic stakeholders' approach and public-private partnerships?
- d. What are the policy implications of the research project in supplementing the ICT4E (Information & Communication Technology for Education) initiatives of the Department of Education in line with its Education for All program and with the Millenium Development Goals of Universal Access to Education of the United Nations?

3. Theoretical Frame: Action Research as Participatory Social Practice

Action research is a social practice [9]. The goal of setting up an e-learning station in public school is grounded on this principle. It is participatory social practice by design because it asks the fundamental question: "how can this situation be understood in order to change it?" [10]

Furthermore, six basic assumptions are clearly relevant in adopting a participatory research paradigm [11] vis-à-vis the research requisites of the project: "1. It is a social process, 2. It is participatory, 3. It is practical and collaborative, 4. It is emancipatory, 5. It is critical and 6. It is recursive."

4. Methodology

The research uses qualitative methods anchored on participatory action research with emphasis on social participation, processes and immersion. Given this methodological background, the project has been structured into four phases (See Figure 1 below):

- A. Benchmarking and assessment of a model e-learning program for replication
 - 1. Self-assessment of program organizers
 - 2. Interviews/FGD of teachers and student-participants
 - 3. Lessons learned
- B. Setting up of an E-learning Outreach Station in a public elementary school
 - 1. Participatory Action Research
 - a) Implementation-Taking Initial Actions
 - Registration of pupils
 - E-learning readiness survey of participants
 - Stakeholders' orientation
 - b) Action Planning
 - IT infrastructure implementation
 - Teachers' E-learning training program
 - E-learning engagement of pupils
 - Community building & lifeskills program
 - c) Analysis & Feedback
 - Focus discussion with pupils, school administration, parents

- d) Data Collection
 - Assessment/authentic evaluation of learning experiences of participants
- e) Problem Statements & Solving
- C. Networking for Quality Project Implementation
 - 1. Consultatative meetings with school administrators, teachers
 - 2. E-learning Training Workshop for teachers in NCR
 - 3. Collaborative partnership meetings with stakeholders
- D. Dissemination and policy making consultative agenda formulation
 - 1. Presentation of research results and findings to conferences here and abroad
 - 2. Formulation and writing of policy papers for DepEd, LGUs and funding agencies

5. Results of the Study

5.1 Facilitation and other limitations

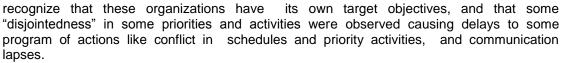
In about 2 years of the Project's operation, various observations (facilitating and limiting factors) were documented. These depict strengths that facilitated the project's development initiatives on its operation , as well as limitations or problems that caused some delays and adjustments in the project's development efforts In the process, insights were also documented to learn from them and help the Team formulate next steps towards the attainment of the Project's goals.

5.2 Facilitating Factors//Positive Observations

- a. Generally, the positive image of DLSU or its status as an academic institution made it easy for the Team to introduce the Project to the partners public elementary school (Gen. Pio Elemetary School and Pulo Elementary School) and thus get the consent of the authorities to immediately start and set up the Project.
- b. The proximity to the partner elementary school is a major factor to the easy implementation of the project. The first partner school, that General Pio Elementary School which is located at Washington St. corner the Facundo St., Makati City, from DLSU (Taft Ave. Manila), has facilitated easy visits to the school and introduce project development efforts of the Team, while the location of second partner elementary school, that is Pulo Elementary School which is located at Brgy Pulo, Cabuyao, Laguna, made it difficult for the team to travel from Manila to the second site for its operation.
- c. The multi-disciplinary nature of the action research team (CG Project Team) created a better appreciation of the many facets of introducing ICT in the basic public elementary school. Having a Team from different background/specialization from two Colleges inside the University (College of Liberal Arts [CLA] and College of Education [CED] made it work, which also facilitated the process of sharing faculty from 2 colleges (see the Short Profile of the Work Team).
- d. The support of DLSU ITS, by lending computer units and assistance provided by the ITS staff to set up the computer labs, and COSCA, which sent volunteer student-teachers, could not be undermined. These DLSU offices extended priceless support to the project.
- e. The volunteer teachers have consistently provided invaluable assistance to the members of the Team.

5.3 Limiting Factors/Difficulties Observed

- a. It is difficult for a faculty member under a trimestral system, like in DLSU, to keep a high profile in the partner school. For faculty members, Fridays are for tying "loose ends"- checking papers, and doing research (in or outside of the University). This creates problem and difficulty in scheduling activities in the project implementation.
- b. While the formation of the public-private partnership between DLSU and the partner school is a welcome effort for both sides, it could not be undermined however that it is important to



- c. The volunteer teachers have consistently provided invaluable assistance to the members of the Team. But, there remains the need to increase more awareness about the DLSU efforts to help communities outside within the public-private partnership framework
- d. There is a perceived limitation on the part of the Team on the direct engagement of the teachers in the partner school in the project.
- e. While the parents expressed support to the Project during the parents orientation, the level of parents participation as volunteer teachers is observed to be very low.

5.4 Methodological Concerns and Lessons Learned

- a. Below are some methodological concerns and insights that can be drawn from the initial efforts done by the Team.
- b. Utilizing the participatory action research (PAR) for this project is a challenge. The use of PAR is a very intricate process that requires an ideation of openness to learning, as well as learning from the "trial and error" experiences of the Team, given the recursive nature of the approach, to determine what will work and adjustments needed to be done, and these efforts require time, patience, persistence and consultations of the various units involved.
- c. The multi-disciplinary nature of the action research team (CG Project Team) helps form a holistic view of looking at the many dimensions of implementing an e-ducation project in an urban community setting, but can also post difficulties in terms of balancing and leveling off priority areas for action or implementation.
- d. Using the participatory approach in this project, given the urban community's heterogeneous composition is a big challenge. Getting parents's participation becomes doubly difficult as one faces the question of how to maintain a participatory process in an urban setting with a highly heterogeneous culture, like Makati City.
- e. The dynamics in setting up of a social laboratory, under the context of public-private partnership intervention scheme is not an easy task. It necessitates the setting up of a formal partnership between DLSU and the partner school to formalize all actions and efforts. The evolution of this partnership formation is expected to be an innovation in the social action experience of the DLSU-Manila.
- f. Networking and Partnerships provide access to the necessary resources. This project requires good effort of networking and partnerships. Doing these however requires long process. Education effort such as this project is not just an activity but a set of activities that the partner agencies pursues in a systematic way over an extended period of time. It is a *process* that is continuous and need to be guided. The process need to be interactive and assisted by experts in developing organizational and operational processes. Continuous sharing and networking among all the stakeholders (POs, GOs, NGOs, private organizations and the University) are crucial for the promotion of e-ducation.
- g. Effective advocacy and social mobilization are needed for raising the consciousness level of all stakeholders. These are two interconnected processes, which bring together all possible and practical allies to raise people's awareness and demand for any development project. Raising the level of awareness and consciousness of the community about the development project strengthens community participation, mobilize local resources and facilitate the delivery of programs that can help reduce the costs of services.
- h. Integrating computer literacy is important to ensure greater impact of e-education. Moving to the second phase of the Project, that is using the Hope Module, will be easier with the pupils working in the same page.

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