

The Effect of Parents' Perception about Internet on Students' Ability to Use Internet : A Lesson from Faculty of Business and Management at Widyatama University

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ABSTRACT

This paper describes the effects of parents perception about internet on students' ability to use internet. There are two research question in this study. First, is there evidence indicating that parents' perception of internet will effect their decision to use internet connection on their personal computer (PC) at home? Second, is there any evidence indicating students' ability to use internet are enhanced by availability of internet connection on their home computer? To answer those research question, I have conducted a Focus Group Discussion (FGD) with 50 parents of students from Faculty of Business and Management at Widyatama University in February 2010. Research finding reveal that parents who have negative attitude in term of perceived usefulness (PU) and perceived ease of use (PEU) have no internet connection on their PC at home which in turn hampered students use of internet extensively at their home. In contrast, parents who have positive attitude in term of PU and PEU have internet connection on their PC which will offer great opportunity for their children to learn internet operation extensively.

Keywords : Parents perception, Perceived of usefulness, Perceived easy of use, Students' ability to use internet

Introduction

In 2001 Marc Prensky published companion papers on a new generation of students : the 'Digital Natives' [1]. The basic argument of Prensky was that this new group of students coming into universities was fundamentally different from any students that educators had seen before. The students come from new cohort and they are described as had spent their entire lives surrounded by and using computers, video games, digital music players, video cams, cell phones and all other toys and tools of the digital age [2].

Current studies indicate that students use various modern technologies such as computer, handheld devices, software application and laptop [3a][4a]. Jones [3b] found that the majority of college students own computers and wireless devices and believe that internet use has enhanced their learning experience. Modern technologies have replaced most traditional pedagogical technologies [5a]. Harris and Koehler (2007 : 61) points out that most traditional pedagogical technologies are characterized by *specificity* (a pencil is for writing, while a microscope is for viewing small objects); *stability* (pencils, pendulums, and chalkboards have not changed a great deal over time); and *transparency* of function (the inner working of pencil or the pendulum are simple and directly related to their function). Overtime, these technologies achieve a transparency of perception. They become commonplace, and in most cases, are not even considered to be technologies. Digital technologies – such as computers, handheld devices and software applications – by contrast, are *protean* (usable in many different ways); *unstable*

(rapidly changing); and *opaque* (the inner workings are hidden from users).

By their very nature, the newer digital technologies, which are protean, unstable and opaque, present new challenges to teachers who are struggling to use more technology in their teaching [5b]. The same challenge is also faced by students who are struggling to learn digital technology in order to enhance their learning performance. Use of technology, for students, sometimes has unpleasant side effects, which may include strong, negative emotional states that arise not only during interaction but even before when the idea of having to interact with the computer begins. Evidently, factors such as the context in which an individual was first introduced to the computer, past failure and successes with hardware or software, and the current tasks being attempted are considered as many factors that effect computer anxiety [6a].

There are strong relationship between computer or laptop ownership and computers literacy. Simonson et., al., [7] define computer literacy as "an understanding of computer characteristics, capabilities, and applications, as well as an ability to implement this knowledge in the skillful, productive use of computer applications suitable to individual roles in society". In order to enhance computer literacy, students need to learn extensively about computers and they will be able to do that if they own computer or wireless devices. In recent years, educational organizations have been taking courageous steps in the

way they aim to apply computers as part of the educational technology in the teaching and learning processes. One example of such an initiative is that taken at the University of Lapland, Finland, where all entering students have been given an opportunity to acquire a laptop through the university [4b].

How students intend to use computers for their own purpose have been revealed by many researchers. For example, study by Tunku Ahmad et., al., [8a] show the relationship between self efficacy, perceived usefulness, perceived ease of use and computer usage. A Study by Saade and Kira [6b] show how computer self efficacy mediates the relationship between computer anxiety and perceived ease of use. But there are no studies which try to reveal the role of parent perception about internet that can affect students ability to use internet.

Research Question

1. Is there evidence indicating that parents' perception of internet will effect their decision to use internet connection (either *hardwired connection* or *wireless connection*) on their personal computer (PC) at home.?
2. Is there evidence indicating students' ability to use internet are enhanced by availability of internet connection on their personal computer (PC) at home.?

Methods

To answer the above questions, a Focus Group Discussion (FGD) was conducted with 50 parents of students from Faculty of Business and Management at Widyatama University on February 2010. The Sample of parents came from students who were considered as having computer and internet illiteracy based on observation during their attendance in the classroom. Students who have computer and internet literacy score below 50 are 15 students and they are considered to be computer illiterate.

There are 35 parents of students who have computers with internet connection. They have an internet literacy score of 60 or above. These students are then considered to be computer literate. Samples of parents were chosen from

the two groups of students in other to make it possible for comparing each group of students in term of their computer literacy score and parents' perception about internet usage.

Research Findings

This section present the result of FGD and its interpretation to answer research questions.

Parent Perception about Internet

Buying a computer and internet for home usage is all the matters of buying process decision. Kotler and Keller [8b] have identified at least six roles that can be played by the members of an organization in the buying decision process and relevant for this study:

1. Initiators – Users or other in the organization who request that something be purchased
2. Users – Those who will use the product or service
3. Influencers – People who influence the buying decision
4. Deciders – People who decide on product requirements or on suppliers
5. Approvers – People who authorize the proposed action of deciders or buyers
6. Buyers – People who have authority to buy the product

Parents usually play an important role in the buying decision process especially when they are involved in the buying such as buying computer and internet. In such a case, parents usually play as decider and buyer as well.

According to Technology Acceptance Model (TAM) developed by Davis et., al. [9], the decision to use a certain technology (i.e. computer or internet) depends upon *intention* to use technology, *perceived usefulness* (PU) and *perceived ease of use* (PEU) . TAM is one of frameworks frequently used in studies to predict and explain the use of computer. While PU indicates the extent to which the use of the technology is promising to advance one's work, PEU represents the degree to which the technology seems easy to use. The relationship between PU, PEU, intention and use are shown in Figure 1

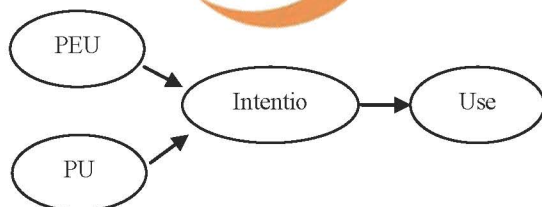


Figure 1. Technology Acceptance Model (Tunku Ahmad, et., al., 2010 : 270)

The Focus Group of Discussion (FGD) with 50 parents of students from Faculty of Business and Management at Widyatama University that held on February 2010, revealed PEU and PU are as follows :

1. There are 21 parents who perceived that internet is hard to learn (PEU)
2. There are 17 parents who are can't operate internet properly (e.g., they cannot sent email or download data from internet) (PEU)
3. There are 32 parents who perceived that internet usage

- by their children has nothing to do with students' performance (PU)
- There are 38 parents who perceived that internet usage by their children, potentially give them negative impact (e.g., parents are worried that their children will be the victim of kidnapping or that their children are looking for sites that contain pornographic materials) (PU)

Parents who have negative attitude in term of PU and PEU have use no internet connection on their PC at home which in turn hampered students to use internet extensively at their home. In contrast, parents who have positive attitude in term of PU and PEU have use internet connection (either hard-wired connections or wireless connections) on their PC at home which in turn will offer great opportunity for their children to learn internet operation extensively.

Students' Ability to Use Internet

Students who have computers or laptops with internet connection in their home, show higher computer literacy score compared with students who have no computer or laptop with internet connection. Table 1 show computer and internet literacy score between those two groups. As

Table 1 show, students who have computer or laptop with internet connection (n=35) have better average literacy score (71,5) compare with students who own computer without internet connection (n=12, literacy score mean 48,8) as well as students who have no computer (n=3, literacy score mean = 42,1)

Table 1. Computer and Internet Literacy Score

Number of Students	Literacy Score (Mean)
Own computer with internet connection (n=35)	71,5
Own computer without internet connection (n=12)	48,8
Have no computer (n=3)	42,1

Computer literacy was measured using Microsoft Work Tasks Assessment (SAM 2003) [11] which is fall into three categories:

- Microsoft Word Tasks (such as opening a document, bolding text, italicizing text, underlining a word, check the spelling, inserting text, changing font, cutting text, using undo and redo buttons, printing documents etc.). See Table 2.
- Microsoft Power Point Tasks (such as creating from a blank presentation, deleting slides from a presentation,

and add effect on presentation slide).

- Microsoft Excel Tasks (such as merging cells, copying cells, centering across selection, inserting worksheet into a workbook, locating and open existing work, creating formula using the Sum function, use filling handle to copy a cell etc). See Table 3

Internet literacy is measured by internet task assessment such as using the web for instant messaging, using the web to download articles and using the web for web conferencing. See Table 4

Table 2. Microsoft Word Tasks Assessment

Basic	Moderate
Opening a document	Counting words
Bolding text	Adding bullets
Italicizing text	Highlighting text
Underlining a word	Finding and replacing text
Check the spelling	Using the Thesaurus
Inserting text	Inserting a date
Changing font	Justifying a paragraph
Cutting text	Entering data in a Word table
Using Undo and Redo buttons	Inserting rows in a table
Printing documents	Creating a document header
Changing page orientation	

Table 3. Microsoft Excel Tasks Assessment

Basic	Moderate
Merging cells	Creating formulas using the Sum function
Copying cells	Use filling handle to copy a cell
Centering across selection	
Inserting worksheet into a workbook	
Locate and open existing work	

Table 4. Internet Tasks Assessment

Using internet to access a school portal
Using internet to look up reference information for study purposes
Using internet to send or receive email
Using internet to read other people's blog
Using internet to share photographs or other digital material
Using internet for instant messaging/chatting

Conclusion and Discussion

Research finding reveal that students who have no internet connection in their home tend to have less computer and internet literacy score compare to students who have a computer with internet connection. This findings are supported by Martin and Gay's study [10] which is reveals that students spend more time at home for browsing compared to time spend for browsing during class or in campus. The study also reveals that students spend more time to learn about computer at home . The study by Martin and Gay, also, indirectly explained why the absence of computer with internet connection at home will effect students' computer/internet literacy. This problem arise because computer/internet are part of digital technology product characterized by rapid change (unstable) and opaque, so the students need more time to learn computer and task in order to operate computer/internet properly.

If we go further into Technological, Pedagogical, Content Knowledge (TPACK) setting, then we will realize that the students' computer/internet literacy will make teaching learning process using educational technology - more difficult, unless students who posses computer/internet

illiterate make substantial advancement in their literacy score. This is because the Technological, Pedagogical, Content Knowledge or educational technology are based on digital technology as the framework propose by Koehler and Mishra [5c]. Their framework suggests that effective TPACK framework should consist of :

1. Content knowledge (CK) is teachers' knowledge about the subject matter to be learned or taught.
2. Pedagogical knowledge (PK) is teachers' deep knowledge about the processes and practices or methods of teaching and learning
3. Pedagogical content knowledge (PCK) is knowledge of pedagogy that is applicable to the teaching of spesific content
4. Technology knowledge (TK) is certain ways of thinking about and working with technology.
5. Technological content knowledge (TCK) is an understanding of the manner in which technology and content influence and constrain one another.
6. Technological pedagogical knowledge (TPK) is an understanding of how teaching and learning can change when particular technoloies are used in particular ways.

Further Research Direction

This study has many limitations because it is using a small number of sample. To further the study we need a large

sample (n>200) . This large sample will give us opportunity to use Structural Equation Modeling (SEM) or other confirmatory as well as exploratory factor analysis , so research findings would be more conclusive .

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