

RESEARCH ARTICLE

The Need of Philosophy Education for Parents

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ABSTRACT

It is a common phenomenon for students to use information and communication for studying or entertainment. However, there is a great difference between these two tools. This can be referred to as “digital capital for education” because there is a clear gap that separates communication and education. To overcome this, parents should be educated with school-family partnerships and mediation philosophies so that they can adopt an affirmative culture and attitude toward properly handling their children’s Information and Communication Technologies (ICTs) usage at home. In other words, education professionals should teach those parents in how they should lead (or manage – take care about) their children’s ICT usage in positive ways such as passionated learning but NOT just in entertainments. Hence, positive and high-quality ICT usage among students may be encouraged to prevent negative academic consequences.

Key words: Philosophy, education, parents

INTRODUCTION

Only a few years ago, it was not very popular to use information and communication technology among students. Now, however, students participate in different types of digital activity such as using mobile phones for texting and chatting with friends and playing various online games. At the same time, beyond this digital fluency, our present generation of youngsters possesses another form of “capital,” that of creating content and interacting digitally. Children maintain relationships through face-to-face contact, short message service, email, and other forms of online and mobile chat regardless of where the other person is in the world (Goldberg, 2003).^[68] There has been a significant shift which has gone from programming new technology to the ability to use it. Indeed, this study describes the above situation as “digital capital.” According to Daniel, 2011, it may be empirically treated as follows:

“Digital capital is the blend of the social, cultural, economic, and technological skills, knowhow and attributes that allow access to and interaction with the digital environment.”

This differs from the technological and information capital of the technoculture transmitted to children through the family and the household (Selwyn, 2004). According to Daniel, “our generation is imbibed with technology, and their whole social networks and engagements are mediated by the technology (Daniel, 2011, p. 238).” Therefore, from the above discussion and the descriptions of cultural capital, this study proposes two forms of “digital capital:”

1. Digital social capital: People who participate and benefit from social media, which establishes social relationships among a prescribed demand interaction. In addition, networks with face-to-face technological contacts should be considered (Seale *et al.*, 2015). Examples of which would be friends who live nearby or the use of social media platforms such as Facebook.
2. Digital cultural capital: People who participate and benefit from digital objects (content) where interests and tastes are acquired through

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digital practices. In other words, this refers to people who have technological knowhow, who informally invest time in the self-improvement of technology competencies and skills. For example, those who participate in Information and Communication Technologies (ICTs) training and education or those who offer early and sustained access to technology together with the encouragement to use the technology in the environment of the school or family. Specific examples are GCSE or A-Level ICT qualifications or DSA funded assistive technology training sessions (Seale *et al.*, 2015).

As a result, a new definition for digital divide (in education) has been set down (Robinson *et al.*, 2015 p. 112-113):

“A digital divide (in education) is the perceived asymmetry, between two sets of people, of the amount of a digital form of social, material-objectified or institutionalized cultural capital that can be tracked in specific sets of practices. The different forms of capital, as already defined, are also the result of different aspects of social and cultural interactions, as well as educational opportunities and require a minimum threshold of access to ICT/digital resources reached before any given person can be considered as having this new form of capital.”

Therefore, digital divide (in education) can be restricted as a demonstration of the length and density of the relationship that a person can develop and use through participating and benefiting in a form of digital capital.

It is a common phenomenon that students may participate in learning using digital technology such as mobile chatting software after school (Lam, 2014). With reference to the above definition, they may possess a certain amount of digital social capital. However, their level of academic benefits must be questioned. It is worth trying to determine whether there is actually the new digital divide in education forming between students. In other words, can they be academically rewarded from participating in this kind of digital activities? To answer that, Bourdieu’s cultural capital rule needs to be applied, since this is where digital capital originates. From this, it can be determined how educational technology is affecting our students’ performance in school.

LITERATURE REVIEW

What is cultural capital?

The concept of cultural capital was proposed by French sociologist Pierre Bourdieu. It was used to explain French children’s educational outcomes in the 1960s. Usually, capital refers to the exchange of money such that one can create profit. However, in Bourdieu’s theory, capital has in-depth implications such that it acts as a social relation within a system of exchange. To be more precise, cultural capital consists of properties of Bourdieu’s capital but also includes a form of accrued cultural knowledge such as taste and preference with the reward of power and status.

In 1986, Bourdieu categorized cultural capital into three variants. These were capital that incorporated body and mind that known as the embodied state, educational qualifications known as institutionalized capital, and finally cultural goods such as technological artifacts or art known as objectified form of capital (Bourdieu, 1986). During an embodiment process, embodied cultural capital will be obtained (Brock *et al.*, 2010). In fact, the process includes labor assimilation and inculcation which results in an investment return (Kvasny *et al.*, 2010). To cite an example, one cannot acquire technical knowledge and experience on a second-hand basis (Hales *et al.*, 2010). In other words, a person needs to invest time and effort so that he or she can change his or her integral part from external wealth. Similarly, students need to invest time and effort in learning different subjects through the usage of ICT so that one can attain a higher level of embodied cultural capital (Brock *et al.*, 2010). A legally assured and acknowledged value of certification about the special cultural competence will be given and is known as institutional cultural capital (Kvasny *et al.*, 2010). For example, an Information Technology degree is one of the academic certificates that will be recognized by institution with the “performative magic” (Hales *et al.*, 2010). The Hong Kong Diploma of Secondary Education can be viewed as a form of institutional cultural capital as it is the basic entrance requirement for higher education. However, there is no formal examination to test students’ abilities in using ICT tools for learning. It is still a controversial issue as to whether it is true that the use of ICT tools can improve academic achievement. Indeed, from

these tests and qualifications, students can obtain figurative and material net profits. The profits that students' gain depend on the necessary time and effort they are willing to invest, poverty factors, and the diploma's monetary value in the labor market (Brock *et al.*, 2010). Finally, this study has objectified cultural capital which focuses in media and material objects such as digital tools (Kvasny *et al.*, 2010). Objectified cultural capital is found in material objects and media, such as digital tools (Hales *et al.*, 2010). Moreover, material objects can be transmitted under legal ownership (Brock *et al.*, 2010). The possession about a digital consumption symbolically assumes embodied cultural capital (Kvasny *et al.*, 2010). The effect of ICT strengths is looked at from an agent point of view and hence the profits obtained will be proportional to how the objectified cultural capital is handled (Hales *et al.*, 2010). Furthermore, these enhance the embodied cultural capital.

Bourdieu's objectified state can be viewed as financial resources for cultural activities while the embodied state can be considered as "stratified social class values imposed in different class origins" (Leung, 2014, p. 31). The institutionalized state refers to the one's educational level.^[1-25]

Concept of bourdieu's habitus and social reproduction

In society, there are different social classes which result from differential socialization of individuals (Tramonte and Willms, 2010). This refers to the Bourdieu's concept of social reproduction. Through the process of socialization, children can develop a sense of what is natural or comfortable. That is Bourdieu's concept of "habitus." He suggested that both material and non-material resources can be transferred by parents to their offspring through the possession of capital in three forms: Cultural, social, and economic.

In 2003, Lareau found that both middle and upper classes parents are more likely to participate in various age-specific activities (i.e. music lessons, going to the theater and playing sports) which can be considered instruments to enhance children's skills and cultural capital. Lower class parents assume children's free time should not try to develop "talents" (Lareau, 2003).

In Bourdieu's opinion, what is the role of education? Certainly, he tries to convert those previous hierarchies from a social perspective

into an academic one (Wagner, 2010). Students from those high socioeconomic families were likely to be exposed to more highbrow cultural activities at home. This means that cultural capital was an essential characteristic, so much so that social selection and education were based on the candidates' participation in cultural activities (Bourdieu, 1977; Bourdieu and Passerson, 1977). This argument indicated that the differences in cultural capital can be used to explain part of the relationship between the socioeconomic positions of the parents and their children's educational performance.

Bourdieu's theory is famous for predicting education outcomes. However, in mid to late 20th century France, there was a main quantitative study undertaken (Bourdieu, 1984 [1979]) which raised the question of transferability in some situations. There are suggestions for the modification of Bourdieu's social class-based categories using variables such as gender and ethnicity. The result is a problem with the validity of his taste zones and conjecture concerning class hierarchy. In the following section, the study will look at some comments on these principles.

Critics to bourdieu's cultural capital

First, the idea of cultural relativism can be used to reformulate cultural capital theory. Bourdieu believed that for a special group, corresponding cultural activities are hierarchically ordered by means of their ability to carry out power. His main theory tries to "relativize" dominant groups' claims into cultural legitimacy (Swartz, 1997). Nevertheless, by the definition of cultural relativism, it should be understood what a human being's activities and beliefs are through his/her own culture. Therefore, a conflict exists between both of Bourdieu's concepts in emphasizing class ranking while relativism stresses that there is no absolutely "right" or "wrong" but is totally cultural specific. This means that stratum is not an essential factor. Through empirical research in the present societies, there are individuals named "cultural omnivorous." They are having advantaged social positions but not exclusive in their cultural tastes and consumption. In this study, "cultural omnivore" is considered as the highbrow or lowbrow class boundary which is artificially rigidified while Bourdieu views it as fluid which is continuously redefined as the

result of field dynamic (Savage and Hanquine, 2016). Indeed, Bourdieu's theory is coherent with "discriminating ominosness" under the condition that "the ethnocentrism central to snobbish elitism is replaced by cultural relativism," Peterson and Kern (1996: 904). It is true that there are several critics to omnivorous such as continued validity of the pattern, different types of omnivorous, "workers" become more omnivorous, and highly educated people are less exclusive (Savage and Hanquine, 2016). From the 1980s, scholars were developing another model where "national cultures had been constituted through constant information flows and encounters between populations with different origins. Phenomena such as migration and globalization were key elements in this whole rationale" (Savage and Hanquine, 2016, p. 114). Second, idealism philosophy disproves Bourdieu's theory. Although cultural capital philosophy is not focused on materialism, all practices under its view are established with material. It is known as "sociology of interest" and is a generalized way of thinking. Indeed, it means a way of thought where one has the consideration for all practices as "economic practices directed towards the maximizing of material and symbolic profit" (Bourdieu, 1977 p.183). Clearly, a dialectic relationship can be found between his habitus and social structure which leads to the phenomenological critique of Kantian idealism (Lane, 2000). Merleau-Ponty (1945) has argued that experience lies in the connection between the living body and the living world. Naturally, a rivalry exists between Kant and Bourdieu. At the same time, what is meant by idealism of education is to "discover and develop each individual's abilities and full moral excellence in order to better serve society"^[1] In fact, philosophy is fundamentally mental, mentally constructed, or immaterial. Thus, this denies the main stance of Bourdieu where he is anti-idealist. Equally, the theory can be viewed as a materialist one of social action (Resch, 1992, p. 217). Finally, cultural capital theory is non-objectivism and anti-subjectivist. With difference from cultural relativism, objectivism is concerned with those believes of certain things or especially with moral truths, which exist independently from human perception or knowledge of them. One piece of clear evidence of this is our world's distinct types of religion. When applied to objectivist structuralism, Lévi-Strauss suggests

that universal patterns which occur in cultural systems are results of the human mind's invariant structure. Therefore, objective structure refers exclusively to mental structure. On the other hand, subjective existentialism proposed by Sartre can be defined as a philosophy that places emphasis on one person's existence when it is facing the problems and peculiarities of individual human beings. There is no abstraction or over-generalized formulation in "human nature." We shall make our own nature. The difference between objective structuralism and subjectivist existentialism can be observed: The former being mentally predefined or created by God while the latter depending on the individual themselves. This means that there is a contradiction between theories. According to Bourdieu, he tries to develop a third mode of sociological of thinking called his "theory of practice" which goes beyond "objectivism" and "subjectivism." His approach intends to consider actors' power and their capacity to act.

Nevertheless, "Bourdieu wishes to sail – and, as he admits, cannot avoid sailing – between the Scylla of phenomenology or subjectivism and the Charybdis of objectivism" (Susen and Turner, 2011, p. 10). Indeed, he believes that the above knowledge is somehow insufficient.^[26-50]

Although there are critics to cultural capital mainly in the field of philosophy, this author finds that the theory is still valid. However, it requires some transformation based on the previously mentioned criticism and the development of the modern world such as the situation referred to in the introduction. If one wants to understand the necessary changes, the relationship between educational ICT and cultural capital needs to be determined: This will be addressed in the next section.

Use of educational ICT as a type of cultural capital

What are the factors affecting students' school performance and how has ICT been used outside of school hours? Previous studies (Claro, 2008) have focused on the social and family background that affects students' ICT use outside school. However, recent research tells us that the parent's involvement, family structure, educational resources in the home, and the family's cultural and social capital all have effects on children's educational achievements (Buchmann, 2003).

There are several studies which have proposed educational resources in the home can be considered as a form of cultural capital measurement and can be related to educational success (Claro, 2008). They include reading material such as books and newspapers. Nowadays, technological changes – such as home computers – need to be considered when participating in computer-related activities (as stated in PISA, 2003).

Indeed, access to the internet at home is as significant as the number of children's books (Corbett, 2002). Thus, some authorities suggest that “technological capital” should be treated as a subsection of cultural, economic, and social capital in the digital age (Hesketh and Selwyn, 1999; Howard, 1992).

In 1998, Emmison and Frow tried to determine what skills and competencies for ICT use be considered as cultural capital. They assumed that if there is early exposure among families in the use of scientific instruments and machines, then children would have an advantage over traditional forms of competence in the fine art (Emmison and Frow, 1998: 42).

In 2003, PISA discovered that there was a correlation between academic attainment in most countries and ICT use at home. Old theorems cannot explain the relationship between lower home access of students to computers and the associated disadvantaged backgrounds. There are differences in usage depending on students' cultural and social capital outside of school. In fact, studies on cultural consumption posited that women who have high socioeconomic resources are more likely to engage in “highbrow” cultural practices (Bihagen and Katz-Gerro, 2000). Poor parents who spend excessive time watching television can be associated with children's leisure socialization activities, which lead to a negative impact on their school outcome and cultural capital (Bianchi and Robinson, 1997).

Therefore, there are reasons to consider educational ICT as a form of cultural capital. Nevertheless, there might still be critics opposed to this viewpoint and these shall be discussed in the next section.

Critics of the use of educational ICT

Information censorship and school library

Information censorship can be confined to ideas and facts that have been distributed among a

society in which there has been some form of dictatorship at some point in contemporary or ancient history. In the last century, censorship has been achieved through the inspection of films, plays, books, radio and television programs, news reports, and other forms of communication, one may alter or suppress ideas that were considered offensive or objectionable. One of the purposes of school libraries is to provide “equal and unhampered access to internet-based information resources on a global scale” (Hamilton, 2004, p. 5). However, what barriers are confronted? With reference to the research (Hamilton, 2004, p. 251), these obstacles are:

1. The digital divide: This issue is mainly caused by the fact that one needs to allow library users an easy access to information searches, more computers are required for internet use. The key to overcoming the divide is to have more resources allocated to school libraries' specific access requirements. Therefore, extra funding is required for it.
2. Financial barriers: The problem is somewhat related to digital divide. Libraries require more funds to acquire new computers and some cases, commoditized information is needed. Therefore, monetary explanation is indispensable for digital divide in different areas but not just material access. Lucre should be considered as the most fundamental encumbrance faced by school libraries.
3. Filtering and blocking of information: In general, there are several reasons for filtering and blocking information in different countries. These are for sociopolitical, religious, cultural, and social reasons (Feng, 2007). In school libraries, the main reasons for filtering and blocking are usually because of “pornography, hate speech, violent materials, and fringe ideologies” (Hamilton, 2004, p. 154). The most popular methods are content analysis and router blocking. The author thinks that it is not a trouble due to these genuine aspects only.

Moral panic and ICT education

In 1972, Cohen proposed “moral panic.” This occurs in a specific social group as a subculture of youth (Bennett *et al.*, 2008). Indeed, the public may have a specific perception from the news media that these subcultures are a threat to our societal norms

and values (Bennett *et al.*, 2008). Moreover, these groups always express their practices and attitudes in resounding language which will only amplify the apparent threat and will, therefore, be focused more intensively by the media. In such cases, the term “moral panic” is used as a way of describing the public discourse taken not actual panic among the population (Bennett *et al.*, 2008). In social science, the theory is used to explain although there is evidence to support the phenomenon; it lags public concern of the issue (Thompson, 1998). Similar cases using dramatic language show that there are generational differences and as a result, there is a call for essential and imperative changes to education. Furthermore, there are structurally strong boundary divides between the new generation and all previous generations (Bennett *et al.*, 2008). In 2001, Prensky showed that for teachers who do not change their practices, they are labeled “ineffective” and “lazy.” Therefore, “teachers, administrators, and policy-makers have every right to demand evidence and expect that calls for change be based on well-founded and supported arguments” (Bennett *et al.*, 2008, p. 13). In brief, a shift in present education system is needed to prevent moral panic caused by current digital natives.^[51-79]

Student’s unethical ICT usage

Usually, one may refer ethics to those moral principles which manage human beings’ behavior or the conduct of performing an activity. According to Berkowitz, there are seven ICT-related unethical issues: Digital hacking, issues concerning copyright, hate speech, piracy, digital addiction, plagiarism, and the identity theft of a person (Bell, 2002). However, the present study only focuses on three of them: Piracy, plagiarism, and hacking (Lau *et al.*, 2011):

1. Piracy (Lau *et al.*, 2011): This is referred to as “the activity of manufacturing unauthorized copies of protected material and with handling such copies by way of distribution and sale” (Sterling, 2008: p. 635). It is arguably the most serious of the problems since it is so simple task to copy software or music. The situation is only made worst as the expansion of internet allows people to more easily communicate and share files with each other (Wall, 2005). In 2004, Siegfried examined the attitude of students concerning piracy. He found that

students accepted internet music piracy and commercial software copying, which implied that they have no such sense of incorrect behavior.

2. Plagiarism (Lau *et al.*, 2011): There are two types of plagiarism. The first is academic theft of another person’s thoughts or writings without being properly attributed. The second references those who gain from someone else’s speech or ideas (Gibaldi, 2009). In 2007, Stephens *et al.* conducted a survey among students who revealed that they may prefer conventional rather than digital means of copying homework. However, they preferred to use digital methods when plagiarizing sentences. Researchers considered plagiarism as a social problem which is in fact an ethical-behavioral and legal issue.
3. Hacking (Lau *et al.*, 2011): From the InfoSec website of HKSAR, hacking means “illegally accessing other people’s computer systems for the purpose of destroying, disrupting, stealing files, or carrying out illegal activities on networks or computer systems.” In 2005, according to Yar, there are three explanations for teenage hackers. First, the adolescent could be in “a period of inevitable psychological turmoil and crisis” (Yar, 2005: p. 394). Second, it is possible that problematic family backgrounds such as parental neglect or family breakdown are a contribution factor. Third and finally, differential association theory shows peers’ subculture as a critical catalyst for teenage hackers.

Uncertain improvements in students’ education outcome

Whether educational technology can improve students’ academic performance is still up for debate. Some research such as Impact2 produced by Harrison *et al.*, 2003, reported that:

“The outcomes of initiatives are more evident in improvements in pupils’ achievements in ICT capability than in their application of this learning in other subjects” (Ofsted, 2004: p. 4).

However, there is a negative caution from the researchers’ who note that:

“In some subjects, the effects were not statistically significant and they were not spread evenly across all subjects” (Harrison *et al.*, 2003: p. 1).

Although it is hard to show educational ICT can improve students' school performance across all curricula, the academic consequence can be explained by Ajzen's theory. The theory discusses those conditions that may have effects about "the degree of congruence between people's attitudes and behaviors" (Chen, 2009). Specifically, the theoretical model is useful and "applicable to the changing situations we face in ELT" (Kennedy and Kennedy, 1996: p. 345). This means that the theory can be applied into English Language teachers' attitudes and behaviors and hence forecast students' outcomes. "Intentions and behaviors are a function of three basic determinants, one personal in nature, one reflecting social influence, and a third dealing with issues of control" (Ajzen, 2005: p. 117).

1. Personal in nature: This consists of two parts: How a human being evaluates the possible outcomes during the performance of a specific behavior, taking into the consideration a person's past experiences (Kennedy, 1996).
2. Reflecting social influence: Concerns one's perception of social influence to carry out or not to carry out a specific behavior (Ajzen, 1988).
3. Control beliefs: It includes one's perceived behavior control over a specific behavior (Ajzen, 1988). According to Kennedy and Kennedy, 1996, there are other factors which may override attitudes and result in certain types of behavior. It is different from the predictions of a study about attitudes alone. Simply put, there may be differences between what people have said and what they really did. In 1993, Wong found that there are powerful influences on our secondary school teachers in the implementation of a new Hong Kong curriculum, due to parent's anxieties and expectations concerning their students' examination results. Therefore, it was observed that the outside behavior controlling perception is the major obstruction for teachers when implementing their beliefs (Chen, 2009). This shows the relationship between behavior and cognition and can be used to explain why there is a difference between students' beliefs and their utilization of digital technology in their coursework (Cheon *et al.*, 2012). In other words, this tells one why there are abusing of ICT usage among students and can reduce uncertainly.

Although educational ICT has its drawbacks from the usage abuse, it is this author's opinion that one should still consider it as a form of cultural capital and it does have effects on students' learning outcomes. Indeed, cultural capital is used as the explanation for the relationship between students' educational outcomes and parents' socioeconomic backgrounds. If one wants to prevent misuse, one should help students solve problems that they face during study, parents and teachers' involvement is, therefore, necessary. The parents' interaction with children and teachers at home and in schools will be explored.

Epstein's model and cultural capital

One of the most famous parental involvement frameworks was created by Epstein. It is the most widely accepted and tested model in Western society (e.g. Barnard, 2004; Fishel and Ramirez, 2005; Hoover-Dempsey and Sandler, 1995; Hutchins *et al.*, 2007; McBride *et al.*, 2002) and is divided into six involvement types which has been described by Epstein (1992, 1995, 2001).

1. Parenting: To help parents establish home environments which promote children's learning and cognitive development?
2. Communication: To encourage communication between home and school for children's progress and school programs in both academic and non-academic issues.
3. Volunteering: Schools organize and recruit help from parents in variety schools' functioning.
4. Learning at home: Provide concepts and knowledge for families so that students can get help at home with homework and other curriculum-related matters.
5. Decision-making: Parents can take part in school's policy and management decisions.
6. Community collaboration: Through integration and identification services and resources from the community so as those strengthened school programs.

In fact, Epstein's model is not theoretical and cannot show the relationships between these six types (Ringenberg *et al.*, 2009). When wants to overcome the gap, Lee and Bowens (2006) suggested that Bourdieu's Cultural Capital Theory can be applied to those concepts like field, habitus, and cultural capital.

"Field" refers to a particular school, "Habitus" is one's individual's values; the lens where

the individual sees our world and responds accordingly; and how the field and habitus fit together determines the level of cultural capital the parent has.

Thus, if there is a great divergence between field and habitus, then there is a greater chance of misunderstanding, suspicion, and a devaluing of the individual will exist. The result is the individual becoming less welcome and hence less involved (Ringenberg *et al.*, 2009).

With reference to cultural capital theory and the results from Lee and Bowens (2006), there are two predictions: “Parents with greater cultural capital are expected to exhibit higher levels of parental involvement than parents who have less” (Ringenberg *et al.*, 2009: p. 86). To cite an example, volunteering is where parents with high cultural capital are expected to report more involvement than low cultural capital parents. Moreover, Lee and Bowen (2006) predicted that it is more likely for lower cultural capital groups to select those involvement types which are least beneficial in relation to student outcomes (Ringenberg *et al.*, 2009).

In Hong Kong, the situation is different. Most parental involvement is home based and with minimal interaction with the teachers (Pang, 1999). Hong Kong parents prefer monitoring the homework process and providing tutorial assistance for their children’s learning (Lau *et al.* 2011; Tam and Chan, 2009). Therefore, there is a need to promote parents’ direct and active involvement in school activities (Ho, 2003). In the early 1990s, the Hong Kong Education Department started to implement policies for promoting and strengthening the home-school partnership so that principals, teachers, and parents could have a better collaborative relationship (Pang, 2004). Subsequently, there was a shift in parent attitudes toward home-school cooperation and they began sharing more responsibilities with schools in the education of their children (Pang, 2011). If one needs to stimulate collaboration between school, parent, and community, this author believes that it is important to encourage an effective school-family partnership philosophy which has been described below:

1. Priority: The top priority for schools and families is to establish partnerships. Specifically, a consortium relationship should be set up between parents and teachers. This will result the best possible educational outcomes for children.

2. Planning: A planned effort is needed when wants to build an effective partnership between schools and families.
3. Proactive and Persistent Communication: The condition for effective partnerships is through communication between parents and schools so that “issues” are resolved in a timely manner.
4. Positive Communication Style: To enhance the best response between parents and teachers, the communication between them should be positive and should try to focus on strengths.
5. Personalization: Schools should communicate with parents specifically about their child’s successes, challenges, and needs to encourage parental response.
6. Practical Ideas: Practical and specific suggestions are useful for teachers and parents as a mean to improve children’s learning.
7. Program Monitoring: Benchmarks need to be set as a key part of the parent involvement action plan. The aim being to continually monitor what needs to be changed, what is working, and what barriers have been found.
8. Process: This is an ongoing process constructing relationships between schools and families. The objective should be to share responsibility and continue to become more effective.

Apart from Epstein’s model, there are possible parental influences on student’s home-based ICT use within the family social environment which contributes to children’s educational outcomes. This shall be discussed in details in the next section.

Parental influence within family

According to Yu *et al.*, 2012, they identify five influential categories for parents relating to their children’s home-based usage of computers: Digital skills, monitoring, control and guidance, and concerns.

1. Digital Skills: For those families with parents who have little technical expertise or interest in computers, informal advisor outside the immediate family is needed. They can provide advice to the individual child or to the whole family (Sutherland *et al.*, 2000).
2. Monitoring: Parents who have relatively high ICT skills are more likely to assist and monitor

their children in education which was one of their main concerns.

3. Control and guidance: Parents who can communicate effectively with their children and guide them closely will provide predominant controlling over how children allocate time for using digital technology. The result being that children will invest more time with learning activities using ICT when compared with other poor communication skilled households. This shows that there is a spiral effect between parents and the children's home computer usage. Therefore, parents who are more worried will monitor more, according to Yu *et al.* (2012).
4. Concern: A lack of a comprehensive understanding about how to get involved appropriately becomes one of the barriers for parents' desires to get involved with children's home computer usage. If a parents' control become ineffective and children refuse to communicate on the use of digital affairs, then parents become "worried outsiders" (Yu *et al.*, 2012).^[80-90]

From Yu's research, it is vital that the problems which arose are solved. Parents should not only be acted as regulator but also facility providers and motivators in children's home computer use. Thus, this study proposes a mediation philosophy designed to educate parents for abolishing children's abuse in ICT usage. According to Clark (2011), mediation should include the following strategies:

1. Restrictive mediation (or "rule making," Atkin *et al.*, 1991): Parents who engage in internet mediation may set rules for children prohibiting, viewing certain content or directly using the internet (Valkenburg *et al.*, 1999). There is a correlation between children socializing and social competence if children experience firm behavioral control from parents (Peterson and Hann, 1999). If the policy is implemented in too extreme a fashion, the result is a resistance from children against the strict parental rules (Nathanson, 1999). Children need to view the content with their peers (Nathanson, 2002).
2. Instructive mediation (evaluative/active mediation; Atkin *et al.*, 1991): Parents will discuss certain digital media contents with their children, either during or after use (Valkenburg *et al.*, 1999). One of the positive outcomes of

this is that young people's aggressive behavior or the cultivation of a skewed world view can be mitigated (Austin *et al.*, 1990). In addition, teenagers may acquire a higher ability to be sceptical about internet contents as well as promote more critical thinking and develop a better moral compass for aggressive thinking (Beck and Wood, 1993). Finally, a high level of conversational skill can reduce unproductive conflict and thus foster a more positive climate for children (Isaacs and Koerner, 2008).

3. Coviewing (Dorr *et al.*, 1989): This refers to the situation where parents and children use social media together, to share their experiences, but do not engage in any discussion about the content (Valkenburg *et al.*, 1999). Research shows that parents and children will feel closer to one another (Bryce and Leicher, 1983). Hence, children learn more about human relationships from the mediation (Dorr *et al.*, 1989).

In addition to the three mediation strategies mentioned above, this study adds participatory learning as another strategy. This concern plays learning-driven inquiry and free experimentation (Salomon and Perkins, 1998). In 1978, Vygotsky suggested that children can learn to develop abstract meanings.

Practically speaking, parents and children can have so-called "quality time" when using digital tools for more child-centered activities. Parents participate with their children together in browsing the internet, playing interactive games, and using mobile devices (Horst, 2009). Through the virtual environment of social network sites and wikis, all participants can contribute, participate, and collaborate (Gauntlett, 2011; Jenkins, 2006). Indeed, participatory learning tries to facilitate learning through media by sharing ideas, goals, and comments (Clark, 2011).^[91-89]

DISCUSSION – A PHILOSOPHICAL WAY OF HANDLING ICT USAGE

This study will now discuss the philosophy of educational technology and by extension the framework of the study. ICT has been gradually transformed from a technical subject into regular human activity. Moreover, it is not just a tool for learning but has an influence on pedagogy, the education curriculum, and policy. For example,

with reference to Yuen *et al.*, 2003, there are three types of schools. These are the technological adoption model, catalytic integration model, and the cultural innovation model. The aim of curriculum reform with ICT integration is to change matters so that they not only transform the technical but also the cultural (Cheng, 2009).

Digital capital as mentioned in the introduction is a way of both technological and cultural integration into our curriculum. Nevertheless, this leads to the dilemma: Can students benefit from the use of technology such as mobile chatting software? To answer this, knowledge of cultural capital theory is required, which can be used to explain the relationship between parents' socioeconomic backgrounds and their children's school performance. Certainly, there are critics to Bourdieu's philosophy such as with cultural relativism, idealism, objectivism, and subjectivism. Therefore, the theorem needs to be extended.

Thus, the question remains: Should one consider ICT Education as a form of cultural capital? Inevitably, high socioeconomic parents spend more time in "high-brow" cultural practices while poorer socioeconomic parents only spend their leisure time watching TV. This leads to bad academic results for children. There are points to remember about educational technology such as with information censorship and the school library, immoral digital usage by pupils, students' unethical ICT usage, and the uncertain relationship between educational technology and students' academic results. The intervention of parents and teachers is needed to avoid this poor behavior from students.

"What should be the interactions between parents, schools, and children in order to achieve a better academic outcome?" With reference to Epstein's model and Lee and Bowen's research, poor parental involvement with low cultural capital will certainly lead to a digital divide in education and hence educational inequalities. Therefore, an effective school-family partnership philosophy is required. This author believes that parent education is the most important factor among the six types of parental involvement in the school-family relationship. At same time, there are five categories of parental involvement within family and as a result it is important to teach parents about mediation theories so that the abuse of ICT usage can be eliminated between students and avoid negative academic performance.

The author notes that both school-family relationship and mediation philosophies are needed for low socioeconomic parents when "one feels puzzled about the meaning of what one is doing – its aims and purposes, the implicit values, the assumptions made about what is right or wrong, true or false, worthwhile or not" (Pring, 2015: p. 206).

CONCLUSIONS – A PARENTAL CHANGE IN CULTURE AND ATTITUDE

The purpose of this study was to find out whether the use of digital technology in education can have positive effects on students' school performance. The conclusion is: If one can encourage "positive and quality usage of ICT" (Yuen *et al.*, 2014:13) among children, then influence is assured. However, it is important that parents should have high cultural capital and involvement for the students' ICT usage at home. Parental participation in school activities is significant. To solve the problem, the author's suggestions are to educate low socioeconomic parents with both school-family and mediation philosophies so that they can have an affirmative culture and attitude of how to handle their children's ICT usage correctly. It means a change in parents' ideas, customs, social behavior, and manner in the foregoing implantation. In other words, parents should lead (or manage – take care about) their children's ICT usage in positive ways like passionate learning but not only allow them to employ ICT in entertainments. Hence, this will ensure a "positive and quality use of ICT" (Yuen *et al.*, 2014:13) among students and eliminate poor academic effects.

Certainly, there are also implications and recommendations for government and schools as depicted by Wong, 2015:

1. Government should assist programs that provided to parents and help to develop a stronger network for them on educating children through non-government organizations. There should be enhanced knowledge between them such as posting of public education materials on the web. More government subsidy will be needed for low socioeconomic children's after school activities.
2. Students' engagement with school can be increased from teachers by providing more play facilities such as sport equipment for them

to use as well as organizing non-academic funding support like student art exhibition and music shows. Government should assist by funding schools in these areas. Parents should also be educated about excessive knowledge learning, the activities employed to children and the influence these have on accomplishment and growth. They should also reward their children's good school performance and have regular discussions about school affairs. Parent-Teacher Association is a good example of this (Wong, 2007).

3. The government and NGOs should provide more talks and workshops about school-family partnership and mediation philosophies as well as their practices for parents. For example, there should be courses teaching parents how to set rules for children using ICT, technological skills for parents to actively mediate in children's ICT use. Parents' ICT training class should show the effects of parental school involvement as well as how parents should teach children about respect and moral issues, and how parents should communicate with children (Delaney, 2011). More funding is, therefore, needed for family resource centers to conduct previous classes and encourage parents to exchange ideas between schools and families (Grenfell and James, 1998).

This study finds that further research should be done in the family capital. This is a type of social capital which is related to the breaking down of the intergenerational cycle of disadvantages in social mobility (Gofen, 2009). In such a case, the problem of educational inequalities caused by digital technology would be solved completely.

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