Managing Children's Environment 24 Hours: The Case of Thai Children and IT

Definition:

Information Technology (IT) refers to the use of computer technology to manage data and information. The discussion of IT in this document covers computers, notebooks, tablets, mobile phones, smart phones, electronic or computer games, as well as future equipment or technology for managing data and information.

Significance of Problems, Current Situation and Trends

1.	Information Technology is very important in today's society and is likely to become even more important. IT is easily accessible 24 hours a day, and has become a part of the daily lifestyles of children. Children use computers at school, they use communication devices, and they use tools for entertainment such as computer games and online games. They can communicate online by accessing the Internet[*] on personal computers, portable computers (notebooks and tablets) or even mobile phones. A large number of children spend many hours a day using IT media, longer than the hours they spend on other play activities or studying, or even more hours than they spend sleeping. This leads to health detriments and many other negative effects, especially when the habits turn into computer game addiction or Internet addiction, or if they gain access to forms of IT media which are particularly harmful to children.

2.	In 2011, a survey by the National Statistical Office[1] found that out of 62.4 million Thais aged 6 and above, the 6-14 age group had the highest rates of computer use (71.9%), followed by the 15-24 age group (58.8%). The highest rates of Internet use were found in the 15-24 age group (51.9%), followed by the 6-14 age group (38.3%).

3.	Thai children spend a lot of time playing computer games. 1) Sirichai Hongsanguansi and his research team[2] studied the gaming behaviors of high school students (2003) and found that 85% had played computer games, 24% played more than 4 days a week, and 11% played every day. The majority of these young gamers would play for approximately 3 hours per session. In 2003, the Bangkok Poll Center[3] conducted a study on the time spent gaming among youth of ages 10 and above in the Bangkok area and found that 38% played 3-4 days per week, 26% played 5-6 days per week, and 18% played every day. Of all the child gamers, 54% played for 1-3 hours maximum per session, 31% played for 4-6 hours per session, 6% played for 7-10 hours per session, and 3% played for more than 10 hours per session.

4.	That is why online gaming businesses in Thailand which target mainly children and teenagers grow very rapidly. Today, kids can connect to online gaming networks via their computers, mobile phones, and electronic gaming devices. From 2004 to 2008, the market value of the online game industry in Thailand[4] increased at an average of 19% per year, a total increase of 2.16 billion Baht in a period of five years, reaching a market value of approximately 3.7 billion Baht in 2008. Reports from IT companies in 2010[5] showed that user accounts for online games increased from 1,651,211 accounts to 4,502,516 accounts. Some contributing factors are

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[*] The Internet is a large global computer network. Users are able to communicate with each other in many ways, such as via electronic mail (e-mail), web boards or forums, and can search for different types of information, as well as copy data and programs (such as downloading games or music). The Internet is a channel for social networking.

1) faster Internet and increased areas of accessibility, with wireless systems such as Wi-Fi/3G that allow children to access the Internet anywhere anytime; 2) games designed for specific gender or age groups are especially captivating to those target groups; 3) games designed so that players can connect with a large number of other players through online networks; 4) convenient services such as game shops similar to Internet cafes, found all over the country—in big cities, villages, and rural areas. Sales promotions have made pre-paid Internet cards easy to find.

5.   Computer game and Internet addiction in Thai children is a serious problem which has only worsened over the years, and is likely to keep getting more severe. The current estimate of game and Internet addiction rates in school children are at 10-15%.[6] There is a likelihood that in the year 2013 the American Psychiatric Association will classify "computer game addiction" and "Internet addiction" as conditions of mental illness,[7] diagnosed according to the following 4 characteristics: 1) spending many hours at a time on computer games or on the Internet, resulting in reduced motivation to work; 2) having to keep increasing hours of use, increasing the complexity of the games, and increasing the capabilities of the electronic equipment used; 3) the inability to stop playing: suffering frustration, uneasiness, and stress if unable to play or stopped or prevented from playing, or becoming angry and exhibiting harmful behavior when prevented from playing; and 4) having suffered adverse effects of excessive gaming or Internet use, such as negative health effects, isolation from one's family or social circle, or negative behaviors such as lying, stealing, aggression, skipping school, or running away from home.

6.   There are numerous negative effects from addiction to computer games or the Internet, which include physical, mental, and developmental issues, injuries to the joints and ligaments leading to joint pain, muscle tension, Trigger Finger, blurry eyesight, and headaches. When children don't get enough exercise, miss out on opportunities to learn other activities, and develop an aversion towards schoolwork, they develop a personality of isolation, which makes them vulnerable to abusive practices, physical harm, or sexual exploitation. There have been reported cases of death resulting from extensive gaming.[8]

7.   This year (2010), the Thai government issued a policy to procure computer tablets for schools. In a pilot project, 800,000 first graders were given tablets to use. Providing advanced IT tools for children from a young age may have its benefits, but it also poses a great risk of leading to the problems mentioned above, especially if no importance is given to helping these children build the immunity they need. Further, studies have found that most parents are happy to leave their kids at game shops. When parents of children aged 4-5 are too busy to take care of their children, they feel that leaving them at game shops is safer than letting them run around outside.

8.   Because most people still do not realize what potential dangers can arise from excessive gaming and Internet use, preventive measures and rehabilitation of children with addiction to gaming will require raising greater awareness. Parents and those who work closely with children, such as teachers and child care personnel, need to become more aware of the issues at hand.

Current situation and trends in other countries

9.   In the U.S., the American Academy of Pediatrics' systematic compilation of data[9] from a large body of research led to progress at the policy level.

9.1   In 2010, studies indicated that American children used the Internet for up to 7 hours per day on average, which was more time than they spent on any other activity. Also, excessive time spent on the Internet correlated with problems with schoolwork, attention deficit,

sleeping and eating disorders, and obesity. IT media often contains violence, sex, and drugs and alcohol, which can influence the behavior of children. Over 2,000 studies have shown that aggressive behavior in children correlates with exposure to media with violent content.[10, 11] Similarly, premature sexual activity in youth also correlates with their exposure to media with inappropriate sexual content.[12, 13]

9.2   It is recommended that parents should 1) keep all access to electronic media away from children under 2 years of age; 2) allow children over 2 years old no more than 2 hours of exposure to electronic media per day; 3) set up the home environment to accommodate "computer free zones", especially in the bedroom or dining area; 4) filter appropriate content for children and encourage them to do other activities such as playing outdoors, using paper media such as books and nursery tales, or other play activities which enhance creativity.

10.   The People's Republic of China has the largest base of Internet users in the world, with over 457 million users. In 2005, Chinese government networks and various media networks proposed a measure to reduce game addictions—programming the games to stop after some time or preventing the player from scoring more points after 3 hours of use—but they faced too much resistance from game developers, distributers, and users. After attempts to reach an understanding with the public, in 2007, the government settled on imposing the regulations only on children and youth under 18 years of age.

11.   South Korea has approximately 20 million computer game users. In 2006, 30% of users were under 19 years of age. In the 9-16 age group, 2%, or approximately 210,000 people underwent treatment for addiction to computer games. Within that number, 80 of them were prescribed psychiatric drugs, and 20-24% were admitted as in-patients. 1,043 personnel were trained as treatment counselors in 190 hospitals.[14] Schools adopted new preventive measures[15] such as teaching self-control and communication skills, giving children more time to talk to their parents or teachers, promoting other activities such as sports, and making the environment less conducive to game access.

12.   Brazil and Germany have put a ban on games with violent or sexual content for children under the age of 18, prohibiting their sales and online services.

Relevant Laws, Rules, and Regulations

13.   There have been many laws and regulations relating to the topic "Thai Children and IT," which have been passed and supervised by many different departments under different ministries: 1) Film and Video† Act, B.E. 2551 (2008) (such as ministerial regulations on the permission to start a video store business); 2) Public Health Act B.E. 2535 (1992) (such as ministerial regulations which determine the rules, methods, and measures in controlling business areas that pose health risks); 3) Commission of an Offence relating to Computers Act, B.E. 2550 (2007); 4) Child Protection Act, B.E. 2546 (2003); 5) Copyright Act B.E. 2537 (1994); 6) Gambling Act B.E. 2478; 7) Export and Import of Goods Act B.E. 2522 (1979); 8) Customs Act B.E. 2469 (1926).

The Role of Important Stakeholders and Procedures in Thailand

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† Video: A material containing images or images with sound, which can be projected as a continuous motion picture, such as in the format of games or karaoke videos (according to the Film and Video Act, B.E. 2551 (2008).

14. In Thailand, problem solving efforts have started in many sectors in the past 8 years, namely:

14.1. The cabinet set up the "Committee for Safe and Creative Media" in 2007, with the Prime Minister as chairman of the committee, the Minister of Culture as vice chairman, and the Ministry of Culture serving as the secretariat. The committee was responsible for integrating cooperation from different departments from every sector in efforts to "eliminate harmful media and expand positive media." The committee has worked to improve laws regulating media so that they are up-to-date and has set up the National Safe and Creative Media Operation Center. Important achievements by the committee include: 1) driving strategies in 13 pilot provinces; 2) setting up a plan for investigation and elimination of inappropriate media; 3) setting up the National Safe and Creative Media Operation Center, with a website created for a system of managing calls for action from the Culture Hotline; 4) pushing the draft of the Safe and Creative Media Development Fund Bill; 5) pushing for the revision of two media laws: The Printing Act, B.E. 2550 (2007) and the Film and Video* Act, B.E. 2551 (2008). One of the proposed rules submitted to this committee for consideration was the ranking of appropriateness of printed media, designating Level 2 (๑๒+) media as media appropriate for teenagers aged 12 and above. Positive media should not contain realistic or hyper-realistic imagery, or violent or sexual content. In June 2012, an adjustment was made to set up 3 subcommittees, namely: The Subcommittee for the Promotion of Safe and Creative Media, the Subcommittee for Developing and Advocating Strategies for Safe and Creative Media, and the Provincial Subcommittee for Safe and Creative Media.[16]

14.2. The Ministry of Culture is responsible for setting standards for inspections and carrying out inspections of video production houses. The ministry has consistently promoted the "Clean Game Store Project" since 2008 to promote and encourage game shop owners to take part in social responsibility by turning their game shops into informal education areas which are safe and enriching environments for children and youth.

14.3. The Ministry of Public Health has set up the "Center of Game Addict Prevention" at the Ratchanakarin Institute of Child and Adolescent Mental Health in May 2004, with the objectives of 1) rehabilitation and prevention of game addictions for children and their families and 2) academic development for the dissemination of knowledge to the public and staff involved, and production of a manual, "Program for the Improvement of Quality of Youth and Family in the Cyber Age."

14.4. Participation of the Ministry of Education and Education Institutions:

1) Siriraj Hospital Faculty of Medicine, Mahidol University has collaborated with the Ministry of Culture and created the website www.HealthyGamer.net, connected to the Ministry of Culture website to serve as a mechanism for knowledge and immunity building for the purpose of solving game addiction problems in children.

2) This year, the Ministry of Education has given out computers in the form of tablets to first grade students throughout the country, following a policy issued by the government. This has been a concern for many; academics, parents, teachers, academics in education administration, and pediatricians are worried about the possible negative effects which still lack

prevention measures and question what the developmental effects would be for children at that age.

3) A research team from Srinakarinviroj University[17] has conducted a pilot study project on the integration and use of computer tablets for elementary school education, following the 1st stage government policy. The study was funded by Office of the Basic Education Commission and conducted on 1st and 4th grade students in the second school term of Academic Year 2011 (January-March 2012) in 5 schools in Bangkok, Lampang Province, Phang Nga Province, Khon Kaen Province, and at the Prasarnmit Demonstration School. The duration of the study was 6-7 weeks. It was found that the use of tablets was probably not worth the price because it could lead to health problems, ethical problems, and lack of responsibility. Also, the Internet was not so permitting and there weren't enough teachers who were ready to use them. The research team recommended that the government revise the policy to start with 4th graders, and not to give everyone tablets. The team provided the government with 5 recommendations: 1) there should be a model scheme for giving out tablets, with the benefits reaching all parties involved; 2) the content should be developed so that it is better than learning from books; 3) staff should be recruited to help teachers with technical issues; 4) the tablets should be given to 4th graders before 1st graders; and 4) the tablets do not need to be given to every student.

14.5. In many areas, many self-run communities have been set up to handle game addiction problems in children.

14.6. Rehabilitation services for child game addicts and counseling for parents can be found in many areas, with participation from the Ministry of Public Health, the Ministry of Education, the Ministry of Culture, etc.

14.7. Networks of the civil society and business sectors have been carrying out a lot of this type of work; for instance, the IT Watch (Mirror Foundation), the Facebook Association of Game Addicts, the Family Network Foundation, various networks of parents of school children of different schools, children and youth councils, the Coordinating Center for Media for Children and Youth Well-Being Region…, the Thai Internet Shop Service Association, and various game and Internet shop owners' clubs in different provinces, etc.

14.8. The government and private sectors created (and gave service) software to filter inappropriate games and websites, monitor online computer use time, and save data so that it can be checked and used. Some examples are the Sai Jai Program and ICT Housekeeper program.

14.9. The Thai Health Promotion Foundation (Thai Health), by way of the Partner Networks of Media for Youth Well-Being, has been working to promote creative media for children and youth, with the main strategies being to improve the quality and channels for positive media for children, to promote and push the policy mechanisms involving beneficial media for children, to create a children's media network and mechanisms in the region, and to improve life skills and media literacy in children, youth, and their families, which includes media for children and IT such as 1) The Children's ICT Media Literacy Project and the Internet Foundation for the Development of Thailand, 2) the IDEA – IDOL media literacy project, which drives the main idea of "keeping a close watch and awareness of media" through activities, 3) a project to develop mechanisms for public communications for media awareness in children and

youth in the Northeastern region; 4) the Youth Idea Action for Change media literacy project, and 5) the "Immunity for Beneficial Media" Project.

Problems and Solutions

15. The mentioned problems with "Children and IT" are still getting more severe.

15.1. The causes of the problems come from various different factors, including the children themselves, family, school, the environment, government action, and the lack of enough databases and knowledge appropriate to Thailand. There needs to be multi-disciplinary nation-wide action in gathering academic information, research, knowledge, legal procedures, and on the responsibilities of different sectors involved. This should be completed within the year 2013, leading to a direction in which to proceed, and an integrated way of following up on the results. Dissemination of information and awareness is needed for the government, private sector, families, children and youth, as well as consistent efforts.

15.2. In solving the problems, the important driving force should come from communities and local areas, with support from the academic sector, the government sector, the private sector, and entrepreneurs. Problem solving should happen in an integrated way, with participation from the sectors involved, and there should be mutual understanding between the government and the public so that all participants are aware of their roles and responsibilities.

15.3. Management in preventing and solving the problem of game addiction in children is still not complete and inclusive enough, and the types of service and methods still need development. There has been a proposal to include the controlling and setting of time limits on game use by children at game shops in the Ministerial Regulation on Permission and Operation of Video Shops B.E. 2552 (2009), but it hasn't been successful yet due to the lack of consistent follow through. In practice, there are still a lot of problems in the legal measures for controlling and monitoring the computer game and Internet businesses.

15.4. The Computer Crime Act, B.E. 2550 (2007) requires that owners of computer games shops and Internet cafes keep a detailed record of information on computer users: first name and last name, age, ID card number, time of use, and names of programs and websites used. However, this law has not been seriously enforced due to the lack of technology, funding, and supporting incentives. At this point, the Ministry of Culture and the private sector have agreed to urgently develop the information system in order to store this information.

16. To prepare elementary schools to let children use computers according to government policy, there should be a fostering of collaboration of the various parties involved, namely the children themselves, schools, teachers, and parents. There should be instructions and advice for tablet users in order to maximize their benefit and prevent possible negative consequences. Also, there should be close monitoring and assessment of the results of their use.

17. Because children and youth are directly affected by the problems, they should have a role in the prevention process—they should be able to develop enough media awareness and know how to protect themselves from the dangers of IT. The leadership core for care of children and youth should be improved in order to broaden the results in communities and in society. Children should also play a part in calling for games, Internet, and game shops that are beneficial to them. They should be involved in taking caution and reporting problems; they should receive the help they need to build on their knowledge so that they can create media such as games or content in the IT world that is beneficial to them and suits the context and needs of children.

Issue to be considered by the National Health Assembly:

Requesting the National Health Assembly to consider Document Assembly 5 / Draft Resolution 4

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