Internet Literacy: Levels of Literacy Among Selected Filipinos Across Economic Classes

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This research probed into the way the Internet had affected the rich and the poor, the young and the old. It investigated selected groups' initiation into the Internet and how the technology was acquired, appreciated, given meaning and interpretation.

Using the Social Construction of Technology Theory, the study revealed that the impact of the Internet on the informants depended on various literacy states where they were located, i.e., Awareness and Acquisition State, the Interpretive State and the Critical State. Key informant interviews and focus group discussions, found that economic standing and age were not factors in reaching the different states of Internet literacy. The comparative study on the acquisition, interpretation and critical regard on the Internet provided insights on the role it played in changing the ways the informants communicate and relate with one another and how they construct meanings and identities reflected in their experiences and ability to adapt and reinvent the technology as appropriate to their particular circumstances.

Keywords: Internet Literacy, social construction of technology, information communication technology

Introduction

Information Communication Technologies or ICTs are upon us, affecting our communication system, values, decision-making and social relationships among groups, families and individuals. According to Jayaweera and Reddi (1987), technologies can transform minds. Communication technologies generate a whole cluster of new identities and attitudes—"psychic mobility, empathy, cosmopoliteness, achievement motivation and rising expectations" (1987, p. 81). Jayaweera further writes:

> As a consequence of these transformations, people who, for untold centuries, had lived in enclosed subsistence communication break out of their captivity and take the first faltering steps towards a fuller life. (p. 81)

Eventually, communication technologies provide "altered psychological states and begin to generate wants which become increased demand"

(Jayaweera, 1987, p. 82). And since people differ in their self-representation, they react in diverse ways and perspectives when confronted with new experiences, acquisitions and innovations. They become products of the contexts in which they are situated. Thus, as this study showed, the computer and the Internet—a "new" innovation, particularly to poor people, and one of the much-desired technologies—had changed the identities of its users and provided them diverse experiences and representations (Pertierra, 2006; Reddi, 1987). In the same vein, Jones (2007) argues that:

> Technology not only mediates but also produces subjectivities, deeply infecting how we experience ourselves. "In what ways have technologies (such as the computer or laptop, Internet and the mobile phone), changed the possibilities for and meanings of figuration in art? How might these evoke considerations of subjectivities...and/or engender a typical encounter." (n.p.)

By extension, this study scrutinized experiences of selected sectors of Philippine society by revealing how the computer and the Internet have affected their lives. It investigated the identities and representations created by the Internet-user-informants, representing the selected youths and adults from rich and poor sectors living in Metro Manila, Philippines. Central to this study is the extent to which the computer and the Internet influenced the users, attitudinally and socially.

The Internet and Internet Literacy
The Internet came to the Philippines in 1994 through the Department of Science and Technology (DOST) and has since grown and spread rapidly. Estimated users in the Philippines were placed at approximately 12 million in 2007 (Khan, 2006) and 33.6 million in 2011 ("Philippine Internet Usage Stats," 2014). This spike in the number of Internet users has led to the establishment of Internet-related companies, and to the rise of online activities, including e-commerce and electronic editions of local newspapers (Khan, 2006).

The question now arises as to how people have been using the Internet, and how adept are they in using the various functions of a computer. What would acquiring and accessing a computer and the Internet, respectively, mean to them? Are they computer or Internet literate?

According to Potter (2001), ICT literacy, and for the purpose of this study, computer and Internet literacy, is a perspective actively used when one is exposed to the technology in order to interpret the meaning of

the messages. ICT is "about information and the way it is hadled in the quickest way through eletronics, computers and otherforms of media communication" (Bardelay, 1987, p. 1). In addition, ICT literacy consists of an informed citizenship, aesthetic appreciation and expression, social advocacy and consumer competence (Kubey, 2001). ICT-literate people take control of their own lives. They have a clearer perspective of the dividing line between the real and the media world. More importantly, they build the life that they want, instead of allowing these technologies (computer, Internet, or ICT) to build the life that these technologies want for them (Aufderheide, 2001; Potter, 2001).

"Technology literacy" implies an understanding, first, about what literacy is. Literacy, in Latin, is *literatus,* or "marked with letters." In the Philippine educational system, it used to mean knowing the "3 Rs" or the three basic skills, namely: "Reading, 'Riting and 'Rithmetic" (Schiller, 1996). Secondly, technology literacy involves a range of skills or the mastery of almost any skill. For instance, a musically literate person can identify the works of composers; a mathematically literate person has the ability to understand calculus, and; a computer literate person can write programs in computer languages that make computers perform tasks (Schiller, 1996).

Given the upsurge in communication and technology developments then, the "new literacy" means the bundle of information skills that may be required for one to effectively *function in society* [emphasis mine]. These skills may improve or evolve due to the widespread use of "compunications" (i.e., computer and communication technology). It is literacy that "builds on, rather than replaces, contemporary notions of literacy" (Schiller, 1993, p. 148). The skills progress alongside technology and along with political, economic and social systems.

Hence, technology literacy is not limited to the ability to know and operate the ICT gadgets and learn the ICT language. It also includes the ability to give meanings to these and use these in order for a person to effectively function in society. This presumes that the use of the technology is intended for the development of society's members.

Drawing from the works of Potter (2001), Schiller (1996), Aufderheide (2001), and Silverblatt and Finan (1999), this researcher has produced a synthetic definition of technology literacy, as follows: Technology literacy is the process of acquiring critical awareness about technologies and their context; the economics of their use; the capacity to know their use and functions; and the ability to operate the gadgets, interpret and make sense of the messages, and use such messages for social mobilization and change.

Thus, the definition goes beyond the traditional definition of literacy, i.e., the ability to read and write. Locating literacy in technology expands

the definition to more than acquiring and using the technology. Otherwise, the definition would be too simplistic and misleading. Because that would mean assuming, wrongly, a static view of culture and technologies and "this might locate the root of the technology problem, and the remedy, to the individuals and their skills" (Schiller, 1996, p. 21). This in turn would be dangerous since the contributions of other structural and social contexts would be rejected or negated.

Technology literacy goes beyond mere computer or Internet access and possession. It is more than knowledge of the brands, parts and functions. It does not only mean adeptness in using these gadgets but also the ability to critically derive meaning and interpretation of the computer and the Internet. Potter (2001) says that the most important knowledge structures in building technology literacy perspectives, include, among others: knowledge about the media and ICT industries, their origins, patterns of development, economic bases, structural (ownership patterns and governmental regulations) contexts, and broader perspectives about media effects, whether long term or immediate, societal or individual, or behavioral, cognitive, attitudinal, emotional and physiological (bodily functions).

Research Objectives

The study explored the contexts within which the informants (a selection of youth and adults from rich and poor sectors) interpreted the Internet, which inevitably impinges on their daily lives. The study aimed:

- To draw a socio-demographic and Internet literacy profile of the informants;
- To find out the level of awareness, access to, motivation and use of a computer or laptop and Internet;
- To explore the representations through the experiences of the informants in using a computer/laptop and Internet and how this contributes to the creation of identities, and
- To find out the meanings that individuals attach to a computer and Internet access, acquisition and use, and the contexts within which these meanings occur.

Study Framework

The study drew heavily on Peter Berger and Thomas Luckmants Construction of Reality (SCR), which posits that meanings emerge through the intersubjective interaction between people and the interpretation of objects (Berger & Luckmants, 1991). Meaning is generated out of the experience of the subjective world of other human beings (Littlejohn, 2002). The meaning is shared, experienced and interpreted by the person and other members

of society. Meanwhile, technologies play a key role in the production of the reality that the members of society perceive.

The theory allows for formation of literacy states, which the researcher categorized as: a) Awareness and Acquisition State, b) Interpretive State, and c) Critical State (Portus, 2005). The Awareness and Acquisition State is that condition wherein the person becomes aware and conscious of the Internet technology, analyzes its significance, reflects on its value and, subsequently, desires and decides on acquiring the technology. This awareness and acquisition state follows the process of the Social Construction of Technology Theory, wherein the user goes through the process of awareness and appraisal reflection. This process occurs when the person actively uses the technology and interacts with other persons.

Meanwhile, the Interpretive State bears on the meaning-and-sense-making initiatives of the users. As persons acquire, use, interpret and develop an affinity with the communication technology, they harness skills and achieve a level of development that eventually leads to a worldview about the self, others, values, functions in society, social relationships, knowledge, attitudes, and communication behavior. The interpretation of the technology becomes wide-ranging, depending on the various types of persons and on the users' class, age, gender and position or leadership role in the community.

Finally, the Critical State is that condition wherein persons possess a holistic view or understanding of a technology, including its origin, uses and effects on the technology-users and their worldview. Furthermore, they become aware of the motives of technology companies; judge the truthfulness of advertisements regarding technologies; understand the consequences of acquiring a technology; judiciously use the technology and critically assess the effects of the technology on their values, communication and buying behavior as well as their development as persons and leaders in society.

Research Method

The study used the Focus Group Discussion (FGD) method to obtain broad but diverse perspectives and experiences from the informants in acquiring and using a computer and the Internet.

The sampling procedure for the FGD discussants involved non-parametric, or purposeful, sampling. The basic criteria for the selection of discussants were as follows: residents of Metro Manila; adults: age ranged from 31 to 50; youth: age ranged from 18 to 30; and owners and regular users of ICTs.

There were four types of focus group discussion groups, as follows: a) adults: aged 31 and above, belonging to the A-B class; b) youth: aged

18-30 years old, belonging to the A-B class; c) adults: aged 31 and above, belonging to the C-D class, and d) youth: aged 18-30 years old, belonging to the C-D class. The A-B class generally refers to individuals belonging to the upper class of Philippine society who live in posh subdivisions, earn more than Php100,000.00 (approx. USD 2,000.00) a month and possess cars and expensive gadgets, while the C-D class broadly refers to those who live in rented houses, subdivisions, or urban poor communities.

Findings and Discussion

Profiles of Informants

The A-B adult informants consisted of seven (7) discussants, two (2) females and five (5) males. A majority belonged to the 51-54-year old bracket, and were residents of Quezon City. Almost all were Catholics. They belonged to the upper income level. Most of the discussants were either CEOs, EOs, presidents, owners, or heads of their particular companies. This implies the availability of staff or other persons who do things on their behalf, such as telephone calls, typing of documents and other ways of connecting with other persons. It also suggests the little time that these persons have for doing the nitty-gritty work, which was better assigned to their staff.

Meanwhile, there were nine (9) discussants belonging to the A-B youth group. Seven (7) of them were females and two (2) males. They belonged to the age range of 20-25 years old. All of their families had a high level of income. A majority were residents of Quezon City. Almost all were Catholics. Eight (8) of the discussants were students while the remaining one worked in an advertising agency. Among the students, only four (4) worked full time, while the rest were concurrently taking graduate courses at the University of the Philippines College of Mass Communication.

The C-D adult discussants comprised of six (6) females and one (1) male. They belonged to the age range of 31-50. All of them were employed. Five (5) were married and two (2) were single. A majority were Catholic. Their declared income (from the Personal Information Sheet) revealed that they belong to the low-income group.

Finally, the C-D youth consisted of seven (7) discussants. Four (4) were females and three (3) were males. A majority belonged to the age bracket of 25-30. The students among the discussants were not earning yet while those who work revealed that their income ranged from PhP 10,000-20,000.00 (approx. USD 200-400.00) a month. Four (4) of the discussants were working while three (3) of them were students. Those who were earning were involved in computer-based work.

Awareness and Acquisition State

All four sectors have reached this state in diverse circumstances and to varying extents. They all became aware and conscious of Internet technology through friends, their offices and the media. They all realized the significance of a computer or laptop and the Internet; they have seriously reflected on their value and, subsequently, desired and decided to acquire or purchase the Computer and have access to the Internet.

For the A-B adults, Internet literacy was manifested in the decision of the discussants not to be swayed into a rush-buying mode for newer models of computers or laptops. A discussant related how she carefully planned a purchase, despite the prodding of her daughters studying in Ateneo (a prestigious expensive school in the Philippines run by the Jesuits). The daughters claimed an urgent need to have a computer with advanced features. However, the discussant set some conditions before the purchase of the computer, such as obtaining good grades in school, to make sure that her daughters deserved to have a computer.

Apart from this, the cost of the computer or laptop was considered. This meant that as long as the computer or laptop features were adequate enough to meet the needs of the students in school, it need not be the top-of-the-line or the most expensive.

This practical approach revealed the value of money among discussants. Despite the fact that the economic status of the discussants showed the ability to afford the best computer model, they were discriminating in the use of their money.

Meanwhile, the A-B youth discussants owned personal computers at home, but these were not necessarily connected to the Internet. Those discussants with offices accessed the Internet in their respective offices' Internet connections. They prefer to avail of the office's connection because it would cost them nothing. Although given their economic status, they may be able to afford an Internet connection, they were also conscious of the cost. Thus, even when they have Internet connection, they still accessed the office Internet because they spent most of their time there.

A majority of the discussants have desktops while about four of them have laptops. Since most of them were still students, they found the laptop very useful. Apples (a discussant) laughingly shared the reason why she got a laptop:

> For many many years, I really wanted a laptop. When I reported in Dr. Pernia's class, I brought my entire desktop computer… (laughing). She got mad and said that at my

age, I should already have the capability to buy a laptop.
(Personal communication, July 2009)

Erman (a discussant), on the other hand, found the laptop very useful when traveling. The desktop could not be brought around. On the other hand, Chadwick used the desktop differently—only for word processing and making diaries and student papers. The laptop was used for emailing and business transactions.

All the A-B youth discussants used the computer and Internet everyday for work and personal matters. The various features of the technology were explored and used, such as burning compact discs, watching movies, listening to music, production of student term papers and other school projects, typing, and editing. The Internet was also used for researching, playing games, Facebook and other social network sites, e-mailing, downloading music and games, chatting, and other activities related to the discussants' job. There were various considerations in buying the computer or the laptop, the most common of which was costs or price of the unit.

Unlike the A-B adult, some A-B youth discussants put premium on the brand, making sure that it was top of the line, "hi-tech," and had all functions and features that would allow one to do editing work. The reason offered was that they regarded the unit as an investment, the longevity of which could be extended.

Computer purchases were given much thoughtful consideration, weighing the advantages and disadvantages of the brand. Therefore, much research was done regarding decision-making. The discussants asked around and did a lot of surfing or comparisons of models and brands before they actually bought the gadget.

The Internet was used every day. Since part of the study was conducted at the time when dial-up connections were the mode of access to the Internet, a majority used this system of connection, including prepaid cards to access the Internet. Subscription for an Internet connection was expensive back then.

The above data suggested the A-B youth's desire to be the best; and to do so, they have to invest precious time and effort and thoughtful considerations. This showed in their being "segurista" or cautious and circumspect in decision-making.

For the C-D adult discussants, their motivation to acquire a computer and get access to the Internet stemmed from the need of their children, who were in school, to do research or learn from the Internet. Thus, despite their limited income, they saved up and incurred loans to get a computer.

One of the discussants bought her computer because of her home-based work that required her to do a lot of Internet surfing and research. Also, her daughter was using a computer and the Internet for online games.

The manner of acquiring computers or laptop was through installment payments or loans. A majority of the discussants bought second-hand computers instead of brand new units. Some computer units were hand-me-downs; others were assembled or surplus.

A majority of the respondents did not mind if their computers were not branded because they knew the cost involved in purchasing such items. An assembled computer was cheaper. What mattered most with the discussants was the processor. Willa (a discussant) explained:

> At first we used a branded unit, given as a gift by my brother. But I noticed that when it breaks down, you have to go to the companies which office was very far. This will be too tiring. Now our computer was only assembled but the parts were available. (Personal communication, July 2009)

A majority of the discussants availed of Internet connections in their offices rather than at home, in order to save on the cost of connecting to the Internet. Those among them who had Internet connections at home would use these only on weekends.

The discussants used various features of the computer and the Internet, such as Yahoo, Google, Chikka, email, Excel, Word, OPAC Catalogue, desktop publishing, online news and newspapers, movie, TV, Adobe, webcam, Linux, games, etc.

This seemed to indicate the extent of computer literacy of the discussants and their wide-ranging knowledge and understanding of the computer's various features. It manifested adeptness and high capability in the operation of the gadget; this, despite avowed difficulties in life and receipt of low pay. The identity of the discussants as parents was obvious as their decision to buy a gadget was influenced by their children's needs.

The C-D youth had computers both in their homes and in their offices. Most computers at home were desktops instead of laptops. Generally, computers at home were not connected to the Internet. Most of them accessed the Internet in the offices because it was free of charge.

Those who did not work in an office or who did not have permanent offices and earned from "rackets" (jobs outside of their regular work) or free-lance work found it very necessary or were left with no choice but to have Internet connections in their homes. This was a "must" in their line of work.

Computers at home were mostly "assembled," meaning, parts had different brands. Assembled computers were perceived to be practical because one would customize the specifications to one's needs. The other important consideration for having an assembled computer, where the motherboards and other parts had different brands, was cost. A discussant confirmed that it was more expensive to buy a branded one.

The C-D youth's motivation for owning a computer was work-related. Most discussants cited work as their motivation for acquiring a computer. Some of them stressed that they really needed a computer because of their work or sidelines. The place where the discussants used their computer was at home. Among those who use Internet, the most popular place was the office; most discussants did not have an Internet connection at home.

Others went to Internet Cafes when offices were closed, or when they ran out of Internet card load, or when their units were out-of-order. Other venues where some discussants used a computer were the dorm and library.

There were various modes of acquiring a computer. Most of the discussants bought theirs in installment plans or using the credit cards of parents. As computer parts were purchased, cash was the more dominant mode. A few who had savings bought their computers with cash. There were those who also got their computers as second hand units, passed down by well-off relatives who were changing their computer units.

When asked about the type of software being used, the discussants enumerated the following: Adobe, Photoshop, PageMaker, Illustrator, Macromedia, Flash, C3D, Mojo, Aha Swiss, Groovie, Premiere, Word, Excel, PowerPoint, Publisher, Microsoft Office Word, Lessons, Animation, Pinnacle, Record banners, and Veges.

When asked to rank their level of knowledge and skills in using a computer, where 5 was the highest and 1 the lowest level, most discussants gave a rating of 5 to themselves. One of them said that while initially their knowledge and skills may have been low, their constant use of the technology made them gain a higher level of skills or knowledge. Some of them went as far as surfing the Internet and downloading research materials in order to familiarize themselves. They also tried the tutorials in the Internet.

The most popular use of the Internet then was e-mail, followed by Chikka, Friendster, Yahoo messenger, Chat, Blog and E-groups. A unique use described by one was the e-book. Said Marianne (a discussant):

> Oh, aside from email, (I use) e-book, books online and proves to be cheap if you search these in the Internet. Even

newly arrived books like *Half-blood Prince*, I got this from
e-book. (Personal communication, July 2009)

Some said that the Internet has been useful in purchasing airplane
tickets, including reservations for international travel. Even tickets for
concerts were reserved through the Internet.

The data above suggested that the C-D youth, despite their poor
economic condition, keep up with technologies. Like their A-B counterparts,
they were aware of the wide-ranging applications of a computer and the
Internet. Some of these applications and uses were inherently learned from
school and from rich classmates or friends.

The Interpretive State

Meanings emerged as the discussants acquired, used, interpreted and
developed an affinity with their computer. Ultimately, the discussants
formed identities and representations of themselves, of others, their
values, functions in society, social relationships, knowledge, attitudes and
behavior.

The A-B adult regarded technologies such as the cellphone, computers
and the Internet as harbingers of values. A discussant explained:

> I agree with Jerry, whatever invention or equipment I have,
> my values should not be forgotten.   Like the dynamite,
> invented by Alfred Nobel, which was intended for mining,
> for digging, for road construction that was why the Nobel
> Peace Prize was established. It was because the intention of
> the dynamite was for useful purposes and not for destruction.
> So in relation to what Jerry said, it all depends on the values
> of people. So abusing the equipment or the technology
> would still be more or less be founded on the values of the
> people. (Mercedes Robles, personal communication, July
> 2009)

Reminiscent of the technological determinism of McLuhan (1964),
the discussants believed that technologies should not determine what one
wants to be or what to do. They believed that it was still the human agency
that matters. The discussants interpreted the computer as a servant. A
discussant stressed:

> Once you accept the technology, use it for news, as a servant,
> it should be a servant, not a ruler, not a master. Love of

people, of humanity should be priority. The technology was only an instrument, a servant; the master was still the individual. (Gerardo Josue, personal communication, July 2009)

In the meantime, the A-B youth found the computer as a gadget that should be controlled. Thus, their respective families have formulated rules on using the Internet—in fact, to some, the rules were self-imposed. Those at work avoid using other programs not related to work, i.e., Friendster, Facebook, chat or games while using the Internet. They believed that this was not proper and that there were ways that their supervisor or manager could find out. This might reflect on their evaluation or performance. According to Chadwick (a discussant):

It's everyday rule to limit the use of the computer. I am a Supervisor, I should show example. I only use the computer for non-work related matters when I am done with my work. So I don't use office hours, usually, I don't eat lunch at the office. I don't. So, I take a break. (Personal communication, July 2009)

By using a computer, the good side of the discussants came out. For instance, being considerate with others was manifested among those with dial-up connections in which the telephone landline was needed. Whenever other people needed to use the phone, the discussants made it a point to disconnect the Internet at once if they would find no e-mail, so that the others would be able to use the phone.

Those with children in the family would only allow them to use the computers when adults were around. However, since most of the discussants were old and mature enough, generally, no rules were imposed in the use of the Internet. The discussants simply self-regulate, accordingly.

The C-D adults also imposed rules in using the computer on their children. They allowed their children to use the computer only on weekends when there were no classes. During examination periods, the children were not allowed to use the computer. They regarded the computer as an educational tool, which would allow them to explore and learn more about anything. They pitied children who did not know what a computer was. Some discussants who could not afford an Internet subscription dreamed of being connected someday for the sake of their children, as they believed that the Internet would give their children a wider vocabulary and enable them to search for more knowledge.

Another rule imposed was that children were strictly prohibited from accessing the X-rated programs. Parents monitored Internet use and made sure that the sites they were accessing were wholesome. They allowed Friendster, but lamented the fact that this used up too much of their children's time—time that could have been used for studying and reading. But they also have to balance the social life of their children and schoolwork.

The C-D youth discussants interpreted the computer and the Internet as a work and school companion. They were able to enhance their scholarly activities by joining e-groups and forum. For instance, they cited the Math forum wherein mathematical problems were posted and solved. They also revealed that there was a website called problemsolving.com, which permitted free download of instructions and explanations regarding subjects or topics they want to study.

The discussants found some websites that catered to their interests, such as art and poetry. Jonathan (a discussant) related:

> Actually, one example was the Yahoo group. We have a group, an artist group in the Philippines, although not really the entire Philippines. And then, we share ideas and work opportunities or "racket". Like, they announce job postings free for all. We compete and we give the lowest price that we can give to get the job. We have to act fast as soon as the announcement was given so we can get the job. This was nice. I like the yahoo group.
>
> Then, I can also post my work. I find this nice and a healthy competition. I also like the part when I get feedbacks and criticism on my work. I learn a lot from this. The next time I do the work, I will consider the comments and will adjust accordingly, like lighten the color red, etc. (Personal communication, July 2009)

Dianne (a discussant) also shared that she has a *Pinoy* (Filipino) poets group which metamorphosed into an organization with members, regular meetings, sessions, workshops and counted UP, Ateneo, and UST professors as members. The organization also posted contests and provided guidelines for joining.

Thus, the Internet has been very beneficial to the discussants in terms of their personal growth and skills development. The Internet has given them information and entertainments in forms which can further enhance their hobby.

When asked whether the Internet was empowering, most of the discussants said it was empowering because it provides information like a book could. Other said it was convenient—"it eases my life, making it fast paced. It facilitates what I do in life. People can be located fast. I become more efficient. (Willa Castro, personal communication, July 2009).

There seems to be no end to the range of available resources that the Internet affords its users. Some discussants regard it as even better than a library. Jonathan noted the changes in his research activities. He used to go to the library — it took him several hours to consult the catalogue, then several days to browse through the books. Now, he was amazed at the efficiency and swiftness of the Internet. In minutes, he can do the browsing.

Even personal relationships have changed as communication through e-mails gets efficient, especially when compared to the postal mail. Nanette shared that in the past, when she sent postal mails to her relatives and friends, particularly those residing abroad, it took months before she could get a reply. Nowadays, in a matter of seconds, she could get a response. It was even astounding that she could converse with them through the instant messaging feature of the Internet. They could interact in real time even though they were miles apart.

1.) Across All Sectors. All types of discussants shared the following changes in their lives, brought about by their ability to use the Internet:

a. Those who were employed, whether as employers or employees, now communicate through email, notwithstanding the fact that they stay in the same premises. The face-to-face communication was supplemented by email because there was more freedom in expressing one's self. The feedback system was established not only to convey criticism, comments or suggestions but also to articulate positive strokes or appreciation. The forwarding of feel-good messages, warnings, or general information comprises the bulk of email messages. Moreover, the response was immediate as inhibitions were diminished, thereby hastening the work process.

b. Those who experienced job-hunting were spared the inconvenience of going from one office to another to submit their resume. Their online applications were honored, saving precious time, money and effort.

c. Both government and non-governmental organizations now have websites that provide information, for instance, on the result of government exams, even prior to information published in the newspaper. Also, these websites have downloadable forms. This provides comfort and expediency when accessing their services.

One service cited by the discussants as being successfully able to serve government employees was the e-card. This offers easy access to the government office, its loan facilities and other information needed by employees.

d. Internet games become venues for relaxation and bonding among family members. News on current events were now available anywhere anytime. You can go to other places and see different worlds.

2.) Changes, Identities and Representations. Acquiring computer units brought excitement and happiness, meant pride, and elevated the economic status of the discussants. The computer became a status symbol as those who acquired it first (the A-B groups) were envied. The C-D groups kept up with them by also aiming to have a computer and ultimately access the Internet.

The computer, according to the discussants, "makes everything easy" although they faltered initially, they eventually ended up being adept and victorious in manipulating the computer. A discussant elucidated:

> Me, at first, when I was assigned a computer in the office, I was so glad. But since I was used to the typewriter which keypad was easy to press, I had difficulty typing. But since I wanted to learn and to keep up with my rich friends and because, it was the "in" thing now, I eventually learned it. My brother advised me not to be afraid to explore in the computer. I have to learn by making mistakes. As I followed his advise and continuously explored, I inadvertently deleted my files (laughter). Very exciting it makes everything easy. (Herman, personal communication, July 2009).

Various changes in lifestyle were conveyed by the discussants. "They don't have to go out or travel to talk to friends" (Gerry, personal communication, July 2009), particularly those who were abroad. One of them cited the positive effects of the computer and Internet as follows:

> It was such a big relief. You see, my first job was, ah news room. I write articles, I worked first in a newspaper company. It was just right because immediately I had to use a computer. Although there were still reporters using typewriter. I saw the convenience of the computer, proof reading errors were minimal. When copy editing, it was easy to correct the story for the writer. I was so relieved,

it was good the computer was invented in terms of Word processing. (Chadwick, personal communication, July 2009)

3.) Age as a Factor in Using the Internet. When asked to compare how adults and the youth use the Internet, the following differences were revealed:

Adults took more time to learn the functions of the computer and to access the Internet. This resulted in young members of the family, whom the adults relied on, doing the e-mails, typing or other activities for them. Overall, the discussants found the computer and the Internet a welcome technology and development. Apples confirmed:

> When I was young, I really like computers. Something better than typewriter. Not having to use correction fluid on things. It's something that you feel good about. I feel amazed. It seems like you can't live without it. It was amazing how much you can do. (Personal communication, July 2009).

Erman described the computer as a "breakthrough." Saj (a discussant) said that she got a lot of friends though the Internet. Michelle described the "convenience" that the Internet rendered to her schoolwork and organization of files. Cheska would do online shopping through the Internet. She discovered that this was very convenient. She realized that the Internet had become an effective advertising and marketing tool.

Chadwick also found many educational stuff in the Internet, including learning other languages and improving one's grammar. Apples corroborated Chadwick's observation and said:

> Research, I agree. With the other looking at with the other users from abroad like my friends, my friend taking up masters. So, isn't it? You talk instantly. Yahoo, something different. I mean, it's fast. It's so, immediate. That's immediate. (Personal communication, July 2009)

The Critical State

1.) A-B Adult Internet Literacy and Representations. A-B Adult Literacy was likewise apparent with the A-B adult's awareness and understanding of the negative effects of the computer and the Internet on their children. They describe the Internet as a force that can exact undue influence, particularly

on children. Some discussants were very careful in allowing their children to surf the Internet. A cautious mother related:

> We're hoping that in our case, for example, since we were strict, even with TV watching and hours, *eh,* no TV during weekdays. And we carefully select the shows and websites. Sometimes, my friends think that's funny because I work in television, and yet, my children see very little TV. We expose them to other forms of recreation: they play *sungka* (indoor game); they read books; they read magazines; they look for frogs. So, hoping this kind of mindset to use other ICTs will carry over. So, when my daughter was done with her homework, she'd probably surf a little, but she'll do other things. (Mercedes, personal communication, July 2009).

The informants also observe that their children were hooked to the many attractions of the Internet, and this adversely affected their concentration and the opportunity to think critically. A discussant wanted her children to continue reading books and spend less time in front of the computer where there were many features that were not priorities for students.

Most A-B adult discussants believed that the Internet has made communication impersonal and faceless. They believed that technologies like the Internet have worked to isolate people. The discussants would rather have face-to-face meetings where there were some exchanges. People who have been isolated by computers should make sure that they also have time for reunions, time for walking, and frequent communication. Some discussants felt that computers may dehumanize people.

The discussant claimed that the Internet intrudes into one's privacy. As clarified by one:

> While we're talking about the positive side of connectivity which was a very big advantage offered by the technology, you should only be connected to people you want to be connected with. But you get a lot of trash like, I don't want to be connected with this person from Kenya for example, a millionaire looking for an heiress. How come, just because we have given a little of our privacy, some information about us, other companies continuously write you for marketing and promotion purposes. For instance, I want to be connected with old classmates, relatives and people I select the people to be connected with me, but I

do not welcome others I do not know. It was an assault to my privacy to some extent, I did not wish for it. (Mercedes, personal communication, July 2009).

2.) A-B Young Internet Literacy and Representations. The discussants had shown their critical assessment of the Internet when they shared their realizations, to wit: The Internet was addictive. According to Chadwick, he knew of people who did nothing but sit in front of their computers and surf or search. They related with no one else but their computer.

Discussants observed that there were no government regulations and policies on the use of the Internet. They strongly suggested that the Internet be regulated, although there were no specific suggestions on how this could be done.

A critical sense was likewise observed among the discussants when they were asked to comment on Internet companies and service providers. They were aware that more than the service, their primary motive was to amass profit.

3.) C-D Adult in the Critical State. There were indicators showing that the discussants had achieved the critical state of ICT literacy.

a. The awareness on the effects of the Internet on their budget or finances was expressed by the discussants, to wit:

Ma'am although I am excited, so excited, Ma'am I am upset Ma'am with the money used to buy the computer (laughter). I could have used it with other important things. Eh, my child forced me to buy. (Willa, personal communication, July 2009).

This was supported by Irene who said that she had to allot funds for the purchase of Internet cards or rental of computers in Internet cafes.

b. When asked what the discussants could say about ICT companies, the discussants were aware of the monopolies and the business strategies of cellphone companies. Generally, the discussants perceived the ICT companies as "rich," and said that "They use a lot of gimmicks to profit" (Dante Velasco, personal communication, July 2009).

c. Most of the indicators pertaining to the Critical State of ICT literacy were hinged on the cellphone since the discussants were more familiar with it. This implies that they were more exposed to the cellphone companies and less knowledgeable of the computer makers and Internet providers or servers. Their critical attitude

towards the computer and the Internet were expressed in terms of the effect or its impact on relationships and acquisition of values.

d. Majority of the discussants mentioned that some family members tended to stay in front of the computer for long hours, missing out on the bonding and quality time that they should have spent with other members of the family. Regarding values, the majority of the discussants complained about the images and online advertisements seen on the Internet that made some of them develop acquisitive values—the effect of commercialism and a capitalistic economy.

4.) C-D Young Group On Computers/Internet. Despite their economic condition, the researcher noted a high level of computer use and program application. Using the study's framework on levels of technology literacy, the data also suggests a high level of Internet literacy. The extent and quality of this literacy are detailed below.

While the discussants cited many positive aspects of having access to the Internet, they were also aware of its adverse effects. These were: virus and technical problems on service providers bogs down the work; the adverse effect of a lack of Internet on the work process; the existence of hardware problems that could ruin a day's work; the inability to control technologies in need of repair; and the delays caused by other technical problems. The impatient among the discussants complained:

> Our computer, the old type (because that is what we can afford), it takes centuries before it opens. Then, it is too slow. Also, a problem in the computer is the virus. Yesterday, when I accessed the Internet, there was virus. So, my virus protection has already expired. So, I am now problematic what to do with it. (Josie Muyco, personal communication, July 2009).

The Internet becomes a distraction, causing one to lose concentration when studying. Mike and Karen elaborated:

> It disturbs my studies. At times, when I review for a class examination, I can't help but access the Internet. It seems like I am addicted to it. I have to see it. So, I cannot fully concentrate on what I am doing. That is what I am trying to overcome now.

> Also with me, for example if I am at work, since I am online, there are many distractions that pop up and I am disturbed.

So, even when I try to ignore the buzz, it keeps on buzzing. The computer becomes irritating. Mor3 so, when it hangs. (Personal communication, July 2009).

The prolonged use of the Internet has a physical impact on users. Most discussants complain about having eyestrain. Long hours of working in front of the computer result in teary and tired eyes.

Access to the Internet was erratic. There were times of the day when, due to volume (number of users), it was difficult to get access. Some discussants said they had to wait till 2:00 a.m. or the wee hours of the morning before they could get connected.

Some discussants with dial-up connections get promo deals of free Internet, which were only available when everyone else was already asleep. As soon as you get someone to chat with, i.e., in the morning, the promo ends and payment of the service starts.

5.) Rules Observed When Using the Computer or Internet. The discussants have respective rules that they follow in using the computer, as follows:

Dianne set the weekends as no-computer days and refused to use the computer and Internet. Her reason:

Because there are times when even on weekends, I am contacted and bothered when I am supposed to relax. Even for one day or for five hours, I want to have break. (Personal communication, July 2009).

Jonathan was conscious about the time when he used the Internet because fees drop during certain times. He claimed:

Ah, in using the Internet, there are prepaid cards available that give free hours of use during off-peak hours, so there are thrifty people that consciously use the Internet only during off-peak period. During peak period, say, seven o'clock, they turn off the computer first, so they save on their prepaid load or card. There are people like that.

At Mao's (a discussant) house, the Internet was not allowed to be used when someone was expecting a call. The family's Internet was connected to a landline phone.

Quite a number of discussants, however, disclosed that there were no rules imposed in their home regarding the use of the computer. They

reasoned out that rules were for the young or minor members of the family. Since they own the computer then, they could use it anytime without any time limit.

Conclusion

There were three states of Internet technology literacy among the four groups of selected Filipinos. Most of the youthful informants belonged to the first— State of Awareness and Acquisition, which involves dexterity in operating the technology. Meanwhile, all informants displayed the Interpretive State or one's ability to generate meanings from the acquisition and use of the Internet, but the meanings differed according to their social location and experiences. Finally, most of the informants who tended to analyze and to question motivations, utilization and values as well as attitude developed out of the Internet, displayed the Critical State.

The class or economic status of the informants bears on the manner of acquiring access to the Internet. It may be unexpected for the well-to-do informants to use prepaid cards when accessing the Internet, or to write emails in the offices instead of doing this in the comfort of their homes just to save on cost or tightening one's belt to save money to buy a computer, or to buy it on installments. However, the lower income groups found ways to do these just to be able to keep up with technologies.

Thus, the informants whether belonging to A-B or C-D classes are not technologically impoverished; they have a high level of Internet competencies.

At the Interpretive State, the discussants attached various meanings to the Internet. It is evident that, among the youth groups, the peer pressure to be "in" was quite strong and the regard for the Internet as a status symbol was high.

The A-B groups, in particular, regarded the gadgets as convenient and necessary tools, since these connect them to the world, their work and to their businesses. Similarly, the C-D groups regarded these gadgets as necessities that they should possess, but the manner of acquisition and use would reveal some financial problems. They however coped with this as they adopted alternative ways to acquire and use the Internet.

At the Critical State, the discussants displayed a critical attitude towards the Internet. They were able to assess how the ICT have invaded their privacy, affected their relationships, took a toll on their budget, and influenced their values.

Understandably, the C-D groups were concerned about the dilemma of choosing whether to buy a desktop or laptop, or use their money for their more basic needs.

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