

**UTILIZATION OF INFORMATION TECHNOLOGY
AS TEACHING TOOL IN ISPSC-CA**

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Chapter 1

THE PROBLEM

Introduction

The growth of computers and information technology continues accelerating. These technologies affect nearly all aspects of human endeavor. The field is now called information systems because it combines the technologies, people, processes and organizational mechanisms for the purpose of improving performance.

In technologically advanced countries, computers are used effectively as instructional media, a tool for enhancing instruction where the traditional approach has limits. But in the Philippines, the use of computers in education and training processes is just sill a starting point because of limited trainings and skills of most of the teachers.

According to Ordonez, to help students cope with rapid change, to understand and to succeed in the new work that is taking form around, the educational system should be designed as education oriented to the future. The focus of curricula, lesson plans, and structures must be the latest, calling for innovations that are brought about by new technologies.

With technology revolutionaryizing education, teacher need to assess classroom practices and teaching programs accordingly, since, technology implies activities based on design, make and appraise, approach and apply knowledge in various subject content. Thus, it is necessary for utilizing essential information technologies such as the use of multimedia slide presentation that run from computer. These become increasingly

important not only in trainings and conferences but also in the classroom because it is far better – that is more understandable and more usable-way of presenting informations. Moreover, the possibility of visualizing things through computer simulations is opening more potentials and a boon to understanding, attention and active participation, thus, making education more responsive and challenging.

To meet this technological challenge in improving instruction and students' performances, it is at this juncture that this research was conducted.

Problem Identification

The present scenario of the teaching – learning activity at ISPSC-College of Agriculture both in the academic and technical courses were far behind in the use of modern facilities such as computer software to deliver what are expected by the learners. Audio-visual aids particularly the electronically operated devices, especially computer system were seldom used and only in some or rare instances were utilized.

In this case, there were clamor that students' performances were gradually going down or getting poorer in quality as revealed by their very low scores in evaluation tests and rare participation in classroom discussions. Along this line, there might be reasons for such annoying results.

Since the college is offering information technology course, the researcher has thought of utilizing computer systems as a teaching tool by professors and instructors in order to enhance effectiveness in teaching and that the academic performance of the students be improved, thus, ultimately redounded to quality ISPSC graduates.

Statement of the Problem

The study was conducted primarily to determine the usefulness and effectiveness of power point in enhancing the learning ability and the academic performance of the BSA III students in Natural Science 109 (Plant Pathology), 2nd semester 2004-2005.

Specifically, it sought to answer the following questions:

1. What is the academic performance of the students with the traditional “chalk and board” method of teaching?
2. What is the academic performance of the students with the use of the computer system-power point?
3. Is there a significant difference between the average scores of the students with the traditional method of teaching compared with the use of power point?
4. What is the level of acceptability of the students and the teacher on this method?

Analysis of the Problem

The following were situations that justify the present teaching – learning scenario of college students.

1. Inattentiveness of some students
2. Lack of participation
3. Poor performance in quizzes and examinations.
4. Poor comprehension of the lesson
5. Negative attitude of teachers for trainings regarding utilization of the computer in teaching.
6. Limited facilities

Scope and Delimitation of the Study

The focus of the study was on the utilization of information technology particularly the power point with the slide projector in teaching compared it to the traditional “chalk and board” and the objective was to determine the effectiveness of utilizing power point with the slide projector in teaching as well as to the academic performance of the students. It either tests the acceptability of the method by students and the teacher.

The study utilized the BSA III students taking Natural Science 109 (Plant Pathology) subject under Prof. Bernadette C. Calibuso, at ISPSC – College of Agriculture. They were the respondents of the study. There were forty six (46) student respondents and were gathered at the FTC hall for the purpose.

Significance of the Study

Education is the preparation of the youth for the future. Teaching is one of the component activity and exercises by the learner and the teacher. In quality education, the process must be effective and relevant, thereby; this study finds its worth to benefit the clients, the students and teachers as well.

Definition of Terms

Pre-test is a mental exercise administered to the students before a certain stimulation activity is done.

Post-test is a mental exercise administered to the students after a certain stimulation activity is done.

Feed back positive and negative reactions of the respondents after the utilization of the devices.

Computer an electronic device that accepts, process, stores and outputs data at high speeds according to programmed instruction.

Multi media is the combination of time-based media-such as voice, animation, and video and space-based media such as text, graphics and images.

Information Technology processing of data via computer: the use of technologies from computing, electronics, and telecommunications to process and distribute information in digital and other forms.

Power Point is a graphical presentation that is develop by Microsoft.

Classroom Instruction is a material that used in the classroom like visual-aid.

Frequency Distribution a set of intervals, usually adjacent and of equal width, into the range of a statistical distribution which is divided and associated with a frequency indicating the number of measurement in that interval.

Chapter 2

REVIEW OF RELATED LITERATURE

Instructional resources or devices are physical means employed by teachers for the purpose of emphasizing, clarifying and vitalizing instructions. (Gloria G. Salandanan, et. Al., 1996)

According to Cabasan (2002), multi-media teaching devices like video, television, computer software, interactive electronic mail/computer programs are means to deliver information to students. These are already proven effective tools of learning for the messages are easily understood, meanings are immediately grasped and viewer's attentions are directly aroused that enhanced analysis and evaluation.

The provision of varied types of instructional aids evaluation materials will insure students to have better understanding, permit them to think better and have more permanent retention and interest and attention are greatly aroused (Futol, 2002).

As opined by Gregorio (1976), the use of visual aids should be well planned by the teacher. The teacher needs to have all visual aids properly classified and ready for instant use. Where mechanisms are involved, they should be carefully checked to insure their perfect working condition before use. Visual aids should be viewed in their relation to good teaching.

In teaching and in learning, according to Gregorio (1976), visual devices supply one form of aid to attention, understanding, imagination and incentive to action visual devices are used to attract attention. The teacher who has a repertoire of good visual

devices at hand usually maintains full class attention. Visual devices are also used to facilitate reasoning and understanding. Visual devices are further used to stimulate imagination and provide incentives to action.

Mateo (1999) said that the teacher in the 21st century should not ignore the influence and importance of technology and information rather to such scientific development and use them as a tool for good. She mentioned further, that it takes a teacher who values his students above his own advancement and above the technology that surrounds him to model such values.

Media education cultivates literacy that takes place alongside the skills of reading, writing and visualizing. Education today has to go with the time, especially to our audio-visual environment which is bombarded everyday with three systems of symbols: words, images and sounds. People should be literate in all of there system, (AMIC Philippine, 1995)

Ordonez (1994), the essential task of education is social transformation or “revolution of the learners’ mind and heart”.) To help the learner cope up with rapid change, to understand and to succeed in the new word that is taking form around us, we must design an education which is for oriented for tomorrow.

Cabardo (1998), in her study revealed that the use of computers in the classroom is valuable as instructional device and that these can lighten the burden of teaching. However, to some extent the use of computer in the classroom depends on the subjects handled by the teachers.

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