



# The 2<sup>nd</sup> INTERNATIONAL SEMINAR ON EDUCATION TECHNOLOGY



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The 2nd INTERNATIONAL SEMINAR ON **EDUCATION TECHNOLOGY** 



# THE 2ND INTERNATIONAL SEMINAR ON EDUCATIONAL TECHNOLOGY 2016

# Conservation Education in the Era of Innovation and Technology

Auditorium Unnes, Sekaran, Gunungpati, Semarang, Indonesia 25th May 2016

> Organized by: Postgraduate Program Semarang State University

In Collaboration with: University of Muhammadiyah Semarang Sultan Agung Islamic University

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## Foreword

Technology advancements provide great benefits to the lives and living. Everything becomes easier and practical, while works could be more efficient from the aspect of time, money and manpower. On the other hand, unresposible technologies could also cause damages to the environment, neglection of the genuine social and cultural values, and even could affect human character. Therefore, conservation ideas and efforts are very urgent to safeguard the impact of destructive technology.

The 2<sup>nd</sup> International Seminar on Educational Technology (ISET) is an international seminar and a scientific collaborative forum organized by the Postgraduate Program of Semarang State University in order to celebrate the 51<sup>th</sup> Dies-natalis of Semarang State University and the 19<sup>th</sup> Anniversary of Postgraduate Program. ISET invites researchers, practitioners of industrial sector, public and private stakeholders, educators from various fields come from different countries to exchange and share knowledge. More specifically, 2<sup>nd</sup> ISET is expected to provide acceleration of technology and innovation, progression of industry and economic growth, solve multidimensional crisis, and enhance education reformation.

#### Theme

### **Conservation Education in the Era of Innovation and Technology**

Topics of interest for submission include but are not limited to:

- 1. Development of new and environmental friendly technology and engineering, bio and nano technology, bioenergy
- 2. Impact of technology emergence to environtment and public health, medical technology, pharmacetics, health and safety
- 3. The role of education in internalization of consevation values/insight, including: education management, administration, education technology, curriculum, teaching and learning approach, evaluation and assessment method.
- 4. Conservation of arts and culture, include: traditional ornamentation and crafts, performing arts, fine arts and sculpture
- 5. Creative economy based on local potential and wisdom in efforts to increase competitiveness in the era of Asean Economic Community (AEC)
- 6. Development of human resources and capital, vocational and career education, entrepreneurship, technopreneurship, and cyberpreneurship
- 7. Information and communication techno-logy, language studies, oral tradition
- 8. Natural Science, Social Science and Humanity

# Welcome from the Rector of Semarang State University

I take great pleasure in welcoming you to 2<sup>nd</sup> International Seminar on Education Technology (ISET) in Semarang. The seminar is conducted in the context to 51<sup>th</sup> years Semarang State University and 19th Postgraduate Program anniversary.

Seminar is the right place to enhance our academic quality and awareness on issues related to "conservation" as one of our vision. It will be privilege for me to open this seminar today, where all researcher, expert, and academics sit together for knowledge sharing and discussion. The issues of the seminar is in line with the vision of Semarang State University as a conservation university, not only for environment issues, but also in character building.

Conservation values can be proliferated by the awareness to the cultural heritage, and in turn, can be developed by embarking from conservation and local values. Therefore, this seminar will give a great contribution to our effort to proliferate the cultural preservation as an integral and significant part of our national identity.

I extend my gratitude to all the key speakers for attending, and the ISET committee for their efforts to organize this prestigious event. I wish all the speakers and participants of this International Seminar could get the best benefit of this special event.

**Prof. Dr. Fathur Rokhman, M.Hum.** Rector of Semarang State University

## Welcome from the Director of the Postgraduate Program

Postgraduate Program of Semarang State University is intends to enhance the academic atmosfeer through seminars. At least 5 seminars national and international are conducted every year. The 2<sup>nd</sup> International Seminar on Education Technology is a special seminar organized to celebrate the 51<sup>th</sup> anniversary of Semarang State University and . I am very pleased to provide some introductory remarks for the Program Book of the seminar.

I wish to thank the invited speakers for their great attention in sharing their knowledge, and also to the participants for attending the seminar. I would also like to congratulate the committee for the hard work, thoughts, and time dedicated to this seminar.

With more than 800 participants, the seminar examines issues concerning the education in the era of technology., there will be a stronger bond amongst academics, professionals, teacher, students especially those with the interest in education. Postgraduate Program of Semarang State University will always play its significant role in mediating this important task.

I wish you all a wonderful seminar.

**Prof. Dr. Achmad Slamet, M. Si.** Director of Postgraduate Porgram Semarang State University

# Welcome from the Chair of Organizing Committee

The year 2016 is declared by Unnes as the Year of Innovation Acceleration, indicate commitment to technology advancement. However, as the university of conservation, Unnes is also concern about embedding the conservation values.

After the great success ISET in October 2014, we are coming back with the 2<sup>nd</sup> ISET 2016, with the theme Conservation Education in the Era of Innovation and Technology. More specifically, 2<sup>nd</sup> ISET is expected to provide acceleration of technology and innovation, progression of industry and economic growth, solve multidimensional crisis, and enhance education reformation.

The 2<sup>nd</sup> International Seminar on Educational Technology (ISET) is a scientific forum organized by the Postgraduate Program of Semarang State University in order to celebrate the 51<sup>th</sup> Diesnatalis of Semarang State University and the 19<sup>th</sup> Anniversary of Postgraduate Program.

It is a pride for us, that this seminar is organized in collaboration with two major universities in Semarang, the University of Muhammadiyah Semarang (Unimus) and Sultan Agung Islamic University (Unisula), integrated by utilizing two-way teleconference technology.

On behalf of the Organizing Committee, I would also like to express my gratitude to our invited speakers Prof. Dr. Abdul Latif Ahmad from Universiti Sains Malaysia, Associate Prof. Atchara Purakom, Ph.D from Kasetsart University, and Gregor J. Sahler from Sparkassentiftung für Internationale Kooperation, for their attendance to share their knowledge. I would also like to welcome all of participants of ISET. And last but not least, for all the committee members, thank you for your best efforts and hard work.

**Dr. Ir. Rodia Syamwil, M. Pd.** Chair of the Commitee

#### **Invited Speakers**

#### Prof. Dr. Abdul Latif Ahmad



School of Chemical Engineering, Universiti Sains of Malaysia Prof. Dr. Abdul Latif was the Dean of School of Chemical Engineering, USM for almost 6 years (2005-2010) which later promoted to be the Research Dean, Science Fundamental Platform for 3 years (2010-2012). He obtained his BEng, MSc and PhD from the University of Wales, Swansea, UK. When he was promoted to his professorship, he was then the youngest professor being promoted. He has a wide experience in administration and research. He has put the School of Chemical Engineering, USM on the global map as top 100 Faculty in the world according to QS ranking. He involves actively at Ministry level in many committees and different Task Force related to research policy and research grant evaluation. Numerous local

universities invited him to share his experience as a mentor to junior lecturers. Being a Chartered Engineer and a Fellow to The Institution of Chemical Engineers (IChemE), UK, he is frequently being appointed by IChemE to accredit Chemical Engineering Program in Europe, Australia, New Zealand, Sri Lanka, Singapore and Malaysia. He is an internationally renowned researcher and an internationally acclaimed award winning researcher in membrane science and technology. Due to that, the King Saud University has appointed him to hold the Geoscience Chair to help King Saud University's researchers to lift up their research visibility internationally. His enthusiasm and dedication towards his research works have been reflected in his achievements in winning numerous scientific invention awards. To-date, a total of 50 personal achievement awards and 69 research product awards have been won. Recently, he was awarded by The Ministry of Higher Education Malaysia as the recipient of The Malaysia's Rising Star Award 2015. He was listed by the Thomson Reuters New York as The World Most Influential Scientific Minds 2014 and the country has selected him to be one of the recipients of Merdeka Award 2014. Due to his outstanding achievement in research, the Korea Invention News has awarded him with the World Inventor Award for two years in a row (2013 – 2014). In fact, Prof. Latif was bestowed the TWAS Prize in Engineering Sciences 2012 by The Academy of Sciences for the Developing World (based in Italy) and he was appointed as the Fellow of the Academy Sciences of Malaysia. In the same year, he was also received the Rotary Research Gold Medal Award, presented by the Rotary Club of Kuala Lumpur Di Raja. On top of that, the Academy of Science Malaysia has recognized him as one of the recipient of the Top Research Scientist of Malaysia (TRSM) for the year 2012. He was the sole Asian recipient of the Saudi Arabia Prince Sultan Bin Abdulaziz International Prize for Water in year 2006, besides being awarded the 20<sup>th</sup> Khwarizmi International Award from Iran. His active participation in scientific research has also been exhibited by being the recipient of multiple research grants in various disciplines sponsored by government and non-government bodies, with a cumulative value of more than RM 29.9 million. His capability in carrying out quality research work of international standard has been further supported by publication of more than 314 articles in high impact factor international refereed journals, with current cumulative citation number of 8394 and h-index of 44. As a tenacious educator, he showed dedication towards the supervision of postgraduate students, by successfully graduating 30 PhD and 60 master students. With his persevering attitude, he is veritably a source of inspiration to hundreds of his former students spread throughout the globe.

# Associate Proffessor Atchara Purakom, Ph.D. Kasetsart University Thailand



#### Curriculum Vitae

#### Assoc.Prof. Dr.Atchara Purakom

Address : Department of Physical education and sports, Faculty of Education and Development Sciences, Kasetsart university, Kamphaeng-sane campus Thailand, 73140 Telephone number:+66-3435-1898 ext. 504

Fax :+66-342-820-40Mobile Phone :+66-890-731-329E-mail-address:feduacrp@ku.ac.thWebpage:http://www.pe.edu.kps.ku.ac.th/pes2016/Education Background20142014Post-doc research in Physical activity and Health in<br/>agingUniversity of Porto, Portugal2010Ph.D. in Human and Social Development

Naresuan University, Thailand

- 1998 Master degree in Education (Health Promotion) Chiang Mai University, Thailand
- 1991 Certificate in Tourism
  - Sukhothai Thamathiraj University, Thailand
- 1990 Bachelor science in Nursing Budhachinnaraj Boromrajonani nursing college, Thailand

#### **Professional experience**

- 2006-now Professor in health education and health promotion
- 2009-2015 Deputy of head department of physical education and sports
- 2010-2015 Director of M.Ed. (Health promotion)
- 2010-2011 Project Manager in health promotion evaluation in National housing Authority project
- 2014-2015 Project Manager in Thailand active aging project supported by Thaihealth promotion foundation
- 2015 Head researcher of report card project in western region, Thailand (Physical activity for kid)

#### **Research and publication**

- 1. Atchara Purakom, Ajchareeya Kaisiyapat, Kasem Nakornkhet. 2015. Association between sedentary behavior
- 2. and cardio-metabolic risk in Thai active older adults. Proceeding of ACPES 2015. Semarang University, Indonesia.
- 3. Purakom, A. 2014. Community-based Physical Activity Inverventions to Promote Thai Older
- 4. Adult's Health : A Systemic Review. Asian Confernece for Physical Education ans Sports Science 2014. 6-9July, Singapore.
- 5. Purakom, A., Nakornkhet, K, Tanoomsuk, T., Pupanead, S., Seabra, A. Carvalho, M.J. 2014.

- 6. Association between physical activity, functional fitness and mental fitness among Thai older adults, Nakornpathum, Thailand. AJESS, August 11(21).
- 7. Purakom, A., Carvalho, M.J., Tanoomsuk, T., Pupanead, S., Carrapatoso, S. 2013. Comparative
- 8. Study on Physical Activity in Ageing Population among Thai and Portugal Context. The 21st IUHPE
- 9. World Conference on Health Promotion, 25-29 Ausgust Pattaya, Thailand.
- 10. Purakom, A., Nakornkhet, K, Tanoomsuk, T., Pupanead, S., Carvalho, M.J. 2013. Association of
- 11. physical activity , functional fitness and mental fitness among older adults in Nakornpathum,
- 12. Thailand : A Pilot study, ISBNPA. May 22-25th, Ghent, Belgium.
- 13. Purakom, A. and Mahingsa, Y. 2012. Health promotion behavior in Bachelor students , Ksetsart University, Kamphaeng sane campus, , 10th annual conference in agricultural kamphaeng-sane. Nakornpathum.
- **14.**Purakom, A. 2011. Capital Budgeting in sports and exercise for health promotion. Journal of Sports science and Health. **13(3)**. September-December.
- 15. Purakom, A. 2010. Knowledge sharing network in youth in summer camp. Kasetsart Journal (Social science):30(1). January-April.

#### **Personal Interests**

- 1. Physical activity in older adults
- 2. School health Programe
- 3. Health Promotion in community
- 4. Tourism

#### **Training and Commitee**

- 1. Role of Education Assurance , Kasetsart University (2015-2016)
- 2. Measurement of Physical activity , early network career Webinar , ISPAH, 2016 (2016)
- 3. Committee of Asian Council of Physical Education and Sport (2015-2016)
- 4. Committee of National Physical activity conference (2015)

#### Gregor J. Sahler

International Business Administration Senior Advisor Sparkassenstiftung für Internationale Kooperation, Germany



#### Work Experience

Since 12/2014 Saving Banks Foundation for International Cooperation (SBFIC) Senior Advisor in Indonesia 
Advising ASBANDA, Bank Jateng and several other BPDs on Micro Finance and Financial Literacy

09/2013 – 11/2014 German Development Institute (DIE), Bonn Professional research project □ Research-based consultancy on the on-going fiscal decentralization of property taxes in Indonesia as a mean of development finance

02/2012 – 08/2013 ProCredit Holding AG & Co. KGaA, Frankfurt am Main Employee in the department Supervision & Capital Planning 
MSME financing in South America, Sub-Sahara Africa and Eastern Europe 
Project implementation of Basel III regulations on group level, in Ghana and Romania

06/2011 – 09/2011 Fraport Saudi Arabia, Jeddah, Saudi Arabia Business Development King Abdulaziz International Airport □ Consulting in the field of business development

06/2010 – 02/2011 NORDCAPITAL Portfolio Management GmbH & Cie. KG, Hamburg Portfolio Management 
Analyzing and valuation of shipping investments that are traded on the secondary market

07/2009 – 10/2009, Fraport AG, Frankfurt am Main 10/2008 – 02/2009 International Human Resource Development □ Design and conducting of training in the field of intercultural competence

#### Education

10/2009 – 11/2011 Master of Arts – International Business Administration University of Hamburg Core studies: International management, Finance Grade: Excellent (1.4)

10/2005 – 09/2008 Bachelor of Arts – International Cultural and Business Studies University of Passau Core studies: Business administration, South-East Asian studies Grade: Very good (1.8)

08/2007 – 04/2008 Darmasiswa scholarship of the Indonesian government University of Indonesia, Jakarta Core studies: Language and culture of Indonesia Month-long study excursion in Indonesia

08/2003 – 06/2005 Abitur – Georg-Christoph-Lichtenberg-Oberstufen-Gymnasium Bruchköbel Grade: Excellent (1.4)

08/2002 – 06/2003 CETUSA scholarship Foothill High School, Henderson, NV, USA Grade: Excellent (1.0)

#### **Personal Skills**

Languages German – native speaker

English – fluent (written and spoken) Indonesian – very good command (written and spoken) Spanish – good command (written and spoken)

#### **Computer skills**

Excel – excellent skills PowerPoint – excellent skills Word – strong skills Atlas TI – strong skills Stata – basic skills

#### **Recent soft skills trainings**

Presentation and facilitation (3 days) Team building and conflict management (2 days) Professional writing (2 weeks)

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# **Side-Effects of Technology for Children's Development**

#### Andarini Permata C

Elementary School Teacher Education Department, Faculty of Teacher Training and Education Sultan Agung Islamic University

#### Corresponding author: and arini permata@gmail.com

**Abstract.** Technology has become the important part of life. Many kinds of technology which are being avery helpful tools for human to communicate each other. Television, computer, smartphone, internet, chatting service, and social media are some of many technologies used by people everyday. These tools also become familiar things for children who live in this era. There are some negative side effects of technology if do not be used wisely, moreover for children who are not guided by adult when they are using these technology. Children still need to be guided when they are using those, especially some technology which is using internet, because children have not been aware of bad content that be able to be searched just by typing some keywords. So, parents and teacher of children under-middle school age have to be aware of this, and they should guide them supposed they are able to use internet and the other technology for a good purpose.

#### INTRODUCTION

Technology develops as the time going on, from the traditional to the modern one. Human tend to create something new and useful, just like the main purpose of the creating of technology: to help them in order to fulfill their needs, easier than before they develop the modern technology. Some of technologies used by people these days such as television, smartphone, internet, chatting services, internet-based social media, and many others. Those are technologies which have become the part of human's life. People can be easier to communicate and know each other even if they are in the far away country. Technology is not only used by adult people, but also children and adolescent. Because of technology does not only have a positive impact for human life, but also negative side effect, children and adolescent still need guidance from their parents and teachers supposed to prevent them for using it with bad purposes. They are also able to get the negative side-effects because they do not use it wisely.

#### **CHILDREN AND TECHNOLOGY**

Being active is an intuition for children. They are using physic in many activities compare to them who already reached adolescent or adult age. They like playing games which involve physics strength, such as hide and seek or doing some sports. It is a common thing for elementary school children. Like what Department of Health & Human Service of Victoria (2016) wrote on their website that children's job is to play, because they like to be active. Australia's Physical Activity Recommendations for 5-12 Year Olds also states that every day kids need to do at least 60 minutes of physical activity. Explain more, it is also written that there are many benefits of physical activity for children, such as:

- 1. improved cardiovascular fitness,
- 2. prevented children for being overweight,
- 3. helped kids to have sleep pattern better,
- 4. increased self-esteem and confidence,
- 5. improved concentration,
- 6. easier to relax,
- 7. helped kids to have strong bones and muscle,
- 8. improved physical development,
- 9. enhanced social skills.

In fact, the children nowadays are different from they are who lived few years ago when technology was not as modern as now. These days, technology and gadget have become an important part of human life, including youth people. "For the past several decades, television has become a ubiquitous fixture and preferred activity in most occidental family environments" (Pagani, Fitzpatrick, Barnett, et al, 2010). But, many parents show poor factual knowledge and awareness of such existing guidelines. The American Academy of Pediatrics and the Canadian Society of Pediatrics stated "infants aged 0-2 years should not have any exposure to technology, 3-5 years be restricted to one hour per day, and 6-18 years restricted to 2 hours per day" (Relos, 2014). In fact, many parents still put television in the bedroom without knowing that it has bad effect for children's development. Besides, many parents facilitate their children with smartphone and computer which are connected to internet.

These days, children and adolescents tend to stay at home watching television, playing game or chatting in social media with their own gadget. There are some reasons behind this, such as there is no more playground for children to play with their friends, or field for them to do some sport activity. Moreover, most of schools in Indonesia (especially in Java) are placed on the roadside or around the adjacent settlements. It causes the school does not have space enough for their schoolyard, so children are not able to play around freely. Furthermore, parents like to see their children watch television at home than let them doing outdoor activity because they can keep their eye to them while completing their chores (Dehghan, Akhtar-Danesh, & Merchant, 2005). These also become a reason why children tend to choose playing with the technology in their free time instead of playing actively with their friends.

As one of the technology used these days, internet has become a major necessities of life, even for young people. Internet is a fast way for finding information, doing business matters and connecting people by using social media or chatting apps. But if we rely on internet so much, we could be caught into internet addiction. Mazhari (2012) described internet addiction as "intense mental preoccupation with Internet use, compulsive Internet use, spending a lot of time on the Internet, inability in managing time spent on the Internet, considering the world without the Internet as boring, irritability in the case of being disturbed at the time of using the Internet, and decreased social relationships because of Internet use". Children are persons who have not been able yet to control their desire when they like doing something. Parents have huge responsibility to help children in order to use internet for a good purpose, such as helping them in learning or doing some simple research when they are curious about something. But children must be taught that there are limitations on using internet, and they still need to be guided in order not to access some websites which contain bad influence for them such as pornography and violence.

The more kids spend their time in with modern technology, the more questions about the use of technology raise (Simufurosa, 2013: 1). And this will be affected children to get the side effect (Simufurosa, 2013: 1). parents should be aware of these side-effects so they can teach their children to manage the technology.

### SIDE-EFFECTS OF TECHNOLOGY FOR CHILDREN'S PHYSICAL AND BEHAVIOUR DEVELOPMENT

Technology has a huge impact for human, particularly to make things easier to do and help people in the daily routine. Not only adult people, young people also feel the same thing. Technology (including gadget) has many advantage, such as: establishing and maintaining relationship among people (Hertlein & Ancheta, 2014); communication has also become cheaper, quicker, and more efficient; it makes the world closer together and brige the cultural gap (Kumar, 2014). However, there are many side-effect of technology if we could not control our self on using that. Asian Journal has released an article titled "Electronic gadgets should be banned for kids 12 and below, expert say" (Relos, 2014) that written "handheld devices (cell phones, tablets, electronic games) have dramatically increased the accessibility and usage of technology, especially by very young children" and we need to ban this before it's too late.

#### Video Game or Media which Contain Violence

Children who played a lot of video games contained violence became more physically aggressive (Anderson, Sakamoto, Gentile, et.al, 2008). The Academies of Physicians, Pediatricians, Psychologist, and Psychiatrists have joined with the American Medical Association classify media violence as a public health risk because of its impact on child aggression (Rowan, 2010). This showed that games and media which contain violence have contribution on the changing of children's behavior.

Beside, the violent media content also give some short-term and long-term effects (Huesmann, 2007). The short-term effects mostly due to:

1. priming process — the external stimulus can be inherently linked to a cognition, when media violence primes aggressive concept, aggression is more likely;

- 2. arousal process the violence stimulus can arouse aggressive behavior;
- 3. *mimicry* process in recent years evidence has accumulated that human and primate young have an innate tendency to mimic whomever they observe.

Huesmann (2007) also stated that long-term effects, seem to be due to:

- 1. more lasting observational learning of cognitions and behaviors (i.e., imitation of behaviors) during early, middle, and late childhood children encode in memory social scripts to guide behavior though observation of family, peers, community, and mass media. Consequently observed behaviors are imitated long after they are observed and children's social cognitive schemas about the world around them also are elaborated;
- 2. activation and desensitization of emotional processes Long-term socialization effects of the mass media are also quite likely increased by the way the mass media and video games affect emotions. Repeated exposures to emotionally activating media or video games can lead to habituation of certain natural emotional reactions. This process is called "desensitization."

Children who watch violence contains everyday will have a changing behaviour. They also will do it unconsciously as if it has been a habit.

#### Putting Television and Other Screens in Children's Bedroom

Young people having a TV in the bedroom is common thing for these days. This makes the chance of TV hours for children has been inceased (Swinburn & Shelly, 2008). Dietz and Gortmarker (1985) did some research about the relation between television and obesity of children and adolescents. The result of the study showed that increased television viewing could cause obesity and vice versa. The hours spent watching TV make children being passive and could reduce resting metabolic rate. Children and adolescent also eat snack and drinking while wathing TV. Without doing any sports, this habit may cause the obesity of children.

Besides, the content of the TV program could influence children's minds until they fall asleep. If they don't do some physical activity, they could have troubled with their routine that will cause behavior problems (Susilawati & Rezkisari, 2016). Children and adolescent often check their gadget before sleep, whereas to chat with someone or just check the game they usually play. But researchers found that using a gadget for just two hours before sleep can cause sleep problems (Prigg, 2012). Watching television & using mobile phones and computers in bedrooms late night can cause sleep deprivation (Coughlan, 2013). Children naturally need more sleep than adult. They will have physic and concentration problem if they lack of sleep. So it could be a hidden factor in lowering a student's achievement.

#### Using Technology (Cell Phone, Internet, iPads, Television, Laptop, etc) in a Long Time

Children's brain has not developed completely. Using screens in a long time could have given more side effects for children than adult. The delay of children's development can be caused by the overuse of technology (Rowan, 2010). Their development will not be the same as they who are limited in using those technologies. Spending time more than 2 hours in front of the screen can cause psycological difficulties, even if they are active children. Children who have been interviewed said they often become unhappy or down-hearted and they usually play by their self (Page, 2010). It is indicated that doing physical activity after that could not become a compensation for long hours of screen viewing. The effect can only be reduced by limiting children's screen time.

Besides, the radiation exposures are higher for children than adults because children have thinner skulls, and their brains have higher water and higher ion (charged particle) content and might cause a greater risk for them (Rosenberg, 2013). Children's brain development are influenced by environmental stimuli, and if they use technology out of appropriateness, it can cause decreasing attention, cognitive delays, vulerable learning, impulsivity, decreasing self-regulate, e.g tantrums, impulsive, moody, and could not pay attention (Small & Vorgan, 2008; Liberatore, Rosario, Colon-De Marty, et.al, 2011; Dunkley, 2014). Woolaston (2013) wrote on her article that parents can detect whereas their children are starting to have technology addiction or not by knowing these 5 signs: 1) lack of interest in other activities, 2) constantly talking about or getting distracted by technology, 3) mood swings and argumentative behavior, 4) withdrawl symptoms, and 5) increase in lying or rise in devious behaviour.

According to some studies, internet overuse would bring some negative outcomes in sleep, physic, academic progress, and family relationships. "Eventually, all these issues can lead to various physical and psychiatric disorders such as low back pain, carpal tunnel syndrome, depression, anxiety, loneliness and low self-esteem" (Mazhari, 2012). In addition, internet addiction cause losing interest in other hobbies or never develop any others, and sometimes makes someone feel irritated, depressed or even physical shaking (Tsukayama, 2016).

This is very bad for children who are addicted on technology, whatever the reasons are (chatting, browsing, or playing online game). And if it happens in a long time, they are able to be an anti-social person who could socialize with their family, friends, or society.

#### SUMMARY

Technology gives many advantages, but also has some side-effects for human, including young people and children. If they are overdue in using technology or access some violence-content, they will get some side effect such as: being more aggressive; having sleep problem and mood disorder; not able to concentrate; having obesity, cognitive delay, low self-esteem, and tantrum; losing interest in other hobbies; feeling depressed and lonely; and they could be an anti-social person. As Rowan (2010) said "these 'crimes of technology' indicate that many children do not have the maturity or the parental guidance to use technology in a safe and responsible manner".

Kids are in a phase which they mimic action of people around them. So, parents should be a good example in order to teach them how to control their self in using technology. There are some ways to do it: show the children that we also participate in physical activity, allow our child to choose what activity they want to do, give an understanding for children that there are the social benefits in doing physical activity, help kids to develop their skills by doing different physical activity, restrict 'screen time' to less than two hours per day, and turn the television off when the program is finished (Department of Health and Human Service of Victoria, 2016). Parents also need to guide their kids when they are watching television or access internet with computer or smart phone supposed not to search something with bad contains.

But if the children has been already addicted, Dr. Graham suggests that parents could do the 72 hours for digital detox. Initially they will show distrees and signs of withdrawal, much like any addict would feel. The challenge starts when we reintroduce technology back into their lives in a controlled manner, they need a balance of activities to help children including an increase of physical activity. parents should try to set down some 'compromise agreements', meaning families still spend time together. Perhaps there are no smartphones at meals, and the family have half a day together cyber-free over the weekend (Woollaston, 2013). This solution needs to do frequently and without any force. Parents need to choose an interesting physical activity (indoor or outdoor) so that the kids will enjoy it and forget about technology.

Technology is like a knife. We can use it in a good or bad purpose. Do not let technology control us, we are the one who need to control it. Never teach or forbid our children without giving any example. If we want our children use technology wisely, we need to do and show it first, so will them.

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