Smart e-Learning Through Media and Information Literacy

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ABSTRACT

In the past decade, Thailand has been one of the pioneers to stipulate national Information Communication Technology (ICT) policy frameworks for the investment, development and implementation of ICT. The goal is to lead the country toward a knowledge- based economy and society. In this paper Strategy 6 of the ICT 2020 Policy Framework is addressed and questions are asked on whether providing ICT infrastructures in education is enough to achieve social equality, quality lifelong learning and create fair economic, social and cultural opportunities in Thailand. The paper also engages with the debates that rise when merging technology and education. A transmission model of learning, one based merely on traditional paper- based culture is juxtaposed with a Smart e-Learning model of learning where students and teachers interact transversally with technology and engage with internet and media culture.

When discussing the relationship between technology, education and development one must not fall into technological determinism. Bringing ICT to the classrooms is not a synonym for quality lifelong learning. We believe that a Smart learning plan of action must integrate Media and Information Literacy (MIL) skills with e-Learning and ICT because it is not enough only to teach the technical skills. One must also research the relationship between technology and user and teach about the role of ICT in transforming society, knowledge, culture and literacy. The OneTablet per Child project that became effective this year in Thailand will be used as a case study to follow the changes and transformations in learners' literacy skills and competencies.

In attempting to explain frameworks such as ICT, e-Learning and MIL, it is believed that an integrated approach that engages learning as a 3-phase journey can be utilized where ICT is envisioned as the departure point, e-Learning as the journey itself and MIL as the destination to be reached. The goal is to empower learners with the new literacy skills that will enable them to evaluate the quality of information, understand the functions of media, critically engage media content and effectively use ICT for self- expression.

1) Introduction

With the formulation of the *ICT 2020 Policy Framework* and the recent *OneTablet per Child* project, Thailand has shown much interest in Information Communication Technology (ICT) and its potential to lead the country toward a knowledge- based economy and society. However, there are still ongoing debates on which strategies to adopt in order to implement ICT in Thailand and ensure that it will be used to create a lifelong learning networked society. In particular, this paper zooms on *Strategy 6* of the ICT 2020 Policy Framework (ICT to enhance social equality). The aims of this strategy are to secure people's rights to access and make use of telecommunications services and information in order to create fair economic, social and cultural opportunities in Thailand.

The recurring debates on merging technology and education are also addressed. Many educators and parents take a protectionist stance (Kellner, 2007) when it comes to e- Learning and bringing technologies within the classroom. This stance exalts traditional print culture over digital and media culture and presumes learners to be incapable of negotiating media messages. Media manipulation and addiction are stressed more than learners' capacities to re-invent media culture and provide alternative or oppositional readings. In telling his experience of tablets use within the classroom, Chalermchai Boonyaleepun, president of Srinakharinwirot University clearly shows his protectionist stance. He declared, "Tablets used in our pilot project in Grade 1 are not accessible to the Internet. The students learn only content provided by the school. Schools (with students using tablets) do not need to have Internet access and there should be no concern that the tablets will be used for wrong purposes" (In Wilson, 2012). This protectionist approach to tablets does not make the technology different from the books (print culture) that schools have used until this day. The fear of the Internet denies the potential of the latter to become an interactive learning space. Not connecting tablets, thus, denying Internet use to children, will not solve the problems Thai people are facing in education, nor will diminish the fears and risks that exist when using new technologies. Giving tablets to children and preventing them from access to the Internet and media culture will annihilate the empowering potential of ICT in education and reiterate the highly contested transmission model of learning.

In the digital age it is unthinkable to maintain the same paradigm in education that has worked for the past generations. Children actively engage with media culture; therefore, the latter must be inserted within school curriculum and teachers must be trained to teach popular culture via the tablet. As Carmen Luke (1999) maintains,

> The media texts of popular culture that people are exposed daily, are the very texts that help shape their understandings of social inequalities and equalities, differently valued cultural resources and identities, and differential access to various forms of social power. Everyday media texts are therefore eminently suitable for teaching about social justice in contemporary cultural contexts. (p. 624)

A transmission model of learning that relies merely on "book culture" is unsuitable with the new generation of learners mostly because it does not teach them the skills and knowledge they will need in the world outside of the classroom. As an adjunct voice to the debates on e-Learning and ICT in education occurring in Thailand and in the world, this paper suggests Media and Information Literacy as a set of guiding skills for teachers and learners who engage new technologies and media culture in the classroom.

2) Integrating New Approaches in the Learning Environment

Strategy 6 of the ICT 2020 Policy Framework advocates for *smart learning* to achieve its goals but nor defines the meaning of the latter or provides skills and a plan of action to promote it in Thai society. Professor Dae- joon Hwang (2010) explains that "Smart" learning should be "a flexible learning intensifying competence of learners on the basis of changes in behaviour through leveraging Open Educational Resource, smart IT, and international standards". In this paper we argue that in order to fulfill some of the objectives of Strategy 6, an interdisciplinary Smart learning plan of action must be promoted.
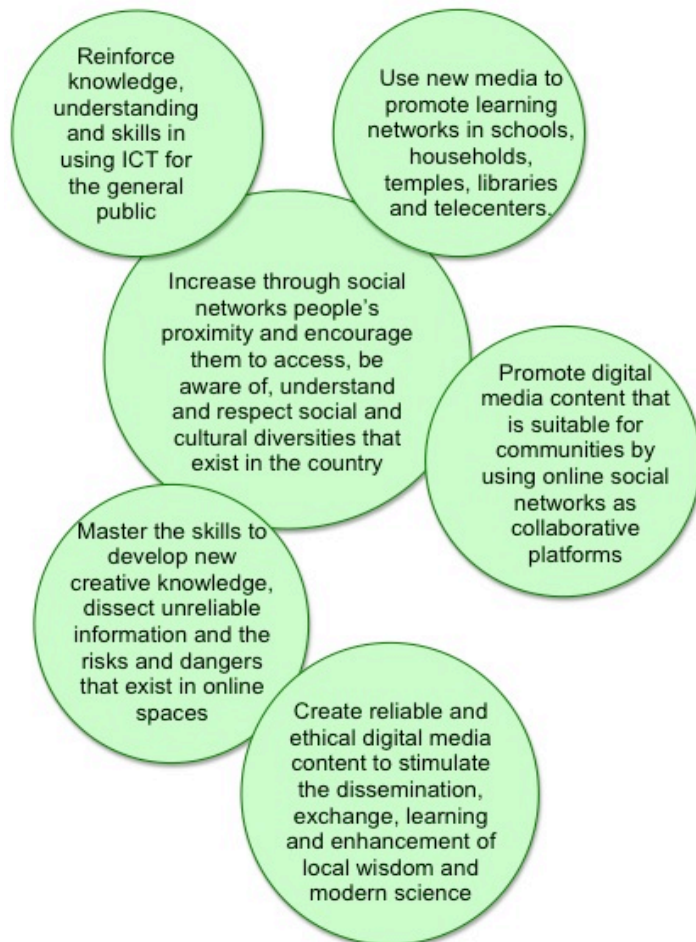
Figure 1: Objectives of ICT 2020 Strategy 6

Simply providing ICT will not teach learners the skills to cope with the convergent world they live in. One must also teach about the mediating role of ICT and its impact in transforming society, knowledge, culture and literacy. Moreover, the relationship between technology and user must be investigated, as well as the new ways one thinks, teaches, learns and connects with others. To reach the objectives outlined in Strategy 6, a Smart learning plan of action that integrates Media and Information Literacy with ICT and e-Learning must be endorsed.

2.1) The OneTablet per Child Project and the Need for New Literacies

The OneTablet per Child Project that became effective this year in Thailand aims at fulfilling some of the objectives mentioned in Strategy 6 of the ICT 2020 Policy Framework. Great attention was given in first place to the technological medium (the tablets). As a consequence,

the unpreparedness of teachers and the lack of skills to make the best use of ICT in education gave rise to divergent and disparate opinions concerning the pros and cons of bringing tablets within the classroom. Some have argued that giving tablets to young students is an imperative for those who are growing up digital and will become the new workforce of the country. However, many academics are still skeptic about the role that tablets will take in supplementing education. Maitree Inprasitaha, dean of education at Khon Kaen University brought up issues concerning the lack of e- books, software for learning and training programs for teachers. Other voices made it clear that before bringing tablets within classrooms, the 1.6 billion baht education budget must have been spent on curriculum development (In Khaopa and Saengpassa, 2011). Sompong Jitradab, a lecturer at Chulalongkorn University's Faculty of Education and member of the education policy reform, expressed his concern for young people using tablets to play games, with only a minority using them for learning.

Other concerns have been addressed in the study led by Lim and Soon (2010) on Chinese and Korean mothers' standpoint in relation to the adoption of ICT in the household. Chinese and Korean parents are very involved and committed to their children's education and academic achievement; success is strongly related to family status. This study has shown that in the digital era, parents are facing dilemmas when it comes to supervising school -work and setting rules and restrictions for ICT use in the household. Mothers acknowledged the educational value of new media, they were aware that ICT is critical for one's advancement in society and were attentive not to isolate their children from their peers and from popular culture. However, both parents and academics rarely acknowledge that learning also occurs when children play, experiment and create with new media.

In the twenty- first century mediated world, it is faulty to understand literacy as the mere ability to read and write. The concept of literacy has been expanded to embrace those social and cultural skills that people need when they engage with new media in the participatory culture. Henry Jenkins explains (2006) that these new skills (play, performance, simulation, appropriation, multitasking, distributed cognition, collective intelligence, judgment, transmedia navigation, networking, negotiation) do not suddenly sprout out from nowhere; rather, they find their roots in traditional literacy, research skills, technical skills, and critical analysis skills taught in the classroom. Indeed, they are the result of convergence and remediation. In addition, David Barton and Mary Hamilton (1998) maintain:

> [Literacy] is primarily something people do; it is an activity, located in the space between thought and text. Literacy does not just reside in people's heads as a set of skills to be learned, and it does not just reside on paper, captured as texts to be analyzed. Like all human activity, literacy is essentially social, and it is located in the interaction between people. (p. 3)

As such, it is anachronistic in the digital era and now that tablets have been given to students to limit teaching to traditional literacy skills, book culture and the classroom. Smart e-Learning through play, social interactions, experience, dialogue, participation and sharing must be embedded in school curriculum.

3) Understanding Frameworks

Embracing smart e-Learning presupposes a shift in people's traditional view of technology to an understanding of the democratic potential of ICT in education. Despite the fact that no

universal and fixed definition of ICT, e-Learning and MIL exists, this paper acknowledges that explaining the three frameworks and their integration is an important step to make the shift happen. To better understand the necessity for integrating MIL with ICT and e-Learning, we will refer to Anderson's (2010) vision of e-Learning as a three- phase journey. While ICT provide the vehicle to embark for the journey, e-Learning is the moment where learners and teachers interact with each other and with culture and through MIL skills engage problem-solving as teamwork. Finally as the destination to be reached, learners are encouraged to bring into the world the skills acquired during the e-Learning process and collaboratively create, innovate and invent. For smart e-Learning to occur, the three frameworks must be integrated.

3.1) Information Communication Technology (ICT)

Hamelink (1997) envisions ICT as the ensemble of communication technologies that can:

> Process different kinds of information (voice, video, audio, text, data) and facilitate different forms of communications among human agents, among humans and information systems, and among information systems. These technologies can be further subdivided into capturing, storing, processing, sharing, displaying, protecting, and managing technologies. (cit. in Chowdhury, 2000, p. 6)

This framework is particularly useful in that it displays the ways in which ICT (as facilitators) are the departure point of Anderson's vision of learning as journey. When discussing the relationship between technology, education and development one must not fall into technological determinism and assume that bringing technology to the classroom will annihilate the existing digital divides and social and economic disparities. ICT have indeed revolutionized the ways in which people gather, process, exchange and display information; however, without the integration of skills and practices that critically scrutinize the social relationships that bring these technologies into existence and without fostering a deeper understanding on the politics of meaning, how knowledge is produced and transmitted, by whom, for which interests and to which audiences, the potential of ICT to fulfill quality lifelong learning and social equality will be used only partially.

3.2) e-Learning

E-Learning is envisioned by Anderson as a journey; the moment where through ICT, training and horizontal interactions learners may become familiar with the skills that will allow them to become critical cultural readers and producers of culture. Elliott Massie explains:

> E-Learning means more than digital on- line transmission of knowledge, or computer-based training through the Web. The "e" in e- Learning refers to two essential components: the experience of learning as well as the electronic technology. The meaning of e- Learning includes both the technology and the type of learning.

This definition reinforces the importance of the relationship between medium and user, communication infrastructures and content, and of valuing the experiential and participatory dimensions of learning. Professor Rob Koper (2004) perceives e-Learning as the organization of learning networks for lifelong learning where learners are connected both technologically and socially to other human beings and to the information that they exchange. However, having the technologies that allow to access resources and engaging in on-line interactions is not enough. As Yam San Chee maintains, "simply enabling ready access to pertinent

information, even instructional information, need *not* necessarily entail learning or education. Overcoming the difficulty of access via technology only solves the easy part of the education problem. Achieving learning is a harder challenge" (cit. in Shih, 2004, p. 296). Media and Information Literacy trainings must be brought within the classroom because using ICT to teach is just one aspect of the e-Learning process. Skills are needed to teach about the ways ICT shape and change the knowledge that we produce, the new social relationships that spring out from e- Learning, new identity formations, and the changes in language and literacy practices brought by new media.

3.3) Media and Information Literacy (MIL)

UNESCO (2011) uses the term *Media and Information Literacy* to recognize the importance of locating and evaluating the quality of information, understanding the functions of media, critically engaging media content and effectively using information communication technology for self- expression.

The following figure maps out the skills of Media and Information Literacy and the outcome of their merging:
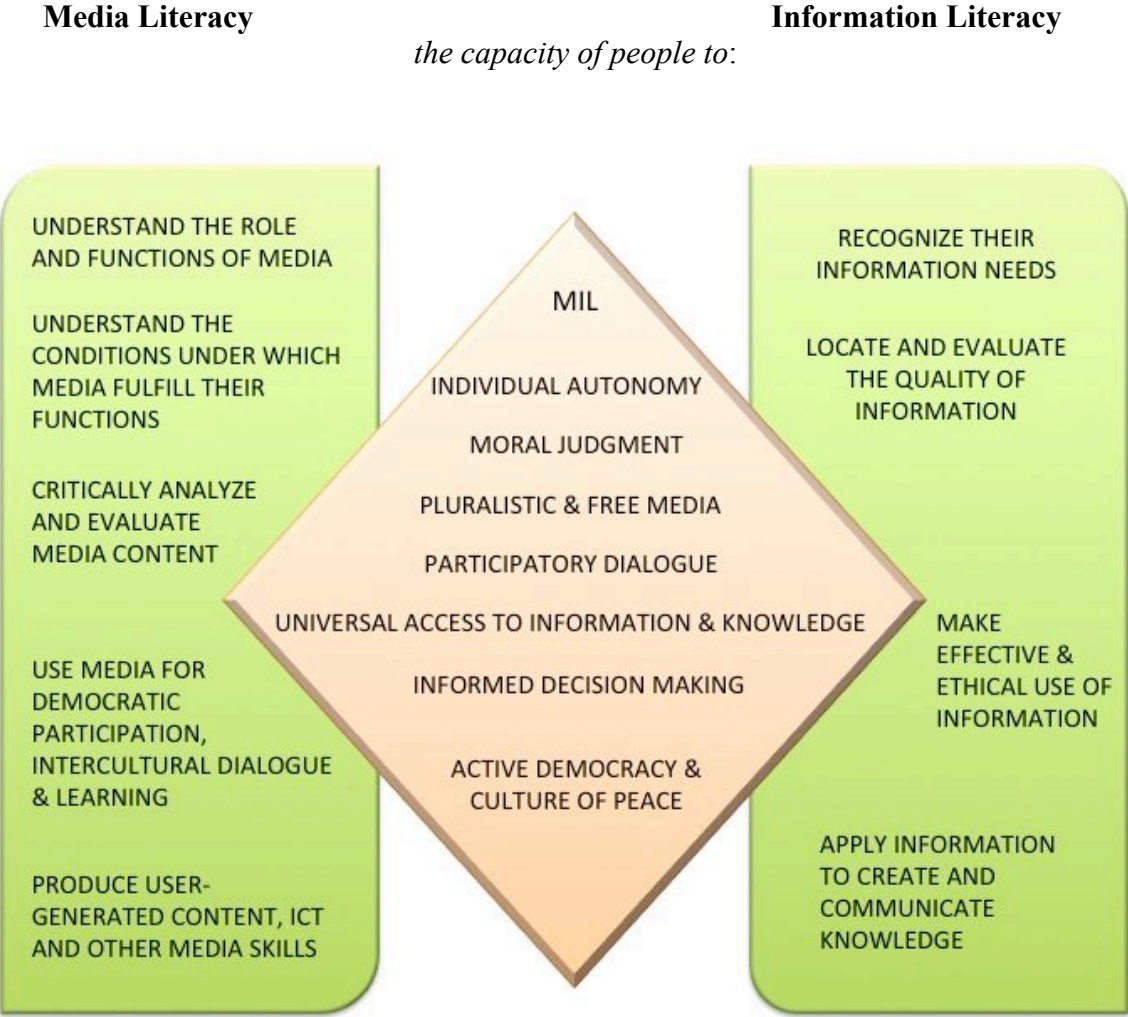
Media Literacy   **Information Literacy**

the capacity of people to:

UNDERSTAND THE ROLE AND FUNCTIONS OF MEDIA

UNDERSTAND THE CONDITIONS UNDER WHICH MEDIA FULFILL THEIR FUNCTIONS

CRITICALLY ANALYZE AND EVALUATE MEDIA CONTENT

USE MEDIA FOR DEMOCRATIC PARTICIPATION, INTERCULTURAL DIALOGUE & LEARNING

PRODUCE USER-GENERATED CONTENT, ICT AND OTHER MEDIA SKILLS

MIL

INDIVIDUAL AUTONOMY

MORAL JUDGMENT

PLURALISTIC & FREE MEDIA

PARTICIPATORY DIALOGUE

UNIVERSAL ACCESS TO INFORMATION & KNOWLEDGE

INFORMED DECISION MAKING

ACTIVE DEMOCRACY & CULTURE OF PEACE

RECOGNIZE THEIR INFORMATION NEEDS

LOCATE AND EVALUATE THE QUALITY OF INFORMATION

MAKE EFFECTIVE & ETHICAL USE OF INFORMATION

APPLY INFORMATION TO CREATE AND COMMUNICATE KNOWLEDGE

Figure 2: *Media and Information Literacy Framework*

The importance of including Media and Information Literacy skills within the discourse of e-Learning and ICT development and implementation is due to the fact that "we are moving away from a world in which some produce and many consume media, toward one in which everyone has a more active stake in the culture that is produced" (Jenkins, 2006, p.10). Therefore, the widely stressed importance of learning the technical skills on how to use ICT must be equated to the importance of teaching how through those technologies learners may become critical consumers of media and information and responsible cultural producers. MIL is not only part of Anderson's journey, but also the destination to be reached. The goal is to encourage people to fully be aware of their rights of free expression, defend their access to information, critically evaluate content, participate in decision- making processes and make their voices be heard. The "e" –learning process must require learners to engage with the new literacies available to them in the digital culture and expand their critical consciousness to take action within the world.

4) Why do We Need Media and Information Literacy?

One of the promises and intentions for bringing ICT within the classroom and establishing e-Learning programs is to diminish the digital divisions that exist both between and within countries. The Organization for Economic Co- operation and Development (OECD) defines digital divide as " the gap between individuals, households, businesses and geographic areas at different socio- economic levels with regard to their opportunities to access information and communication technologies and to their use of the Internet for a wide variety of activities" (2001, p.5). This definition draws attention to two related aspects of digital divisions –*access* and *use*. Strategy 6 of the ICT 2020 Policy Framework proposes to provide and distribute equitably information infrastructures across the country as one solution to deal with the issue of digital divide. In line with the framework, Thailand has launched the OneTablet per Child project equipping schools and primary school Thai students with tablet PC's and free WiFi. This is indeed an important initiative for the country; however, one must not ignore the fact that more than 2000 schools without adequate facilities and electricity and whose teachers are unable to make use of these technologies are still part of the digital divide and were not eligible for the OneTablet per Child project. Monitoring the project closely and ensuring that tablets will be brought to every strata of the population is a priority for Thailand. Not of lesser importance, children equipped with the technology must be trained with the necessary skills that will allow them to participate fully in public, community and economic life.

As it was argued by the International ICT panel (2007), "the digital divide should no longer be defined only in terms of limited access to hardware, software, and networks, but rather, one that is also driven by limited literacy levels and a lack of the cognitive skills needed to make effective use of these technologies". Indeed, one can no longer limit the discussion to issues of access. This paper suggests that Media and Information Literacy trainings must be adopted by the ICT 2020 policy framework as a strategy to face the issue of digital divide understood as limited literacy levels and lack of skills in how to effectively use new media and ICT. Merely paying attention to people's access to basic ICT services will not reduce socio- economic inequalities. A Media and Information Literacy framework that connects the social relations and exchanges occurring in virtual communities and the economic, political, social and cultural dimensions of real life will be key in building a united yet heterogeneous active and informed citizenry.

5) Conclusion

As it is outlined in the ICT 2020 Policy Framework, Thailand is increasingly opening its doors to implement ICT to foster a stronger economy, social equality, smart learning and environmental friendly practices. Strategy 6 of the framework emphasizes the importance of reaching social equality and decreasing through ICT in education and e-Learning the strong digital divides that exist in Thai society. This paper argues that providing information communication technology infrastructures is just the first step to reach the framework's goals. During the e- Learning journey, teachers must provide learners with Media and Information Literacy skills that will enable them to engage with knowledge in an interdisciplinary way. Using moral judgment when engaging new media, being critical about information, scrutinizing the systems that bring knowledge into existence and participating in collaborative learning networks will both prepare learners to enter the workplace and respond to the demands of the economy, and allow them to become informed decisions' makers and builders of an active democracy and culture of peace.

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