Integration of **C**omputer **T**echnology in **A**dvance **T**eaching **A**nd s**K**ills **O**pportunities
Project ICT at AKO :
An Encouragement to Equip Teachers of SVES

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ABSTRACT

As it continues to shape all aspects of our lives, information, and communication technology (ICT) plays a more prevailing role and presence in the educational situation. Several reform projects have been implemented with the goal of incorporating ICT into educational systems. Teachers are widely regarded as the primary agents of educational change.

Although most teacher educators come to this field with some ICT experience—as a user, researcher, teacher, or administrator—anyone working in the field of ICTs is well aware that there are no established patterns and pathways. As a result, teaching ICTs necessitates on-the-job learning for teacher educators: we must learn new concepts, knowledge, and skills of how to use them and how to teach them "on-the-job," as ICTs change rapidly and new technologies emerge every day.

PROJECT ICT AT AKO was created to upskill and reskill teachers of San Vicente Elementary School since 77% or 50/65 teachers need to improve their skills on the integration of ICT. It is intended to encourage them to learn how to use ICT or basic computer applications that can be used in daily classroom activities. Continues practice of the knowledge that will be provided by this research helps teachers to use more technology to improve teaching and learning for the sake of the next generation. This research will open their mind on the world of ICT and helps them to be updated and raises knowledge of cutting-edge developments in evaluation techniques, instructional strategies, etc. for professional development.

INTRODUCTION

We used to marvel at the Information Technology tools that supported teaching and learning: the word processor, database, spreadsheet, Logo, and simulations, just a few years ago. Teachers utilized these tools and incorporated them into their lessons. The ability to store and organize data, modify structures and settings, and manipulate text and images liberated students from time-consuming tasks and aided learning.

The task has become more difficult. New learning communities are emerging, providing synchronous and asynchronous contribution and participation, new channels for creative expression, and easy and rapid access to information, thanks to a concentration on the communication element of ICT. We must now consider how ICT may best promote challenging, engaging, participatory, and rewarding learning experiences, as well as how ICT can support meaningful learning, as opposed to just integrating ICT tools into the curriculum.

We are in a time of accelerating change and ICT will change both the teaching and learning practices in education. We can either choose to go forward with the knowledge that the changes are sound and well implemented or we can drag the chain using ICT in a mediocre way and miss the chances ICT offers to make a real difference to how teaching and learning occurs in schools. We've gone past the rhetoric of computers making a difference in schools. Now a clear view is emerging that you can get (ICT in education) wrong, or you can get it right. We are in the opportunity stage where we are asking what is the right thing to do' (Heppell, 2000).

Based on the E-SAT results, there are 50/65 or 77% teachers need to improve their skills on the integration of ICT to improve the delivery of teaching and learning process, and other task to be performed that needs technology.

In this study, the teacher's skills will be developed to suit our kids' changing needs and expectations. It will offer a meaningful focus for communication and expression and shifting pupils' expectations about the nature and context of learning. Teachers at the school will no longer waste time manually encoding data, using traditional visual aids, or manually computing grades; instead, they will be able to observe how computer technology works and how it might make their jobs easier.

The main goal of the researcher are all the teachers at San Vicente Elementary School be equipped in integrating ICT by giving them advanced knowledge to avoid fear in front of learners, co-teachers, principal and visitors when presenting their lessons and confidently discussed the topics without any hesitations.kinakailangang impormasyon. Ang mga awtputs na

METHODOLOGY

First, a letter of consent was provided to the approving authorities in order to conduct the action research. Once the letter is approved, the researcher determined the number of teachers who stated in their E-SAT answers that their weakness is ICT integration. The researcher also

used questionnaires/surveys to determine teachers' strengths and weaknesses in the use of computer technology, as well as their opinions on the use of ICT in various school tasks as a way of encouraging them to use and integrate ICT in their lessons.

The T-Test was used in the training task to determine the teacher's knowledge and skills in integrating advanced computer technology. If there is a significant difference and improvement between the previous skills and knowledge and present performance of the participants, the use of PROJECT ICT AT AKO is considered effective in equipping teachers and motivating their learners through the utilization of computer technology.

Ethical Issues - A letter will be submitted to the Division Office explicating the intent of writing the research as approved by the School Principal of San Vicente Elementary School. All the protocols will be strictly followed in order to implement the research smoothly.

RESULTS

The research was anchored in Part VII of the BE-LCP, where the District 5 Framework was demonstrated. It depicts the process of Innovating, Communicating, and Delivering. PROJECT ICT AT AKO entails a variety of innovations to ensure proper communication between teachers and pupils, as well as teacher-to-teacher communication and the delivery of appropriate reports as soon as possible and create accurate data/records.

The main goal of PROJECT ICT AT AKO is to support, train, encourage and help teachers, departments, and whole schools in developing the necessary skills for effective implementation of ICT in teaching and learning' because most of the time, young teachers were the one who first to accomplish than old teachers since they do not have a fundamental understanding of how to operate a computer application. This will offer a meaningful focus for communication and expression and shifting pupils' expectations about the nature and context of learning. Teachers at the school will no longer waste time manually encoding data, using traditional visual aids, or manually computing grades; instead, they will be able to observe how computer technology works and how it might make their jobs easier.

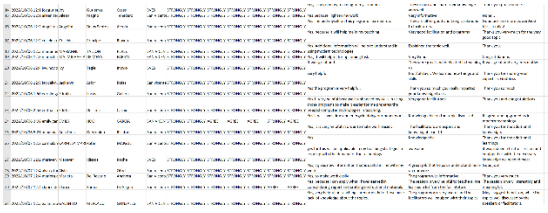
As the result, all teachers were reskilled and upskilled on the different basic computer operations such as MS Excel (How to use PIVOT, VLOOKUP, Formulas, and shortcut keys for consolidations of reports, ID-layouts etc.) MS Word (How to use Mailings for easy printing of documents, certificates etc., How to formulate the sum and average of a given data in the tables, make a designed template for front cover without using an internet, convert pdf file into an editable copy) MS Publisher (How to make accurate sizes for tarpapels, designs, etc.) and MS Powerpoint (step by step process of creating a video, picture background removal, inserting of

texts and images, convert the file copy to pdf, images, videos).

1. How the training improved the knowledge and skills of the teacher in integration of computer technology in teaching? (knowledge)

We provided the respondent a pre and post-test. The pre-test MPS was 49.69%, while the post-test MPS was 80.15%. Using the pared t-test, we compute the difference between the respondent's pre and post-test. The computed pared t-test resulted in 19.005 and the table test resulted in 2.000, indicating that the null hypothesis was rejected. There is a vital role in the training task to improve the teacher's knowledge and skills in integrating advanced computer technologies.

2. Is there a significant difference in the task given in the training to upgrade the knowledge and skills of the teacher in integrating advance computer technology? (skills)



After the Project ICT AT AKO was conducted 65 or 100% of teachers learned and agreed that the project was useful and beneficial. Their expertise was expanded, and their viewpoint on the use of Microsoft Office was broadened. Outputs of teacher participants and the slide used by the speakers were attached on the completed research files as references.

3. Is there a significant improvement in the teacher knowledge and skills in the integration of computer technology in teaching learning process? (Teaching learning process).

Question: from scale of 1-10, how confident you are in using computer technology on your teaching process?

	Pre-test	Post Test	Difference	Difference2
1	6	8	-2	4
2	6	8	-2	4
3	7	8	-1	1
4	7	8	-1	1
5	6	8	-2	4
6	6	8	-2	4
7	7	8	-1	1
11	8	8	0	0
12	8	8	0	0
13	8	8	0	0
14	7	8	-1	1
15	7	8	-1	1
16	7	8	-1	1
17	7	8	-1	1
29	7	8	-1	1
30	7	8	-1	1
31	7	8	-1	1
32	7	8	-1	1
33	7	8	-1	1
34	6	8	-2	4
35	6	8	-2	4
36	6	8	-2	4
37	6	8	-2	4
39	8	8	0	0
40	8	8	0	0
41	8	8	0	0
42	8	8	0	0
43	7	8	-1	1

44	7	8	-1	1	
47	7	8	-1	1	
53	6	8	-2	4	
54	7	8	-1	1	
55	7	8	-1	1	
56	7	8	-1	1	
58	7	8	-1	1	
59	8	8	0	0	
60	8	8	0	0	
61	8	8	0	0	
64	8	8	0	0	
65	8	8	0	0	
median	7	8			
mode	7	8			0.08167

-0.938 / 0.08167 = 11.4852

We asked our respondents one question about their confidence in using computer technology in the educational process. Prior to the training, 40% of respondents rated themselves as 7, while 37% rated themselves as 6. After the training, 62% of the participants rated themselves as 8. The paired t-test is used to calculate their significant differences. The computed result of the paired t-test was 11.4852, which is equal to 2.000 in the table. The null hypothesis is rejected as a consequence of the paired t-test results, indicating that there has been a considerable development in teacher knowledge and skills in the integration of computer technology in the teaching learning process.

Since all participants put their newfound knowledge into practice, there has been a considerable development in teachers' knowledge and abilities to integrate computer technology into the teaching and learning process.

DISCUSSIONS

Science and technology touch every aspect of life. A massive flow of information is emerging in all fields around the world. Now, information and technology are widely used in the educational field to make teaching and learning more successful and enjoyable for both students and teachers.

Based on the E-SAT results, there are 50/65 or 77% teachers need to improve their skills on the integration of ICT to improve the delivery of teaching and learning process, and other task to be performed that needs technology.

In accordance with this, ICT AT AKO project was raised. This training aims to help, encourage, and train all teachers from San Vicente Elementary School in basic computer skills, give them techniques and strategies since it is one of the prior weaknesses based on the result on E-SAT to be fully prepared and competent enough by the end of school year or even for the rest of their lives.

To ensure effective, efficient, and sustainable higher-quality education **“PROJECT ICT AT AKO”** was collaboratively planned and studied in preparation for the upcoming implementation of full in person classes. After the approval of the proposal the proponents were able to contribute their knowledge and expertise. The teacher participants were grouped into four and the trainings were conducted after class hours adhere to the

DepEd Orders that there will be no classes will be disturbed. The resource speakers shared the techniques and strategies in addition to the proposed topics. The participants were actively engaged in every lesson discussed by the speakers. All teachers were feeling amazed and awesome on the newfound learnings even the young ones. Amazingly, several of the school's "oldies" teachers demonstrated their enthusiasm for the trainings and put all its lessons into practice, which gave them the courage to face their lack of confidence in using computers.

The **"PROJECT ICT AT AKO"** was a success. The proponents were overwhelmed with the impacts of the research and continue to guide the teachers to sustain and share new set of computer knowledge.

ACKNOWLEDGEMENT

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