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# PROPOSED – E MODULE IN TECHNOLOGY AND LIVELIHOOD EDUCATION CAREER PATHWAY FOR GRADE 5 LEARNERS AT AGNO DISTRICT

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**ABSTRACT**

The study made use of the E-Module Materials in TLE Grade 5; these included four mini courses in home economics, and the questionnaire was the basic tool of the researcher in gathering data from the respondents. These e-module materials had its goal the improvement of the quality of education in the public schools. Based on the findings, sets of e-module instructional materials were developed to enhance the performance level of Grade 5 learners in TLE. The learners while answering this module need not attend regular lectures but should know practical application on their chosen topic or has spent several hours in answering the guide questions in these modules.

**INTRODUCTION**

The world of modern teaching can the mode of education in the field of learning environment, the international education and science institute magnificently applied to the ministry of education in the United State of America based in the golden millennium goals of education

E-learning is a broadly inclusive term that describes educational technology that electronically or technologically supports learning and teaching. Bernard luskin, a pioneer of learning, advocates that the "e" should be interpreted to mean "exciting, energetic, enthusiastic, emotional, extended, excellent, and educational" in addition to "electronic". This broad interpretation focuses on new applications and developments, and also brings learning and media psychology into consideration. Parks suggested that the "e" should refer to "everything, everyone, engaging, easy". (2000)

Depending on whether a particular aspect, component or delivery method is given emphasis, a wide array of similar or overlapping terms has been used. As such, e-learning encompasses multimedia learning, technology-enhanced learning (TEL), computer-based training (CBT), computer-assisted instruction (CAI), internet-based training (IBT), web-based training (WBT), online education, virtual education, virtual learning environments (VLE) which also called learning platforms, m-learning, digital educational collaboration, distributed learning, computer-mediated communication, cyber-learning, and multi-modal instruction. Every one of these numerous terms has had its supports, who point up particular potential distributions.

In practice, as technology has advanced, the particular "Narrowly Defined" aspect that has initially emphasized has blended into "e-learning.

The worldwide e-learning industry is economically significant, and was estimated in 2000 to be over $48 billion according to conservative estimates. Development in internet and multimedia technologies are the basic enabler of e-learning, with consulting, content, technologies, services and support being identified as the five key sectors of the e-learning industry. Information and communication technologies (ICT) are used extensively by young people.

E-learning expenditures differ within and between countries. Finland, Norway, Belgium and Korea appear to have comparatively effective programs.

Early e-learning systems, based on Computer-Based Learning/Training often attempted to replicate traditional teaching styles whereby the role of the e-learning systems was assumed to be for transferring knowledge, as opposed to systems developed later based on Computer Supported Collaborative Learning (CSCL), which encouraged the shared development of knowledge.

Cassandra B. Whyte (2002) researched about the ever increasing role that computers would play in higher education. This evolution, to include computer-supported collaborative learning, in addition to data management, has been realized. The type of computers has changed over the years from cumbersome, slow devices taking up much space in the classroom, home, and office to laptops and handheld devices that are more portable in form and size and this minimalization of technology devices will continue.

The Open University in Britain and the University of British Columbia used the Internet to deliver learning, making heavy use of web-based training and online distance learning and online discussion between learners . Practitioners such as Harasim (1995) put heavy emphasis on the use of learning networks.

With the advent of World Wide Web in the 1990s, in the Philippines teachers embarked on the method using emerging technologies to employ multi-object oriented sites, which are text-based online virtual reality system, to create course website along with simple sets instructions for its learners . As the internet becomes popularized, correspondence schools became highly interested with the virtual education, setting up a name for itself in 1980.

In 2000, Graziadel described an online computer-delivered lecture, tutorial and assessment project using electronic mail. By 2004, the first online high school had been founded. In 2006, Graziadel described criteria for evaluating products and developing in technology-based courses include being portable, replicable, scalable, and affordable, and having a high probability of long-term cost-effectiveness.

By 2000, CAL Campus presented its first online curriculum as Internet becoming more accessible through major telecommunications networks. CAL Campus is where concepts of online-based school first originated, this allowed to progress real-time classroom instructions and Quantum link classrooms. With the drastic shift of Internet functionality, multimedia began introducing new schemes of communication; through the inventions of webcams, educators can simply record lessons live and upload them on the website page.

Now, there are currently wide varieties of online education that are reachable for colleges, universities and K-12 learners. In fact, the National Center for Education Statistics estimate the number of K-12 learners enrolled in online distance learning programs increased by 65 percent from 2002 to 2005.This form of high learning allowed for greater flexibility by easing the communication between teacher and learners, now teachers received quick lecture feedbacks from their learners . The idea of Virtual Education soon become popular and many institutions began following the new norm in the education history.

Recent studies show that the effectiveness of online instruction is considered equal to that of face-to-face classroom instructions but not as effective as the combination of face-to-face and online methods

The extent to which e-learning assist or replaces other learning and teaching approaches is variable, ranging on a continuum from none to fully online distance learning. A variety of descriptive terms have been employed (somewhat inconsistently) to categorize the extent to which technology is used.

Technology has made almost every experience virtual from making friends and talking with them to doing business with other people. Education has followed suit with e-learning

DepEd Strategy Plan

The Department of Education (DepEd) put emphasis on the need to develop e-learning via its five years information and Communication Technology for Education (ICT4E) Strategy Plan. ICT4E aims to integrate ICT every school's curricula, develop programs, establish infrastructure and come up with a system for evaluating the program's effectiveness. DepEd has also strove to strengthen its Educational Technology Unit and conduct literacy training among teachers.

Two years ago, more than 6,600 schools participated in DepEd Internet Connectivity Project. During that time, only 1,936 schools had internet access. Today, more than 3,127 schools are connected.

Infrastructure and teacher competencies are also areas of concern as computer literacy is not a requirement for teacher certification and licensure. But despite all this the department remains optimistic about the ICT4E program saying that "meeting challenges by using the tools available creatively is key to effectively integrating ICT"

http://opinion.inquirer.net/16263/investigating-in-e-learning-future#ix22orXEFkyaM

E-Learning as an Educational Approach

The researcher being TLE Elementary School Teacher for the past ten years and concurrently in charge of computers in Abanon National High School has always been aware of the use of e-learning. Needless to say she conduct TLE concept via e-Learning just to cope up with the DepEd Modern TLE teaching strategies.

Urbiztondo has fifteen (15) Nationalized High Schools located strategically in the different barangays.

This nationalized high schools are being managed by fifteen school principals who were promoted from the ranks through merits, qualifications and accomplishments. In their respective schools they assign teachers to handle subjects in their specialized areas.

When the division calls for seminars and conferences regarding DepEd updates on the eight subject areas of each elementary level the principal may either send the department heads, master teachers what they learned from the said seminars to their fellow teachers who did not attend such.

However no matter, how beneficial, attractive enjoyable are the modern teaching strategies, still many teachers resort to traditional teaching perhaps because they are well-versed such teaching techniques.

When the DepEd, DOST, civic minded citizen donated computer sets to high schools all over the division slowly the teachers engaged themselves in technology like encoding their paper work, records, test questions and even lesson plans.

But finding showed that the younger teachers are those interested to use the computers and the old ones did not mind the computer at all.

So, when seminars on e-learning strategies are offered the young teachers were assigned to attend and ultimately apply all their computer skills in schools including the e-learning.

It is therefore the aim of the researcher being in charge of computer sets in her working station, that she deemed it necessary to conduct a study on e-learning.

**NEED OF THE STUDY.**

The establishment of large hospitals where hundreds to thousands of patients are treated , it has created a serious problems of biomedical waste management. The seriousness of improper biomedical waste management was brought to the light during summer 1998. In India studies have been carried out at local / regional levels in various hospitals, indicate that roughly about 1-5 kg/bed/day to waste is generated. Among all health care personnel ,ward boys , sweepers, operation theatre & laboratory attendants have come into contact with biomedical waste during the process of segregation , collection, transport, storage & final disposal . The knowledge of medical , paramedical staff & ward boys , sweepers about the biomedical waste management is important to improve the

biomedical waste management practices. The biomedical waste requiring special attention includes those that are potentially infectious , sharps ,example needle , scalpels , objects capable of puncturing the skin , also plastic ,pharmaceutical & chemically hazardous substances used in laboratories etc.

**3.1Population and Sample**

KSE-100 index is an index of 100 companies selected from 580 companies on the basis of sector leading and market capitalization. It represents almost 80% weight of the total market capitalization of KSE. It reflects different sector company's performance and productivity. It is the performance indicator or benchmark of all listed companies of KSE. So it can be regarded as universe of the study.Non-financial firms listed at KSE-100 Index (74 companies according to the page of KSE visited on 20.5.2015) are treated as universe of the study and the study have selected sample from these companies.

The study comprised of non-financial companies listed at KSE-100 Index and 30 actively traded companies are selected on the bases of market capitalization.And 2015 is taken as base year for KSE-100 index.

**3.2 Data and Sources of Data**

The research subjects of this study were the TLE 5 teachers, Department Heads and principals from the twelve elementary Schools in Agno District, Pangasinan.

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**3.3 Theoretical framework**

An appropriate teaching theory that the researcher used as bases of this study is the e-learning which was discovered and developed in 1993 in States, Brazil, Finland, Asia, and ultimately in the Philippines.

They explored e-learning theory considering its objectives, benefits and advantages although it has also some limitations. The history of e-learning in foreign lands could be traced in 1963 but now is rapidly being used in all subject areas in the Philippines.

Chee Khiew and Myint, 2003 pointed out that effective e-learning is trace by strategies and individual styles by teachers and learners . Critical pedagogy identifies a wide range of e-learning styles which the teacher helps makes the decisions to a learners-centered styles.

In addition to various teaching techniques there are multiple ways to learning styles but recently e-learning was found out to be less expensive, self-paced, moved faster, provides a consistent message, can work from any location and any time, can be updated easily, can lead to increase retention and easily managed.

According to (Agabin 2003) e-learning is the most effective teaching styles today. Traditional strategies are considered taboo but the e-learning is on worldwide and gained the admiration and consent of all in the DepEd family.

**RESEARCH METHODOLOGY**

This study I employed the descriptive and developmental method of research in ascertaining the level of achievement of learners in TLE 5. The sources of data were the achievement test results in TLE 5 in the twelve elementary Schools in Agno District, Pangasinan during the last three years 2020-2023.

Based on the analysis of the Division Achievement Test Result in TLE 5, the researcher prepared e-Module Materials in TLE. These materials was validated by TLE 5 teachers and administrators who determined its level of acceptability.

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This chapter presents, analysis, and interprets the data of this investigation which attempted to proposed e-module materials to improve the Grade 5 learners achievement level in TLE.

It should be recalled that this study determined the achievement level of Grade 5 learners in TLE for the past three years (2020-2021, 2021-2022, and 2022-2023) based on the result of the Division Achievement Test. Based on the findings, sets of e-module instructional materials were developed to enhance the performance level of Grade 5 learners in TLE.

The latter portion of this chapter assessed extend by which the e-module materials have met the given criteria.

**Achievement of the Grade 5 Learners' in**
**Technology and Livelihood Education**
**During the School year 2020-2021, 2021-2022, and 2022-2023**

Data reflecting the achievement of the Grade 5 in Technology and Livelihood Education for the School year 2020-2021, 2021-2022, and 2022-2023 which are here to appended, indicate that the achievement level was very low as shown by the mean percentage score 35.40 during the school year 2020-2021, in during the second year (2021-2022) the mean percentage is 48.50 and 36.94 during the third year (2022-2023). These are still far from the performance level of 75% as set by DepEd. This very low achievement of the Grade 5 learners could be attributed to several factors and one of these is the inadequacy of e-module materials. Researchers conducted in the past have proven that adequate instructional materials are vital resources that ensure and improve achievement level of learners.

**ACHIEVEMENT TEST RESULT IN TLE – 7 FOR THE**
**SCHOOL YEAR 2020-2021, 2021-2022, and 2022-2023**
**AGNO DISTRICT PANGASINAN**
**N = 12**

Table II – B
Validation of E – Module Materials in TLE for Grade 5 Learners by School Principal/Department Heads and Grade 5 School Teachers
N = 12

| Indicator | AWM | Descriptive Equivalent |
|---|---|---|
| **I. Congruence to Objectives** | | |
| 1. The objectives focus on the acquisition of knowledge, skill, habits, attitudes and values | 4.22 | HA |
| 2. The objectives are clear, specific, and attainable | 4.00 | A |
| 3. The materials are congruent to the objectives | 4.21 | HA |

The table shows the validation of E – Module Material in TLE for Grade 5 Learners by School Principal/Department Heads and Grade 5 School Teachers. It further shows that in I. Congruence to Objectives; in the objectives focus on the acquisition of knowledge, skill, habits, attitudes and values the AWM is 4.22, highly acceptable; the objectives are clear, specific, and attainable the AWM is 4.00 meaning acceptable and The materials are congruent to the objectives as the respondent rated it AWM is 4.21, highly acceptable.

This table further reveals that with regards to the Congruence to Objectives of the modules the respondents rated it acceptable therefore it can be used as one teaching strategy in teaching Technology and Livelihood Education.

| Indicator | AWM | Descriptive Equivalent |
|---|---|---|
| **II. Content** | | |
| 1. The contents are relevant to the needs of Grade 5 learners | 4.22 | HA |
| 2. The materials have comprehension aids like illustrations, diagram, drawing, and charts | 4.00 | A |
| 3. The contents support objectives of the study | 4.21 | HA |

The table shows that with regards to the content of the module the respondent rated The contents are relevant to the needs of Grade 5 learners the AWM is 4.22, acceptable and The materials have comprehension aids like illustrations, diagram, drawing, and charts, the respondent rated it as acceptable with AWM 4.00 and The contents support objectives of the study, the respondents rated it with highly acceptable with AWM of 4.21.

The table further reveals that the contents are relevant, could be comprehended by the Grade 5 learners and it supports the objectives of the study.

| Indicator | AWM | Descriptive Equivalent |
|---|---|---|
| **III. Appropriate Difficulty** | | |
| 1. The objectives and contents are appropriate to the level of the Grade 5 learners | 4.21 | HA |
| 2. The questions are challenging but could be understood and answered by most learners | 4.20 | A |
| 3. The language used is appropriate to the level of the Grade 5 learners | 4.20 | A |

The table shows the appropriate difficulty encountered by the respondents in the objectives and contents are appropriate to the level of the Grade 5 learners, the respondent rated it as 4.21 Highly Acceptable. The questions are challenging but could be understood and answered by most learners the respondent rated it with the AWM of 4.20 Acceptable and The language used is appropriate to the level of the Grade 5 learners, again the respondent rated it with a AWM of 4.20 Acceptable.

The table further shows that the respondents face difficulty in making the learners understand and answer the questions and the learners could hardly understand the English language.

| Indicator | AWM | Descriptive Equivalent |
|---|---|---|
| **IV. Development of Skills** | | |
| 1. The materials can lead to the development of skills | 4.21 | HA |
| **V. Variety** | | |
| 1. The materials are different from other instructional materials | 4.20 | A |

The table shows the Developmental of skills in The e-module materials can lead to the development of Home Economics skills, the respondent rated it Highly Acceptable with a AWM of 4.21. We can gleaned with the table that further shows that could develop their Home Economics skills through the e-learning module. The materials are different from other instructional materials, the respondents rated it as Highly Acceptable with AWM of 4.20

The table further reveals that the e-module materials are visibly different from the traditional instructional materials.

Legend:

HA = Highly Acceptable
A = Acceptable
MA = Moderately Acceptable
FA = Fairly Acceptable
NA = Not Acceptable

E – MODULE MANUAL

I. Introduction
II. Parts:
  A. Main Form
  B. Sub-Form
    i. Nail Care
    ii. Care Giving
    iii. Commercial Cooking
    iv. Bread and Pastry
III. How to use
  A. Inserting DVD Copy
  B. How to open Nail Care Sub-Form
  C. How to open Care Giving Sub-Form
  D. How to open Commercial Cooking Sub-Form
  E. How to open Bread and Pastry Sub-Form

To the Reader

This module on Home Economics is designed to provide a through introduction on 4 mini course: likewise it also serves as preparation for being a productive member of the labor sector.

This module provides up to date instruction in all about home economics however changes are welcome as days go on.

This module, in four (4) mini-courses is intended to help the learners in their vocational trainings and could even include apprenticeship or on the job trainings.

It is the aim of this module to help learners develop a well-balanced curriculum and knowledge and skills on the four (4) mini courses of HOME ECONOMICS, like BEAUTY CARE, CARE GIVING, COMMERCIAL COOKING, BREAD AND PASTRY PRODUCTION.

Learners are free to choose which of these four mini courses they may master and after graduation they make seek employment using it.

The learners while answering this module need not attend regular lectures but should know practical application on their chosen topic or has spent several hours in answering the guide questions in these modules.

The person who prepared these module included male learners believing that the world of Home Economics does not rest on the hands of the females anymore.

We can make this module clear and self-learning by using e-learning module approach.

Department of Education updates include e-learning module as effective teaching learning strategies which the researcher believes will make your understanding fast and accurate.

Please inform the researcher as to how this module helped you today and tomorrow when you are on your own.

G O O D L U C K

I. Parts of E-learning Module
  A. Main Form
    - Tool bar – Contains list of E-learning Modules Shortcut Menu, about and Exit.
    - Nail Care Button – this button when clicked will open the form of Nail Care.
    - Care Giving Button - this button when clicked will open the form Care Giving.
    - Commercial Cooking Button - this button when clicked will open the form Commercial Cooking.
    - Bread and Pastry Button - this button when clicked will open the form Bread and Pastry.

## INTRODUCTION

Technology and Livelihood Education (TLE) is one of the nomenclature in the implementation of the K to 12 Basic Education Program (BEP) composed of four components; namely, Agri-Fishery Arts, Home Economics, Industrial Arts and Information and Communication Technology. In this module, the focus is on Home Economics mini-courses – **Beauty Care (Nail Services).**

In this course, varied and relevant activities and opportunities are provided to demonstrate your understanding of concepts and underlying principles in Beauty Care (Nail Services) and provides quality, and fashionable manicuring service to target clients. This will also be a venue for you to assess yourself and identify aspects of business that you need to strengthen and safeguard before you take the plunge into the world of work.

Now that the workforce is far behind in equating the number of available jobs, the Department of Education is revitalizing its resources to lead the young minds and to prepare them skillfully as future beauty care provider. It is in honing the skills that learners can assure o have an edge of surviving the daily needs of oneself and of others. It seeks to provide learners with the knowledge, skills, and motivation in the field of beauty care (nail services).

## IV. RESULTS AND DISCUSSION

This chapter presents the summary of the present study. It likewise presents the conclusion drawn based on the findings and the recommendations offered based on the findings and conclusion drawn.

## SUMMARY

This study E Module Materials consisting of four mini courses in Technology and Livelihood Education for Grade 5 learners. With the use of the descriptive developmental method. It determined the knowledge and skills in TLE where Grade 5 learners performed low based on their achievement test result as stated in the Division Consolidated Achievement Test Results in all Elementary schools in Agno District Pangasinan. This E-Module Materials had for its goal the improvement of teaching learning process in the classroom situational management leading to a quality education in the Elementary Public Schools.

There respondents followed by determining the acceptability of the developed set of varied e-modules that would address the identified, difficulties the acceptability and adequacy of the developed Module Materials in terms of the criteria. For the purpose of the study, documentary analysis was used in determining the skills and knowledge in TLE where the Grade 5 learners were found to be weak while a questionnaire was used in determining the acceptability and adequacy of the proposed e-module materials, the following steps were followed: 1. Identification of the TLE knowledge and skills where learners were found to be weak, 2. Specification of the lessons objectives, 3. Preparation of the first draft, 4. Face validation, 5. Further improvement of the proposed module materials, 6. Evaluation of the proposed e-module materials in terms of criteria for acceptability, 7. Revision for further improvement, 8. Production of the final form.

In determining the areas where the Grade 5 learners are weak/low in achievement level, this was based on the MPS consolidated results.

The average weighted mean and frequency and percentage were also used in describing the acceptability of the proposed e-module materials in terms of certain criteria.

**Findings**

1.0 Skills in Technology and Livelihood Education where Grade 5 learners perform low based on their Achievement Test Results.

The Grade 5 were focused to be weak in comprehension of all components in TLE as shown in the division consolidated reports based on the MPS.

2.0 Proposed Interactive e-module address the difficulties of the Grade 5 learners in Technology and Livelihood Education as a result of the findings

3.0 Acceptability of the Proposed e-Module Materials in TLE 5 with regards to the acceptability of the proposed e-module materials, majority of the Grade 5 teachers, head teachers, evaluators focused the aforesaid materials acceptable as manifested by their “Adequate” responses to the items that deal with the qualities of acceptable e-module materials.

## CONCLUSIONS

Based on the findings of their study, the following conclusion were drawn:

1. Majority of the TLE Grade 5 learners have not mastered the basic skills in TLE more specifically in the comprehension and application in the different components in the learning sessions based on the achievement test results.
2. The e-module consisting of 4 mini-courses in Home Economics can address the identified weaknesses of the Grade 5 learners in TLE since they are based on the needs assessment.
3. The interactive e-module materials meet the criteria for acceptability
4. The interactive e-module materials manifested an avenue in technological world in the teaching-learning climate environment.

## RECOMMENDATIONS

On the bases of the findings of their study and the conclusion drawn the following recommendations are offered.

1. The module materials consisting of four mini-courses in Home Economics for Grade 5 and Grade 5 learners should be reproduced by the school heads of the District Elementary at Agno District Division to be used by the TLE 5 Elementary Teachers for the development of the skills along the comprehension of TLE components concept.
2. The e-module materials should also be tried out to Grade 5 learners to enhance their achievement level.
3. The e-module materials should adapt for innovative teaching experience use the modern technology and high profile gadgets.
4. Other researcher may replicate this study to cover other year level in TLE relative to development of interactive learning lessons needed in the K to 12 Basic Education Curriculum.

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