



**COMPUTER-AIDED INSTRUCTION FOR BASIC EDUCATION OF SANTIAGO  
ELEMENTARY SCHOOL IN BOTOLAN, ZAMBALES  
S.Y 2011-2012**

**A Thesis  
Presented to the  
Faculty of the College of Communication and Information Technology  
Ramon Magsaysay Technological University  
Iba, Zambales**

**In Partial Fulfillment  
of the Requirements for the Degree  
Bachelor of Science in Computer Science**

**by  
Kimberly Ann S. Ortega  
Sarah Jane D. Tadena  
Amor D. Denito  
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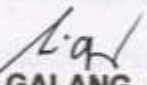
Republic of the Philippines  
Ramon Magsaysay Technological University  
College of Communication and Information Technology  
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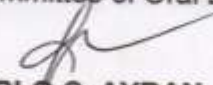
The study hereto attached entitled


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has been prepared and submitted by **KIMBERLY ANN S. ORTEGA, SARAH JANE D. TADENA** and **AMOR D. DENITO** who are hereby recommended for oral examination.

  
**NEMIA M. GALANG, MSIT**  
Adviser

Approved by the Committee of Oral Examiners:

  
**CARLO C. AYRAN**  
Member

  
**DAIMEL D. DELOS REYES**  
Member


  
**ROMNICK C. BUMANLAG**  
Member

  
**GEOFFREY A. SEPILLO**  
Member

  
**JENILYN P. TOLEDO**  
Member

Accepted as requirement for the degree of **BACHELOR OF SCIENCE IN  
COMPUTER SCIENCE.**

March 19, 2012

  
**FRANCO D. NERO, MSIT**  
Dean, CCIT



## ABSTRACT

The study was conducted to determine the perception of the respondents on the level of effectiveness on the implementation of basic education through computer technology of Grade 1 students of Santiago Elementary School situated at Botolan Zambales.

The researchers used the descriptive design, a design that does not involve any generalizations in the totality of the groups but only the group under the study. It describes quantitatively the degree of relationship existing between the measures of different characteristics of the group under study.

The main survey instrument used was the questionnaire. The survey consisted of three parts. The first part included questions and focused on the demographic information about respondents, including age, sex, economic status and availability of computer at home. The second part focused on what respondent's perception current instruction in basic education. The third part included the respondents' perception on the proposed computer-aided instruction in basic education.

The respondents of the study were seven (7) teachers and thirteen (13) parents from Santiago Elementary School, Botolan, Zambales.

The following are the significant findings of the study:

On the profile of the parent-respondents, most of the parent-respondents belong to age group of 24-29 with a mean age of 32.5 years. Most of the



respondents were females, belongs to a lower class family and do not have a computer at home.

On the profile of the teacher-respondents, most of the respondents belong to age group 36-41 with a mean age of 38.5 years. Seven (7) or 100 percent of the respondents were females; belongs to middle class family and have a computer at home.

On the effectiveness of the current instruction in basic education as perceived by the respondents, the average weighted mean of respondents' perception on the current instruction in basic education in terms of learning content is 3.59 interpreted as effective.

The average weighted mean of respondents' perception on the current instruction in basic education in terms of operation and manipulative mechanism is 3.70 interpreted as effective.

The average weighted mean of respondents' perception on the current instruction in basic education in terms of speed is 3.61 interpreted as effective.

The average weighted mean of respondents' perception on the current instruction in basic education in terms of aesthetic value is 3.78 interpreted as effective.

On the effectiveness of the propose computer-aided instruction in basic education as perceived by the respondents, the average weighted mean of respondents' perception on the proposed CAI in basic education in terms of learning content is 4.65 interpreted as very much effective.





The average weighted mean of respondents' perception on the proposed CAI in basic education in terms of operation and manipulative mechanism is 4.52 interpreted as very much effective.

The average weighted mean of respondents' perception on the proposed CAI in basic education in terms of speed is 4.52 interpreted as very much effective.

The average weighted mean of respondents' perception on the proposed CAI in basic education in terms of aesthetic value is 4.56 interpreted as very much effective.

On the significant difference on the effectiveness of the current and proposed computer-aided instruction in basic education, since the t-stat value which is -14.37 falls outside the non-rejection region of t-critical value which is 3.18 at two-tailed test, reject null hypothesis, thus there is significant difference on the respondents' perception on the effectiveness of the current instructions and propose computer-aided instructions.

Based on the findings of the study, the following conclusions were drawn. (1) A typical parent-respondent is 32.5 years old mother who belongs to a lower class family and do not have a computer at home; (2) a typical teacher-respondent is a 38.5 years old, female, belongs to a middle class family and has a computer at home; (3) the level of effectiveness of the current instruction in basic education is very effective as perceived by the respondents; (4) the level of effectiveness of the computer-aided instruction in basic education is very much effective as perceived by the respondents; and (5) there is significant difference o the respondents' perception



on the effectiveness of the current instruction and computer-aided instruction in basic education.

From the conclusions drawn from this study, the following recommendations were given. (1) Implementation of computer-aided instruction in basic education; (2) additional subjects for basic education should be added in the CAI; (3) allocation of time in evaluation; (4) the evaluation must provide different types of examinations or test structures; and (5) additional sounds, objects, shapes and animation for interactive learning.