



## ASSESSMENT ON THE ACCEPTABILITY OF E-LEARNING TOOL ITEACH: A TECHNOPRENEURSHIP MODULE

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### ABSTRACT

E-Learning makes the process teaching and learning simpler, prolific, and productive that ensure students understanding regarding the lessons online with adequate and ample time. This study was undertaken to find out the perceived usefulness of iTEACH an E-learning tool in relation to the respondents' technological skills and to determine the benefits and problems encountered by the users of the system. A total of 60 randomly selected college students were the respondents of the study. Descriptive Statistics such as mean and Pearson r moment correlation were used in analyzing the gathered data. The respondents' perceived usefulness on iTEACH obtained an overall mean of 3.63 while their level of technological skill is exceeded expectations; there is a significant relationship between the perceived usefulness and the respondents' technological skills.

The respondents considered iTEACH as a useful tool in learning; their technological skills exceed expectations; their perceived usefulness regarding iTEACH affect their technological skills in relation to Microsoft office, connect to social media, and navigate a website. The problems encountered by the respondents in using the iTEACH particularly in terms of poor technical and physical infrastructure.

**Keywords:** *E-Learning, technological, iTEACH, skills, website*

### 1. INTRODUCTION

The world of today is full of challenges and expectations both on the part of the education and industry sector. The modern way of learning helps the learners became updated with the current trends is through According to Sinclair (2016), it provides students with better access to education, cuts costs, generates more knowledge and gives learners flexibility and more interaction.

E-Learning is cost-effective as this method is quick and easy. The long training period, infrastructure, stationary, travel expense, etc. is reduced. It is a benefactor to those who feel nervous and disconnected in groups. Developing cloud-based application tool like iTEACH is an attempt to bridge the gap between the teachers and learners and to have tech access to dissipate the dilemma of online learning. Faculty of Higher Education Institution need to develop strategies on how to improve the learning abilities of their students, craft methodologies suited to the capabilities of their students, and innovate tools that would help students to have an additional avenue in learning.

The E-Learning tool is new to the students of Occidental Mindoro State College for it was only introduced five years ago. Its purpose was to supplement lessons in the classroom which is called web presence. Faculty within the IT department utilized different tools such as Moodle, Schoology, and the like. The researcher, as a faculty and administrator of Occidental Mindoro State College, has the intense desire to contribute to the improvement of students' performance in Technopreneurship because innovation is the key to



addressing the problems on limited resources and we need to create mechanism/system to optimize the availability of resources to our students. In view of this, the assessment and evaluation of the developed iTEACH are very important to be able to materialize the implementation of the system.

This research took interest to conduct a survey among students, specifically information technology students, on the perceived usefulness of iTEACH as a learning tool and to assess perspectives and needs.

This paper aims to find out if there exists a relationship between the perceived usefulness and perceived use of iTEACH tool among the students.

Specifically, it attempted to:

1. Identify the perceived usefulness of iTEACH tool.
2. Determine the technological skill of the students in terms of: (a) Microsoft Office; (b) Connect on Social Media; (c) Collaborate with others online; (d) Navigate a Website; and (d) Video Conferencing and Sharing Videos.
3. Determine the benefit of iTEACH E-Learning tool to the students.
4. Find out the problems encountered by the students in the use of iTEACH E-Learning tool.
5. Find out if there is a significant relationship between the perceived usefulness of iTEACH and Technological Skills.

## 2. MATERIALS AND METHODS

This study utilized the descriptive design in order to analyze whether the extent of utilization has a significant relationship on the perceived use of iTEACH to the respondent and to determine the significant difference in their utilization performance when they are grouped according to gender and year level. The study involved a total of sixty (60) 1<sup>st</sup> year IT students and 3<sup>rd</sup> students who were randomly selected and who were enrolled in Technopreneurship subjects in both the first and second semester school year 2018-2019. Fifty-five percent (55%) of the respondents are female.

The study used a self-made questionnaire in order to gather the data needed. The questionnaire is divided into five parts: (1) the background of the respondents, (2) extent of utilization, (3) respondents' perceptions; (4) benefits; and (5) the problems encountered.

The data was analyzed using Microsoft Excel and through descriptive statistics such as weighted mean, Pearson r Moment Correlation. Weighted mean was utilized to determine respondents' perceived usefulness towards iTEACH and technological skill. Whereas, Pearson r moment correlation was used to determine if there is a relationship between perceived usefulness of iTEACH and students' technological skills.

## 3. RESULTS AND DISCUSSION

### Perceived usefulness of iTEACH Tool

It is reflected on Table 1 that perceived the usefulness of iTEACH is shown in 3.63 overall mean. This implies that the respondents considered the iTEACH E-Learning tool useful since it helped them to make their learning environment interesting and it serves as a gateway to exposed them in different learning style. The aforementioned findings coincide with the statement of Yang (2009) that adaptive learning focuses on the recommendation system that suggests learning resources to suit the learning styles of learners.



**Table 1** Perceived usefulness of iTEACH E-learning tool.

Indicators	Mean	Interpretation
iTEACH makes access to relevant learning easier	3.30	Moderately useful
iTEACH makes more effective use of classroom time	3.10	Moderately useful
Allows exposure to different styles of learning	3.80	Useful
Using it makes answering activities easier	3.40	Moderately useful
Using it makes learning more effective	3.80	Useful
Using it increases students interest in the subject	3.90	Useful
It increases quality of teaching and learning	4.30	Useful
It makes students more confident in answering test	4.10	Useful
It provide choices of learning materials	3.60	Useful
It helps in gaining knowledge outside of class	3.50	Useful
Enhance its use to learn more effectively	3.30	Moderately useful
Over all Mean	3.63	Useful

**Technological Skills of the students** In Table 2, the technological skills obtained an overall mean of 2.85 which exceeds the expectations but the use of video conferencing and sharing videos online has a mean of 1.90 where it needs improvement. The result it is ‘exceeds expectations’ on the use of social media and navigation of website which both obtained a mean score of 3.40. The findings of the study were supported with the explanation of Algharabat et. al. (2017) that social media applications have been observed as one of the most efficient and influential implications that have been progressively engaged in most aspects of people’s lives.

**Table 2** Technological Skills of the respondents

Indicators	Mean	Interpretation
Microsoft Office	2.80	Meets Expectation
Connect on Social Media	3.40	Exceeds Expectation
Collaborate with others online	2.70	Meets Expectation
Navigate a Website	3.40	Exceeds Expectation
Video Conferencing and Sharing Videos	1.90	Needs Improvement
Technological Skills	2.85	Meets Expectation



### Benefits of using iTEACH as a learning tool

The findings below show that students believe that their motivation to learn new concepts and an additional avenue for a different teaching style obtained a mean of 4.57 and 4.55, respectively and interpreted as strongly agree. The students have a positive attitude towards the utilization of iTEACH E-learning tool because they appreciate the new undertakings and environment introduced to them at the same time the techniques and strategies were considered efficient. The overall mean of 3.85 shows that the students appreciate the benefits of creating a new and different tool used in teaching. Thomas, (2011) suggested to provide innovative ideas to promote active learning online with ready-made adaptable activities, specific examples of what can be done, case studies detailing actual teaching practices, tips for effective pedagogy and technologies that are based on traditional theories integrated with the latest research in cognitive learning.

**Table 3** Benefits of using iTEACH as an E-learning tool.

Indicators	Mean	Interpretation
It reinforces and expands contents learned	3.08	Neutral
It increases motivation to learn new concepts	4.57	Strongly Agree
It allows adjustment to different teaching styles	4.55	Strongly Agree
It allows demonstration of other skills	3.52	Agree
It makes student more internet literate	3.92	Agree
It allows struggling students to practice	3.65	Agree
It changes the pace of classroom learning	3.90	Agree
It allows learning current events and news	2.85	Neutral
Over all Mean	3.85	Agree

### Problems encountered by the students in the use of iTEACH

Most of the respondents agree that problems persist in its implementation, garnering the highest points are the poor technical and physical infrastructure (4.80) is an indication of the students' frustration as to the availability of computers in the library and the inconvenience of having to find an internet café. According to Tarhini et. al (2014), many students want to learn online learning, but still cannot go anywhere as they live in isolated areas without a proper communication system. In addition, most of the respondents agree regarding the insufficient financial resources, lack of interest and lack of personal computers are considered as their main problems in using iTEACH as an E-learning tool. This was supported by the study of Schepers and Wetzel (2007) that e-learning implementation is not simply a technological solution, but a process of different factors such as social factors.



**Table 4** Problems encountered by the students in using iTEACH as an E-learning tool.

Indicators	Mean	Interpretation
Insufficient time to answer assessments	3.43	Neutral
Poor technical and physical infrastructure	4.80	Strongly Agree
Lack of Personal Computers	4.03	Agree
Difficulty in finding suitable materials	3.22	Neutral
Insufficient technical knowledge	3.38	Neutral
Lack of guidance to gain skill and knowledge	3.17	Neutral
Lack of interest on the part of students	3.97	Agree
Insufficiency of financial resources	4.15	Agree
Lack of support from the administration	2.67	Neutral
Over all Mean	3.65	Agree

#### Relationship between the perceived usefulness of iTEACH and Technological Skill

As shown in Table 5, there is a significant relationship between the perceived usefulness of iTEACH and their technological skill in relation to Microsoft Office, connect on Social Media, and Navigate a Website since the p-value is less than 0.05. This only shows that respondents find the iTEACH e-learning tool useful to them due to the fact that they have the knowledge needed to be able to utilized and appreciate the e-learning tool. The results indicates that usefulness of it EACH has a significant effect on improving their technological skill. Likewise, Boettchar and Conrad (2004) stated that using of electronic technologies in education will steadily grow, and universities look for ways to use online tools to deliver instruction.

**Table 5** Relationship between the perceived usefulness of iTEACH and technological skill.

Perceived Usefulness of iTEACH	Technological Skill	Correlation Coefficient	p-value	Interpretation
Usefulness	Microsoft Office	3.70	.009	Significant
	Connect on Social Media	5.41	.0002	Significant
	Collaborate with others online	3.62	.021	Not Significant
	Navigate a website	4.24	.002	Significant
	Video Conferencing and Sharing Videos	1.93	.301	Not Significant

Legend: \* Significance is < .05 level

\*\* Significance is < .01 level



#### 4. CONCLUSIONS

The following conclusions were drawn based on the findings of the study: The respondents considered iTEACH as a useful E-learning tool. The level of technological skill of the respondents needs improvement in terms of the use of video conferencing and sharing videos. The respondents benefit on the development of iTEACH as an E-Learning tool; encountered problems in using the iTEACH particularly in terms of poor technical and physical infrastructure; and respondents' perceived usefulness towards iTEACH affects their technological skills in relation to Microsoft office, connect to social media, and navigate a website.

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