



PROGRAMME BOOK

ICMS 2019

3rd International Conference on Media Studies 2019

3-6 July 2019 | Bangkok, Thailand

School of Multimedia Technology and Communication (SMMTC)

Universiti Utara Malaysia.

Faculty of Science and Technology,

Bansomdejchaopraya Rajabhat University (BSRU)

 icmsuum19@gmail.com

 www.icms2019.weebly.com



(1)

About ICMS 2019

ICMS 2019, will be addressed comprehensively from the media to social perspectives, aiming at presenting, discussing and disseminating current developments, new approaches, new tools and practical solutions for the media landscape. The conference is targeted to an academic audience (lecturers, researchers and students) and practitioners (media buyer, press and media managers from diverse media organizations).

To introduce the emerging developments of media. Growing with media is essential for every individual. Issues will be presented and discussed in this 360 degrees of media growth.

1. To introduce the importance of media in 360 degrees;
2. To deliberate on the challenges or difficulties associated with the media;
3. To discuss success factors of media;
4. To discuss the future trends of media in 360 degrees;
5. To introduce the state-of-the-art practices in media;
6. To introduce digital media;
7. To enhance collaboration media with other fields

This conference is held to continue the research civilizing or publication of product on media studies in journalism, broadcasting, advertising, new media and communication.

Organization of this conference was held in the form of a seminar / conference on media studies which was first organized on behalf of media technology (under course of Broadcast digital seminar, Journalism seminar and Advertising digital seminar) on 2012, 2013 and 2014 during SMMTC week. In addition, the conference continued into international level that was held in 2014 at Universiti Utara Malaysia in collaboration with University of Ahmad Dahlan (UAD), Indonesia.

In 2015 and 2016, Media Studies Research Colloquium event was held during SMMTC week. On 2017, the committees for the conference were from students and also lecturers. For this year, 2018, this conference's committees are students and a lecturer.

This conference should be continued in order to cultivate ongoing research or publishing products and diversify its product research or media studies among students and involve as organizers for this time. School of Multimedia Technology and Communication (SMMTC) will form a conference committee that will be placed under responsibility of Media Technology Program, School of Multimedia Technology and Communication.

ICMS 2019 seeks high-quality contributions on media academics and practitioners, including theoretical foundations, innovative practices, case studies, experiences, among others.

(2)

Recommended topics include (but are not limited to) the following.

Conference topics:

- Broadcasting
- Advertising
- Journalism
- New Media
- Communication
- Multimedia
- Creative Media
- Cultural Media
- Media Management
- Social Science
- Related media issues
- Media - Mathematics
- Chemistry
- Industrial Chemistry
- Biotechnology
- Applied Physics
- Biology
- Microbiology
- Environmental Science
- Agriculture
- Computer Science
- Electronics Computer Technology
- Occupational Health and Safety
- Public Health
- Home Economics
- Information Technology
- Animation and Multimedia
- Public Health
- Food Science and Technology
- Industrial and Technology Management
- Information Technology for Industrial Logistics
- Industrial Technology
- Thai Traditional Medicine
- Electro Mechanic Manufacturing Engineering
- Computer Technology and Industry Information
- Industrial Design
- Media and Education
- Higher Education
- Teaching and Learning Improvement

Who should join?

- Academician
- Undergraduate students
- Post-graduate students
- Media Practitioners
- Government Agencies
- Non-profit Organisation

(3)

Message from the Dean of UUM CAS Student Development and Alumni



Assalamualaikum w.b.t and welcome.

Distinguished guests, ladies and gentlemen,

First and foremost, on behalf of Universiti Utara Malaysia, I bid you all a very warm welcome to the 3rd International Conference on Media Studies 2019 (ICMS 2019). ICMS 2019 is an occasion, which I expect to provide a genuinely necessary platform for the presenter to share their findings and insights on issues pertaining to the field of communication and media.

I am happy to note that this year's ICMS is organised in collaboration with a Bansomdejchaopraya Rajabhat University. Engaging in a collaborative undertaking such as this, i.e. involving an institution celebrated for its expertise in the field is precisely the tack to take if we mean to soar to greater heights of excellence. I hope that there will be many more collaborations of this nature in future where partnerships are formed with eminent international institutions, so as to enable us to further hone our expertise and gain greater visibility in the global arena.

An occasion of this nature would not have been conceivable without the help and support of generous collaborators, and sponsors for their invaluable support. Finally yet importantly, I would like to thank all the participants, presenters, moderators, and delegates who share their insights and knowledge in this event.

I would also like to extend my sincere congratulation to the members of the conference's organizing committee, from Media Technology Association (PERMEDIA) on the effective change of the possibility of this occasion into a significant reality through their persistence and perseverance in making this conference a successful event.

I sincerely wish everyone an enjoyable and intellectually engaging discussion. I wish you all the best, and may the blessings of God be with you always.

Wabillahi taufik walhidayah wassalamualaikum warahmatullahi wabarakatuh

Thank you.

ASSOC. PROF. DR. BAHTIAR MOHAMAD
Dean
Student Development and Alumni
UUM College of Arts and Sciences
Universiti Utara Malaysia.

(4)

*Message from the Dean of UUM
School of Multimedia Technology and
Communication*



Assalamualaikum w.b.t and greetings.

Essentially, it is an extraordinary joy to be a part of this huge occasion, 3rd International Conference on Media Studies 2019 (ICMS 2019). It is also a great pleasure and honor to be given a chance to collaborate with Faculty of Sciences and Technology, Bansomdejchaopraya Rajabhat University (BSRU), Bangkok along with other partner institutions.

Besides Faculty of Sciences and Technology BSRU, other representatives from universities of Thailand, Indonesia, India and Jordan also play an important role in ensuring this event became a well-known to the others. I strongly believe that this conference will be a platform for the shared of thoughts that will prompt to long-lasting joint efforts.

For decades, media and communication have contributed generously to our general knowledge of global conditions and procedures. The media nowadays is at the core of cultural, social, political and economic occasions all through the world. Hence, I believe this event will give a truly vital stage to the participants to display their thoughts, and sharing the understanding on the growth of media.

This event will not happen without the invaluable support from the associates, sponsors, and fellow participants. I might likewise want to stretch out my heartiest congrats to the organizing committee for their hard work to make this conference a success. Lastly, I hope that this event will continuously held in the future with more topics being discussed.

Wabillahi taufik walhidayah wassalamualaikum warahmatullahi wabarakatuh

Thank you.

ASSOC PROF DR. MOHD SOBHI ISHAK
Dean
School of Multimedia Technology and Communication
UUM College of Arts and Sciences
Universiti Utara Malaysia.

*Message from the Dean of
Faculty of Science and Technology
Bansomdejchaopraya
Rajabhat University*



Dear Colleagues,

Welcome to the 3rd International Conference on Media Studies 2019 at Bansomdejchaopraya Rajabhat University (BSRU), Bangkok Thailand.

Evidently, media is the world's fastest growing industry and is an area of rapid and continuous technological, political, economic, and social change. Much of the recent explosion in the stock of human knowledge is linked with developments in media industries. This conference is one of the stepping stones for all of us to share our views and information to bring the greatest future to the world.

I am very pleased to have been entrusted to be a part of this great endeavor where researchers, media experts, academicians, representatives of higher learning institutions and students around the globe, share insights and challenges of significant issues our world is facing today.

I would like to thank Universiti Utara Malaysia (UUM) for making ICMS 2019 a successful event. We hope that this will be a cornerstone for us to cooperate and have a joint venture not only with the university from Malaysia but also in all ASEAN countries. From my point of view, I can say that this conference is one of the platforms for us to build a long-lasting collaboration not only in terms of education but also in another discipline.

Finally, I would like to extend my appreciation to those who work tremendously to make this event a dynamic and a successful one.

Have a wonderful stay in Bangkok!

Assoc Prof. Boonmee Kavinseksan, Ph.D.
Dean
Faculty of Science and Technology
Bansomdejchaopraya Rajabhat University

(6)

*Message from the Advisor of
Media Technology Association
(PERMEDIA)*



Assalamuailaikum w.b.t and welcome.

I would like to express my warmest welcome to delegates at this 3rd International Conference on Media Studies 2019 (ICMS 2019) and to the Universiti Utara Malaysia. This is the third international conference organized by the Media Technology Association (PERMEDIA) in collaboration with School of Multimedia Technology & Communication (SMMTC), Faculty of Sciences and Technology (BSRU), and Student Development & Alumni Office (PPA) College of Arts and Science (CAS).

The theme for ICMS 2019 is “Growing with Digital Media”. The purposes of this international conference are to provide an integrated media platform and a holistic views of latest media knowledge which can be discussed in a friendly environment with the aim to learn from each other. This is always the best opportunity platform for the academician, undergraduate and post-graduate students, media practitioners, government agencies and non-profit organisation.

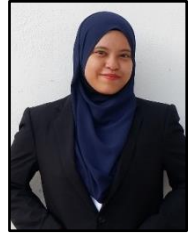
There are many conference topics related to mass communication (broadcasting, advertising, journalism), new media, communication, multimedia, creative media, cultural media, media management, social science and others. The conference also provides a platform for international and local presenters as well as participants to develop positive intercultural relations with one another.

I believe that this conference will be the mutual exchange of knowledge and ideas that will lead to a stronger bond and long-lasting collaborations. To the ICMS 2019 organizing committee and all individuals who have contributed in one way or another, I am truly appreciated and thank you for making this conference succeeded.

Thank you.

Dr. Noor Aziah Abdullah
Advisor Media Technology Association (PERMEDIA)
Universiti Utara Malaysia

*Message from the Director of
International Conference
on Media Studies*



Assalamualaikum w.b.t

A warm welcome is never complete with warm words before I go further, I would like to express my gratitude and a warmest welcome to the representative from various university across ASEAN countries and also Jordan to the 3rd International Conference on Media Studies 2019.

As all known this is the third conference that being held by School of Technology Media and Communication (SMMTC) under Media Technology Association (PERMEDIA) and Student Development and Alumni Office (PPA), College of Arts and Science.

Compared to the previous conference, Universiti Utara Malaysia (UUM) often being used as a venue to held ICMS but for this year we can see a slight of changes as we change venue to Bansomdejchaopraya Rajabhat University (BSRU) Bangkok. These changes strongly showed an interesting progress as we have held a joint-venture and collaboration with our partner, BSRU.

I hope that by this new collaboration it can be a stepping stone in building a new partnership with other universities for our own benefits. Beside that I also would like to thanks to my honorable committee members and lectures in helping me to ensure this conference become a successful event. To our invited guest and paper presenters, who travelled a long way to join this conference please accept my sincere appreciation for joining this event.

Last but not least hope you will enjoy your day in the wonderful city of Bangkok and Khob Khun Kha.

NURHASYIMAH BINTI MUHAMMAD ALI

Director

3rd International Conference on Media Studies 2019

Universiti Utara Malaysia

INTERNATIONAL CONFERENCE ON MEDIA STUDIES 2019 (ICMS'19)

PATRON

Vice Canselor UUM, YBhg. Prof. Dr. Ahmad Bashawir Hj. Abdul Ghani
President BSRU, Assistant Prof. Linda Gainma

ADVISOR

Dean School of Multimedia Technology and Communication, Assoc Prof, Dr. Mohd Sobhi Ishak
Dean Faculty of Science & Technology BSRU, Assoc Prof. Dr. Boonmee Kavineseksan
Dean Student Development & Alumni Office, College of Arts & Sciences, Dr. Bahtiar Mohamad
PERMEDIA Advisor, Dr. Noor Aziah Abdullah

COMMITTEES

EXECUTIVE COMMITTEE

PROTOCOL

Assoc Prof. Dr. Sobihatun Nur Abd Salam (UUM)
Assistant Prof. Dr. Kasame Tritrakan (BSRU)
Mrs Sutipporn Chotratanasak (BSRU)
Dr. Kanakorn Sawang charoen (BSRU)

BOOKS & PROCEEDINGS

Assc. Prof. Dr. Norsiah Abdul Hamid (UUM)
Dr. Norizah Aripin (UUM)
Dr. Sabrina Rashid (UUM)
Assistant Prof. Dr. Akaranun Asvarutpokin (BSRU)
Miss Ana Malaya Camaligan (BSRU)

REGISTRATION

Dr. Awan Ismail (UUM)
Pn. Zuraidah Abd Talib (UUM)
Assistant Prof. Phongphan Narenoi (BSRU)
Assistant Prof. Dr. Yanisa Tantipalakul (BSRU)

PUBLICITY

Pn. Siti Syamsul Nurin (UUM)
Assistant Prof. Dr. Thien Thiraworawong (BSRU)
Assistant Prof. Dr. Khanitta Hathaisammit (BSRU)

LOGISTIC

Assistant Prof. Jaran Prajanban (BSRU)
Assistant Prof. Dr. Prapai Sridama (BSRU)

FOOD

Piangthida Sersiuthikulchai (BSRU)
Kwannapa Watchanarat (BSRU)
Theeraporn Patiwetwitoon (BSRU)
Dr. Thanida Sujarittham (BSRU)

MAIN COMMITTEE

DIRECTOR

Nurhasyimah Binti Muhammad Ali

DEPUTY DIRECTOR

Aiman Shafiq Bin Norha

SECRETARY

Gautham A/L Ambu Pulay

TREASURER

Siti Dzulaikha Binti Mazlan

SECRETARIAT UUM

PROTOCOL

Muhammad Naufal Bin Kamaruddin
Nur Syazana Binti Muhd Shahrinnizam
Zarith Sofea Binti Zaharin

BOOKS AND PROCEEDINGS

Nurfadhilah Binti Abdullah
Nurul Syafiqah Syahierah Binti Mustapha
Zetty Amelia Binti Ab Ghani Bahauddin

LOGISTICS & TECHNICAL

Muhammad Shahir Bin Khairul Hasni
Muhammad Hamiezan Afieq Bin Suhaimiee
Nurain Fathina Binti Mahamad

FOOD

Mah Yi Wei

Mohd Izar Shamin Bin Mat Jusoh

PUBLICITY PROMOTION

Nor Alia Anis Binti Abdullah

Amirul Syahmi Bin Sahidan

Nurul Ilhami Binti Mohd Lokman

SPONSOR

Noraimi Marziana Binti Khaireynezam

Nur Diyanaa Binti Abu Kasim

Naruwan Pattarapongdilok (BSRU)

REGISTRATION

Muhd Nizam Bin Yaakob

Fatinnajihah Binti Kamaruzaman

Nurul Alia Binti Ali

Nurul Athiyah Binti Azizan

Time	Programme
3 July 2019	Presenter and Participant arrived at BSRU Hotel / Ibis Bangkok Siam Hotel
4 July 2019	Conference Day Venue : Floor 4th Building1 BSRU
08.30 - 09.00	Registration
09.15 - 09.30	Welcoming speech
09.30 - 10.00	Opening ceremony
10.00 - 10.30	Invited speech 1 Prof. Dr. Mohd Azizuddin Mohd Sani
10.30 - 10.45	Coffee Break
10.45 - 11.15	Invited Speech 2 Dr. Anandrao B. Dadas
11.15 - 11.30	Souvenirs Presentation and Photography session
11.30 -12.30	Lunch
Parallel Session Venue: Floor 11st and 12nd Floor Build7 BSRU	
13.00 - 14.45	Presentation session 1 Presentation time is 10 min Questions and Answers (Q&A) Session is 5 min
14.45 - 15.00	Coffee Break
15.00 - 16.45	Presentation session 2 Presentation time is 10 min Questions and Answers (Q&A) Session is 5 min
16.45 - 17.00	Certificates and Best Presenter Awards Giving
18.00 - 21.00	Grand Dinner ICMS 2019

Time	Programme
5 July 2019	Post-tour conference
07.00 - 08.00	Breakfast at hotel
08.00 - 10.00	Depart from BSRU to downtown Bangkok
10.00 - 14.00	Shopping <ul style="list-style-type: none"> - Pratunam Market - CentralWorld - MBK Shopping Centre - Siam Paragon
14.00 - 15.00	Lunch and pray Free and easy
15.30 - 19.00	Moving to Asiatique The Riverfront / Chao Phraya river
19.00 - 20.30	Sightseeing Dinner
21.00	Check-in Hotel
6 July 2019	Depart to hometown

<p>A1</p> <p>12.30 PM – 02.30 PM</p> <p>(Room 7121)</p>	<p>Track Chairperson : Dr. Awan Ismail</p> <p>A1-1 The Framing of LGBT Issues on News Portal Media in Malaysia <i>Kok Jean Jie, Dr Julia Wirza Mohd Zawawi, Dr Akmar Hayati, Binti Ahmad Ghazali</i> <i>Universiti Putra Malaysia, MALAYSIA</i></p> <p>A1-2 Effects on LGBT issues in Malaysia? How You Think, How You React on It. <i>Julia Wirza Mohd Zawawi, Hamisah Hassan, Kho Suet Nie, Norliana Hashim</i> <i>Universiti Putra Malaysia, MALAYSIA</i></p> <p>A1-3 Framing Analysis of Arrest News "Muslim Cyber Army" at detikcom, KOMPAS.com and REPUBLIKA.co.id Period 27 February - 31 March 2018 <i>Hartin Nur Khusnia</i> <i>University of Mataram, INDONESIA</i></p> <p>A1-4 How Journalists Perceive The Media Relations Of Public Relations As News-Sources In Indonesia <i>Rachmat Kriyantono</i> <i>Brawijaya University Malang, INDONESIA</i></p> <p>A1-5 News Framing: Harmonious Reporting in Malaysia-Singapore Relationship <i>Awan Ismail, Rizalawati Ismail</i> <i>Universiti Utara Malaysia, MALAYSIA</i></p> <p>A1-6 Malays Online News and Public Opinion: A Study of Issues during the Semenyih By-Election <i>Muhamad Mat Yakim, Kamaruzzaman Abdul Manan, Shafizan Mohamed,</i> <i>Universiti Utara Malaysia, MALAYSIA</i></p> <p>A1-7 Exploring the Ideas of Hyperlocal News as A Future Journalism <i>Afiqah Mior Kamarulbaid, Wan Anita Wan Abas, Siti Zobidah Omar, Rosmiza Bidin</i> <i>Universiti Putra Malaysia, MALAYSIA</i></p>
------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>A2</p> <p>02.40 PM – 04.40 PM</p> <p>(ROOM 7121)</p>	<p>Track Chairperson: Dr. Norsiah Abdul Hamid</p> <p>A2-1 Appending Roles of Thai Lanna Temples for Sustainable Communities: A Case Study of Wat Phumin, Nan Province <i>Tawipas Pichaichanarong, Veerawat Sirivesmas, Rueanglada Punyalikhit, Suan Sunandha Rajabhat University, THAILAND</i></p> <p>A2-2 An Explainer Video: Saleduck Asia Sdn. Bhd. <i>Nadia Diyana binti Mohd Muha'yuddin, Nurul Atiqah Binti Mohd Zailani, Leanna Seah Universiti Utara Malaysia, MALAYSIA</i></p> <p>A2-3 Effectiveness of Game-based Formative Assessment on Students' Understanding in Human Computer Interaction Classroom <i>Subashini Annamalai, Azizah Che Omar Universiti Utara Malaysia, MALAYSIA</i></p> <p>A2-4 Formative Evaluation for Mobile Application Guide for Infrequent Flyers (MAGIF) <i>Sobihatun Nur Abdul Salam, Fathin Nabilah binti, Mohd Razif, Rawdhah Nadhirah binti Zainal Universiti Utara Malaysia, MALAYSIA</i></p> <p>A2-5 Cross Cultural Communication of BIPA Learners in Program Darmasiswa Indonesia <i>Muhammad Najih Farihanto Universitas Ahmad Dahlan, INDONESIA</i></p> <p>A2-6 Research on Media Literacy: A Retrospective Analysis <i>Assoc Prof Dr Norsiah Abdul Hamid Universiti Utara Malaysia, MALAYSIA</i></p> <p>A2-7 Teenagers' Emotion and Courtesy Expression in Online Interaction <i>Romlah Ramli Universiti Utara Malaysia, MALAYSIA</i></p>
------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

B1	Track Chairperson : Dr. Ghassan Oweis
12.30 PM – 02.30 PM	B1-1 Satire Politic in the Era of the President Joko Widodo <i>Nunik Hariyanti</i> <i>Universitas Ahmad Dahlan, INDONESIA</i>
(ROOM 7122)	B1-2 Framing Analysis of the 14th General Election News Theme: A study of six online newspapers in Malaysia and Indonesia <i>Azahar Kasim, Nur Atikah Mawardi</i> <i>Universiti Utara Malaysia, MALAYSIA</i>
	B1-3 Designing Conceptual Model of Interactive Television Advertisement Ecosystem in Malaysia <i>Siti Mahfuzah, S., Azizah, C.O., Sabrina, M.R.</i> <i>Universiti Utara Malaysia, MALAYSIA</i>
	B1-4 Hatyai Travelogue: A Short Documentary Project <i>Fakhrul Anuar Aziz,</i> <i>Muhamad Nabil Mohd Khairil @ Hamzah</i> <i>Muhamad Hisyam Elias</i>
	B1-5 The Role of Internal Communication as An Intangible Strategic Brand Resource: An Empirical Study of Malaysia Brand-Oriented Small and Medium-Sized Enterprises <i>Rohana Mijan, Shuhaida Md Noor, Mastura Jaafar</i> <i>Universiti Utara Malaysia, MALAYSIA</i>
	B1-6 Organisational Management Practices In Media Organisation Towards Movie Animation Park Studio <i>Noor Aziah Abdullah, Nadia Diyana Mohd</i> <i>Muhaiyuddin, Sharifah Ismail,</i> <i>Universiti Utara Malaysia, MALAYSIA</i>
	B1-7 Teaching Mathematics Creatively Using Representation Concepts in Digital Wayang Kulit <i>Jasni Ahmad</i> <i>Universiti Utara Malaysia, MALAYSIA</i>

B2	Track Chairperson: Dr. Azlina Kamaruddin
02.40 PM – 04.40 PM	B2-1 Adapting 'Ethos' To Enhance Students' Confidence <i>Azlina Kamaruddin, Mohd Baharudin Mohd Hadza @ Othman, Rizwan Sabri</i> <i>Universiti Utara Malaysia, MALAYSIA</i>
(ROOM 7122)	B2-2 DIKI Model of Knowledge Management <i>Adirek Vajrapatkul, Sirinda Palakul, Chanida Wimarogh</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i>
	B2-3 Faktor- Faktor Yang Mempengaruhi Wartawan Dalam Pembingkaian Isu Pilihan Raya Kecil <i>Mohd Zuwairi Mat Saad</i> <i>Universiti Utara Malaysia, MALAYSIA</i>
	B2-4 Dasar Pelaksanaan Membawa Kewujudan Fenomena Filem Cetak Rompak & Filem Tidak Bertapis <i>Noor Aziah Abdullah</i> <i>Universiti Utara Malaysia, MALAYSIA</i>
	B2-5 Etika Dan Hukum Remaja Dalam Menggunakan Media Social <i>Di Kota Bandung Hana Silvana, Lusy Mukhlisiana</i> <i>Indonesia University of Education, INDONESIA</i>
	B2-6 Pengaruh Personaliti Big Five Menerusi Keseronokan Menonton Filem Seram Terhadap Nilai Agama <i>Aselawati Che Ab Adziz, Rohani Hashim, Hasrina Mustafa</i> <i>Universiti Utara Malaysia, MALAYSIA</i>
	B2-7 Understanding A Person With Autism And ADHD <i>Noor Aziah Abdullah , Yeo Kai Wen</i> <i>Universiti Utara Malaysia, MALAYSIA</i>

<p>C1</p> <p>12.30 PM – 02.30 PM</p> <p>(ROOM 7123)</p>	<p>Track Chairperson: Dr. Hammuzamer Irwan Hamzah</p> <p>C1-1 3D Animation Workshop: The Implementation of 3D Printing Education <i>Aimi Nabila Anizaim , Nelysa Nurshafira Mohd Roslan, Asrul Hafiz Huliman, Hami Ahmad</i> <i>University Teknologi Mara, MALAYSIA</i></p> <p>C1-2 From a Soccer Ball Inspiration to 3-D Structure <i>Liew Yek Ming, Siek Hwee Ling</i> <i>Sunway University, MALAYSIA</i></p> <p>C1-3 Achievement On Online Lessons Class Latex Products of High Vocational Certificate Student (Diploma) Year 1 in Suratthani Technical College. <i>Kasini Tanglien, Pattarawadee Jareernporn,</i> <i>Tapee University, THAILAND</i></p> <p>C1-4 Summative Evaluation of Animation of Schizophrenia (ANSCHI) <i>Azizah Che Omar, Azliza Othman,</i> <i>Nor Syamila Noor Azalli, Fatimah Zahra, Mohd Suhami, Mohd Adib Abd Muin</i> <i>Universiti Utara Malaysia, MALAYSIA</i></p> <p>C1-5 Analyzing the Requirements for Web Directories to Viewing Images With Google Cardboard <i>Hammuzamer Irwan Bin Hamzah,</i> <i>Tuan Zalizam Tuan Muda, Mohd. Nizam Saad</i> <i>Universiti Utara Malaysia, MALAYSIA</i></p> <p>C1-6 Testing Moderating Effects in a Persuasive Visual Design Model for Website Design <i>Nurulhuda Ibrahim, Mohd Fairuz Shiratuddin,</i> <i>Kok Wai Wong, Universiti Utara Malaysia, MALAYSIA</i></p> <p>C1-7 Integrating Multimedia Principle and Similarity Principle in Designing Digital Flashcard English Vocabulary Application for Intensive English Course Students <i>Azliza Othman, Hussein Bawazir, Yusrita Mohd Yusoff</i> <i>Universiti Utara Malaysia, MALAYSIA</i></p>
------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>C2</p> <p>02.40 PM – 04.40 PM</p> <p>(ROOM 7123)</p>	<p>Track Chairperson: Ana Malaya Camalingan</p> <p>C2-1 A Case Study of Computer Numerical Control Machine by Arduino Uno and TB6560 Driver Board <i>Muangmol Senpheng</i> <i>Loei Rajabhat University, THAILAND</i></p> <p>C2-2 Development of Phu-Lae Pineapple Process Improvement Technology <i>Pumipong Duangtang, Thanawut Tanawanit,</i> <i>Anusorn Jaikaew</i> <i>School of Computer and Information Technology,</i> <i>Chiang Rai Rajabhat University, THAILAND</i></p> <p>C2-3 Reducing The Errors In Production Process Of Uniform Product Factory <i>Nuttapol Lertsirisakulchai, Piyarat Khanla,</i> <i>Kaewketsaya Songthan, Pannipa Mongmontree,</i> <i>Wipawee Burana</i> <i>Khon Kaen University, THAILAND</i></p> <p>C2-4 From Research To The Community: Creation And Evaluation Of Motion Infographics Media For Knowledge Transfer In Environmental Factors On Cockle Production Of Ban Khlong Khon Community, Samut Songkhram Province <i>Kampanat Kusirirat, Tiantada Hiranyachattada,</i> <i>Kasem Kamolchaipisit, Woramet Weeraburinon,</i> <i>Nutthanun Thongtae</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>C2-5 The Study on Waste Management in Sra-yay-some District for Sustainable Development <i>Suwapat Tungphonphoon, Sarayuth Kan, Pasit Tinnam</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>C2-6 Case Study: Level of the Internet Based-Technology Dependency of the English Program Students of Bansomdejchaopraya Rajabhat <i>Theeraphon Charoensub, Nantanut Jokthongkum,</i> <i>Sookroj Rodjaroen</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p>
------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	<p>C2-7 Factors Affecting English Oral-Aural Communication of Undergraduates Majoring in English in the Universities in Bangkok <i>Nareumol Kheawkamlop, Nattida Phuengpanit, Orada Binhad Bansomdejchaopraya Rajabhat University, THAILAND</i></p>
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

D1	Track Chairperson: Dr. Joyce Cheah Lynn Sze
12.30 PM – 02.30 PM (ROOM 7124)	<p>D1-1 Visualizing Symptoms of Mental Health Through Public Service Announcement Animation <i>Norhasheila Muharam, Nora Edrina Sahharil, Aimi Nabila Anizaim, Nelysa Nurshafira Mohd Roslan</i> <i>University Teknologi Mara, MALAYSIA</i></p> <p>D1-2 Female Leadership Communication Style From The Employees' Perception <i>Joyce Cheah Lynn-Sze, Syamimi Binti Jamil</i> <i>Universiti Utara Malaysia, MALAYSIA</i></p> <p>D1-3 Communication Therapy Through Sound And Sound On Autism Patients In SLB Bina Anggita Yogyakarta <i>Fajar Dwi Putra</i> <i>Universitas Ahmad Dahlan, INDONESIA</i></p> <p>D1-4 Wayang Sada As a Media Communication For The Character Building of Children In The Village of Bejiharjo Gunung Kidul <i>Vani Dias Adiprabowo, M. Sn.</i> <i>Universitas Ahmad Dahlan, INDONESIA</i></p> <p>D1-5 Media Strategy By The Ministry Of Tourism Republic Indonesia for Supporting Lombok Tourism after Earthquake 2018 <i>Siti Chotijah, S.IP , MA,</i> <i>University of Mataram, INDONESIA</i></p> <p>D1-6 Marine Harpacticoid Copepods associated with <i>Ulva intestinalis</i> in Various Habitats at Chonburi Province, Thailand <i>Pawana Kangtia</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>D1-7 SDS-PAGE Technique In Genetics <i>Hatairuk Tungkasen</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p>

<p>D2</p> <p>02.40 PM – 04.40 PM</p> <p>(ROOM 7124)</p>	<p>Track Chairperson: Natawee Chaijum</p> <p>D2-1 Application of Preventive Maintenance for Mechanical Pressing Machine <i>Akaranun Asavarutpokin, Seksan Chaijit, Kanakorn Sawangcharoen</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>D2-2 Arduino-Based Programmable Spectrum of Horticultural LED with Constant PPF <i>Napat Watjanatepin, Angsuchawalnan Jampanak, Paiboon Kiatsookkanatorn</i> <i>Rajamangala University of Technology Suvarnabhumi, THAILAND</i></p> <p>D2-3 The Development Of Height Meter And Data Recording Using Embedded System With Ultrasonic Sensors <i>Natawee Chaijum, Wachira Boonrod</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>D2-4 An Emerging Digitalization: Is Missing the Human Touch in Human Resource <i>Dr. Preeti Sharma, Dr. Kirti Dang Longani</i> <i>Savitribai Phula Pune University, INDIA</i></p> <p>D2-5 A Proposal of Preventing Forgetting Children on School Buses by IoT Technology <i>Natthamol Heebjankri, Thamavich Wongsamerchue, Surin Pholngam, Prawit Pholnagm</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>D2-6 Design And Development Of Motion Infographics in Knowledge of Fish Releasing For Elderly <i>Tiantada Hiranyachattada, Kampanart Coosirirat, Titikron Phongdee</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p>
------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>E1</p> <p>12.30 PM – 02.30 PM</p> <p>(ROOM 7125)</p>	<p>Track Chairperson: Dr. Mohamad-Noor Salehuddin Sharipudin</p> <p>E1-1 The Influence of Electronic Word of Mouth (E-WOM) on Hotel Booking Intention Among Generation Y <i>Mohamad-Noor Salehuddin Sharipudin, Yee Chat Yin, Noraziah Mohd Amin</i> <i>Universiti Utara Malaysia, MALAYSIA</i></p> <p>E1-2 Health Communication in the Field of Nutrition Based on Online Media Platform <i>Mufid Salim, Fasty Arum Utami</i> <i>Universitas Ahmad Dahlan, INDONESIA</i></p> <p>E1-3 What Is Watched and Commented on Social Media? A YouTube Content Analysis <i>Norizah Aripin, Awan Ismail, Sabrina Mohd Rashid, Revathy Amadera Lingam, Nursyafiqahadila Zainal</i> <i>Universiti Utara Malaysia, MALAYSIA</i></p> <p>E1-4 Imitation Of Selegram Teenagers Behaviour In Conduct Use of Instagram <i>Hana Silvana, Lusy Mukhlisiana</i> <i>Indonesia University of Education, INDONESIA</i></p> <p>E1-5 The Role of Social Media Influencers and Consumers' Desirability in Buying <i>Haslina Halim, Marsyanila Adinda</i> <i>Universiti Utara Malaysia, MALAYSIA</i></p> <p>E1-6 Women's Domestification Through The Internet (Descriptive Study on Women's Social Media Users in Medan) <i>Dr. Nurbani, M.Si, Sabilla Tri Ananda, M.Si</i> <i>Universitas Sumatera Utara, INDONESIA</i></p> <p>E1-7 The Influences of Social Media and Local Norms in the formation of Social Capital : The Case Of Youth in Malang Indonesia <i>Reza Safitri</i> <i>University of Brawijaya, INDONESIA</i></p>
------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>E2</p> <p>02.40 PM – 04.40 PM</p> <p>(ROOM 7125)</p>	<p>Track Chairperson : Dr. Noor Aziah Abdullah</p> <p>E2-1 Emosi dan Ekspresi Budi Bahasa Remaja dalam Interaksi atas Talian <i>Romlah Ramli</i> <i>Utara Malaysia, MALAYSIA</i></p> <p>E2-2 Proses Sensemaking semasa Bencana Alam <i>Aida Filzah Ramli, Nor'izah Ahmad</i> <i>Universiti Malaysia Perlis, MALAYSIA</i></p> <p>E2-3 Pengaruh Media Sosial Terhadap Imej Korporat Organisasi <i>Muhammad Sollehudin Md Nadzir, Nor'Zah Ahmad</i> <i>Universiti Malaysia Perlis, MALAYSIA</i></p> <p>E2-4 Artikel Konseptual: Peranan Pengurusan Krisis Semasa Krisis Media Social <i>Nordalila binti Nazri, Nor'izah binti Ahmad</i> <i>Universiti Malaysia Perlis, MALAYSIA</i></p> <p>E2-5 Peranan Pengamal Perhubungan Awam Semasa Pasca Krisis <i>Siti Aishah Zaidi, Dr. Nor 'Zah Ahmad</i> <i>Universiti Malaysia Perlis, MALAYSIA</i></p> <p>E2-6 Program Rujukan Tone Wow Sebagai Kaedah Agihan Zakat Produktif di Malaysia <i>Mohd Adib Bin Abd Muin, Mohd Sollehudin Bin Shuib, Amirul Haqem Bin Abd Ghani, Azizah Binti Che Omar, Muhammad Fakhirin Che Majid</i> <i>Universiti Utara Malaysia, MALAYSIA</i></p> <p>E2-7 Perbezaan Tahap Kepuasan Saluran Komunikasi Penyelia dalam Perindustrian Kecil & Sederhana (PKS) Sektor Perkhidmatan di Utara Semenanjung Malaysia <i>Marzura Ibrahim, Hasrina Mustafa, Hafizah Zainal</i> <i>Universiti Utara Malaysia, MALAYSIA</i></p>
------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

F1	Track Chairperson: Asst. Prof. Dr. Supaporn Srihamee
12.30 PM – 02.30 PM (ROOM 7111)	<p>F1-1 Guideline General Administration of Elementary School under The Office of Chiang Mai Primary Educational Service Area 4 <i>Siriwan Saisupsin, Phornsirima Buranapan Siam Technology College, THAILAND</i></p> <p>F1-2 Administrative behavior of the head in the management of Children Organization Chiang Mai Local Administrative Development Center <i>Nawada Sampansincheu, Phornsirima Buranapan Siam Technology College, THAILAND</i></p> <p>F1-3 Parental Participation in Educational Management of Child Development Center Under The Local Administrative Organization Pong District, Phayao Province <i>Chanitha Muangkheu, Phornsirima Buranapan Siam Technology College, THAILAND</i></p> <p>F1-4 The relationship between emotional intelligence and Administration of child development center under the local administrative organization in Mae Chaem District Chiangmai Province <i>Thitari Sillapongpai, Phornsirima Buranapan Siam Technology College, THAILAND</i></p> <p>F1-5 The Relationship between Leadership and Administrative Skills of Administrators of Child Development Centers under the Local Government Organization Chaiyaphum Province <i>Bunjira Supanphong, Phornsirima Buranapan Siam Technology College, THAILAND</i></p> <p>F1-6 The Development of teaching potential in STEM Education to enhance of Life Skills of Graduate Students <i>Dr. Phornsirima Buranapan, Dr. Vorachai Viphoouparakhot Siam Technology College, THAILAND</i></p>

	<p>F1-7 Academic Administration of Opportunity Expansion Schools Under Suphanburi Primary Educational Service Area Office 2 <i>Janya Onsri, Dr.Pimparit Tiangpak</i> <i>Siam Technology College, THAILAND</i></p>
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>F2</p> <p>02.40 PM – 04.40 PM</p> <p>(ROOM 7111)</p>	<p>Track Chairperson: Asst. Prof. Dr. Wannaporn Siripala</p> <p>F2-1 Organizational Culture of Schools under the Local Administrations, Nong Khae District, Saraburee Province <i>Sarunya Pansomboon, Dr.Pimparit Tiangpak Siam Technology College, THAILAND</i></p> <p>F2-2 Instructional Leadership of School Administrators under Local Administrative Organizations in Nong Khae District, Saraburi Province <i>Supaporn Laoacariyaporn, Dr.Pimparit Tiangpak Siam Technology College, THAILAND</i></p> <p>F2-3 Early Childhood Educational Administration in Child Development Centers under Local Government Organization Kanchanaburi <i>Kunlawan Jensuwan, Dr.Pimparit Tiangpak Siam Technology College, THAILAND</i></p> <p>F2-4 Operation of the Leader of Child Development Center under the Local Administrative Organization Chaiyaphum Province <i>Anek Supanpong, Dr.Vorachai Viphoouparakhot Siam Technology College, THAILAND</i></p> <p>F2-5 Leadership of Administrator with Good Governance Administration in School Network for Enhancing Efficiency of Education Center 6 under Bureau of Special Education Administration <i>Jarunya Chamburee, Dr.Vorachai Viphoouparakhot Siam Technology College, THAILAND</i></p> <p>F2-6 Teacher Professional Performance of the Head of the Child Development Center under the auspices of Local Administrative Organization, Chaiyaphum Province <i>Nualchan Maneesang, Dr.Vorachai Viphoouparakhot Siam Technology College, THAILAND</i></p> <p>F2-7 Personnel Development of Schools under the Phuket Primary Educational Service Area Office 1 <i>Thanaharith Kasiraks, Dr.Vorachai Viphoouparakhot Siam Technology College, THAILAND</i></p>
------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>G1</p> <p>12.30 PM – 02.30 PM</p> <p>(ROOM 7112)</p>	<p>Track Chairperson: Porawee Chotpitayasunon</p> <p>G1-1 A study of Mathematics learning achievement basic knowledge about real numbers of Mathayom Suksa 2, Debsirin Nonthaburi School using Team Assisted Individualization (TAI) <i>Jennarong Buaharn, Wannaporn Siripala, Sompob Saelee, Sumlearng Chunrungsikul, Pongrus Phuangphoo</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>G1-2 A study of Mathematics learning achievement on Powers of Mathayomsuksa 1, Rajavinit Mathayom School using Student Teams Achievement Divisions (STAD) <i>Koonjira Maneechotchutima, Wannaporn Siripala, Sompob Saelee, Maneenat Kaewneam, Pongrus Phuangphoo</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>G1-3 A study of Mathematics learning achievement using Inquiry-based learning management with 5E techniques on Powers of Mathayom Suksa 1 of Trimitwittayalai School <i>Thosapon Saelod, Wannaporn Siripala, Sompob Saelee, Chonticha Sataprahm, Pongrus Phuangphoo</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>G1-4 A study of Mathematics learning achievement on Powers of Mathayom Suksa 1, Rajavinit Mathayom School by using Teams-Games-Tournaments technique (TGT) <i>Oradee Yenkasem, Wannaporn Siripala, Sompob Saelee, Nukul Kaewneam, Pongrus Phuangphoo</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>G1-5 The study of mathematics learning achievement and retention on Pythagoras's theorem of mathayomsuksa 2 students by the cooperative learning STAD (Student Teams Achievement Division) technique <i>Kanthima Pongdeang, Wannaporn Siripala, Sompob Saelee, Maneenat Kaewneam, Pongrus Phuangphoo</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p>
------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	<p>G1-6 The study of mathematics learning achievement and retention on equation system of mathayomsuksa 3 students by the cooperative learning TAI (Team Assisted Individualization) technique <i>Darinee Komthaisong, Wannaporn Siripala, Sompob Saelee, Maneenat Kaewneam, Pongrus Phuangphoo Bansomdejchaopraya Rajabhat University, THAILAND</i></p>
--	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>G2</p> <p>02.40 PM – 04.40 PM</p> <p>(ROOM 7112)</p>	<p>Track Chairperson: Asst. Prof. Nuntanut Wattanasupinyo</p> <p>G2-1 A study of mathematics learning achievement on equation with one variable of mathayomsuksa 1 students by using the cooperative learning STAD (Student Teams Achievement Division) technique <i>Saruttaya Somkid, Wannaporn Siripala, Sompob Saelee, Sumlearng Chunrungsikul, Pongrus Phuangphoo</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>G2-2 A study of mathematics learning achievement on linear equation system of mathayomsuksa 3 students by using the learning management KWDL <i>Kittisak Sakornkum, Wannaporn Siripala, Sompob Saelee, Nukul Kaewneam, Pongrus Phuangphoo</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>G2-3 A study of mathematics learning achievement on indices of mathayomsuksa 1 students by using CIPPA model learning style <i>Pleuk Sappawat, Wannaporn Siripala, Sompob Saelee, Chonticha Sataprahm, Pongrus Phuangphoo</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>G2-4 A Study of Learning Achievement in Teaching by Using Domino game and STAD Technique in Topic “Food and Living” <i>Chanthimakon Kamon, Naruwan Pattarapongdilok</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>G2-5 A Study of Science Learning Achievement on Atmosphere Topic of Mathayomsuksa 1 by Using Science Activities Learning Package on STEM Education <i>Atthachai Sriwatthanasakdina, Watinee Chanmee, Hatairat Sukpreabprom</i> <i>Wang Klai Kang Won School under the Royal Patronage of His Majesty the King, THAILAND</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p>
------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	<p>G2-6 A Study of Learning Achievement and Satisfaction of Mathayomsuksa 1 Students Using STAD Cooperative Learning Technique with Games on Heat Transfer <i>Jiraporn Khunchan, Hatairat Sukpreabprom, Watinee Chanmee Bansomdejchaopraya Rajabhat University, THAILAND</i></p>
--	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>H1</p> <p>12.30 PM – 02.30 PM</p> <p>(ROOM 7113)</p>	<p>Track Chairperson: Dussadee Terdbareeme</p> <p>H1-1 System Analysis and Design of E-Commerce Website System for sale calico in Thailand 4.0 <i>Nattapong Sorbei, Affan Searee, Peanthip Srisutham, Natthamol Heebjankri</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>H1-2 Analysis and Design Web Application for Tennis Court Reservation Service System Management <i>Krisada thongkaw, Tanakon Viratmongkolcha, Peanthip Srisutam, Naphaphorn Jiaphong</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>H1-3 Web Application Development Supporting Tourism in Thonburi District <i>Nuttakit Tobenjasub, Wisarut thongdeenok, Rattana Leerungnavarat, Natthamol Heebjankri</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>H1-4 The control system development of chameleon reptile’s cage with IoT technology <i>Kittipong Boosuwan, Pitiya Phunsakethunchai, Surin Pholngam, Prawit Pholnagm</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>H1-5 Creating “Internet of Things” motion infographics Media for sub-learning units in Internet Technology and Web Development course <i>Kampanat Kusirirat, Tiantada Hiranyachattad, Nutthanan Ranron, Nutthakamon Aueachat, Juthamas Srivirak</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>H1-6 The Development Of Teaching Thai Literature by Applying Active Learning and Constructionism for Grade 12 Students of Mathayomwatsing School <i>Prajak Noinuay</i> <i>Mathayomwatsing School, THAILAND</i></p>
------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	<p>H1-7 The Development of sets of learning activities on dangerous life-threatening drugs using inquiry cycle together with graphic Organizer techniques to promote the analytical thinking ability of Mathayomsuksa 2 students</p> <p><i>Teerasak Sangsrichan</i> <i>Municipal School 1 (Sangkhawit), THAILAND</i></p>
--	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>H2</p> <p>02.40 PM – 04.40 PM</p> <p>(ROOM 7113)</p>	<p>Track Chairperson: Asst. Prof. Surapong Bankrithong</p> <p>H2-1 The Requirements for Music Teaching and Learning Management at the Graduate Level : A Case Study of the Master of Arts Program in Western Music, College of Music Bansomdejchaopraya Rajabhat University <i>Pimonmas Promsukkul, Anurak Boonjae</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>H2-2 A comparative study the military band management of Nawamintharachinuthid Horwang Nonthaburi School and Horwang School <i>Sakda Thongthipmak</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>H2-3 The Study of Curriculum, Teaching and Assessment about Keyboard Skills for Pre-college Students, College of music, Mahidol University <i>Chalinee Suriyonprengsang</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>H2-4 A Construction of Learning Activity Package for Blowing the Pi Mangala by using the Songs of Pi Mangala by S. Ratchapruerk Band Sukhothai Province <i>Palakorn Tipmala, Pimonmas Promsukkul,</i> <i>Ekachai Phuhirun, Worasorn Netthip</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>H2-5 The Study of Educational Management on Teaching Music Practice a Case Study of Music Program Students in Sarasas Witaed Bangbon School <i>Yongyuth Wannasathop, Pimonmas Promsukkul,</i> <i>Ekachai Phuhirun</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>H2-6 Development of Computer Assisted Instruction on Music Natation and Rest of Matthayomsuksa 4 Students Pitchalai Preparatory School, Hatyai District, Songkhla Province <i>Suthep Chotitham</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p>
------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

I1	Track Chairperson: Asst. Prof. Dr. Yanisa Tantipalukul
12.30 PM – 02.30 PM	I1-1 Establishment of Laboratory Safety Standards: Chemical Management <i>Wiriyasomtua, Kanokok Posiw, Khanitta Hathaisamit Bansomdejchaopraya Rajabhat University, THAILAND</i>
(ROOM 7114)	I1-2 Diurnal Variations of Seawater Quality at Klong Khone, Meang District, Samut Songkhram Province <i>Duangjai Khewkasem, Jadsada Lalchuen, Chayarat Srisunont, Treeranut Srisunont, Orapim Mongkolkeha, Khanita Hathaisamit Bansomdejchaopraya Rajabhat University, THAILAND</i>
	I1-3 Study of Physical Water Quality, Chemical and Nutrient Factors in Water at Dendrobium Orchid Garden in Nakhon Pathom Province and Samut Sakhon Province <i>Malee Likitchaikul, Sarayat Khan, Kanitta Hathaisamit, Chayarat Srisunont, Thanyada Varasit, Supaporn Chantatong, Nuttha Charoensom, Ratchanee Khamnongphai Bansomdejchaopraya Rajabhat University, THAILAND</i>
	I1-4 Study on the Change of Organic Matter in Each Sediment level at Klong Khone, Meang District, Samut Songkhram Province <i>Aranya Kansingha, Chayarat Srisunont, Treeranut Srisunont, Malee Likitchaikun, Sarayut Khan Bansomdejchaopraya Rajabhat University, THAILAND</i>
	I1-5 Model of Household Solid Waste Management of people in Nang Laenai village Moo 7, Nang Lae Subdistrict, Mueang District, Chiang Rai Province <i>Pinathinee Jitkham, Phatanit Khamtran, Aree Choyae, Warunee phunwong Bansomdejchaopraya Rajabhat University, THAILAND</i>
	I1-6 The use of cattail fibers for oil removal <i>Oatchara Sonman, Papitchaya Srithep Bansomdejchaopraya Rajabhat University, THAILAND</i>

	<p>I1-7 Development of anti dandruff herbal shampoo formulation <i>Vanchai Khotame, Atchara Kaewnoi, Supharat Duanyai, Tien Theravorawong Bansomdejchaopraya Rajabhat University, THAILAND</i></p>
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>I2</p> <p>02.40 PM – 04.40 PM</p> <p>(ROOM 7114)</p>	<p>Track Chairperson: Asst. Prof. Jaran Prajanban</p> <p>I2-1 Study of the Inhibition Ability of Nelumbo Nucifera for Mild Steel Corrosion <i>Atitaya Samontha, Natthawut Jitsamak</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>I2-2 The Simple Extraction Method of Flavonoid from Averrhoa Bilimbi Fruit <i>Atitaya Samontha, Benjarat Yangpardit</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>I2-3 The Thermoelectric Cooling Box <i>Kavinchai Thongtongchap, Supachok Kaewkanok,</i> <i>Panawat Chimruang</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>I2-4 Study and Design of Electric Motor Torque Meter By Using The Brake Method <i>Peerawat Meesuk, Kawinchai Tongtrongsub,</i> <i>Natthaphong Nak-Udom, Kittiphong Phimyotha</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>I2-5 The Model Development of Cost Reduction for Mould Production of Automotive Part Industry <i>Thawatchai Pongsanam, Boonmee Kavinseksan,</i> <i>Vichai Weanphet, Sombat Teekasap</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p> <p>I2-6 Implementation of the Spectrum of Solar Simulator using 6 color Light Emitting Diodes by Simple Simulation Method <i>Napat Watjanatepin, Pattanapong Sinpitoon,</i> <i>Chaiyant Boonmee</i> <i>Rajamangala University of Technology Suvarnabhumi, THAILAND</i></p> <p>I2-7 Development of Packaging Product Processing Goat Meat in Nakorn Srithammarat Province <i>Nittaya Maneewongse</i> <i>Bansomdejchaopraya Rajabhat University, THAILAND</i></p>
------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

ABSTRACTS

(A1-1)

The Framing of LGBT Issues on News Portal Media in Malaysia

**Kok Jean Jie, Dr Julia Wirza Mohd Zawawi, Dr Akmar Hayati Binti Ahmad
Ghazali**

Universiti Putra Malaysia (jean98jie@outlook.com)

Universiti Putra Malaysia (wirza@upm.edu.my)

Universiti Putra Malaysia (akmar@upm.edu.my)

LGBT has been prohibited in Malaysia and been stated by Prime Minister of Malaysia on 21st September 2018. It becomes one of the top concern news in Malaysia that faced legal challenges from the politic and society. The news of LGBT issue had been published to the public, especially on news portal media. This research aims to determine the concerns of journalists in the process of interpreting LGBT news by using news portal media in Malaysia. At the same time, this research also aims to identify the process of journalists frame the LGBT news by using frame-building process that effected by internal and external factors. In order to meet objectives, researcher will analyses the factors effect on the news framing of LGBT issues through news portal media in the perceptive of journalism. Framing theory is the main theory that will be used in this research. Researcher will adapt and adopt the framing theory of De Vreese (2005) and mainly focus on frame-building process. At the same time, researcher will examine the most significant internal factor and external factor that found in frame-building process and mainly effected in the process of interpreting LGBT issues on news portal media in Malaysia. For the data analysis and findings of this research, researcher will use content analysis to show out the results by using codebook. Online news article about LGBT issues on news portal media of Malaysia such as MalaysiaKini and TheStar will be filtered and coded in codebook. This research has delivered valuable insights into the field of journalism in framing different aspects of news.

KEYWORDS: framing; frame-building; LGBT; news portal media

(A1-2)

Effects on LGBT Issues in Malaysia? How You Think, How You React on It

Julia Wirza Mohd Zawawi, Hamisah Hassan, Kho Suet Nie, Norliana Hashim

Universiti Putra Malaysia (wirza@upm.edu.my)

Universiti Putra Malaysia (hamisah@upm.edu.my)

Taylor's University (SuetNie.Kho@taylors.edu.my)

Universiti Putra Malaysia (h_norliana@upm.edu.my)

The trend of news reporting that is increasingly becoming more open has caused the media industry to shift and report about news that are considered taboo to the mass. The high acceptance and rate of feedback from the readers boost them to constantly present about taboo issues. Lesbian, Gay, Bisexual and Transgender or commonly known as LGBT is an issue that is gaining traction on online news portals. Consequently, the main aim of this conceptual article is to discuss the effects of news presentation regarding this issue using the framing theory from three main aspects which are (i) cognitive (ii) response (attitude) and (iii) behavior (acceptance or rejection). This study can be used to shape a theoretical expectation of LGBT issues that are being presented by online news portal today.

KEYWORDS: framing; frame setting; cognitive; expression; attitude

(A1-3)

**Framing Analysis of Arrest News "Muslim Cyber Army"
at detikcom, KOMPAS.com and REPUBLIKA.co.id
Period 27 February - 31 March 2018**

Hartin Nur Khusnia

University of Mataram (hartinnkhsunia@gmail.com)

Criminal events are events that are news value, therefore it is common for the mass media to make criminal events the material of their reporting. As a crime in cyberspace conducted by a group of people known as "Muslim cyber army" is widely reported in the mass media. Arrests of the Muslim Cyber Army (MCA) group, perpetrators of hoax news spreaders and utter hate speech on social media on February 26, 2018 led to mixed reactions among the public. In general, people who support the arrest of MCA are based on the argument that this should be done by the police to enforce the law and to safeguard national integration. Meanwhile, other parties assume that MCA arrests are politically charged, the National Police are considered to have interests in certain political parties. This study analyzes how the same events are presented according to the frame of each media. Analysis of Pan and Kosicki framing is used to view news frames in three online media, namely detikcom; REPUBLIKA.co.id; and KOMPAS.com. News frames according to Pan and Kosicki's framing formulations can be analyzed through syntactic, script, thematic and rhetorical structures. The results of the analysis on the three media found that: the news frame at detikcom was an MCA arrest purely law enforcement; KOMPAS.com news frame is a criminal MCA activity and is politically charged, while the REPUBLIKA.co.id news frame is a politically charged MCA arrest. The difference between the three online media is to frame the news due to differences in interests and media ideology.

KEYWORDS: framing analysis; online media; muslim cyber army

(A1-4)

How Journalists Perceive the Media Relations of Public Relations As News-Sources In Indonesia

Rachmat Kriyantono

School of Communication, Brawijaya University,
Malang, Indonesia

The research aims to examine the perception of journalists on media relations conducted by public relations practitioners. The Agenda Building-Information Subsidies Theory views that media relations encourages public relations practitioners to be a news-sources for journalists. Media relations is a tool of relaying information which ties together both professions, however, the relationship is often tinged by conflict of interest that arise from the different perceptions of each other. Through a survey, the research delivers questionnaires to 158 journalists in East Java Province. The t-test reveals that the journalists' perceptions are determined by journalists' working experiences. Website can support media relations becomes more effective.

KEYWORDS: Agenda Building-Information Subsidies; Journalist;
Media Relations; Public Relations

(A1-5)

News Framing: Harmonious Reporting in Malaysia-Singapore Relationship

Awan Ismail, PhD, Rizalawati Ismail, PhD

Universiti Utara Malaysia (awan@uum.edu.my)

International Islamic University Malaysia (IIUM) (rizalawati@iium.edu)

This paper discusses the development journalism and news reporting practice in Malaysia. The research analyses the forces which shape 'harmonious reporting' in Malaysia. Using Malaysia-Singapore relationship as a case study, this paper discusses the descriptive analysis of news trends which demonstrates how leadership shaped or influenced online news in Malaysia-Singapore relationship. The trend was observed from 1996 to 2019. However, attention is given under Mahathir's administration; this article identifies what are the contributing factors impacting on journalists in adopting this harmonious reporting approach. Besides, the concept of 'framing' is significant to a study aiming to identify the importance of the news agenda setting, and what can be seen as 'harmonious' reporting, as the main or primary characteristic of Malaysian news reporting. How the media frame the issues through the headlines and the news text is important. The analysis will indicate a significant relationship between news reporting, leadership styles and whether the news reporting constitutes the nature of harmonious reporting. Do the headlines, first and second paragraph constitute any meaning of harmonious reporting. These preliminary findings showed that the practices of 'harmonious reporting' in Asian, in particular Malaysia are very much influenced by the internal forces such as the leadership style. The news items fluctuated and the highest quantity of online news is spotted in the years/periods during Mahathir's era.

KEYWORDS: harmonious reporting; news trend; content analysis;
Malaysia-Singapore relationship

(A1-6)

Malays Online News and Public Opinion: A Study of Issues during the Semenyih By-Election

**Muhamad Mat Yakim, Kamaruzzaman Abdul Manan,
Shafizan Mohamed, Azahar Kasim**

Universiti Utara Malaysia (muhamad.my@uum.edu.my)
International Islamic University Malaysia (kamarule@iium.edu.my)
International Islamic University Malaysia (shafizan@iium.edu.my)
Universiti Utara Malaysia (w_azahar@uum.edu.my)

Media can play an important role in the public's voting decision. Despite that, it is unknown whether the issues highlight by media agenda counterpart the issues of the public. Semenyih by-elections resulted in a second victory for Barisan Nasional. The factor that made the election a very interesting one was that the new government which was covered by various issues such as the recent loss of Cameron Highlands, the effectiveness of the new government's Pakatan Harapan (PH) and the strength of Barisan Nasional-PAS cooperation gave a big challenge to PH government to face in the Semenyih by-election. The majority of the voters are Malays, thus this will determine the strength of support in Malay society after GE14. In Malaysia, Facebook is the most popular social media that been used in political communication. This paper investigates whether news online such as Facebook set the agenda for its readers. In response to the importance of social networking sites as sources of information, news media organizations have set up Facebook channels in which they publish news stories or links to articles. This allows for a wider news reach as well as audience participation. When audience members read and subsequently comment on news articles on Facebook, it becomes possible to identify public opinions and sentiments on the issues being covered. Content analysis was used to analyse 398 issues that been highlighted by two Malays online news facebook page namely Malaysiakini BM and Sinar Harian during Semenyih by-election. Moreover, a total of 691 public responds from the issues been sampled to investigate whether user comments mirror the issues and sentiments presented in the news articles. The findings showed that news sentiments and audience sentiments did not necessarily have a clear relationship.

KEYWORDS: facebook; election; Malaysia; politics; public opinion;
agenda setting; news

(A1-7)

Exploring the Ideas of Hyperlocal News as A Future Journalism

**Afiqah Mior Kamarulbaid , Wan Anita Wan Abas, Siti Zobidah Omar,
Rosmiza Bidin**

University Putra Malaysia (afiqahmks@gmail.com)

University Putra Malaysia (anita@upm.edu.my)

University Putra Malaysia (zobidah@upm.edu.my)

University Putra Malaysia (rosmiza@upm.edu.my)

This study is to explore the ideas of hyperlocal news as future journalism. As the economy weakens, the general trend of declining circulation and advertising revenue for the past few years, Malaysia's media industry has begun downsizing or wrapping up certain segments of their operations. Utusan Melayu offers VSS to more than half its workers as part of its restructuring exercise to reduce overall costs due to the company's financial constraints, same goes to Media Prima and Astro. The new media on news platforms has change the practices of news making. Growing body research on digital journalism and news on digital media but little has been undertaken into the potential of hyperlocal news as future journalism. This study will review articles related to the study of hyperlocal news, digital journalism and new media. By conducting this study, a deeper understanding of what is hyperlocal media, what the roles and how this hyperlocal media as a future of local journalism.

KEYWORDS: hyperlocal news; future journalism; news making;
digital journalism; new media

(A2-1)

Appending Roles of Thai Lanna Temples for Sustainable Communities: A Case Study of Wat Phumin, Nan Province

Tawipas Pichaichanarong, Veerawat Sirivesmas, Rueanglada Punyalikhit

Suan Sunandha Rajabhat University, Thailand (tawipas.pi@ssru.ac.th)

Silpakorn University, Bangkok, Thailand (veerawatsi@gmail.com)

Silpakorn University, Bangkok, Thailand (rueanglada.pun@gmail.com)

Temples have been important in Thai society for over 700 years. During the Sukhothai Kingdom (1238 -1438 AD), under the great King Ramkhamhang in the then capital city of Sukhothai Theravada Buddhism became the predominant religion in the land. Later, the Lanna kindom (1296 - 1558 AD) was founded in the mid-13th century by King Mangrai. Indeed, King Ramkhamhang had good relations with King Mangrai, as well as with King Ngam Muang of Phayao Kingdom (1094–1338 AD). It is often considered that Theravada Buddhism was introduced to these kingdoms during the reigns of these three Kings. Indeed, the Lanna Kingdom established Theravada Buddhism as its official religion. Until 1894, the Lanna Kingdom together with the Siamese Kingdom from the Rattanakosin period (1782 AD - present). Throughout their history, temples – called *wat* in Thai – have become essential to the people of Lanna and Thailand’s lives. At present, some Thai Lanna temples not only function as sites for performing religious rites, but they are also central to the Lanna and Thai communities. The temple is a sacred work of architecture, with specific ideas pertaining to the art and decoration of inside the temples. Wattana Boonjub (2009) points out that Mural painting was used to teach Thai (and the Lanna) people in the past. One example of this is Wat Phumin in Nan province. With its beautiful Lanna architecture and exquisite Lanna mural paintings, the temple is tangible heritage, its unique characteristics having attracted many visitors over the years. Subsequently, Wat Phumin has established itself as a tourist attraction generating revenue for its local community. Johan Galtung (1980) defined “self-reliance” as the strategy for development to achieve financial independence. Through collaboration the community becomes sustainable. This research addresses whether the tourist revenue generated from Wat Phumin has helped create a sustainable economy for the local community For the methodology in this research, quantitative and qualitative methods were used to collect the data from tourists who have visited Wat Phumin in Nan province. The data were then analyzed using mean, descriptive statistics, and qualitative data. This study concludes that Wat Phumin, Nan province has helped make the surrounding community sustainable.

KEYWORDS: Thai Lanna temples; Wat Phumin; self-reliance; stakeholders; sustainable community

(A2-2)

An Explainer Video: Saleduck Asia Sdn. Bhd.

**Nadia Diyana binti Mohd Muhaiyuddin, Nurul Atiqah Binti Mohd Zailani,
Leanna Seah**

Universiti Utara Malaysia (nadia.diyana@uum.edu.my)

Universiti Utara Malaysia (atiqahzailani23@gmail.com)

Saleduck Asia Sdn Bhd, Unit 25-11, Tower A, The Vertical II, 8 Jalan Kerinchi,
Bangsar South, 59200 Kuala Lumpur (leanna@saleduck.com)

Saleduck Asia Sdn.Bhd is a multinational company that helps online consumers to save money while purchasing products from the merchants through coupon code, discounts and deals provided by this company. As to get the exclusive coupon code that will only available on Saleduck Asia Sdn.Bhd, the team members have to seek direct partnership with the advertisers or also known as merchants. One of the solutions to communicate effectively with the advertisers and at the same time to save more time is to produce a video about the collaboration with Saleduck Asia Sdn.Bhd. This video project has been chosen as to enlighten the advertisers on how they will benefit through the collaboration with Saleduck Asia Sdn.Bhd. The main significance of the project is that the advertisers could develop their understandings on how Saleduck benefits them in boosting up the number of traffic and sales. The method that has been used is the ADDIE methodology as to make sure that this project is on track from the first phase which is analysis phase until the evaluation phase. The project has gone through the analysis, design, development, implementation and evaluation phases before the final product is achieved. A few staff and consumers were involved in producing this part especially on evaluation phase. As a result, this video help to develop the advertisers' understanding and get a clear view on parts they can gain through the collaboration with Saleduck Asia Sdn.Bhd. For future work, this video is expected can be a converted to a short advertisement which can be shown in television.

KEYWORDS: advertising; video; ADDIE methodology

(A2-3)

Effectiveness of Game-based Formative Assessment on Students' Understanding in Human Computer Interaction Classroom

Subashini Annamalai, Azizah Che Omar

Universiti Utara Malaysia (subashini@uum.edu.my)

Universiti Utara Malaysia (azizah@uum.edu.my)

Human Computer Interaction (HCI) is growing both in terms of educational offer and professional demands and it is perceived as a critical discipline. The aim of HCI courses is to expose the students with the concepts of user interface and interaction design techniques, skills and values which is necessary for them to develop an interaction design system. Although, the teaching and learning approaches has significantly shifted to a technology based pedagogies, little has been done in the assessment process. In addition, the current practice in the HCI is assessment of learning which primarily on assigning grades of student performance. This study attempts to investigate the effectiveness of game-based formative assessment on students' understanding in Human Computer Interaction classroom. The respondents for this research were 30 undergraduates who enrolled in a HCI course in a public university in Malaysia. A quasi-experimental research design was employed whereby the respondents were formatively assessed using a game-based online assessment tool and the scores are recorded to measure the students' understanding of the learning content. A set of pre test and post test were also used as data collecting instruments to further prove the effectiveness of the intervention. The data were then collected and analyzed using descriptive and ANOVA statistical analysis. The findings revealed that the students showed higher understanding compared to previous semester students who was not assessed formatively, therefore adducing a scope of implementing game-based formative assessments enhanced the learning process.

KEYWORDS: game-based; formative assessment; HCI; understanding

(A2-4)

Formative Evaluation for Mobile Application Guide for Infrequent Flyers (MAGIF)

**Sobihatun Nur Abdul Salam, Fathin Nabilah binti Mohd Razif,
Rawdhah Nadhirah binti Zainal**

Institute of Creative Humanities and Multimedia Innovation, School of Multimedia
Technology and Communication (SMMTC), Universiti Utara Malaysia
(sobihatun@smmtc.uum.edu.my)

School of Multimedia Technology and Communication (SMMTC),
Universiti Utara Malaysia (fathin_nabilah@smmtc.uum.edu.my)
School of Multimedia Technology and Communication (SMMTC),
Universiti Utara Malaysia (rawdhah_nadhirah@smmtc.uum.edu.my)

The formative evaluation for Mobile Application Guide for Infrequent Flyers (MAGIF) was conducted with the ultimate objective to assess the usability of the high-fidelity prototype of MAGIF according to several dimensions. Focus group was chosen as the main method to evaluate the application and two sessions were conducted with experts under different types of fields. The first session was with the multimedia experts at School of Multimedia Technology and Communication (SMMTC), UUM and the second session was with the subject matter experts (SME), staffs under an airline company working at Sultan Abdul Halim Airport, Alor Setar. The study gathered both qualitative and quantitative data. Based on the feedback and input accumulated during the evaluation, a major redesign is needed for certain sub-menus to avoid making users frustrated while using the application. Besides that, one major takeaway from the session with the airline experts was the application needs to use icons and terms that are most common and familiar among the majority of the users in order to avoid confusion. Hence, based on these findings, several parts of the application will undergo some major redesign to enhance the usability of the application.

KEYWORDS: airport guide; mobile application; formative evaluation;
focus group; usability

(A2-5)

Cross Cultural Communication of BIPA Learners in Program Darmasiswa Indonesia

Muhammad Najih Farihanto

Universitas Ahmad Dahlan, Indonesia (muhammad.farihanto@comm.uad.ac.id)

Indonesian government hold a program called BIPA (Bahasa Indonesia for Foreign Learners) which aims to internationalize Bahasa Indonesian and hold scholarships named Darmasiswa Program, special scholarships for foreigners who are interested in Bahasa Indonesian. In this study discussed the cross-cultural communication of foreign students at Darmasiswa Program. The purposes of the research are find out the problems of cross-cultural communication experienced by the Darmasiswa students when they lived in Indonesia. The results of the research are the problems of verbal and non-verbal cross-cultural communication. Verbal problems related to language. For example Ukrainian students are very difficult to pronounce words that use the letters *ng*. While non-verbal problems relate to the symbols that encountered in Indonesia. For example, Chinese students who live close to the mosque are very disturbed by the sound of the Adhan. This research is a qualitative descriptive and using case study. The research subjects were foreign students in the Darmasiswa Program. The objects of the research are the problem of cross-cultural communication of foreign students in the Darmasiswa Program. In this study using interview methods, questionnaires, documents, and direct observation in the process of collecting data.

KEYWORDS: cross cultural; communication; foreign learners

(A2-7)

Teenagers' Emotion and Courtesy Expression in Online Interaction

Romlah Ramli

Universiti Utara Malaysia (romlah@uum.edu.my)

The development of social media is enable users to use from all areas, purposes, and times. The changes of usage and media exposure significantly affect the way of communicator's interaction. Further, the related issue such as courtesy is relevant to be discussed. This study looks at the extent of the exposure level and social media facilities with emotions of communicator with the local courtesy. This study uses a quantitative approach with the need to collect data through questionnaires approximately 395 teenagers in Penang. The method of data analysis is by using descriptive and inference. The findings show that aspects of courtesy become a consideration in expressing emotions through emoticons chosen by respondents and the emotions of youth had the interesting to be explored.

KEYWORDS: Malaysian courtesy; communicator emotions; teenagers courtesy

(B1-1)

Satire Politic in the Era of the President Joko Widodo

Nunik Hariyanti

Universitas Ahmad Dahlan Yogyakarta, Indonesia
(nunik.hariyanti@comm.uad.ac.id)

The start of reforms in 1998 in Indonesia was a gateway for Indonesian people to be able to communicate their opinions and aspirations freely and openly. This also does not rule out the possibility for the public to be able to express criticism of the ruling government. The presence of political satire brings its own color to the communication process where messages in the form of criticism are packed in the form of humor. Through this research, researchers aim to describe the form of satire politics that occurred in the era of President Joko Widodo, and examine political messages that emerged as a form of criticism of the ruling government. This study uses a type of qualitative content analysis research. Where researchers allocate to self-activity as observers and participants in the form of associating personal experiences, interviews, observations, and interactions to be able to describe related to satire politics in various media. Therefore, this study shows that at present the aspirations and even criticism of the people is not something taboo. The satire politics is part of the democratic system in Indonesia.

KEYWORDS: satire politic; Joko Widodo; democracy

(B1-2)

Framing Analysis of the 14th General Election News Theme: A study of six online newspapers in Malaysia and Indonesia

Azahar Kasim, Nur Atikah Mawardi

Universiti Utara Malaysia (w_azahar@uum.edu.my)
Universiti Utara Malaysia (nuratikah1402@gmail.com)

The 14th general election in Malaysia has created history for the first time, Malaysia form a new government that will rule the country for the next five years and successfully break the Barisan Nasional (BN) monopoly for 60 years. The 14th general election was a nuisance to the world compared to the previous election where a clash between two political figures Najib Razak and Mahathir Mohamad, who was the former Malaysian prime minister re-contested to seize the Malaysian government under Najib Razak's leadership. The election was illustrates as a bigger election where many political crises took place to topple the BN and Najib Razak linked to the 1MDB issue. Hence, more issues will be discussed in this election which has had major changes to Malaysia. Therefore, this study is to identify news trends and total articles coverage during on the 14th General Elections (GE-14). This study uses qualitative methods and content analysis from three online newspapers in Malaysia namely Berita Harian, Harian Metro, Sinar Harian and three online newspapers in Indonesia namely Kompas, Media Indonesia and Tribun Jabar. The study was conducted for 14 days from May 3 until 16 2018. A total of 135 news on GE-14 was published from six news papers. The findings show that nine theme were discussed in GE-14 namely the Fake News, Election Result, Democracy Practices, Candidate, Security, Power Transition, Campaign, Transformation and 1MDB Scandal.

KEYWORDS: general elections; online newspapers; framing; media and politic

(B1-3)

Designing Conceptual Model of Interactive Television Advertisement Ecosystem in Malaysia

Siti Mahfuzah, S., Azizah, C.O., Sabrina, M.R.

Universiti Utara Malaysia (ctmahfuzah@uum.edu.my)

Universiti Utara Malaysia (co.azizah@uum.edu.my)

Universiti Utara Malaysia (sabrina@uum.edu.my)

This paper is a continuation of authors' previous study on behavior of television viewer in Malaysia, from the key industry players' point of views, with regards to the new digital environment. The networked media content industry in Malaysia, which has been predominantly television and radio broadcast, is undergoing changes as new convergent technologies emerge. One of them is interactive television advertisement. While the infrastructures are not entirely ready for the innovation of interactive television advertising, this study believes that it will get onto the track soon. Hence, the preparation for it should be commenced through designing a conceptual model of the interactive television advertisement ecosystem in Malaysia. The conceptual model is constructed through the adaptation process of the peer-to-peer standard mechanism for impression exchange solution, which perceived as an ideal ecosystem for implementation of interactive television advertising in Malaysia. The conceptual model was also validated through expert reviews, which involve five personnel from related industry. Findings from expert reviews show that the conceptual model could open ways to more possibility of implementing the interactive television advertising in Malaysia and benefits from it.

KEYWORDS: interactive television (ITV); interactive advertising;
conceptual model

(B1-5)

The Role of Internal Communication as an Intangible Strategic Brand Resource: An Empirical Study of Malaysia Brand-Oriented Small and Medium-Sized Enterprises

Rohana Mijan, Shuhaida Md Noor, Mastura Jaafar
Universiti Utara Malaysia (rohana.mijan@uum.edu.my)
Universiti Sains Malaysia (shuhaida@usm.my)
Universiti Sains Malaysia (masturaj@usm.my)

The purpose of this study is to identify the role of internal communication as a strategic brand resource in Malaysia brand-oriented Small and Medium-sized Enterprises (SMEs) across industries. The qualitative study has applied by using in-depth interview methods with the company representatives of 10 brand-oriented SMEs. The companies were selected from the list of brand recognition award. Thematic analysis has been applied to analyses interview data. The finding showed that an internal communication plays an important role to solved SMEs lack of resource's awareness where they tend to focus on tangible and ignored intangible. With free of charge resource package, internal communication has successfully contributed to the company brand performance merits. The findings can create awareness among SMEs on the potential of internal resources for brand development without entirely dependent on external resources. Utilised their internal communication by influencing employees to develop brands together are the strategic move to decrease financial burdens on brand communication strategy. This study has only focus on internal strategic brand resources within the context of Malaysia SMEs capability and characters.

KEYWORDS: communication; brand orientation;
small and medium-sized enterprises; resource-based view

(B1-6)

Organisational Management Practices in Media Organisation Towards Movie Animation Park Studio

Noor Aziah Abdullah, Nadia Diyana Mohd Muhaiyuddin, Sharifah Ismail
Universiti Utara Malaysia (nooraziah@uum.edu.my)
Universiti Utara Malaysia (nadia.diyana@uum.edu.my)
Universiti Utara Malaysia

Organisational management practices are an essential aspect of ensuring that the survival of an organisation and this role if not handled wisely will invite critical situations in the organisation. The objective of this paper is to focus on organisational management practices from the perspective of media organisation Movie Animation Park Studio (MAPS), which is the first media organisation in Asia to offer media products in the form of animations to visitors. The focus is on the importance of management and marketing strategy practices from the perspective of media organisations. The method of in-depth interviews was carried out by analysing the opinion of 5 top management MAPS. The findings show that the practice of organisational media management is dynamic and is continuously moving with technology development especially in marketing practices. The sensitivity to the environment, especially the latest developments of competitors, is a crucial element in increasing visitor attractiveness to MAPS. Hence, studies are often conducted on any program that is happening in this country in general and the state of Perak, in particular, to ensure that MAPS is always moving together in every organised program. The introduction of the latest MAPS strategy by introducing the 'Pay Per Ride' model is with the ultimate goal of providing opportunities for every age group of people to enjoy entertainment with the family seen very precisely to set up to be one of Asia's entertainment centres. In conclusion, the practice of organisational media management should always be dynamic to ensure that it is in line with the development of media technology.

KEYWORDS: organisational management practices; media organization;
movie animation park studio

(B1-7)

Teaching Mathematics Creatively Using Representation Concepts in Digital Wayang Kulit

Jasni Ahmad

Universiti Utara Malaysia (jasni@uum.edu.my)

This paper introduces the use of the theory of interaction design (IXD) and the concept of representation in shadow play, known as Wayang Kulit (WK), to teach mathematics. Drawing from the facts that there is deficient in mean performance of primary school children in mathematics, we proposed the e-WayCool as a means for natural developmental progress in learning the subject. For teachers, e-WayCool provides options for a different version of a digital teaching tool to support teaching mathematical operations, namely addition, subtraction, multiplication and division whereby pre-algebraic concept is being introduced via the representation concept. Ten actors of WK are utilized in delivering the teaching modules of the operations within the range of whole numbers ranging from 1-1000. Each operation is not mutually exclusive, but bound to a specific representation concept and activity scenarios. The results are discussed in terms of the effectiveness of e-WayCool as a complementary digital tools for classroom instruction and, at the same time preserving the WK, one of the Malay endangered cultural heritage.

KEYWORDS: digital wayang kulit; wayang kulit; representation concept; IXD theory

(B2-1)

Adapting ‘Ethos’ To Enhance Students’ Confidence

Azlina Kamaruddin, Mohd Baharudin Mohd Hadza @ Othman, Rizwan Sabri

Universiti Utara Malaysia (lyna@uum.edu.my)

Universiti Utara Malaysia (bahar@uum.edu.my)

Universiti Utara Malaysia (rizwan_rs2@yahoo.com)

This study has been conducted to adapt ‘ethos’ (persuasive communication modes) in order to cultivate students’ confidence in public speaking. *Ethos* means "custom" or "character" in Greek. As originally used by Aristotle, it referred to a man’s character or personality, especially in its balance between passion and caution. In addition, persuasive communication skills are closely related to individual self-esteem. By highlighting public speaking as an activity that enhances self-confidence, communication skills, problem-solving skills, teamwork ability and critical thinking skills, this study takes initiative to explore how the element of ‘ethos’ in persuasive communication modes contribute to enhance self-confidence in public speaking during classroom activities. This study conducts at Universiti Utara Malaysia with a sample of six informants by doing focus groups (qualitative methodology). Data transcripts have been process through thematic analysis using NVivo 8 software to produce relevant themes. The findings show that lecturer’s role and students’ characters (ethos) are main important strategies that contribute to self-confidence in public speaking. The researcher has applied Aristotle's Art of Persuasion to explain the entire findings of the study. Overall, this study can guide students as a step to enhance self-esteem theoretically and practically in order to improve their persuasive communication skills which can assist them in their future career.

KEYWORDS: ethos; communication; persuasion; public speaking; confidence

(B2-2)

DIKI Model of Knowledge Management

Adirek Vajrapatkul, Sirinda Palakul, Chanida Winnarogh

Bansomdejchaopraya Rajabhat University, Thailand (adirek.v@gmail.com)

Bansomdejchaopraya Rajabhat University, Thailand (sirindapalakun@gmail.com)

Bansomdejchaopraya Rajabhat University, Thailand (chanidawin101@gmail.com)

In this work, we aim to present the mathematical model that reflects the dynamics in knowledge management (KM), which is the issue of interest in the management area. The model called DIKI model was constructed based on the relationship between people who differ in their knowledge level and the assumptions relating to the knowledge transfer. We investigated the basic properties of the model and also conducted the numerical simulations. It discovered that there exist variations in knowledge transfer before it close to the particular objective of knowledge management. Also, we found that if the organizations can reduce the knowledge loss from their KM process, they will meet the objective of increasing the number of employees who contain a high level of knowledge.

KEYWORDS: knowledge management; knowledge transfer; knowledge risk; mathematical model; differential equation

(B2-3)

Faktor-Faktor Yang Mempengaruhi Wartawan Dalam Pembingkaihan Isu Pilihan Raya Kecil

Mohd Zuwairi Mat Saad

Universiti Utara Malaysia (zuwairi@uum.edu.my)

Media merupakan salah satu platform dalam penyampaian maklumat kepada khalayak. Peranan yang dimainkan oleh media dalam pembingkaihan isu terutamanya menjadi sangat penting apabila ia dapat memberi kesan bagaimana seseorang khalayak itu berfikir. Oleh itu, artikel ini menganalisis pembinaan bingkai dengan memfokuskan kepada berita pilihan raya. Kajian menggunakan temu bual separa berstruktur bersama wartawan dilakukan adalah untuk menjelaskan bagaimana faktor-faktor dalaman dan luaran yang mempengaruhi wartawan dalam bilik berita memberi kesan kepada pembingkaihan berita pilihan raya kecil di Malaysia. Informan bagi temu bual bersemuka ini ialah pengamal media Malaysia iaitu wartawan akhbar cetak (Utusan Malaysia dan Berita Harian) daripada latar belakang, peranan yang berbeza dan berpengalaman dalam kewartawanan politik. Sebanyak tiga informan daripada Berita Harian dan tiga informan daripada Utusan Malaysia. Wartawan yang ditemubual merupakan wartawan yang berpengalaman dalam melaporkan berita bingkai pilihan raya kecil atau umum telah ditemu bual. Hasil kajian mendapati bahawa, terdapat faktor dalaman dan luaran yang mempengaruhi wartawan dalam pembinaan bingkai berita. Bagaimanapun, terdapat faktor yang lebih dominan memberi kesan kepada pembingkaihan berita pilihan raya kecil di Malaysia iaitu pendidikan wartawan. Pendidikan wartawan memainkan peranan penting dalam memberi pemahaman dalam menyampaikan laporan berita kepada khalayak. Pengkhususan bidang yang terdapat pada wartawan, memberi impak kepada penulisan berita di samping memantapkan pemikiran wartawan dalam pemilihan tema, arah berita dan sumber walaupun faktor dalaman organisasi dan faktor luaran memberi kesan kepada pembikin berita.

KEYWORDS: pembingkaihan; wartawan; bilik berita; media cetak; pilihan raya kecil

(B2-5)

Etika Dan Hukum Remaja Dalam Menggunakan Media Social

Di Kota Bandung Hana Silvana, Lusy Mukhlisiana
Padjadjaran University (hana17010@mail.unpad.ac.id)

Netiquette berasal dari kata “net” untuk menjelaskan jaringan (network) atau bisa juga internet, dan “etiquette” yang berarti etika atau tata nilai yang diterapkan dalam komunikasi di dunia siber. Artinya, walau komunikasi terjadi di dunia virtual dan medium komunikasi diwakili oleh teks, di perlukan standar aturan berdasarkan aturan komunikasi dan atau hubungan antar individu bagaimana halnya terjadi di dunia nyata. Dengan demikian, etiquette bisa di artikan sebagai tiket yang harus dimiliki seseorang untuk masuk ke dalam suatu komunitas; dalam konteks ini, merupakan standar aturan yang harus dimiliki untuk masuk ke dalam suatu jaringan atau masyarakat di dunia virtual. Pada intinya netiquette merupakan etika berinternet sekaligus perilaku sosial yang berlaku di media online. Mengapa diperlukan etika berinternet, Pertama; Pengguna media siber tidaklah setara dan berasal dari lingkungan yang sama juga, kedua; Komunikasi yang terjadi di media siber cenderung mengandalkan pada teks semata. Ketiga; di media siber konten tidak hanya berlangsung tertuju kepada pengguna yang di inginkan, tetapi bisa terjadi secara tidak langsung. Keempat, media siber tidak semata-merta dianggap sebagai media yang berbeda dan melepas dari dunia nyata. Kelima; etika berinternet diperlukan agar setiap pengguna media berada di dunia virtual memahami hak dan kewajiban sebagai warga negara dunia virtual.

KEYWORDS: etika; hokum; remaja; media social

(B2-7)

Understanding A Person With Autism And ADHD

Noor Aziah Abdullah , Yeo Kai Wen

Universiti Utara Malaysia (nooraziah@uum.edu.my)

Universiti Utara Malaysia

Autism and Hyperactive are common behavioural disorder among children. This disorder is often said to occur at pre-school and elementary school children. Most of the previous studies have led to the level of the country without taking into account the value, morale and culture of the Malaysian society. Therefore, this study was conducted to identify what is meant by Autism Spectrum Disorder (ASD), what is the symptom of ASD and Attention Deficit Hyperactive Disorder (ADHD), the time of diagnosis for children, the causes of ASD and how should the public interact with the person who with ASD. To achieve the objectives which raise public awareness, foster understanding and care of Malaysian. An in-depth interview implemented with five informants related to this problem. Informants are from National Autism Society of Malaysia (NASOM), Medical Officer from Consultant Developmental Paediatrician and senior lecturer at University was of Malaya, Medical Officer from General Paediatrician with a particular interest in Autism, parent of the main character of this documentary and sister's friend of the main character. A representative of the National.

KEYWORDS: autism; hyperactive; comorbidity; awareness; documentary

(C1-1)

3D Animation Workshop: The Implementation of 3D Printing Education

**Aimi Nabila Anizaim, Nelysa Nurshafira Mohd Roslan,
Asrul Hafiz Huliman Hami Ahmad**

University Technology Mara UiTM (aiminabila@uitm.edu.my)

University Technology Mara UiTM (nelysa@uitm.edu.my)

University Technology Mara UiTM (asrul2584@salam.uitm.edu.my)

A 3D animation workshop will be organized by the Animation Department from Faculty of Film Theater and Animation. The target participants will be primary and secondary school students between the ages of 10 to 17 years old. The participants of this workshop will work closely with experts in the 3D Animation industry to link the participants' imagination and creativity into tangible forms. The contents throughout the workshop will cover the basic knowledge of 3D animation software at the beginner level. The end result of this workshop will be physically manifested into a 3D model by using the provided 3D printing facilities. This workshop would offer the first-hand exposure on interactive experience by bringing creative imagination into reality. This approach will, in gist, expose the participants to the current technology in the animation industry. Thus, it will motivate them to be an active learner among their peers. This workshop aims to prepare the school students to enter the workforce since 3D industry is becoming a demand from various sectors.

KEYWORDS: 3D animation workshop; 3D printing; education; student learning; classroom

(C1-2)

From a Soccer Ball Inspiration to 3-D Structure

Liew Yek Ming, Siek Hwee Ling

Sunway University (travisl@sunway.edu.my)

Master Program, Institut de Création et d'Animation Numériques,

ICAN, France (tra168@hotmail.com)

Sunway University (perlines@sunway.edu.my)

The MIID Interior Design Students' Saturday, is one of the large-scale events organized by the Malaysian Institute of Interior Designers. As it is a design-oriented event, the researcher believes that the atmosphere of 3-D creations must be emphasized. As such, the researcher intended to use 3-D structures concept of interaction with shapes and lights, to replace the screen projection for the main stage of MIID Students' Saturday 2018. The "Buckminster Ball" concept on soccer ball, created by Richard Buckminster Fuller, became an inspiration for the researcher to create a structure that is composed of a plurality of flat plates from the same shape. The choice of material was a vital part for this project; the researcher applied the repeated measures method from the experimental research design to evaluate and identify the most suitable material from three different materials that can fully present the concept and design. By using laminated foam board as the main material, the researcher created two units of 3-D stage projection structures for the 2018 MIID Students' Saturday event main stage's backdrop decorations design. Two projectors were placed in front of each 3-D structure to ensure that the lights were projected directly and clearly at the laminated foam board. The concept of "shapes & lights" was fully presented when different color-pattern images and short videos were projected on both structures, which made the entire stage look outstanding. The organizer & committee members were very pleased with the concept as it had clearly carried the objectives of the activity and enhanced the contents of the event. Besides that, the comprehensive application of the interior design elements as the design concept had indirectly increased the standards and pushed the stage design of this event to a higher level.

KEYWORDS: soccer ball; 3-d structure; stage design; laminated foam board

(C1-3)

Achievement on Online Lessons Class Latex Products of High Vocational Certificate Student (Diploma) Year 1 in Suratthani Technical College

Miss. Kasini Tanglien, Miss. Pattarawadee Jareernporn

Achievement on online lessons class latex products of High Vocational Certificate student (Diploma) Year 1 in Suratthani Technical College. The objective is (1) study about satisfaction of learners. (2) compare before and after result learning achievement of learners in latex product High Vocational Certificate student (Diploma) Year 1 in Suratthani Technical College. The sample group students are registered 16 subjects of latex products the students are studying in High Vocational Certificate students (Diploma) Rubber and Polymer Technology department of Suratthani Technical College. The Interview form for find the needs of users and student satisfaction assessment form for online lessons class latex products of High Vocational Certificate student (Diploma) Year 1 in Suratthani Technical College. The results: 1. Satisfaction of learners about online lessons latex products For High Vocational Certificate students (Diploma) Rubber and Polymer Technology department. Most of the students are male 13 people studying in vocational certificate level (14 people). All former government school in the overview are at a high level. $\bar{X} = 3.79$, S.D. = 0.707) 2. Online lessons in latex product courses of High Vocational Certificate student (Diploma) Year 1 in Suratthani Technical College has the content in 4 lessons. Chapter 1 Review the properties of latex and chemicals for latex products by latex Chapter 2 Study and practice chemical preparation for latex products working Chapter 3 Study and practice in preparing latex and chemicals mixing and testing Chapter 4 Production process of latex products In overall, after learning achievement is higher than before learning achievement. The students had higher grades after studying significantly at the 0.01 an average score from the average achievement after learning with average $\bar{X} = 7.45$, S.D. = 1.022

(C1-4)

Summative Evaluation of Animation of Schizophrenia (ANSCHI)

Azizah Che Omar, Azliza Othman, Nor Syamila Noor Azalli,

Fatimah Zahra Mohd Suhami, Mohd Adib Abd Muin

Universiti Utara Malaysia (co.azizah@uum.edu.my)

Universiti Utara Malaysia (azliza@uum.edu.my)

Universiti Utara Malaysia (syamilaazalli@gmail.com)

Universiti Utara Malaysia (93fatimahzahra@gmail.com)

Universiti Utara Malaysia (mohdadib@uum.edu.my)

This article is focusing on the summative evaluation of an animation project that highlighting the mental illness named Schizophrenia. Schizophrenia is a psychiatric disorder that let the victim having delusion, hearing non-existence voice and many other symptoms. The animation aim was to develop an Animation of Schizophrenia (ANSCHI) to spread the awareness about this mental disorder. Nevertheless, the animation de-veloped needed to be tested to actual audiences to test user understanding. Therefore, one of the process that should be done during animation development is summative evaluation. The summative evaluation method used was survey which the team had implemented one phase to conduct the process. The phase activity was to con-duct a survey which needed the team to distributed questionnaire online and the output was the analysis of the survey. Findings had shown that majority of the respondents clear regarding of storyline, symptoms and treat-ments of Schizophrenia and the respondents gained information that raise their awareness about Schizophrenia.

KEYWORDS: animation of Schizophrenia; summative evaluation

(C1-5)

Analyzing the Requirements for Web Directories to Viewing Images With Google Cardboard

Hammuzamer Irwan Hamzah, Tuan Zalizam Tuan Muda, Mohd. Nizam Saad
Universiti Utara Malaysia (zamer@uum.edu.my)
Universiti Utara Malaysia (zalizam@uum.edu.my)
Universiti Utara Malaysia (nizam@uum.edu.my)

This research analyzed the requirements to design and develop web directories as a platform for viewing 360° images by using Google Cardboard. The Google Cardboard is used because it is one of the methods to sense the virtual reality (VR) environment and it is also cheap. The VR 360° images were created using the Google StreetView which were uploaded and can be viewed from Google Maps or Google StreetView itself. The 360° images for the developed web directories were specifically taken from interesting places and special buildings in Universiti Utara Malaysia (UUM). Requirements analysis is an important aspect of a project management. The purpose of this requirements analysis is to identify the functional and non-functional requirements which the data collected during data gathering by using a questionnaire. The project prioritizes the user preferences based on the questionnaires that were distributed. Besides the requirements analysis, this research identified the user preferences, prepared the 360° images, designed and developed the web directories, validated and verified the web directories and their contents. The web directories are suitable for both pc and mobile users which allow the VR feature. Other than that, this research also presented the findings about the users' awareness about VR elements, Google Carboard and user persona analysis.

KEYWORDS: virtual reality; google cardboard; 360° image; web directory; requirements analysis

(C1-6)

Testing Moderating Effects in a Persuasive Visual Design Model for Website Design

Nurulhuda Ibrahim, Mohd Fairuz Shiratuddin, Kok Wai Wong

Universiti Utara Malaysia (nurulhuda@uum.edu.my)

Murdoch University (f.shiratuddin@murdoch.edu.au)

Murdoch University (k.wong@murdoch.edu.au)

Based on the Elaboration Likelihood Model (ELM), a person can be persuaded via two routes: the central (i.e. direct) route and the peripheral (i.e. indirect) route. ELM assumes that persuasion via the peripheral route focuses on the impact of simple cues on visual design. This paper tested the influence of a persuasive visual design model on online web users from the perspective of the ELM. 181 web users expressed their beliefs and attitudes about a travel website design in an online experiment. The results show that users' initial interest in travel information does not appear to affect their perception of the persuasive design. However, proficiency in Internet skill slightly affects the strength of the relationship between variables in the persuasive design model.

KEYWORDS: moderating effects; persuasive visual design; ELM

(C1-7)

Integrating Multimedia Principle and Similarity Principle in Designing Digital Flashcard English Vocabulary Application for Intensive English Course Students

Azliza Othman, Hussein Bawazir, Yusrita Mohd Yusoff

University Utara Malaysia (azliza@uum.edu.my)

Universiti Utara Malaysia (hussein.b.uum@gmail.com)

Universiti Utara Malaysia (yusrita@uum.edu.my)

In learning English, there are four basic language skills need to be master which are speaking, reading, listening and writing. In order to support these four language skill, vocabulary acquisition is one of the most important aspects of language learning. The more vocabulary the learner acquires, the better communication they will have. However, current techniques for vocabulary learning such as wordlist and flashcard is often perceived as boring by learners, especially for those who grew up in the digital age and they want a new and different approach. Since learning vocabulary only involve text, it is hard for learner to understand. This supported by Mayer, - multimedia principle said that student learn better when text and picture than text only. Current technologies such as multimedia applications have great influences on people. It also affects teaching and learning processes. While traditional and conventional learning styles are considered boring to learners nowadays, modern learning environment that exploits the use of multimedia are being widely accepted. It can be used to assist students in their learning environment including learning languages. Therefore, this paper introduces digital flashcard English vocabulary for non-native learners. This application will integrate multimedia principle and similarity principle in order to facilitate student better acquire vocabulary while learning in class. Alessi and Trollip's instructional design (ATID) model was adopted to design and develop the application. A pilot usability test conducted shows that the application is a success.

KEYWORDS: multimedia principle; similarity principle; vocabulary;
digital flashcard

(C2-1)

A Case Study of Computer Numerical Control Machine by Arduino Uno and TB6560 Driver Board

Muangmol Senpheng

Rajabhat University Loei, Thailand (muangmol_s@hotmail.com)

This research proposes a case study of computer numerical control (CNC) machine by Arduino Uno and TB6560 stepper motor driver board for low cost engraving laser machine which is able to engrave any image or text file on wood surface. The lower cost is achieved by incorporating the features of a standard desktop or laptop computer interface with Arduino Uno micro-controller board. It used as the control device for this research for converts G-code into of machine language. TB6560 stepper motor driver board is based on pure-sine current control, output current up to 3 Amp, working voltage DC 10 - 35 volt use of switching power supply DC 24 volt. The motor is a 4 phase NEMA17, 1.8 degree, permanent magnet stepper motor. The Laser driver board is 450 nM, 500 mW, input voltage 12v. The image and text file need to converts into G-code by LaserGRBL (v.3.0.4) software. The result of this research, it can be easily to used and lower cost for Laser CNC machine.

KEYWORDS: CNC; arduino uno; TB6560 stepper motor driver; laser driver board; laserGRBL (v.3.0.4) software

(C2-2)

Development of Phu-Lae Pineapple Process Improvement Technology

Pumipong Duangtang, Thanawut Tanawanit, Anusorn Jaikaew
School of Computer and Information Technology, Chiang Rai Rajabhat University
(pumipong5325@gmail.com)

In this work, the technique of increasing the efficiency of the pineapple production and pineapple processing with high-frequency drying from microwave frequency are presented. The objective of this work is not only to reduce the drying time from three days with the traditional method but also maintain the processed pineapple as the same quality obtained from solar drying method. The proposed machine has designed with dimension width 60, length 60 and height 150 centimeters and it included six shelves with a vertical spindle. In this study, we used a microwave frequency generator that configured at the frequency of 2.45 GHz, 800 watts, transmitted through the WR 340 waveguide and then expands the signal of the high-frequency range with 3 sets of the pyramid-shaped antenna. The experimental results show that the proposed method can reduce the processing time of the drying process at an average time of 6.35 minutes per times.

KEYWORDS: drying; microwave frequency; pyramidal horn antenna

(C2-3)

Reducing the errors in production process of uniform product factory

**Nuttapol Lertsirisakulchai, Piyarat Khanla, Kaewketsaya Songthan,
Pannipa Mongmontree, Wipawee Burana**

Bachelor of Public Administration (Fiscal Management) B.P.A. (Fiscal Management), College of Local Administration, Khon Kaen University
(nuttapol_k@kkumail.com)

This research aims to reduce the amount of defected product from garment product and to find the ways to solve problems effectively. Defected production of uniform causes the delay delivering as well as cause the extra cost of delayed delivery. The researchers have used on quality control tools such as Pareto chart cause and effect diagrams and the PDCA + LC and POKA YOKE systems are a tool to analyze the main problem finding the root of the problem, and improve the process which creates defect. The study found that the main cause of the material defect in the production of uniform occurred in shirts more than pants because there are more components in shirt than pants. There are 5 types of defection which are unmatched components; unfinished sewing seam; unmatched label size; left over fabrics; disfort logo. After we prioritize in the Pareto chart, the result shows that the cause of the problem are three season, which are labeled wrong size, unmatched component parts, and stitched seams do not match. After found the defect causes a defective product, the factory has improved the production process on labeling the size and compares the results before and after the update. The result show that it can reduce the amount of error of producing uniforms in 65 pieces/week in percentage, defective uniform has decline to 12 units/week or 81.53%.

KEYWORDS: reducing product defects; quality control tools;
optimization principles series production unitform

(C2-4)

From Research to the Community: Creation and Evaluation of Motion Infographics Media for Knowledge Transfer in Environmental Factors on Cockle Production of Ban Khlong Khon Community, Samut Songkhram Province

**Kampanat Kusirirat, Tiantada Hiranyachattada, Kasem Kamolchaipisit,
Woramet Weeraburinon, Nutthanun Thongtae**
Department Of Animation and Digital, Faculty Of Science And Technology,
Bansomdejchaopraya Rajabhat University, Thailand
(ajdankampanat@gmail.com)

This research aims to: 1) create motion infographics media from research to the community, 2) evaluation the quality of motion infographics media for knowledge transfer in environmental factors on cockle production of Ban Khlong Khon community Samut Songkhram province by using the process of transforming research into motion infographics media consists of 5 steps: research selection step, issue determination step, analysis and synthesis step, transform into motion infographics step and quality evaluation step. The samples are 3 researchers, 5 digital media experts and 7 Ban Khlong Khon community leaders which selected by purposive sampling method. The research tools are motion infographics media from research to the community, motion infographics media quality evaluation form for researcher, experts and community leaders which has passed the performance evaluation. Using average and standard deviation statistic to analyze the research data. The results showed that motion infographics media from research to the community can easy to understand, not complicated to communicate with community, making community people to be aware of environmental factors on cockles' production with 1280 x 720 resolution 1.10 minutes length. The quality evaluation of motion infographics media from researcher, digital experts and Ban Khlong Khon community leaders were all at high level. In conclusion, the quality of motion infographics media from research to community was evaluate at good quality, in pictogram/icon, movement and sound that can be used as a media to educate people in the community.

KEYWORDS: motion infographics media from research to the community, knowledge transfer, quality evaluation

(C2-5)

The Study on Waste Management in Sra-yay-some District for Sustainable Development

Suwapat Tungphonphoon, Sarayuth Kan, Pasit Tinnam

Faculty of Engineering and Industrial Technology,
Bansomdejchaopraya Rajabhat University, Thailand
Faculty of Science and Technology

Bansomdejchaopraya Rajabhat University, Thailand
(watch.vhv@gmail.com)

Sra-yay-some district is one of the other local administrative in Thailand that faced the municipal waste problem. This district has a waste to dispose of about 2 tons/day which has been disposed by open-dumping that was located near the community and will reach its capacity within 10 years. With the lack of proper method and budget, it is needed to explore the waste characteristic and behavior of the community in order to set the sustainable development and eco-friendly waste management to this region. From the observation, the waste was composed of wet waste and recycled waste. The waste management behavior of the community was surveyed in 4 aspects: 1) The separation behavior 2) The waste management attitude 3) The ability of collaboration and 4) The intention to waste management offered from the local officer. From the result, there was 44% of waste separating. Most of the people were realized in the environmental problem. The participation level was at medium rate ($\bar{X}=2.71$, S.D. = 0.756). The waste management method should be integrated together include 3R's participation campaigns with other waste disposal technology. The fermentation technology and incineration technology are the most proper for waste management.

KEYWORDS: municipal waste; waste management; waste technology;
Sra-yay-some District; sustainable development

(C2-6)

Case Study: Level of the Internet Based-Technology Dependency of the English Program Students of Bansomdejchaopraya Rajabhat

Theeraphon Charoensub, Nantanut Jokthongkum, Sookroj Rodjaroen

English Program, Faculty of Humanities and Social Sciences,
Bansomdejchaopraya Rajabhat University, Thailand (theeraphon486@gmail.com)

English Program, Faculty of Humanities and Social Sciences,
Bansomdejchaopraya Rajabhat University, Thailand
(nut_nantanut1997@hotmail.com)

English Program, Faculty of Humanities and Social Sciences,
Bansomdejchaopraya Rajabhat University, Thailand (akck789@yahoo.com)

The study is purposely intended to determine the level of Internet-based technology dependency of 148 English Program undergraduate students. The students answered a 2-part questionnaire; the first part denotes the demographic profile, and the second part the type and the amount of time spent on internet based-technology and the reasons for using internet based-technology. The Internet Based-Technology in the study was defined as Facebook, Youtube, Instagram, Shopee&Lazada, Twitter, Messenger, Games, Line, Netflix&Iflix, And Google.

The findings of the study were limited to the perception of 38 male and 110 female English Program students. The study revealed that 45 or 31% of respondents spent more than 7 hours. There were 39 or 26% respondents spent 5-6 hours, 36 or 24% respondents spent 6-7 hours, 19 or 13% respondents spent 3-5 hours and 9 or 6% respondents spent 1-3 hours utilizing internet based-technology. Correspondingly, most respondents often used electronic dictionary to define English words, whereas watching and/or listening to video online is also one of the activities that the respondents often do.

The findings suggest that internet-based technology can be an effective tool in the learning process. The overwhelming websites are freely available for that reason the researchers propose to have a comprehensive study as to which one and how Internet-based technology can be used in the learning process.

KEYWORDS: internet-based technology; dependency

(C2-7)

Factors Affecting English Oral-Aural Communication of Undergraduates Majoring in English in the Universities in Bangkok

Nareumol Kheawkamlop, Nattida Phuengpanit, Orada Binhad

English Program, Faculty of Humanities and Social Sciences,

Bansomdejchaopraya Rajabhat University, Thailand (ployp42@gmail.com)

English Program, Faculty of Humanities and Social Sciences,

Bansomdejchaopraya Rajabhat University, Thailand (43072@chinorot.ac.th)

English Program, Faculty of Humanities and Social Sciences,

Bansomdejchaopraya Rajabhat University, Thailand (oradabinhad@gmail.com)

This study aims to explore the factors affecting English oral-aural communication of undergraduates majoring in English in the universities in Bangkok. The online survey questionnaire is given to 80 English major students, who are currently studying in the universities in Bangkok. The informal interview is also conducted with 5 participants who have taken the questionnaire to collect detailed information based on the topic of the study. The response indicates that there are both positive and negative factors affecting university students in Bangkok which are 1) language environment, 2) personal problems, and 3) classroom teaching and learning environment.

It is found that the support is required for increasing the opportunity to enhance English oral-aural communication. According to the survey, most of the students are worrying about Ineffective use of vocabulary (61.5%), inaccurate use of grammar (61.5%), lack of confidence (50%), mispronounce (34.6%), nervousness (30.8%) and getting bullied (11.5%) respectively. Moreover, unsupported environment is also found to be the most common problem shared among the participants as they have no one to speak and practice English with them. In addition, it is found that the participants are worried to communicate in English because they are afraid of using incorrect grammar and wrong vocabulary which might cause others confusion also lack of confidence especially, when they were corrected pronunciation and else by someone. The findings also indicate that the support from teachers/professors (79.4%) and School/Collage/University (76.5%) are important roles in practicing oral and aural communication skills. On the other hand, participants can find their opportunity by using social media (82.1%), using English in classroom (69.2%) and self-practice (61.5%) even they got an opportunity in their classroom but most of them prefer to study out of class as they will get the real usage without worrying about grammar and it is more interested than in class, which just study to get certificate with only know theories.

KEYWORDS: English oral-aural communication; factors; undergraduate students; universities in Bangkok; intervention and adaptation

(D1-1)

Visualizing Symptoms of Mental Health through Public Service Announcement Animation

**Norhasheila Muharam, Nora Edrina Sahharil, Aimi Nabila Anizaim,
Nelysa Nurshafira Mohd Roslan**

Universiti Teknologi MARA (norhasheila@uitm.edu.my)

Universiti Teknologi MARA (edrina@uitm.edu.my)

Universiti Teknologi MARA (aiminabila@uitm.edu.my)

Universiti Teknologi MARA (nelysa@uitm.edu.my)

Public service announcements are designed to create awareness around the community regarding issues that are concerning and alarming. In Malaysia, the use of Public Service Announcement (PSA) have become a part of an urban vernacular from moving billboards to distributing flyers to broadcasting on television and social media. Even though mental health issues such as Obsessive Compulsive Disorder (OCD) has not reached critical level in Malaysia, it is important for us to highlight this matter in the early stage. It is common to see the topics on Public Service Announcements (PSA) circulating in Malaysia are relatively similar from environmental issues to portraying mannerism and educating a proper lifestyle. However, mental health issues are in need of special attention and enforcement from the local authorities. The methods that will be used is through reading journals, articles, newspaper, and case studies through related Public Service Announcements (PSA). With these methods, we will analyse the different types of mental health issues in Malaysia. Obsessive Compulsive Disorder (OCD) is our priority in this research area. From the findings and case studies, the execution of this paper will be transferred through a communicative strategy for public knowledge by using Public Service Announcements (PSA) to emphasize this mental health issue. Creating awareness can help to educate the society because everyone is responsible to accept the Obsessive Compulsive Disorder (OCD) as a mental health illness.

KEYWORDS: public service announcement; obsessive compulsive disorder;
mental health awareness; animation; symptoms

(D1-2)

Female Leadership communication style: The perception of an employee

Joyce Cheah Lynn-Sze, Syamimi Binti Jamil
Universiti Utara Malaysia (joycecheah@uum.edu.my)

The effectiveness of a leader communication is assessed on the ability to communicate a vision, goals, strategy and set of attitudes that will gain others' support and action. It demands that women leaders use powerful communication tools to assertively motivate, inspire and influence. Many research claimed that even when women have the skills and abilities necessary to effectively lead in an organization, they may still have difficulty convincing others of their leadership potential. The issue of female as leaders and whether their styles are acceptable were always judged by the employees. Thus, it is more difficult for women to become leaders and achieve success in leadership roles. Thus, this study aims to understand the leadership communication style practice by female leader and also to explore the female leadership characteristics from the employee's perspectives. This study conducted using semi-structured interview. Respondents consist of 10 employees working at the government sector and private sector from various industries such as educational, fashion as well as in retail industry. Findings showed that female leaders displayed transformational, transactional and participative leadership style. Meanwhile, the female leaders also displayed masculine and feminine characteristics. The research should provide a greater understanding of female leadership from the perspectives of the employees, especially in leadership and management positions, and what organizations can do to help women overcome gender bias and discrimination in the workplace.

KEYWORDS: leadership; communication; female; leadership style;
leadership characteristics

(D1-3)

**Communication Therapy through Sound and Sound
on Autism Patients in SLB Bina Anggita Yogyakarta
(Descriptive Study of Communication Therapy
Using Gamelan)**

Fajar Dwi Putra

Ahmad Dahlan University, Indonesia (dwiputra@fsbk.uad.ac.id)

Gamelan is a traditional Javanese musical instrument which until now is still used for artistic and cultural needs. Gamelan is also a historical heritage that has a high value. But not many know that Gamelan has a therapeutic function behind it. When viewed from the material of manufacture, Gamelan is made of metal which can physically channel energy called Metallurgy. This energy is used to carry out special therapy for someone, especially Autistic sufferers. SLB Bina Anggita is the only school in Yogyakarta Indonesia that applies the concept of learning to use Gamelan, so that the lessons provided will be easily accepted. The concept of learning is also a form of therapy using Gamelan. Autistic sufferers will feel comfortable and calm when they hear the sounds, sounds and sounds produced by the Gamelan. This sound is used to carry out communication therapy for Autistic sufferers, with the aim of improving the communication form of Autistic sufferers. As we know, Autism will not be able to recover, Autistic sufferers will only feel comfortable and calm in their lives. to recover 100% until now there is no guarantee. The form of Gamelan for therapy is a car, truck, plane or other type of toy that is easy to remember for people with autism. There is one condition of Autistic sufferers called *tantum* or recurrent. With this Gamelan therapy, it is expected that the *tantum* condition will begin to decrease and continue to decrease until the Autistic sufferer feels comfortable in communicating with the community.

KEYWORDS: communication; therapy; gamelan; music; phycology

(D1-4)

Wayang Sada As a Media Communication for the Character Building of Children in The Village of Bejiharjo Gunung Kidul

Vani Dias Adiprabowo, M. Sn

Ahmad Dahlan University, Indonesia (vani.adiprabowo@comm.uad.ac.id)

This study aims to find out how the Sada Puppets made by Mr. Marsono (wayang sada puppeteers) as a media communication for the formation of children's characters residing in Gunungbang Hamlet, Bejiharjo Village, Karangmojo Subdistrict, Gunungkidul Regency. The puppet sada was inspired by the anxiety of Mr. Marsono when he was a kid playing puppets made from the stem of cassava leaves and needle grass, but the age of the puppets was not long-lived because it was easily damaged or dried. This study uses an ethnographic communication approach to communicate, which is concentrating on the ways in which a cultural group creates meaning, values and activities through communication. Ethnography is one part of research with anthropology (holistic) that produces success stories. Ethnography must also reverse the object of research in accordance with their respective perspectives. Through observation, participation in ethnography is expected to be able to understand people, groups, ethnicities, cultures and technology through a series of ways of learning by seeing, thinking, feeling, and even acting like an insider who is emic or as an actor. This research is a case study research that requires understanding and reading in accordance with the basic concepts and existing rules. This ethnographic research on communication will look at the communication patterns used by a group, when and where group members use all these activities and how communication practices create a community. The expected outcome of this study is information and information about how puppet sada as a communication medium for character building of children is carried out through an ethnographic approach to communication.

KEYWORDS: sada puppet; child; character building; media communication; ethnography communication

(D1-5)

Media Strategy By The Ministry Of Tourism Republic Indonesia For Supporting Lombok Tourism After Earthquake 2018

Siti Chotijah, S.IP , MA

University of Mataram NTB Indonesia (mbakjhe@gmail.com)

Lombok Island is the second famous for tourism destination in Indonesia during google index in 2017. Tourism become the main program by the government of West Nusa Tenggara and supporting for economic growth. During the end of July until August 2018 7.0 SR Earthquake happen and giving serious impact for Lombok especially for tourism sector. After the earthquake level of visitor in Lombok is plummet and some countries declare about travel warning for visiting Lombok. For supporting tourism, Ministry of Tourism launch recovery program to increase visitor after earthquake and the main strategy is media promotion. This research will be focused in how media strategy implement for Lombok recovery after earthquake. This paper will show us about how the media strategy by government (Ministry of Tourism) for increase visitor in Lombok. . This method of the research is using descriptive qualitative and by analyze the data by interview the number of Ministry Tourism member, West Nusa Tenggara Tourism Board, policy maker, annual report and mass media studies during end of 2018 and beginning of 2019. This paper result is descriptive of media strategy for supporting Lombok recovery after earthquake.

KEYWORDS: communication; media strategy; ministry of tourism;
lombok tourism

(D1-6)

Marine Harpacticoid Copepods Associated with *Ulva intestinalis* in Various Habitats at Chonburi Province, Thailand

Pawana Kangtia

Biology program, Department of Science, Faculty of Science and Technology,
Bansomdejchaopraya Rajabhat University, Thailand
(kangtia@hotmail.com)

The taxonomic composition, distribution and abundance of harpacticoid copepods associated with *Ulva intestinalis* at various habitats 5 stations in Chonburi Province in September 2017 (817 individuals) and March 2018 (1,193 individuals). Their abundance was consistently high around sediment where seaweeds dominated the area. So as to measure the environmental factors, such as temperature, salinity, potential of hydrogen ion (pH) and dissolved oxygen by using meter DO210 and collected samples 5 stations were dyed with rose bengal, sea water, and 10% concentration formalin liquid at least 24 hours. After that, wash out and sort out the samples of animals out of the sediment, and classify them by under microscope. The results of study found that there were 24 genera from 16 families of Harpacticoid copepods, i.e. family Ameiridae, family Canuellidae, family Cletodidae, family Cyllindropsyllidae, family Ectinosomatidae, family Harpacticidae, family Laophontidae, family Longipediidae, family Metidae, family Miraciidae, family Parastheneliidae, family Porcellidiidae, family Tegastidae, family Thalestridae, family Tetragnonipitidae and family Tisbidae for both times. The most common genera were *Paramphiascella*, *Nitocra*, *Ectinosoma*, *Harpacticus*, *Tigriopus*, *Metis* and *Tisbe*.

KEYWORDS: Harpacticoid copepods; *Ulva intestinalis*;
Chonburi Province, Thailand

(D1-7)

SDS-PAGE technique in genetics

Hatairuk Tungkasen

Department of Biology, Faculty of Science and Technology,
Bansomdejchaopraya Rajabhat University, Thailand
(Thatairuk@gmail.com)

The genetics is a branch of biology concerned with the study of genes. Most genes contain the information needed to make functional molecules called proteins. Proteins are large, complex molecules that play many critical roles in the body. One of technique used in the lab for the separation of proteins based on their molecular weight is SDS-PAGE (sodium dodecyl sulphate-polyacrylamide gel electrophoresis). SDS-PAGE is an electrophoresis method that allows protein separation by mass, based on their differential rates of migration through gel under the influence of an applied electrical field. This research has been shown the technique in genetics course to teach and learning for science for the learners by using SDS-PAGE for protein analysis. The different protein patterns derived from the porcine follicular fluid (pFF), the study illustrated that the pFF protein patterns from different follicle sizes and a total of porcine follicles were divided into 2 groups. The porcine follicles ranged from 1-2 and 5-6 millimeters (mm.) follicles. The result has shown that SDS-PAGE separated the protein patterns from different porcine follicle sizes. As a result showed protein patterns composed of 53 to \geq 220 kDa which were found in follicle samples from all sizes. The development of teaching techniques are important and necessary for the learners because they can improve their learning and scientific skills. This research shows that technique of SDS-PAGE will support and have benefits for the learners for understand the technique scientific.

KEYWORDS: Sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE); follicles; follicular fluid; protein analysis; genetics

(D2-1)

Application of Preventive Maintenance for Mechanical Pressing Machine

Akaranun Asavarutpokin, Seksan Chaijit, Kanakon Sawangcharoen

Pathumwan Institute of Technology (mr.chira@hotmail.com)

Pathumwan Institute of Technology (seksan@pit.ac.th)

Bansomdejchaopraya Rajabhat University (uttweb@hotmail.com)

This research presents the application of preventive maintenance for the mechanical pressing machine. The study aims to increase the average time that the machine is shutdown and decrease the risk of accidental breakdown. In order to increase the percentage of production time and overall machine efficiency. The current maintenance system is first analyzed. The maintenance is currently done only when the mechanical press machine breaks down. In addition, there is no data collection during maintenance. Consequently a preventive maintenance system is developed, starting with data collection to help identify the cause of breakdowns. For implementing the preventive maintenance plan, several activities are initiated, including complete documentation of all maintenance procedure. The result of preventive maintenance of the mechanical pressing machine found that MTBR increase from 1,776 to 15,265. The percentage of production increased from 83.13% to 96.32%. The percentage of failures was reduced from 16.21% to 3.65%. The crankshaft bearings showed an increase of 268% in MTBF, with an increase of 18.69%. The failure rate decreased 18.69%

KEYWORDS: mechanical pressing;
accidental breakdown and preventive maintenance

(D2-2)

Arduino-Based Programmable Spectrum of Horticultural LED with Constant PPF

Napat Watjanatepin, Angsuchawalnan Jampanak, Paiboon Kiatsookkanatorn
Rajamangala University of Technology Suvarnabhumi (napat.w@rmutsb.ac.th)

The objective of this paper is to design and construct an Arduino-based LED horticultural light that could emit light in three R/B ratios, as well as to test the characteristics of the PAR spectrum and energy efficiency. There are adjustable PPF of red to blue light ratio by using Arduino-Duemilanove with PI feedback control. The portable spectroradiometer was applied for spectral measurement. Results revealed that the horticultural LED could be programmed for three specific difference of R/B light, which are 0.33/1.0/3, at $200 \mu\text{mol m}^{-2} \text{s}^{-1}$ and generate the light spectrum as has been proposed with perfect short term operation. This is an appropriate instrument to maintain accurate PPF red to blue light ratio with high energy efficiency. This could be applied for LED horticultural lighting system in indoor environments and has been gaining global importance for extending the crop yield in urbanized areas with limited plant nurturing conditions.

KEYWORDS: PPF; LED; Horticultural LED; radiant efficiency;
Arduino- Duemilanove

(D2-3)

The Development of Height Meter and Data Recording Using Embedded System with Ultrasonic Sensors

Natawee Chaijum, Wachira Boonrod

Department of Electromechanic Manufacturing Engineering, Faculty of Engineering and Industrial Technology, Bansomdejchaopraya Rajabhat University, Thailand
(mai_screamo@hotmail.com)

Department of Electromechanic Manufacturing Engineering, Faculty of Engineering and Industrial Technology, Bansomdejchaopraya Rajabhat University, Thailand
(bonrod9@gmail.com)

A height meter is a device that is particularly important in medicine such as measuring the height of children to evaluate the growth or measuring the height of the patient for health examination. Measurement of the height of the general height meter will show the height value in digital display of the meter which may cause human error in reading and estimation. According to the problem, in this research will develop height meter and data recording using embedded system with ultrasonic sensors. The aim of this research were: 1) to develop height meter and data recording using embedded system with ultrasonic sensors 2) to evaluate the efficiency of ultrasonic sensors 3) to evaluate the quality of the height meter and data recording and 4) to study the satisfaction of the high meter users. The result showed that the height meter can be usable. The main system devices consists of ultrasonic sensors, Arduino UNO R3 data logger shield and data display section. When measuring the people's height, the system will record the data obtained from the measurement and stored data in the SD card including the data of the date and time, the structure of the height meter made from PVC plastic because it is cheap, lightweight and can be moved easily. In finding the ultrasonic sensors efficiency in height measurement, it is divided into 2 types: 1) measurement of stature directly and 2) height measurement together with the backdrop. It was found that the measurement of the stature directly was 3 - 5% error and the height measurement together with the backdrop was 1 - 2% error. Evaluation the quality of the height meter by 3 experts in physical topic and functional topic, the results found that the strength of the structure had the lowest average score of 3.33 at a moderate level and the overall average score in the physical topic is 4.22 at high level and the topic of usage is 4.56 at the highest level with an average score of 2 topics 4.39 at high level. The results of users' satisfaction evaluate by 20 users was found that the strength of the structure had the lowest average score of 3.45 at moderate level and the average score of all topics is 4.43 at high level.

KEYWORDS: embedded system; ultrasonic sensors; measured stature; data logger shield

(D2-4)

An Emerging Digitalization: Is Missing the Human Touch in Human Resource

Dr. Preeti Sharma, Dr. Kirti Dang Longani

Trinity Institute of Management and Research, Savitribai Phula Pune University,
India (profpreetisharma@gmail.com)

Associate Professor, Suryadatta Institute of Management And Mass
Communication,

Pune, India (drkirtidang15@gmail.com)

It has been seen that the digital revolution leads in a new world. But it is also been seen that it has raised a number of challenges. This change has direct impact on all industries.

It is very true that whatever changes are there due to digitalization are high. The right information has to be implemented at the right time and right place. The arrival of digitalization has changed the working method in business; it is the HR manager to accomplish his function, deliver a true employee relationship as well as brings together the digital and the human touch.

The human resource department is for ensuring that staff is treated fairly and even the organization will achieve its objectives. But its seen that HR job is lacking with the personal touch now a days. Human Resource has started with paperwork, administration and technology, this evolution of the HR department has lost its personal personality. HR managers are behind their computers with operating the official email account and communication to different departments. HR managers are updating the spreadsheet and ERP system of their department. Managers behind the computers are not able to face the staff if arise with problems, disclose secrets and expect support for personal issues.

As digitalization has come in to high affect every member of workplace are treated like they were a block on a spreadsheet. Employees are not machines they and human having the emotion, feeling etc. Without considerate staff morale won't be able to sustain itself. And that's where the human touch can make all the difference.

KEYWORDS: Human Touch; HR manager; Human Resource Department;
Digitalization

(D2-5)

A Proposal of Preventing Forgetting Children on School Buses by IoT Technology

**Natthamol Heebjankri, Thamavich Wongsamerchue,
Surin Pholngam, Prawit Pholnagm**

Information and Communication Technology Program,
Faculty of Science and Technology, Bansomdejchaopraya Rajabhat University,
Thailand (ratta_021@hotmail.com)

Freelance Researcher (thamavich@gmail.com)
Information and Communication Technology Program, Faculty of Science and
Technology, Bansomdejchaopraya Rajabhat University, Thailand
(surinph@hotmail.com)

Information and Communication Technology Program, Faculty of Science and
Technology, Bansomdejchaopraya Rajabhat University, Thailand
(prawitph@hotmail.com)

The aim of this research was to study and design the concept of the system preventing forgetting children on school buses by the IoT conceptual framework. Since forgetting children on the school buses is a serious accident that sometimes leads to a fatality; nevertheless, there was some news about the death of children abandoned on the school buses regularly and the rate of this kind of accident is increasing continually, technology, therefore, becomes the concept of the suggestions to avoid forgetting children on the school buses. The research is done by analyzing the way to avoid this accident and synthesizing the conceptual framework which is developed for solving the failures of monitoring students when they get on and get off the school buses. If there is a child left on the school bus, the notification will be immediately sent to the related people. Displaying application performance is designed via the web application that is synced to Line. The traveling status is controlled by a computer server which is synced to RFID and Cloud storage. Moreover, a real-time report is also provided for supporting Thai's quality of life by being facilitated by technology. IoT technology is capable of decreasing the risk of an accident caused by traveling from home to school and ensuring parents that they will be informed of the location of their children at all times.

KEYWORDS: forgetting children; school buse; Internet of thing;

(D2-6)

Design and development of motion infographics in knowledge of fish releasing for elderly

Tiantada Hiranyachattada, Kampanart Coosirirat, Titikron Phongdee

Department of Animation and Digital Media, Faculty of Science and Technology,
Bansomdejchaopraya Rajabhat University, Thailand (bmafueng@hotmail.com)
Department of Animation and Digital Media, Faculty of Science and Technology,
Bansomdejchaopraya Rajabhat University, Thailand (ajdankampanart@gmail.com)
Department of Animation and Digital Media, Faculty of Science and Technology,
Bansomdejchaopraya Rajabhat University, Thailand (liverpond422r@gmail.com)

Due to the amount of elderly in Thailand have been increasing also found that the content for the elderly that mostly interested in were about health care and recreation activities. Fish releasing was one of the popular recreational activities in the elderly, making merit by releasing the fish from the confines, or giving them freedom is typically done. If released properly will help keep the fish alive therefore must consider the nature of the fish and the environment. So giving the knowledge of fish releasing to elderly was important. Digital media is an important way for communication due to advances in digital technology especially in motion infographics media also the increasing of the usage of social media of elderly nowadays. As mentioned, the aim to this research were: 1) design and development of motion infographics in knowledge of fish releasing for elderly 2) evaluation the quality of motion infographics and 3) to study the satisfaction of the motion infographics. The motion infographics quality evaluation were from 3 digital media experts and 3 content experts. The satisfaction evaluation were from elderly selected by purposive sampling method. The research tools consists of motion infographics in knowledge of fish releasing for elderly, motion infographics quality evaluation form and satisfaction evaluation form. Using average and standard deviation statistic to analyse the collocated data. The result showed that the motion infographics can be usable in elderly, the quality evaluation of content was at highest level, the quality evaluation of the design and development of motion infographics was the high level and the satisfaction evaluation was at high level. In conclusion, the motion infographics can be able to provide knowledge about the nature of fish and the appropriate environment for fish.

KEYWORDS: motion infographics, fish releasing, media, media for elderly

(E1-1)

The Influence of Electronic Word Of Mouth (E-WOM) on Hotel Booking Intention among Generation Y

Mohamad Noor Salehuddin Sharipudin, Yee Chat Yin

Universiti Utara Malaysia (mnsaleh@uum.edu.my)

Universiti Utara Malaysia (cyred411@gmail.com)

Nowadays, web 2.0 is an important platform for consumers to seek information especially in service industry. Many organizations shift their marketing channel from traditional platform to web 2.0 platform. They are actively communicate with their customers through social media, blogs, and online review websites. It allow consumers to share their experiences with products and services through reviews. Electronic Word-of-mouth (e-WOM) communication is one of the communication channels in marketing. E-WOM communication has always been with us when people talk, share their opinions and listen to others' perceptions especially in digital setting. It can be described as an informal and non-commercial form of conversation between a communicator and a receiver regarding a brand, a product, an organization or a service or/and between the actual or potential customers and other people such as product/service providers, independent experts, family and friends. It includes positive or negative statements or comments made by potential, actual or former customers about a product or company. There are two research questions in this study. Firstly does customer satisfaction, customer loyalty and customer commitment contribute to positive e-WOM in hotel industry? Secondly, does e-WOM influences booking intention in hotel industry? Our research aims to investigate customer's satisfaction, customer's loyalty and customer's commitment influence towards the positive e-WOM intention and study the effect of positive e-WOM and hotel booking intention. A total of 450 useable date has been collected. Our respondents were Generation Y (Gen Y) and university students. Our study indicates that customer satisfaction, customer loyalty and customer commitment contributed to the positive of e-WOM among Gen Y. The respondents' perceived positive e-WOM have an impact on high degree of hotel booking intention. Our study mainly contributes to hotel and service industry by providing a better understanding about the determining factors on hotel booking intention. It also help hotel industry players to build and restructure their hotel in a customer-oriented way to encourage the spread of positive e-WOM.

KEYWORDS: electronic word-of-mouth; generation Y; hotel industry

(E1-2)

Health Communication in the Field of Nutrition Based on Online Media Platform

Mufid Salim, Fasty Arum Utami

Universitas Ahmad Dahlan (mufid.salim@comm.uad.ac.id)

Universitas Gadjah Mada (fastyarumutami@ugm.ac.id)

The development progress of the digital communication has a very rapid impact on all fields, including the health sector. Health information can now be delivered according to consumer needs with more comfortable services. This research is purposed to develop digital communication media in the field of nutrition to support government program in health movement. Observation method has employed to observe the public response regarding digital nutrition communication media, which has been developed by researchers with nutritionist involvement. Public response gathered from web statistics provided by the digital nutrition communication media. Result shows that communication media in the field of nutrition can change people's lifestyle towards a healthier and more easily accessible information. This research produced a model of digital health communication media in the field of nutrition.

KEYWORDS: communication; nutrition; digital media; digital health information

(E1-3)

What Is Watched And Commented On Social Media? A YouTube Content Analysis

Norizah Aripin, Awan Ismail, Sabrina Mohd Rashid,
Revathy Amadera Lingam, Nursyafiqahadila Zainal

Universiti Utara Malaysia (noryzah@uum.edu.my)

Universiti Utara Malaysia (awan@uum.edu.my)

Universiti Utara Malaysia (sabrina@uum.edu.my)

(revathylingamphd@gmail.com)

(syafiqahzainal56@gmail.com)

Recently, social media such as YouTube uploaded video that was a conversation issue and became viral for YouTube watch users, interpreted images and gave negative comments or was known as 'flaming'. 'Flaming' is a virtual communication that is aimed at insulting, abusive words and tossing accusations against videos that are disseminated without prevention YouTube parties. The objective of this study is to identify the interpretation of the images and comments of YouTube video users in the video in January 2016. The Social Influence Model of Flaming was used to explain the images interpretation process and comments classifications on YouTube. The qualitative method, the content analysis approach is used to analyze the study data based on the interpretation of images and comments. The thematic analysis is used to analyze the data of this study. The findings show that there are six categories of YouTube video images interpretation that is object, action, emotion, personality, identity and montage. Meanwhile, there are 10 categories of YouTube video comments that include insult, defamation, sarcasm, inter-state attack, sexual attack, prejudice, emotional attack, inter-country attack, name calling, and religious attack. Based on the findings of this study, YouTube users were flaming after they watched the YouTube video and interpreted the video's image and indirectly acting on comments. The study also contributed practically, namely in the development of flaming data for responsible parties, including MCMC and Cyber Security Malaysia.

KEYWORDS: social networking; cyber-bullying; flaming; YouTube;
social influence model of flaming

(E1-4)

Imitation of Selegram Teenagers Behaviour in Conduct Use of Instagram

Hana Silvana, Lusy Mukhlisiana

Padjadjaran University (hana17010@mail.unpad.ac.id)

Padjadjaran University (lusy.mj@gmail.com)

Teenagers are active users of social media in the current period. The use of social media instagram becomes an interesting for teenagers. With the features provided teens stimulate to use the media. The phenomenon that occurs among teenagers is to upload videos of their creativity, ranging from the behavior of 'alay', sharing knowledge, also based on religious teachings. The diversity of things done by adolescents is an interesting discovery to study. The sample in this study is the programmers who have a follower that many at least 1 million folower as many as 5 people. The time span of the study was conducted in May - July 2018. The results showed that teenagers have a tendency to mimic their idol as an example of their behavior. The teenagers usually use instagram to acces information and have fun for giving recreation. Imitation of the behavior that is done in the form of imitating the behavior performed by his idol with evocative video in the form of the same behavior. In addition it also clicks "like" and coment from each video uploaded by his idol. The average of this experiment is done by the ages of 13 - 17 which is the age group of teenagers who are still students and students. Behavior is the result of imitation of the behavior performed by his idol. This pattern of behavior is done continuously as a habit. Addiction to media instagram also hit teenagers who access more than 5 hours in a day.

KEYWORDS: imitation; teenagers behaviour; selegram; instagram, social media

(E1-5)

The Role of Social Media Influencers and Consumers' Desirability in Buying

Haslina Halim, Marsyanila Adinda

Universiti Utara Malaysia (lina@uum.edu.my)

The St. Regis Langkawi (marsyanilamarzuki@yahoo.com)

The rapid development in the use of the internet and social media has opened up new doors for brands to communicate with the public. In relation to this, advertising has such a massive impact on the enhancement of products and brands. As markets are getting bigger and more widespread, brands need to adjust towards utilizing social media platforms to attract the visibility of the public especially the millennial audiences. As of late, brands have turned to online “celebrities” known as Social Media Influencers (SMIs) to promote and disseminate information in order to attract the consumers’ desirability in purchasing. With this development, the research hopes to identify the public perception towards the influence of SMIs in capturing the consumers’ interest in buying online products. In general, the research investigates the relationship between trustworthiness, expertise and attractiveness of SMIs and the consumers’ desirability in buying. A quantitative approach was adopted in collecting the data, with 400 questionnaires being distributed. Two-hundred and seventeen respondents consisting of Indonesian students studying in Malaysia responded to the survey. The findings showed that three attributes, namely trustworthiness, expertise and attractiveness are equally important in affecting the consumers’ desirability in buying a product. The findings help create awareness of brands when choosing the right SMIs endorser to attract a wider scope of consumers and increase desirability in buying the product. Apart from the methodology and findings, the paper also discusses the limitations and suggestions for future research.

KEYWORDS: celebrities; social media influencers; consumer desirability; trustworthiness; attractiveness

(E1-6)

**Women's Domestification through the Internet
(Descriptive Study on Women's Social Media Users
in Medan)**

Dr. Nurbani, M.Si Sabilla Tri Ananda,

Universitas Sumatera Utara (sunbannymonora@gmail.com)

Universitas Sumatera Utara M.Si (sabillatria@gmail.com)

Technology has a masculine culture (Arivia, 2013; Gamble, 2010). The use of technology to bridge gender inequality has not been optimal in society. The internet as part of technology is expected to participate in empowering women in cyberspace. However, women are still bound by patriarchal culture in cyber space activities. Domestic matters are still the focus of women's attention in the use of social media, especially among housewives. Through qualitative methods, this study explains how internet usage increasingly domesticates women in Medan city. The use of the internet is carried out including information on beauty tips and fashion, homework and childcare.

KEYWORDS: domestification; internet; woman; new media

(E2-2)

Proses Sensemaking semasa Bencana Alam

Aida Filzah Ramli, Nor'Izah Ahmad

Universiti Malaysia Perlis (ieydafylza@gmail.com)

Universiti Malaysia Perlis (izah@unimap.edu.my)

Bencana alam merupakan malapetaka yang menyebabkan sesuatu kemusnahan dan kerosakan yang berlaku tanpa dapat diramal. Bencana ditakrifkan sebagai satu peristiwa yang terjadi secara mengejut menyebabkan kehilangan nyawa manusia, kerugian harta benda dan mengugat kegiatan seharian penduduk yang terlibat. Kajian literatur menunjukkan terdapat peningkatan kajian yang dilakukan terhadap sensemaking oleh organisasi semasa situasi krisis dalam membangunkan strategi yang efektif. Dalam pada masa yang sama, kajian literatur juga turut menunjukkan kesan bencana yang perlu dihadapi kerana kegagalan organisasi untuk memberi makna kepada situasi yang kabur (ambiguity) dan tidak boleh diramal dalam usaha memahami situasi bencana. Ini menunjukkan bahawa sensemaking merupakan kaedah terbaik untuk mengurangkan ketidakpastian (uncertainty) dan membuat keputusan terbaik semasa bencana. Sensemaking dilihat sangat relevan dan dipercayai berupaya untuk memperbaiki kegagalan dengan merujuk kepada pengalaman lalu (retrospektif). Justeru itu, artikel ini membincangkan proses sensemaking semasa bencana alam secara khusus.

KEYWORDS: sensemaking; bencana alam; proses sensemaking; krisis; krisis organisasi

(E2-3)

Pengaruh Media Sosial Terhadap Imej Korporat Organisasi

Muhammad Sollehudin Md Nadzir, Nor'Izah Ahmad

Universiti Malaysia Perlis (sollehudin8@gmail.com)

Universiti Malaysia Perlis (izah@unimap.edu.my)

Perkembangan internet dan media sosial yang meningkat kini telah menyumbang kepada perubahan komunikasi korporat sesebuah organisasi. Sifat media sosial yang interaktif iaitu mudah dicapai, pantas dan tanpa sempadan telah memberi kemudahan kepada organisasi. Hal ini demikian kerana media sosial memainkan peranan penting terhadap organisasi dan publik serta merupakan alat komunikasi penting kepada semua pihak berkepentingan. Penggunaan media sosial dengan lebih efektif khususnya dalam penyebaran maklumat dapat meningkatkan reputasi organisasi. Justeru itu, organisasi perlu memastikan maklumat yang disebarkan melalui media sosial dapat dipantau agar tidak menjejaskan imej korporat. Oleh yang demikian, artikel ini membincangkan pengaruh media sosial terhadap imej korporat organisasi. Artikel ini juga turut membincangkan penggunaan media sosial oleh organisasi.

KEYWORDS: media sosial; pengaruh media sosial; imej korporat; reputasi; organisasi

(E2-4)

Artikel Konseptual: Peranan Pengurusan Krisis Semasa Krisis Media Sosial

Nordalila binti Nazri, Nor'Izah binti Ahmad
Universiti Malaysia Perlis (dalilanazri315@gmail.com)
Universiti Malaysia Perlis (izah@unimap.edu.my)

Kewujudan media sosial telah memberikan cabaran yang besar terhadap peranan pengurusan krisis. Dengan perkembangan media sosial, krisis yang tidak diurus dan dibendung dengan baik akan berpotensi untuk berkembang sehingga peringkat global. Krisis merupakan situasi yang tidak dapat diramalkan yang boleh mengancam dan memberikan kesan negatif terhadap reputasi organisasi sekiranya tidak ditangani dengan efektif dan efisien. Media sosial banyak mengubah landskap penyebaran maklumat dan komunikasi terutamanya bagi organisasi. Hal ini kerana maklumat yang disampaikan boleh mempengaruhi imej dan kredibiliti organisasi. Oleh itu, pasukan pengurusan krisis di organisasi memainkan peranan penting semasa krisis media sosial. Objektif utama kajian ini adalah untuk mengenal pasti tindakan yang diambil oleh pasukan pengurusan krisis oleh organisasi. Strategi pengurusan krisis terutamanya komunikasi krisis merupakan elemen yang sangat penting untuk mengatasi krisis media sosial. Justeru itu, kajian artikel ini membincangkan sejauh mana pasukan pengurusan krisis di organisasi berperanan semasa krisis media sosial.

KEYWORDS: krisis; komunikasi krisis; pasukan pengurusan krisis; media sosial; strategi tindak balas krisis

(E2-5)

Peranan Pengamal Perhubungan Awam Semasa Pasca Krisis

Siti Aishah Zaidi, Dr. Nor'Izah Ahmad

Universiti Malaysia Perlis (aishahzaidi@studentmail.unimap.edu.my)

Universiti Malaysia Perlis (izah@unimap.edu.my)

Pengamal perhubungan awam berperanan dalam memelihara imej dan reputasi organisasi. Kewujudan media sosial memberi cabaran yang besar kepada pengamal perhubungan awam untuk mengelak perspektif negatif seterusnya memberi kesan kepada imej dan reputasi organisasi. Hal ini kerana maklumat yang tular di media sosial sekiranya tidak di uruskan dengan efektif boleh menjatuhkan imej dan reputasi organisasi sehingga boleh mencetuskan krisis. Justeru itu, pengamal perhubungan awam memainkan peranan penting dalam menguruskan krisis yang tercetus dengan efisien. Hal ini kerana pengurusan krisis yang efektif akan berupaya memberikan persepsi yang positif terhadap organisasi sekaligus meningkatkan reputasi organisasi. Peranan perhubungan awam juga dilihat bukan sekadar semasa krisis tercetus malahan ianya amat penting semasa fasa pasca krisis. Sehubungan itu, artikel ini membincangkan tentang peranan pengamal perhubungan awam selepas fasa pasca krisis.

KEYWORDS: pengamal perhubungan awam; krisis; pengurusan krisis; pasca krisis; social media

(E2-6)

Program Rujukan Tone Wow Sebagai Kaedah Agihan Zakat Produktif di Malaysia

**Mohd Adib Bin Abd Muin, Mohd Sollehudin Bin Shuib ,
Amirul Haqem Bin Abd Ghani,**

Azizah Binti Che Omar, Muhammad Fakhirin Che Majid

Universiti Utara Malaysia (mohdadib@uum.edu.my)

Universiti Utara Malaysia (sollehudin@uum.edu.my)

Universiti Utara Malaysia (haqem@uum.edu.my)

Universiti Utara Malaysia (co.azizah@uum.edu.my)

Universiti Utara Malaysia (muhammad_fakhirin@oyagsb.uum.edu.my)

Zakat merupakan mekanisme penting bagi setiap umat Islam kerana ia merupakan salah satu daripada paksi rukun Islam yang wajib dilaksanakan oleh umat Islam yang memenuhi syarat. Zakat itu menyucikan, bukan sahaja dari sudut harta malah untuk menyucikan jiwa supaya dapat mendidik manusia untuk saling membantu dan tidak mengetepikan hak orang lain. Statistik Lembaga Zakat Negeri Kedah (LZNK) menunjukkan bahawa fakir, miskin serta fisabilillah merupakan tiga daripada lapan golongan asnaf yang mencatat agihah zakat tertinggi. Ini mungkin disebabkan belunggu kemiskinan ekonomi, kesihatan, pendidikan dan masalah lain yang berkaitan belum Berjaya diperangi atau dikurangkan secara menyeluruh. Kaedah atau sistem program rujukan yang telah bertapak di Malaysia dilihat mampu digunapakai untuk menjana pendapatan bagi mereka yang kekurangan modal dan kurang kepakaran sebagai usahawan tapi berpotensi memberi satu dimensi baru untuk keluar dari masalah kewangan dan masalah berhubung dengannya. Kertas konsep ini cuba memperkenalkan satu model baharu untuk diadaptasi oleh LZNK berdasarkan program rujukan yang disediakan oleh syarikat telekomunikasi Tone Wow dengan menganalisis modus operandi program tersebut yang boleh dipertimbangkan menjadi sebahagian program bantuan zakat dalam kategori zakat produktif selain daripada zakat saradiri sedia ada.

KEYWORDS: kad sim; kad sim tone wow; program rujukan; asnaf; zakat produktif; Malaysia

(E2-7)

Perbezaan Tahap Kepuasan Saluran Komunikasi Penyelia dalam Perindustrian Kecil & Sederhana (PKS) Sektor Perkhidmatan di Utara Semenanjung Malaysia

Marzura Ibrahim, Hasrina Mustafa, Hafizah Zainal

Universiti Utara Malaysia (marzura@uum.edu.my)

Universiti Sains Malaysia (hasrina@usm.my)

Universiti Utara Malaysia (hafizahzainal87@gmail.my)

Kajian ini bertujuan untuk mengenalpasti perbezaan tahap kepuasan maklumat yang diterima melalui saluran komunikasi penyelia dalam kalangan pekerja PKS sektor perkhidmatan khususnya di Utara Semenanjung Malaysia. Tahap saluran komunikasi yang dikaji ialah komunikasi bersemuka dengan penyelia, komunikasi melalui telefon dengan penyelia, komunikasi bertulis, mel elektronik, mesej pesanan segera (instant messenger), aplikasi *whatApps* dan media sosial. Kajian ini menggunakan soal selidik sebagai instrument untuk pengumpulan data. Sampel kajian adalah seramai 418 responden yang terdiri daripada pekerja pelbagai peringkat pengurusan. Hasil dapatan kajian mendapati bahawa terdapat perbezaan mengenai tahap kepuasan maklumat yang diterima melalui saluran komunikasi penyelia dalam kalangan para pekerja PKS sector perkhidmatan. Hal ini perlu diberi perhatian dengan sewajarnya. Seterusnya, implikasi kajian telah dibincangkan untuk membangunkan tahap kepuasan saluran komunikasi penyelia kerana kecekapan penggunaan saluran komunikasi bukan sahaja membantu meningkatkan produktiviti, pengetahuan dan kemahiran pekerja malah membantu ke arah pencapaian prestasi organisasi serta mengekalkan kelebihan daya saing.

KEYWORDS: saluran komunikasi; penyelia; komunikasi organisasi; PKS; sektor perkhidmatan

(F1-1)

Guideline General Administration of Elementary School Under The Office of Chiang Mai Primary Educational Service Area 4

Siriwan Saisupsin1, Phornsirima Buranapan

Program in Educational Administration Master of Education,
Siam Technology College, Thailand (siriwan6595@gamil.com)

This research aims to study the level and compare general administration of schools in Chiang Mai Educational Service Area 4 in Chiang Mai Province categorized by demographic characteristics, status and working experience. The population and sample groups were administrators and teachers

The instrument used in the research was questionnaires distributed with the Multi-Stage Random Sampling. The researcher analyzed the data by using computer software. The statistics used in the research included the frequency, percentage, mean, standard deviation, t-test, and F-test or one way variance analysis (One Way Anova). In the case of difference was found with the statistical significance, they would be tested in pair for the difference at the significance level of 0.05 or at the confidence level of 95% by using the formula according to the Least Significant Difference (LSD) to compare the population mean.

The research result showed that: General administration of schools in Chiang Mai Educational Service Area 4 in Chiang Mai Province in overall scenario was at a good level ($\bar{x} = 3.74$, S.D. = .339). The Consideration of each part, the part of household was very important ($\bar{x} = 3.84$) the secondary was information ($\bar{x} = 3.82$ Student Affairs Department ($\bar{x} = 3.80$) the information of relationship of school and local community ($\bar{x} = 3.79$) Education Board ($\bar{x} = 3.78$) Registration and Evaluation Department ($\bar{x} = 3.72$) Technology in Education Department ($\bar{x} = 3.67$) General Administration and document Department ($\bar{x} = 3.62$) the lowest average mean of the General Administration Department was the Information and planning Department ($\bar{x} = 3.61$) according to the different of gender, education and work experience. For the differences of status and working experience, general administration of schools in Chiang Mai Province was not difference at the statistically significant level of 0.05. It showed that accepted the hypotheses. The acquired information can be useful by adopting the information from the study to be used as a guideline to develop general administration of schools in Chiang Mai Educational Service Area 4 in Chiang Mai Province in order to get maximize benefits.

KEYWORDS: General Administration; School director;
Primary Education Area Office

(F1-2)

Administrative behavior of the head in the management of children Organization Chiang Mai Local Administrative Development Center

Nawada Sampansincheu, Phornsirima Buranapan

Master of Education Program in Educational Administration,

Siam Technology College (STC), Thailand

(koysaeng@gmail.com.)

This objectives of this examination were the following: to analyze administrative demeanor of the head in the management of the Child Development Center: Chiang Mai Local Administrative Organization; of which consisted of six parts being: leadership, inclination, transmission, undertaking, and ascertaining the control target and to contrast the conduct of management in the Child Development Center at Chiang Mai Local Administrative Organization. There were many categories; consisting of individual aspects, education status and experience where the management of Child Development Center at Chiang Mai Local Administrative Organization consisted of 220 individuals.

The tools utilized in this research, were questionnaires by administering them by using the simple random sampling method. The researcher considered the data, by adopting a computer program. The statistics tested in the examination were frequency, percentage, mean, and standard deviation.

The outcome determined the examination of administrative demeanor of the head in Management of Child Development Center at Chiang Mai Local Administrative Organization. For every section in this research, they were measured at a high level of ($\bar{x} = 3.72$). When taking account each factor, it was discovered that the highest mean value was motivation at ($\bar{x} = 3.84$), followed by decision making ($\bar{x} = 3.79$). The operational control ($\bar{x} = 3.74$), the target setting at ($\bar{x} = 3.72$), communication ($\bar{x} = 3.71$). The lowest mean value was leadership at ($x = 3.53$). In the academic section and experience of the attitude of the management of the Child Development Center at Chiang Mai Local Administrative Organization; was analytically distinct at 0.05.

KEYWORDS: Behavior1; Administrative behavior2;
Head of the Child Development Center;

(F1-3)

Parental Participation in Educational Management of Child Development Center Under The Local Administrative Organization Pong District, Phayao Province

Chanittha Muangkheew, Phornsirima Buranapan

Master of Education Program in Educational Administration,
Siam Technology College, Thailand (muangkheewchanittha@gmail.com)

This research aims to study and find the way for parental participation in Educational Management of the child Development Center Under the Local Administrative Organization Pong District , Phayao Province, namely 1) management of child development center 2) personnel 3) environment and safety building 4) academic and activities according to curriculum 5) participation and sectors 6) promotion of early childhood development network classified by age, education level, occupation. Group

This research is a sample group used in the research is the parents of the young children of the child development center under the Local Administrative organization, Pong District , Phayao Province to study was conducted from a sample of 234 peoples. The research instrument was a questionnaire. Using a specific sampling, the researcher analyzed the data by using computer program. The statistics used in the research were frequency, percentage, standard deviation, standard deviation, standard one – way analysis of variance in the case of statistically significant differences will perform double checks at significance level 0.05 or 95% confidence level using the Least significant Difference (LSD) formula

The research found that Parental Participation in Educational Management of Child Development Center Under The Local Administrative Organization Pong District, Phayao Province. The overall picture is at a high level, ($\bar{x} = 3.75$) with the highest level of participation was academic and activity according to the principle. ($\bar{x} = 3.81$) followed by the promotion of early childhood development networks ($\bar{x} = 3.80$) of early childhood development, the third is building, environment, safety ($\bar{x} = 3.77$) And participation in supporting all sector ($\bar{x} = 3.77$) ranked fourth, namely personnel ($\bar{x} = 3.74$) and the lowest level of participation is the management of the child development center ($\bar{x} = 3.60$) The results of comparison of parents 'participation in educational management revealed that age, education level, occupation were different, Parental participation in educational management was not different. Therefore, the overall of these 3 characteristics accepted the hypothesis with statistical significance of 0.05 from this research will be useful to administrators of the child Development center in the development and development of parents to participate in all aspects more.

KEYWORDS: Parental Participation; Educational Management;
Child Development Center

(F1-4)

The relationship between emotional intelligence and administration of child development center under the local administrative organization in Mae Chaem District Chiangmai Province.

Thitari Sillapongpai, Phornsirima Buranapan

Master of Education Program in Educational Administration,
Siam Technology College, Thailand (thitari.silapongpai@gmail.com)

Research on The relationship between emotional intelligence and administration of child development center under the local administrative organization in Mae Chaem District Chiangmai Province, has a purpose 1) to study the emotional intelligence of the child development center under the local administrative organization in Mae Chaem District. 2) To study the administration of the Child Development Center Under the local administrative organization in Mae Chaem District. 3) To study the relationship between emotional intelligence and administration of the Child Development Center under the Local Administrative Organization in Mae Chaem District Chiangmai Province.

This research is a quantitative research. The sample group used in the research were 103 heads of the center and the teachers who supervised the children of local administrative organizations in Mae Chaem District Chiang Mai Province, academic year 2017. This research using the R.V.Krejcie & D.W.Morgan. And the tools used in the research were questionnaires 5 static level type. Static used in data analysis namely Frequency, Average, Standard deviation and Pearson Product Moment Correlation Coefficient.

The results showed that emotional intelligence and administration of the Child Development Center Under the local administrative organization in Mae Chaem District Chiang Mai province as a whole is at a high level ($\bar{x} = 3.64$). When considering each aspect, it was found that the aspect with high level of emotional intelligence, the highest mean is the emotional understanding of others ($\bar{x} = 3.78$). Followed by motivation for self ($\bar{x} = 3.71$), self-control ($\bar{x} = 3.67$), social skills ($\bar{x} = 3.62$) and aspects with high emotional intelligence the lowest mean value is self-awareness ($\bar{x} = 3.42$). Administration of the Child Development Center Under the local administrative organization in Mae Chaem District, Chiang Mai Province overall was at a high level ($\bar{x} = 3.62$). When considering each aspect, it was found that the aspect with high level of management, the highest mean is the building, environment and safety ($\bar{x} = 3.87$) followed by personnel ($\bar{x} = 3.82$), the promotion of early childhood development network ($\bar{x} = 3.68$), management of child development centers ($\bar{x} = 3.65$), academic and activities according to the curriculum for child development centers ($\bar{x} = 3.40$). And the aspect with moderate management level, the lowest average is participation and support from the community ($\bar{x} = 3.28$). The relationship between emotional intelligence and administration of the

Child Development Center under the Local Administrative Organization in Mae Chaem District Chiangmai Province was found that the overall was related. It have a positive relationship at moderate level with statistical significance at 0.01 ($r = .336^{**}$)

The results of this research revealed that the head of the child development center and the teacher who supervised the children under the local administrative organization in Mae Chaem District Chiangmai Province understand that between the emotional intelligence and the administration of the Child Development Center was related at a moderate level. So, it can be a good example for the head of other child development centers to use as a guide for self-development.

KEYWORDS: Emotional Intelligence; Management; Child Development Center; Mae Chaem District Chiang Mai

(F1-5)

The Relationship between Leadership and Administrative Skills of Administrators of Child Development Centers under the Local Government Organization Chaiyaphum Province

Bunjira Supanphong, Phornsirima Buranapan

Master of Education Program in Educational Administration,
Siam Technology College, Thailand (bunjirane@gmail.com)

The purposes of this research were to. 1) to study the leadership of the administrators skills of the child development centers under the local administrative organization Chaiyaphum Province 2) to study the administrative skills of the administrators of the child development centers under the local government organization Chaiyaphum and 3) to study the relationship between executive leadership and administrative Skills of administrators of child development centers under the local government organization Chaiyaphum Province. This research Is a quantitative research. The sample of the research were 297 is Teachers, Child Development Centers under the Local Administrative Organization Chaiyaphum Province, in the academic year 2017, was chosen using the Krejcie and Morgan was used to collect data. Is a questionnaire 5- level estimation scale. The researcher analyzed the data with a computer program. Statistics used in data analysis Namely frequency, percentage, mean (\bar{x}) Standard deviation (SD.) And Pearson Product Moment Correlation Coefficient. The results are that 1) Leadership of administrators of child development centers under the local administrative organization Chaiyaphum Province According to the opinion of the teacher, child development center Overall, the opinion is at the highest level. ($\bar{x} = 4.60$) When considered individually, it was found that the leadership of the child development center administrators All types are at a highest level with in most leadership support. At a high level With the highest mean ($\bar{x} = 4.65$) followed by the leadership cues ($\bar{x} = 4.65$) Success-oriented leadership ($\bar{x} = 4.60$) and the lowest average leadership style is participatory leadership ($\bar{x} = 4.49$) 2) Administrative skills of management, child development centers under the jurisdiction of local governments. Chaiyaphum Province In the opinion of teachers, child development centers overall, each side has commented on the high level ($\bar{x} = 4.55$) When considering each aspect Found that the areas with administrative kills The highest level with the highest average, first is the technical method ($\bar{x} = 4.61$) followed by Education teaching ($\bar{x} = 4.61$) and skilled management level, with an average minimum of interpersonal ($\bar{x} = 4.45$) 3) The relationship between executive leadership and administrative skills of administrators of child development centers under the local administrative organization Chaiyaphum Province overall, there is a positive correlation. At a high level with statistical significance at .01 level the results of this research are useful to the administrators of the child development Center. Under the local government

organization Chaiyaphum Province and can be a good example in with the center manager develop other young children used as a guide for self-development for even better.

KEYWORDS: Leadership; Administrative Skills; Child Development Center

(F1-6)

The Development of teaching potential in STEM Education to enhance of Life Skills of Graduate Students

Phornsirima Buranapan, Vorachai Viphoouparakhot

Master of Education Program in Educational Administration, Siam Technology College, Thailand (phornsirima@hotmail.com)

This study aims to focus on higher education institutions to bringing education innovation resources as well as academic expertise of personnel and technology from higher education institutions to help improve educational quality for educational institutions. By focusing on developing teachers' potential in organizing learning activities that focus on solving the problems of national education Especially the STEM Education learning management to enhance the use of life skills for graduate students with important success indicators of educational institutions participating in activities to develop learner development activities Graduate level

The main factor of improving the quality of education is the development of teacher quality, which is an important engine in driving the development of educational quality to success Therefore need to focus on the development of potential teachers to be able to manage learning effectively In developing teachers to be able to organize activities to develop learners to meet the desired goals can be continued and sustainable. By applying principles for teachers to use their potential and capabilities Perform tasks according to the obligations to achieve the goals. Caused by motivation to work and confidence in their ability and potential and the principles of knowledge management that are a collection of the knowledge that exists in the teachers to develop into a system so that all teachers in the institution can access knowledge And develop oneself to be knowledgeable Including working effectively which will result in learners The graduate level in the educational institution has confidence and faith in a sustainable and stable manner.

KEYWORDS: Development of teaching potential; STEM Education; Life Skill

(F1-7)

Academic Administration of Opportunity Expansion Schools under Suphanburi Primary Educational Service Area Office 2

Janya Onsri, Pimparit Tiangpak

Siam Technology College, Thailand (janya.zeeza@gmail.com)
Siam Technology College, Thailand (pimparit.t1107@gmail.com)

The purposes of this research were to study Academic Administration of Opportunity Expansion Schools Under Suphanburi Primary Educational Service Area Office 2 and to compare Academic Administration of Opportunity Expansion Schools Under Suphanburi Primary Educational Service Area Office 2 In 7 areas School curriculum development Development of learning processes Measurement, evaluation and transfer of grades Development of innovative media and educational technology Research for improving the quality of education Educational supervision And the development of quality assurance systems in educational institutions classified by genders, educational levels, and age

This research was a quantitative research The population was teachers of educational opportunity expansion schools. Under the Office of Primary Education Area Suphan Buri, District 2 15 schools, number 228 people the sample group was the teachers of the School of Educational Opportunity Extension Under the Suphanburi Educational Service Area Office, Area 2, 145 persons Tools used in this research was a general information questionnaire for respondents And checklist Personal status Academic administration variables, the estimated level of Lichert 5 levels Which has the whole confidence value equal to 0.87

The research found that: 1) The academic affairs administration of schools under Kanchanaburi Municipality was overall and in each individual aspect at a high level, ranking in the order of mean from high to low as follows : school curriculum development measurement, learning process development, instructional materials and technological innovation development; measurement, evaluation, and credit transfer; educational supervision, internal quality assurance system development; and research for educational quality development 2) The comparing results of academic affairs administration as perceived by teachers, classified by their genders, educational level were and age overall not significantly different at 0.05 level.

KEYWORDS: Academic; Administration; Opportunity Expansion Schools

(F2-1)

Organizational Culture of Schools under the Local Administrations, Nong Khae District, Saraburee

Sarunya Pansomboon, Pimparit Tiangpak

Siam Technology College, Thailand (joy_charming@hotmail.com)

Siam Technology College, Thailand (pimparit.t1107@gmail.com)

This research aims to 1) Studying the corporate culture of the school under the local Administrative Organization, Nong Khae District, Saraburi Province 2) Compare the Organizational culture of the school under the local government Organization Classified by Education level And work experience of teachers and work experience of teachers

The sample used in this research including teachers, Primary schools under the local Administrative Organization, Nong Khae District, Saraburi Province, academic year 2561 Determine the size of the sample group by using the Creigy and Morgan's finished table. Select the sample group by using simple random method of 118 people. The instrument used is a questionnaire with an estimated value. Which has content validity between 0.67 - 1.00 and has a Reliability value was 0.92 Data analysis using frequency, percentage, mean, standard deviation and t-test and F-test One-way ANOVA

The research found that 1) School culture of the school Under the local administrative organization, Nong Khae District, Saraburi Province Under the local administrative organization, Nong Khae District, Saraburi Province The overall picture has a high level ($\bar{x} = 3.77$). Followed by the third, proactive, with a high average ($\bar{x} = 3.89$) and the lowest mean value is the 1 aspect. Creative characteristics have a high level of mean ($\bar{x} = 3.47$) 2) Comparison of corporate culture of schools under the local government organization Classified by education level Overall, there is no difference. When considering each aspect, it was found that In the 1st aspect, creative features Differing significantly at the level of .05 And the work of teachers Classified by experience the overall picture and each aspect were different with statistically significant of .05.

KEYWORDS: Organizational Culture; Creative style; Receiving characteristics; Aggressive style

(F2-2)

Instructional Leadership of School Administrators under Local Administrative Organizations in Nong Khae District, Saraburi Province

Supaporn Laoacariyaporn, Dr.Pimparit Tiangpak

Siam Technology College, Thailand (supaporn20082520@gmail.com)

Siam Technology College, Thailand (pimparit.t1107@gmail.com)

This research aims to 1) Study Academic leadership of school Administrators Under the local Administrative Organization, Nong Khae District, Saraburi Province 2) Compare academic leadership of school Administrators Under the local Administrative Organization, Nong Khae District, Saraburi Province Classified by education level And work experience

The samples used were teachers in schools Under the local Administrative Organization, Nong Khae District, Saraburi Province Sampling by the opening method of Craigie and Morgan's tables Then determine the proportions and easily randomized using lottery methods The instrument used for data collection was 5-level rating scale questionnaire. With confidence value of 0.98 the statistics used in the research were frequency, percentage, mean, standard deviation. And t-test and F-test (One-way ANOVA)

The research found that 1) Teachers in Educational institutions Have opinions about academic leadership of school administrators under the local Administrative organization, Nong Khae District, Saraburi Province The overall average has a high level in all aspects ($\bar{x} = 4.06$) When considering each aspect, The highest average value was at the high level was The target setting of educational institutions With a high average ($\bar{x} = 4.14$) The lowest mean was In terms of providing learning promotion, the average value was at a high level ($\bar{x} = 3.96$) 2) The comparison of academic leadership of school Administrators Classified by education level And work experience Found that teachers in schools with different work experiences There is no different opinion on academic leadership of school administrators. For teachers with different educational levels have opinions about academic leadership of school Administrators in the overall picture, there was a significant difference at the level of .05

KEYWORDS: Leadership; Academic Leadership

(F2-3)

Early Childhood Educational Administration in Child Development Centers under Local Government Organization Kanchanaburi

Kunlawan Jenuwan, Dr.Pimparit Tiangpak

Siam Technology College, Thailand (donkaminsub@hotmail.com)

Siam Technology College, Thailand (pimparit.t1107@gmail.com)

This Research was Aimed at to study the Early Childhood Educational Administration in Child Development Centers under Local Government Organization Kanchanaburi province in 4 were : experience management learning Media Setting up the environment And development assessment.

This Research is a Quantitative Research. The Population used in this Research were Teachers, carers of Children. Assistant Teacher who cares for children Child Caretakers in Child Development Centers in Thamaka District Kanchanaburi Province. There were 24 Teachers, consisting of 44 teachers who supervise the children, assistant, teachers, care for 29 children, 35 caregivers, a total of 108 people. The instrument used in this research was a questionnaire about the general status of respondents. There are 5 types of question types in the check list. The reliability was 0.90.

The Results of Early Childhood Educational Administration in Child Development Centers under Local Government Organization Kanchanaburi province. Found that the overall performance level was at a high level ($\bar{x} = 4.08$). When classified in each aspect, it was found that the most was the Environment Management. Having a high level of performance ($\bar{x} = 4.08$). Followed by Learning Media Management with a high level of performance ($\bar{x} = 4.02$). And the lowest mean is in terms of experience management and development assessment, there are operational levels. At a high level ($\bar{x} = 4.00$).

KEYWORDS: Early Childhood; Educational Administration;
Child Development Centers

(F2-4)

Operation of the Leader of Child Development Center under the Local Administrative Organization Chaiyaphum Province

Anek Supanpong, Vorachai Viphoouparakhot

Siam Technology College, Thailand (vorachaiv@siamtechno.ac.th)

Purposes of this research are study the operation of the Leader of Child Development Center under the local administrative organization Chaiyaphum Province And to compare the operations of the Leader of the Child Development Center under the local administrative organization Chaiyaphum Province by gender, age and experience

This is quantity research that has teachers in Child Development Center under Local Government Organization of Chaiyaphum in 2017 (Academic Year) as a sample. Total number of the teachers is 297. This research uses Krejcie and Morgan's finished table that separates questionnaire into 5 levels as a tool. Other statistic that uses to analyze data such as frequency, percentage, mean, standard deviation, t-test and F-test.

The results of the research showed that 1) the performance of the Leader of child development center under the local government organization The overall picture of Chaiyaphum province is at a high level ($\bar{x} = 3.92$). When consider in each aspect, it was found that Academic and Activities Aspect has the highest level ($\bar{x} = 4.47$). The next highest is Building, Place, Environment and Safety got the high level too ($\bar{x} = 4.18$). And the aspect that is at a high level with the lowest mean value of the promotion of early childhood development network ($\bar{x} = 3.54$). 2) The comparison results according to the opinion of teachers, child development centers under the local government organization Chaiyaphum province found that teachers, child development centers under the local government organization Chaiyaphum province, which has different gender, has an opinion on the operation of the leader of child development center under the local government organization. Chaiyaphum Province Overall, not different and with different age and experience It was found that teachers, small children development centers under the local administrative organization, Chaiyaphum Province There is an opinion on the operation of the Leader of Child Development Center. Overall, no difference. The results of this research are useful to the head of the child development center. Under the Local Administration Office of Chaiyaphum Province to improve the development of early childhood development

KEYWORDS: Operation; Child development center;
Local government organization

(F2-5)

Leadership of Administrator with Good Governance Administration in School Network for Enhancing Efficiency of Education Center 6 under Bureau of Special Education Administration

Jarunya Chamburee, Vorachai Viphoouparakhot
Siam Technology College, Thailand (vorachaiv@siamtechno.ac.th)

This research aimed to 1) To study the leadership level of administrator in School Network for Enhancing Efficiency of Educational Management of Regional Special Education Center 6 under Bureau of Special Education Administration 2) To study the level of administration according to good governance principles in School Network for Enhancing Efficiency of Educational Management of Regional Special Education Center 6 under Bureau of Special Education Administration 3) To study the relationship between executive Leadership of Administrator and good Governance Administration in School Network for Enhancing Efficiency of Educational Management of Regional Special Education Center 6 under Bureau of Special Education Administration. This research is a quantitative research. The samples were teachers and educational personnel of 181 people. The research instrument are questionnaires 5 rating scale. The data analysis was performed with frequency, percentage, mean, standard deviation and Pearson product – moment correlation coefficient.

The research results were as following 1) Leadership level of executives According to the opinions of teachers and educational personnel in School Network for Enhancing Efficiency of Educational Management of Regional Special Education Center 6 under Bureau of Special Education Administration as a whole, was at a high level ($\bar{x} = 4.35$), When Consider the leader Found was a high level highest average is the leader with success ($\bar{x} = 4.39$), Followed by participatory leaders ($\bar{x} = 4.37$), And the lowest mean is the leader support ($\bar{x} = 4.32$), 2) The level of administration according to good governance According to the opinions of teachers and educational personnel in School Network for Enhancing Efficiency of Educational Management of Regional Special Education Center 6 under Bureau of Special Education Administration as a whole, was at a high level ($\bar{x} = 4.41$), Considering the principles of good governance found that all levels of good governance highest average is the value principle ($\bar{x} = 4.45$), Follows by responsibility ($\bar{x} = 4.44$), The lowest mean is the principle of participation ($\bar{x} = 4.36$). 3) Relationship between leadership of the executive Leadership of Administrator and good Governance Administration in School Network for Enhancing Efficiency of Educational Management of Regional Special Education Center 6 under Bureau of Special Education Administration as a whole, was at a moderate level ($r = 0.67$). Found at .01 level of significance When considering the relationship Found that the pair that was the most relationship leader with success

with the principle of participation, the relationship at a high level ($r=0.75$), The pair that has a secondary relationship is a leader with success with transparency principles of participation there is a relationship at a high level ($r=0.72$), Followed by leader with success with the rule of law there is a relationship at a moderate level ($r=0.70$), Participatory leaders with moral principles and participatory leaders with transparency principles there is a relationship at a moderate level ($r=0.69$), And couples with the least relationship was support leader with the rule of law at a moderate level ($r=0.54$).

KEYWORDS: Leadership; Administrator; Good Governance;
Network for Enhancing Efficiency of Educational Management of
Regional

(F2-6)

Teacher Professional Performance of the Head of the Child Development Center under the auspices of Local Administrative Organization, Chaiyaphum Province

Nualchan Maneesang, Vorachai Viphoouparakhot

Siam Technology College, Thailand (vorachaiv@siamtechno.ac.th)

The research aimed to examine the performance based on professional standards for teachers by the head of child development center under the auspices of Local Administrative Organization, Chaiyaphum Province, and to compare such performance of the head of the aforesaid child development center. The sample comprised 297 child development center teachers who were categorized according to gender, educational qualification and work experience. Five-scale rating questionnaire was the research tool, while the statistics used in data analysis included percentage, mean, standard deviation, t-test and One-way ANOVA.

According to research results, 1) the overall picture and each aspect of the performance based on professional standards for teachers by the head of the said child development center were found at a high level ($\bar{x}=4.16$). Moreover, a high level of all aspects was found after being considered individually. In particular, the aspect of 'being a role model for learners' accounted for the highest mean score ($\bar{x}=4.47$), followed by 'creative cooperation with others in the educational institution' ($\bar{x}=4.28$). However, the aspect of 'doing academic activities for teacher professional development towards the constant advancement' was also found at a high level with the lowest mean score ($\bar{x}=3.97$). 2) The performance based on professional standards for teachers by the head of the mentioned child development center was compared on the basis of categorization of gender, educational qualification and overall work experience. Indeed, the result indicated the statistically insignificant difference.

KEYWORDS: Professional standards for teachers;
head of child development center;
Local Administrative Organization

(F2-7)

Personnel Development of Schools under the Phuket Primary Educational Service Area Office 1

Thanaharith Kasiraks, Vorachai Viphoouparakhot

Siam Technology College, Thailand (vorachaiv@siamtechno.ac.th)

This research aims to study the level of problems and guidelines of personnel development of Schools under the Phuket Primary Educational Service Area Office 1 categorized by demographic characteristics, i.e. status and working experience. The population and sample groups were administrators and teachers of Phuket Primary Educational Service Area Office 1: Thalang District, Phuket Province. The number of sample groups was 206 persons.

The instrument used in the research was questionnaires distributed with the simple random sampling method and a focus group meeting to offer guidance on personnel development. The researcher analyzed the statistics used in the frequency, percentage, mean, standard deviation, t-test, and F-test or one way variance analysis (One Way Anova). In the case of difference was found with the statistical significance, they would be tested in pair for the difference at the significance level of 0.05 or at the confidence level of 95% by using the formula according to the Least Significant Difference (LSD) to compare the population mean.

The research result showed that: The state problems of personnel development of Schools under the Phuket Primary Educational Service Area Office 1 in overall scenario was at a good level ($\bar{x} = 3.67$, S.D. = .259). When each aspect was individually categorized, it was found that the most aspect was personnel development by management process, followed by developmental aspects by process, training, self-development respectively. The lowest aspect of mean was sending staff to study visit whereby their means were 3.77, 3.73, 3.68, 3.60 and 3.57 respectively. For the differences of status and working experience, the state problems of personnel development of Schools under the Phuket Primary Educational Service Area Office 1 was not difference at the statistically significant level of 0.05. It showed that they accepted the hypotheses. The acquired information can be useful by adopting the information from the study to be used as a guideline to develop the state problems of personnel development of Schools under the Phuket Primary Educational Service Area Office 1 in order to get maximize benefits.

KEYWORDS: Personnel Development; Standards;
Primary Educational Service Area

(G1-1)

A study of Mathematics learning achievement basic knowledge about real numbers of Mathayom Suksa 2, Debsirin Nonthaburi School using Team Assisted Individualization (TAI)

**Jennarong Buaharn, Wannaporn Siripala, Sompob Saelee,
Sumlearng Chunrungsikul, Pongru Phuangphoo**

Department of Mathematics, Faculty of Education, Bansomdejchaopraya Rajabhat University, Thailand (ball_jennarong@hotmail.com)

Department of Mathematics, Faculty of Science and Technology, Bansomdejchaopraya Rajabhat University, Thailand (puma_sweety@yahoo.com)

Department of Mathematics, Faculty of Science and Technology, Bansomdejchaopraya Rajabhat University, Thailand (pob_lee@hotmail.com)
Department of Mathematics Faculty of Science, King Mongkut's University of Technology Thonburi, Thailand (isumikul@kmutt.ac.th)

Department of Mathematics, Faculty of Science and Technology, Bansomdejchaopraya Rajabhat University, Thailand (pongurus.ph@bsru.ac.th)

The purposes of this study were: 1) to study mathematics learning achievement on basic knowledge about real numbers of Mathayom Suksa 2 by using Team Assisted Individualization (TAI) 2) to study the satisfaction of learning by Team Assisted Individualization (TAI) of students.

A sample of this study consisted of 50 students of Mathayom Suksa 2/9 in the second semester, academic year 2018, Debsirin Nonthaburi School. The sample were selected by purposive sampling method. The instruments of this study were 1) 8 lesson plans on basic knowledge about real numbers of Mathayom Suksa 2 using Team Assisted Individualization (TAI), 2) 19 items of mathematics learning achievement test on basic knowledge about real numbers, and 3) 15 items of satisfaction questionnaires for learning by Team Assisted Individualization (TAI). The data was analyzed by percentage, mean, standard deviation, t-test for dependent sample, and t-test for one sample.

The results showed that: (1) The mathematics learning achievement on basic knowledge about real numbers of Mathayom Suksa 2 students after learning by Team Assisted Individualization (TAI) is higher than before at .05 significant level (2) The mathematics learning achievement on basic knowledge about real numbers of Mathayom Suksa 2 students after learning by Team Assisted Individualization (TAI) is higher than 60% at .05 significant level, and (3) The satisfaction of Mathayom Suksa 2 students for learning by using Team Assisted Individualization (TAI) is at high level.

KEYWORDS: Team Assisted Individualization (TAI);
Basic knowledge about real numbers; Learning achievement;
Satisfaction

(G1-2)

A study of Mathematics learning achievement on Powers of Mathayomsuksa 1, Rajavinit Mathayom School using Student Teams Achievement Divisions (STAD)

**Koonjira Maneechotchutima, Wannaporn Siripala, Sompob Saelee,
Maneenat Kaewneam, Pongrus Phuangphoo**

Department of Mathematics, Faculty of Education, Bansomdejchaopraya Rajabhat University, Thailand (Koonjira240538@gmail.com)

Department of Mathematics, Faculty of Science and Technology,
Bansomdejchaopraya Rajabhat University, Thailand (puma_sweetie@yahoo.com)

Department of Mathematics, Faculty of Science and Technology,
Bansomdejchaopraya Rajabhat University, Thailand (pob_lee@hotmail.com)

Department of Mathematics, Faculty of Science and Technology,
Bansomdejchaopraya Rajabhat University, Thailand (kmaneenat@yahoo.com)

Department of Mathematics, Faculty of Science and Technology,
Bansomdejchaopraya Rajabhat University Thailand (pongus.ph@bsru.ac.th)

The purposes of this study were: (1) to study mathematics learning achievement on powers of Mathayomsuksa 1 by using Student Teams Achievement Divisions (STAD) 2) to study the satisfaction of Mathayomsuksa 1 students for learning by using Student Teams Achievement Divisions (STAD) on powers.

A sample group of this study consisted of 34 students of Mathayomsuksa 1 students in the first semester, academic year 2018, Rajavinit Mathayom School. The samples were selected by purposive sampling method. The instruments of this study were as follows: (1) 6 lesson plans on power using Student Teams Achievement Divisions (STAD) of Mathayomsuksa 1, (2) 20 items of mathematics learning achievement test on power of Mathayomsuksa 1 with the difficulty was from 0.23 to 0.65, the discrimination was from 0.23 to 0.46 and the reliability was totally 0.85, and (3) 15 items of satisfaction questionnaires of learning by using Student Teams Achievement Divisions (STAD) on powers of Mathayomsuksa 1. The data was analyzed by percentage, mean, standard deviation and t-test for dependent sample.

The results showed that: (1) The mathematics learning achievement on powers of Mathayomsuksa 1 students after learning by using Student Teams Achievement Divisions (STAD) is higher than before at the .05 significant level and (2) The satisfaction of Mathayomsuksa 1 students for learning by using Student Teams Achievement Divisions (STAD) is at high level.

KEYWORDS: Student Teams-Achievement Divisions technique;
learning achievement; satisfaction

(G1-3)

A study of Mathematics learning achievement using Inquiry-based learning management with 5E techniques on Powers of Mathayom Suksa 1 of Trimitwittayalai School

**Thosapon Saelod, Wannaporn Siripala, Sompob Saelee,
Chonticha Sataprahm, Pongrus Phuangphoo**

Department of Mathematics, Faculty of Education, Bansomdejchaopraya Rajabhat University, Thailand (teekio@hotmail.com)

Department of Mathematics, Faculty of Science and Technology, Bansomdejchaopraya Rajabhat University, Thailand (puma_sweetie@yahoo.com)

Department of Mathematics, Faculty of Science and Technology, Bansomdejchaopraya Rajabhat University, Thailand (pob_lee@hotmail.com)
Mathematics Program, Suankularb Wittayalai Thonburi School, Thailand (csataprahm5099@gmail.com)

Department of Mathematics, Faculty of Science and Technology, Bansomdejchaopraya Rajabhat University, Thailand (pongrus.ph@bsru.ac.th)

The purposes of this research were (1) to study mathematics learning achievement on power of Mattayomsuksa 1 students by using inquiry-based learning management with 5E techniques (2) to study the satisfaction of Mattayomsuksa 1 students for learning by inquiry-based learning management with 5E techniques and fraction (3) to study the mathematical learning retention of Mattayomsuksa 1 students after learning by inquiry-based learning management with 5E techniques. The total samples were 31 students from class 1/4 of first semester of academic year 2018 of Trimitwittayalai School which was selected by purposive sampling. The research tools of this study were as follows: (1) 9 lesson plans of power taught through 5E cooperative learning technique, (2) 16 items of achievement test on powers and (3) 15 items of the questionnaire of learning by Inquiry-based learning management with 5E techniques. The data was analyzed by mean, percentages, standard deviation, and t-test.

The results of this study were (1) the mathematics learning achievement on powers of Mathayomsuksa 1 students after learning by inquiry-based learning management with 5E techniques is higher than before at .05 significant level, (2) the satisfaction of Mathayomsuksa 1 students for learning by Inquiry-based learning management with 5E techniques is at the highest level, and (3) the mathematics learning achievement after learning by inquiry-based learning management with 5E techniques and two weeks later is not different at .05 significant level.

KEYWORDS: Inquiry-based learning management with 5E techniques; Powers; Achievement; Satisfaction; Learning retention

(G1-4)

A study of Mathematics learning achievement on Powers of Mathayom Suksa 1, Rajavinit Mathayom School by using Teams-Games-Tournaments technique (TGT)

**Oradee Yenkasem, Wannaporn Siripala, Sompob Saelee,
Nukul Kaewneam, Pongrus Phuangphoo**

Department of Mathematics, Faculty of Education, Bansomdejchaopraya Rajabhat University, Thailand (pong pang2109@gmail.com)

Department of Mathematics, Faculty of Science and Technology,

Bansomdejchaopraya Rajabhat University, Thailand (puma_sweetie@yahoo.com)

Department of Mathematics, Faculty of Science and Technology,

Bansomdejchaopraya Rajabhat University, Thailand (pob_lee@hotmail.com)

Department of Mathematics, Faculty of Science and Technology,

Bansomdejchaopraya Rajabhat University, Thailand (nukulbsru@gmail.com)

Department of Mathematics, Faculty of Science and Technology,

Bansomdejchaopraya Rajabhat University, Thailand (pong rus.ph@bsru.ac.th)

The purposes of this study were: 1) to study mathematics learning achievement on powers of Mathayom Suksa 1 by using Teams-Games-Tournaments technique (TGT) 2) to study the satisfaction of mathematics learning by using Teams-Games-Tournaments technique (TGT).

A sample group consisted of 34 students of Mathayom Suksa 1 students in the first semester, academic year 2018, Rajavinit Mathayom School. The samples were selected by purposive sampling method. The instruments of this study were as follows: 1) 6 lesson plans using Teams-Games-Tournaments techniques (TGT) on powers of Mathayom Suksa 1, 2) 20 items of mathematics learning achievement test with 4 multiple choices with the difficulty (p) was from 0.39 to 0.79, the discrimination was from 0.21 to 0.51 and the reliability of test was totally 0.79, and 3) 15 items of satisfaction questionnaires of learning by using Teams-Games-Tournaments technique (TGT) on power of Mathayom Suksa 1. The data were analyzed by percentage, mean, standard deviation, and t-test for dependent sample. The results showed that: (1) The mathematics learning achievement on powers of Mathayom Suksa 1 students after learning by Teams-Games-Tournaments technique (TGT) is higher than before at the .05 significant level (2) The satisfaction of Mathayom Suksa 1 students of learning by using Teams-Games-Tournaments technique (TGT) is higher than high level.

KEYWORDS: Teams-Games-Tournaments technique (TGT); Power; Learning achievement; Satisfaction

(G1-5)

The study of mathematics learning achievement and retention on Pythagoras's theorem of mathayomsuksa 2 students by the cooperative learning STAD (Student Teams Achievement Division) technique

**Kanthima Pongdeang, Wannaporn Siripala, Sompob Saelee,
Maneenat Kaewneam, Pongrus Phuangphoo**

Department of Mathematics, Faculty of Education, Bansomdejchaopraya
Rajabhat University, Thailand (noonna38@hotmail.com)

Department of Mathematics, Faculty of Science and Technology,
Bansomdejchaopraya

Rajabhat University, Thailand (puma_sweety@yahoo.com)

Department of Mathematics, Faculty of Science and Technology,
Bansomdejchaopraya

Rajabhat University, Thailand (pob_lee@hotmail.com)

Department of Mathematics, Faculty of Science and Technology,

Bansomdejchaopraya Rajabhat University, Thailand (kmaneenat@yahoo.com)

Department of Mathematics, Faculty of Science and Technology,

Bansomdejchaopraya Rajabhat University, Thailand (p.phuangphoo@hotmail.com)

The purposes of this research were (1) to compare the mathematics learning achievement on Pythagoras's theorem of mathayomsuksa 2 students before and after studying by the cooperative learning (STAD) technique (2) to study the mathematics learning retention on Pythagoras's theorem of mathayomsuksa 2 students after studying by the cooperative learning (STAD) technique and (3) to study the satisfaction toward the cooperative learning (STAD) technique on Pythagoras's theorem of mathayomsuksa 2 students.

The sample consisted of 22 students who were studying in the mathayomsuksa 2 students of Thonbureworatepeepalaruk school in the second semester of 2018 academic year. They were selected by cluster random sampling. The research instruments consisted of (1) lesson plans on Pythagoras's theorem (2) The mathematics learning achievement test. The difficulty was from 0.32 to 0.59, the discrimination (r) was from 0.35 to 0.59 and the reliability of test was totally 0.84, and (3) the satisfaction questionnaire towards the cooperative learning (STAD) technique on Pythagoras's theorem. The data were analyzed by mean, percentage standard deviation and t -test.

The research findings revealed that :

1. The mathematics learning achievement on Pythagoras's theorem of mathayomsuksa 2 students after studying by the cooperative learning (STAD) technique was higher than before, at .01 level of significance.

2. The mathayomsuksa 2 students have learning retention on Pythagoras's theorem after studying by the cooperative learning (STAD) technique, at .01 level of significance.

3. The satisfaction towards the cooperative learning (STAD) technique on Pythagoras's theorem of mathayomsuksa 2 students was at a high level.

KEYWORDS: the cooperative learning (STAD) technique; achievement; retention; Pythagoras's theorem

(G1-6)

The study of mathematics learning achievement and retention on equation system of mathayomsuksa 3 students by the cooperative learning TAI (Team Assisted Individualization) technique

**Darinee Komthaisong, Wannaporn Siripala, Sompob Saelee,
Maneenat Kaewneam, Pongrus Phuangphoo**

Department of mathematics, Faculty of Education, Bansomdejchaopraya Rajabhat University, Thailand (popdarinee@gmail.com)

Department of mathematics, Faculty of Science and Technology, Bansomdejchaopraya

Rajabhat University, Thailand (puma_sweety@yahoo.com)

Department of mathematics, Faculty of Science and Technology, Bansomdejchaopraya

Rajabhat University, Thailand (pob_lee@hotmail.com)

Department of mathematics, Faculty of Science and Technology, Bansomdejchaopraya

Rajabhat University, Thailand (kmaneenat@yahoo.com)

Department of mathematics, Faculty of Science and Technology, Bansomdejchaopraya

Rajabhat University, Thailand (p.phuangphoo@hotmail.com)

The purposes of this research were (1) to compare the mathematics learning achievement on equation system of mathayomsuksa 3 students before and after studying by the cooperative learning (TAI) technique (2) to study the mathematics learning retention on equation system of mathayomsuksa 3 students after studying by the cooperative learning (TAI) technique and (3) to study the satisfaction toward the cooperative learning (TAI) technique on equation system of mathayomsuksa 3 students.

The sample consisted of 18 students who were studying in the mathayomsuksa 3 students of Thonbureworatepeepalaruk school in the second semester of 2018 academic year. They were selected by cluster random sampling. The research instruments consisted of (1) lesson plans on equation system (2) the mathematics test was found that the difficulty of test was from 0.26 to 0.59, the discrimination of test from 0.24 to 0.71 and the reliability of test was totally 0.81, and (3) the satisfaction questionnaire towards the cooperative learning (TAI) technique on equation system. The datas were analyzed by mean, percentage standard deviation and t – test.

The research findings revealed that :

1. The mathematics learning achievement on equation system of mathayomsuksa 3 students after studying by the cooperative learning (TAI) technique was higher than before, at .05 level of significance.

2. The mathayomsuksa 3 students have learning retention on equation system after studying by the cooperative learning (TAI) technique, at .05 level of significance.

3. The satisfaction towards the cooperative learning (TAI) technique on equation system of mathayomsuksa 3 students was at the highest level.

KEYWORDS: the cooperative learning (TAI) technique; achievement; retention; equation system

(G2-1)

A study of mathematics learning achievement on equation with one variable of mathayomsuksa 1 students by using the cooperative learning STAD (Student Teams Achievement Division) technique

**Saruttaya Somkid, Wannaporn Siripala, Sompob Saelee,
Sumlearng Chunrungsikul, Pongrus Phuangphoo**

Department of Mathematics, Faculty of Education, Bansomdejchaopraya Rajabhat University, Thailand (beasza_cup@hotmail.com)

Department of Mathematics Faculty of Science and Technology,
Bansomdejchaopraya Rajabhat University, Thailand (puma_sweety@yahoo.com)

Department of Mathematics Faculty of Science and Technology,
Bansomdejchaopraya Rajabhat University, Thailand (pob_lee@hotmail.com)

Department of Mathematics Faculty of Science, King Mongkut's University of Technology Thonburi, Thailand (isumikul@kmutt.ac.th)

Department of Mathematics Faculty of Science and Technology,
Bansomdejchaopraya Rajabhat University, Thailand (p.phuangphoo@hotmail.com)

The purposes of this research were (1) to compare the mathematics learning achievement on equation with one variable of mathayomsuksa 1 students before and after studying by using the cooperative learning (STAD) technique (2) to compare the mathematics learning achievement on equation with one variable of mathayomsuksa 1 students after studying by using the cooperative learning (STAD) technique and 60 percent criterion and (3) to study the satisfaction toward the cooperative learning (STAD) technique on equation with one variable of mathayomsuksa 1 students.

The sample consisted of 31 students who were studying in the mathayomsuksa 1 students of Islamic college of Thailand in the second semester of 2018 academic year. They were selected by cluster random sampling. The research instruments consisted of (1) lesson plans on equation with one variable (2) The mathematics learning achievement test was found that the difficulty (p) of test was from 0.36 to 0.64, the discrimination (r) of test was from 0.22 to 0.78 and the reliability (α) of test was totally 0.74, and (3) the satisfaction questionnaire towards the cooperative learning (STAD) technique on equation. The data were analyzed by mean, percentage standard deviation and t -test.

The research findings revealed that :

1. The mathematics learning achievement on equation with one variable of mathayomsuksa 1 students after studying by using the cooperative learning (STAD) technique was higher than before, at .05 level of significance.

2. The mathematics learning achievement on equation with one variable of mathayomsuksa 1 students after studying by using the cooperative learning (STAD) technique was higher than 60 percentage, at .05 level of significance.

3. The satisfaction towards the cooperative learning (STAD) technique on equation with one variable of mathayomsuksa 1 students was at a high level.

KEYWORDS: the cooperative learning (STAD) technique; achievement; equation with one variable

(G2-2)

A study of mathematics learning achievement on linear equation system of mathayomsuksa 3 students by using the learning management KWDL

**Kittisak Sakornkum, Wannaporn Siripala, Sompob Saelee,
Nukul Kaewneam, Pongrus Phuangphoo**

Department Mathematics, Faculty of Education, Bansomdejchaopraya Rajabhat University, Thailand (kittisakzaza@gmail.com)

Department Mathematics, Faculty of Science and Technology, Bansomdejchaopraya Rajabhat University, Thailand (puma_sweetty@yahoo.com)

Department Mathematics, Faculty of Science and Technology, Bansomdejchaopraya Rajabhat University, Thailand (pob_lee@hotmail.com)

Department Mathematics, Faculty of Science and Technology, Bansomdejchaopraya Rajabhat University, Thailand (nukulbsru@hotmail.com)

Department Mathematics, Faculty of Science and Technology, Bansomdejchaopraya Rajabhat University, Thailand (pongus.ph@bsru.ac.th)

The purpose of this research were (1) to compare the mathematics learning achievement on linear equation system of mathayomsuksa 3 students before and after studying by using the learning management KWDL and (2) to study the satisfaction towards the learning management KWDL on linear equation system of mathayomsuksa 3 students. The sample group consisted of 34 students who were studying in mathayomsuksa 3 of Suwanplubpla-pittayakom school in the first semester of 2018 academic year. The sample group was selected by cluster random sampling. The research instruments were as follows: (1) lesson plans on linear equation system, (2) the mathematics learning achievement test consisted of objective test and subjective test was found that the difficulty of objective test was from 0.38 to 0.66 and subjective test was from 0.21 to 0.28, the discrimination of objective test was from 0.25 to 0.56 and subjective test was from 0.23 to 0.32, the reliability of objective test was totally 0.82 and subjective test was totally 0.90, and (3) the satisfaction questionnaire towards the learning management KWDL on linear equation system. The datas were analyzed by arithmetic mean, percentage, standard deviation, and t-test.

The research findings revealed that:

1. The mathematics learning achievement on linear equation system of mathayom-suksa 3 students after studying by using the learning management KWDL on linear equation system was higher than before, at .05 level of statistical significance.
2. The satisfaction towards the learning management KWDL on linear equation system of mathayomsuksa 3 students was at a high level.

KEYWORDS: the learning management KWDL; achievement;
linear equation system

(G2-3)

A study of mathematics learning achievement on indices of mathayomsuksa 1 students by using CIPPA model learning style

**Pleuk Sappawat, Wannaporn Siripala, Sompob Saelee,
Chonticha Sataprahm, Pongrus Phuangphoo**

Department of Mathematics, Faculty of Education, Bansomdejchaopraya Rajabhat University, Thailand (jambo40526@hotmail.com)

Department of Mathematics, Faculty of Science and Technology,
Bansomdejchaopraya Rajabhat University, Thailand (puma_sweetie@yahoo.com)

Department of Mathematics, Faculty of Science and Technology,
Bansomdejchaopraya Rajabhat University, Thailand (pob_lee@hotmail.com)
Mathematics Program, Suankularb Wittayalai Thonburi School, Thailand
(csataprahm5099@gmail.com)

Department of Mathematics, Faculty of Science and Technology,
Bansomdejchaopraya Rajabhat University, Thailand (pongus.ph@bsru.ac.th)

The purposes of this research were (1) to compare the mathematics learning achievement on indices of mathayomsuksa 1 students before and after studying by using CIPPA model learning style and (2) to study the satisfaction towards the CIPPA model learning style on indices of mathayomsuksa 1 students. The sample group consisted of 28 students who were studying in mathayomsuksa 1 of Chaoprayawittayakom school in the first semester of 2018 academic year. The sample group was selected by using cluster random sampling. The research instruments were as follows: (1) lesson plans on indices, (2) the mathematics learning achievement test was found that the difficulty of test was from 0.29 to 0.71, the discrimination was from 0.29 to 0.86 and the reliability of test was totally 0.92, and (3) the satisfaction questionnaire towards the CIPPA model learning style on indices and the datas were analyzed by arithmetic mean, percentage, standard deviation, and t-test.

The research findings revealed that:

1. The mathematics learning achievement on indices of mathayomsuksa 1 students after studying by using the CIPPA model learning style on indices was higher than before, at .05 level of statistical significance.
2. The satisfaction towards the CIPPA model learning style on indices of mathayom-suksa 1 students was at the highest level.

KEYWORDS: the CIPPA model learning style; achievement; indices

(G2-4)

A Study of Learning Achievement in Teaching by Using Domino game and STAD Technique in Topic “Food and Living”

Chanthimakon Kamon, Naruwan Pattarapongdilok

Science Program, Faculty of Education, Bansomdejchaopraya Rajabhat University, Thailand (juntimakorn9@gmail.com)

Chemistry Program, Department of Science, Faculty of Science and Technology, Bansomdejchaopraya Rajabhat University, Thailand (olinpoo@gmail.com)

The objectives of the study were to examine and compare achievement in the topic “Food and Living” of students between teaching with mixed Domino game and STAD technique, and teaching with only STAD technique. The samples of research were 2 class (30 students per class) of the eighth-grade students of Chanpraditharam Witthayakhom School, Bang Duan, Phasi Charoen, Bangkok. Learning achievement was tested with 20 multiple choice questions (4 choices per question). The statistics for analysis were the mean, standard deviation, percentage, effectiveness index, and t-test.

The findings showed that students taught with Domino game and STAD technique had higher mean scores after teaching than students taught with only STAD technique. Effectiveness index was higher when Domino game was used. It showed that the use of Domino game help to improve teaching effectiveness. The value of t-test for independent samples suggest that students' achievement taught with Domino game and STAD technique was higher than with only using STAD technique at the 0.01 level of statistical significance. The Domino game used with STAD technique is an alternative way for improving the teaching achievement.

KEYWORDS: STAD technique; Domino game; learning achievement; food and living

(G2-5)

A Study of Science Learning Achievement on Atmosphere Topic of Mathayomsuksa 1 by Using Science Activities Learning Package on STEM Education

Atthachai.Siriwatthanasakdina, Watinee Chanmee, Hatairat Sukpreabprom
Wang Klai Kang Won School under the Royal Patronage of His Majesty the King,
Thailand (atthachaiBSRU@gmail.com)

Department of Chemistry, Faculty of Science and Technology, Bansomdejchaopraya
Rajabhat University, Thailand (watinee2106@gmail.com)

The purposes of this research were 1) to develop STEAM Education activity learning package on the topic of atmosphere 2) to compare the achievement before and after learning by the activities learning package. The samples of the study were 50 Mathayomsuksa 1 students of Suankularb Wittayalai school. The students were randomly selected by using cluster random sampling method. The instruments employed in this study included STEM lesson plans of atmosphere, STEAM Education activity learning package on the topic of atmosphere and learning achievement test. The statistics for analyzing the data were mean, standard deviation and t-test for dependent sample.

The results were as follows:

- 1) The efficiency of science activities learning package on STEAM Education was efficient at 84.4/80.05 level under the criteria of 80/80 specified.
- 2) The learning achievement in atmosphere of Mathayomsuksa 1 students after learning by using science activities learning package on STEM Education was significantly higher than before learning at the 0.05 level

KEYWORDS: STEM Education; Learning Activity Packages

(G2-6)

A Study of Learning Achievement and Satisfaction of Mathayomsuksa 1 Students Using STAD Cooperative Learning Technique with Games on Heat Transfer

Jiraporn Khunchan, Hatairat Sukpreabprom, Watinee Chanmee

Department of Science, Faculty of Education,

Bansomdejchaopraya Rajabhat University, Thailand

Department of Chemistry, Faculty of Science and Technology, Bansomdejchaopraya Rajabhat University, Thailand (hatairat278@gmail.com)

The purposes of this research were 1) to compare the learning achievement on heat transfer of mathayomsuksa 1 students between before and after learning through STAD cooperative learning technique with games and 2) to study the satisfaction of mathayomsuksa 1 students towards STAD cooperative learning technique with games on heat transfer. The samples used in this research were 39 mathayomsuksa 1 students of Wat Nuannoradit School in the second semester of academic year 2018. The samples were randomly selected for the experimental group by purposive sampling. The research instruments consisted of 1) lesson plans of STAD cooperative learning technique with games 2) learning achievement test and 3) satisfaction questionnaire towards STAD cooperative learning technique with games. The data were statistically analyzed by mean (" \bar{x} "), standard deviation (S.D.) and t-test for dependent sample.

The results of this research indicated that:

The learning achievement on heat transfer of mathayomsuksa 1 students after learning through STAD cooperative learning technique with games was significantly higher than before learning at the .05 level.

The satisfaction of mathayomsuksa 1 students towards STAD cooperative learning technique with games on heat transfer was at high level.

KEYWORDS: STAD cooperative learning technique; Games;
Learning achievement; satisfaction

(H1-1)

System Analysis and Design of E-Commerce Website System for sale calico in Thailand 4.0

Nattapong Sorbei, Affan Searee, Peanthip Srisutham, Natthamol Heebjankri

Information and Communication Technology Program, Faculty of Science and
Technology, Bansomdejchaopraya Rajabhat University, Thailand
(jadm0831796382@gmail.com)

Information and Communication Technology Program, Faculty of Science and
Technology, Bansomdejchaopraya Rajabhat University, Thailand (tisfan-
8151@hotmail.com)

Information and Communication Technology Program, Faculty of Science and
Technology, Bansomdejchaopraya Rajabhat University, Thailand
(thiplovely@hotmail.com)

Information and Communication Technology Program, Faculty of Science and
Technology, Bansomdejchaopraya Rajabhat University, Thailand
(ratta_021@hotmail.com)

The objectives of this research were to: 1) analyze and design an electronic commerce website system for sale calico in Thailand 4.0 and 2) to evaluate the suitability of the analysis and design of electronic commerce systems for sale calico in Thailand 4.0. Research methodology has conducted according to Waterfall Model theory. The sample group consists of 5 experts were selected by purposive sampling. The research tools were analysis and design suitability assessment form. The statistics used are mean and standard deviation.

The results of the research found that the work process of the system consisted of 9 processes, consisting of 1) assignment of rights, 2) logging in, 3) recording of product data 4) recruiting members 5) selling products 6) payment notification Money 7) Receiving payment 8) Shipping 9) Reporting. The results of the evaluation show that the analysis and design system was good (mean = 3.83 and standard deviation = 0.79), database analysis and design was good (mean = 3.85 and standard deviation = 1.03).

It can be concluded that the analysis and design of the electronic commerce website system for the sale of calico in Thailand 4.0, there is a good operational process and database structure at a good level. It can be developed in the next step.

KEYWORDS: Analyze; Design; Electronic commerce website;
Distribute calico online

(H1-2)

Analysis and Design Web Application for Tennis Court Reservation Service System Management

**Krisada thongkaw, Tanakon Viratmongkolcha, Peanthip Srisutam,
Naphaphorn Jiaphong**

Information and Communication Technology Program, Faculty of Science and Technology, Bansomdejchaopraya Rajabhat University, Thailand (krisada-thongkaw@hotmail.com)

Information and Communication Technology Program, Faculty of Science and Technology, Bansomdejchaopraya Rajabhat University, Thailand (mang_9162@hotmail.com)

Information and Communication Technology Program, Faculty of Science and Technology, Bansomdejchaopraya Rajabhat University, Thailand (thiplovely@hotmail.com)

Information and Communication Technology Program, Faculty of Science and Technology, Bansomdejchaopraya Rajabhat University, Thailand (njiaphong@hotmail.com)

The objectives of research were 1) to analyze and design Web Application for Tennis Court Reservation Service System Management and 2) to evaluate the appropriateness of the system analysis and design. Research methodology has conducted according to Waterfall Model theory. The sample group consists of 5 experts were selected by purposive sampling. The research tools were analysis and design suitability assessment form. Mean and standard deviation of evaluated data were analyzed for the results.

The results show that the working process of Web Application for Tennis Court Reservation Service System Management consists of 8 processes. They were 1) assign for responsibility 2) logging in 3) basic information management 4) member registration 5) booking of the court 6) service payment 7) service payment approval and 8) report. There were 3 parts of the web application system which are customer service, working staff and system administrator. The results of the evaluation show that the analysis and design system was good (mean = 4.07 and standard deviation = 0.64), database analysis and design was good (mean = 4.13 and standard deviation = 0.56).

From the results, it can be concluded that Web Application for Tennis Court Reservation Service System Management have appropriated operational processes and good database structure. It can be developed and applied for the similar works.

KEYWORDS: tennis court service; tennis court;
Web Application system management

(H1-3)

Web Application Development Supporting Tourism in Thonburi District

**Nuttakit Tobenjasub, Wisarut thongdeenok, Rattana Leerunnavarat,
Natthamol Heebjankri**

Information Technology Program, Faculty of Science and Technology,
Bansomdejchaopraya Rajabhat University, Thailand (nuttakit_8002@hotmail.com)

Information Technology Program, Faculty of Science and Technology,
Bansomdejchaopraya Rajabhat University, Thailand (wisarut_tue@hotmail.com)
Information and Communication Technology Program, Faculty of Science and
Technology, Bansomdejchaopraya Rajabhat University, Thailand
(kitti_teen106@hotmail.com)

Information and Communication Technology Program, Faculty of Science and
Technology, Bansomdejchaopraya Rajabhat University, Thailand
(ratta_021@hotmail.com)

The purpose of this study was to analyze and design web application supporting tourism in Thonburi district according to software development Spiral Model methodology. The First step started with secondary data in the form of public relations news, journals and research papers related to tourism then analyze the problems and guidelines for using the web application. The Second step collected result from secondary data to conduct data flow diagram, database and customer relations. And then improve the design according to the advice of five expertise. The Final step was to develop a web application to support tourism in Thonburi, according to the model that has been designed. The results of the assessment of the suitability in system analysis and design by five experts found that the system is suitable at a high level with a mean of 3.77 and a standard deviation of 0.17. It can be concluded that the model of the work system is appropriate to be used in web application development. The system can provide travel information search services in Thonburi district and navigate to other places, both tourist attractions and accommodation that are open nearby as well as showing promotions, special discounts, accommodation fees. The conclusion shows that Web Application supporting tourism who attract in Thonburi area and responding to the user need in Technology 4.0.

KEYWORDS: Thonburi Tourism; Tourism 4.0; Tourism Advocated Technology

(H1-4)

The control system development of chameleon reptile's cage with IoT technology

**Kittipong Boosuwan, Pitiya Phunsaketkhunchai, Surin Pholngam, Prawit
Pholnagm**

Information Technology Program, Faculty of Science and Technology,
Bansomdejchaopraya Rajabhat University, Thailand
(KitipongBoosuwan@outlook.com)

Computer and Information Technology Program, Faculty of Science and
Technology, Bansomdejchaopraya Rajabhat University, Thailand
(Pitiya.phunsaketkhunchai@gmail.com)

Information and Communication Technology Program, Faculty of Science and
Technology, Bansomdejchaopraya Rajabhat University, Thailand
(surinph@hotmail.com)

Information and Communication Technology Program, Faculty of Science and
Technology, Bansomdejchaopraya Rajabhat University, Thailand
(prawichph@hotmail.com)

The purpose of this study was to analyze and design the control system of chameleon reptile's cage with IoT technology. Additionally, the development of IoT technology can control the system of a chameleon cage via smartphone by commanding through an application. The order will be processed under the control of the microcontroller system and simulate the most likely natural environment within the cage. According to the principle guidelines of this research, the beginning of SDLC system development started with the research the needs of a chameleon, then analyzed the term of using technology and implemented the system with proper practices to chameleon's life. The design of the cage has been created and controlled by using a sequence of flow chart diagrams and model diagram before implement to the cage control system software. The software has been developed by Blynk and the hardware has been created by microcontroller device kit and Arduino IDE program. The main points of this research indicated in two parts; receiving the commands from users via mobile application software to simulate the most likely chameleon environment in the cage and the other part are about hardware which is responsible for controlling the process after receiving the commands from users. The conclusion of this research revealed that the control system of chameleon reptile's cage has the ability to simulate the chameleon environment as close to nature and can control the on-off power of temperature, sunlight, heat, cold, and humidity

KEYWORDS: environment simulation; chameleon reptile's cage;
IoT environment control

(H1-5)

Creating “Internet of Things” motion infographics Media for sub-learning units in Internet Technology and Web Development course

**Kampanat Kusirirat, Tiantada Hiranyachattad, Nutthanan Ranron,
Nutthakamon Aueachat, Juthamas Srivirak**

Department of Animation and Digital, Faculty of Science and Technology,
Bansomdejchaopraya Rajabhat University. (E-mail: ajdankampanat@gmail.com)

This research aims to: 1) creating “Internet of Things” motion infographics media 2) quality evaluation of “Internet of Things” motion infographics media and 3) certified “Internet of Things” motion infographic media for sub-learning units in Internet Technology and Web Development course. Create and quality evaluation from 3 content experts and digital media 5 experts. The samples are 13 second years students from Internet Technology and Web Development course selected by purposive sampling method and evaluate the motion infographics certification from 3 experts. The tools used are 1) “Internet of Things” motion infographics media 2) motion infographics media quality evaluation form for experts and students and 3) evaluation form for motion infographics media quality that have been evaluated for efficiency. Using average and standard deviation statistic to analyze the research data. The results showed that “Internet of Things” motion infographics media with 1280 x 720 resolution 2.23 minutes length, has the high quality evaluation and qualified which can be used in sub-learning units in Internet Technology and Web Development course.

KEYWORDS: motion infographics media; sub-learning units;
certification of learning media.

(H1-6)

The Development of Teaching Thai Literature By Applying Active Learning And Constructionism for Grade 12 Students Of Mathayomwatsing School

Prajak Noinuay

Mathayomwatsing school (prajak.buu@gmail.com)

This study aimed to compare the final outcome of students' learning Thai literature by applying Active Learning and Constructionism teaching strategies with the outcome of students who learned with ordinary teaching strategy, and study the grade 12 students' satisfaction towards learning Thai literature by applying Active Learning and Constructionism teaching strategies. The samples of this study were grade 12 students, class 6/2, of Mathayomwatsing school which belonged to the Secondary Educational Service Area Office, area 1. All students were studying in the first semester of 2018 at that moment. There were 48 students which were selected by using Simple Random Sampling method. They were assigned as experimental group which were taught by applying the Active Learning and Constructionism teaching strategies. On the other hand, 38 students of class 6/10 who were studying at Mathayomwatsing school at the same time were selected as control group. All students in 6/10 class were taught with ordinary strategy. The research tools were Active Learning and Constructionism teaching strategies' pattern which consisted of 5 steps. Step 1, stimulating ideas, step 2 considering the content, step 3 developing work pieces, step 4 reflecting knowledge, and step 5 expanding to the community, Thai literature achievement tests and satisfaction Survey form towards Active Learning and Constructionism teaching strategies. The satisfaction form was developed by verifying from experts, calculating the Index of Item-Objective Congruence (IOC), and analyzing with statistical tools such as mean score (\bar{x}), Standard Deviation (SD), and dependent and independent t-tests. The results of this study were, there were significant statistical differences between the students learning Thai literature by applying Active Learning and Constructionism teaching strategies and the students learning Thai literature with ordinary strategy at the 0.05 level of significance. The satisfaction of students learning Thai literature by applying Active Learning and Constructionism teaching strategies was high

KEYWORDS: teaching Thai literature; teaching by applying active learning; constructionism

(H1-7)

The Development Of Sets Of Learning Activities On Dangerous Life-Threatening Drugs Using Inquiry Cycle Together With Graphic Organizer Techniques To Promote The Analytical Thinking Ability of Mathayomsuksa 2 Students

Teerasak Sangsrichan

Municipal School 1 (Sangkhawit), under the Office of Education, Trang City
Municipality
(aungsumalin7427@gmail.com)

This research has the following objectives, to develop and find the effectiveness of sets of learning activities on dangerous life-threatening drugs by using the teaching method of cyclic inquiry modelling with graphic organizer technique that affect learning achievement and satisfaction to meet the efficiency criteria 80/80, to compare the learning achievement of students before and after the study, to compare the analytical thinking ability of students before and after the study and, to study the satisfaction of students on studying by using the sets of learning activities that have been developed. The sample group used in the research was 1 class of 38 Mattayomsuksa 2 students in the 2nd semester of academic year 2017 of Municipal School 1 (Sangkhawit), Mueang District, Trang Province, in which the class was sorted by assorted capabilities derived from Simple Random Sampling by the lucky draw method. The tools used included sets of learning activities on dangerous life-threatening drugs, learning achievement test, analytical thinking ability test and student satisfaction assessment form on learning activity sets. Data analysis was done by finding the mean value (\bar{x}), the standard deviation value (S.D), the efficiency value (E_1/E_2), and the t-test dependent. The results are as follow, there are 4 sets of learning activities that the researcher developed, each activity set consists of name of activity set, preface, contents, statement, essence / purpose, knowledge sheet / activity sheet, pre-learning test, post-learning test, and has an efficiency value of 87.25 / 88.82 which is in accordance with the designated 80/80 standard criteria. The results of using the activity set found that the students of Mattayomsuksa 2 had higher learning achievement after studying on dangerous life-threatening drugs than before studying at a statistical significance of .01, students had a higher analytical thinking ability after studying with a statistical significance of .01, and student satisfaction was at the highest level when learning by using the set of activities that were developed.

KEYWORDS: learning activity set; teaching method of cyclic inquiry modelling with graphic organizer techniques; analytical thinking ability

(H2-1)

The Requirements for Music Teaching and Learning Management at the Graduate Level : A Case Study of the Master of Arts Program in Western Music, College of Music Bansomdejchaopraya Rajabhat University

Pimonmas Promsukkul, Anurak Boonjae

Instructor of College of Music, Bansomdejchaopraya Rajabhat University, Thailand
(pimonmas.pr@bsru.ac.th)

Instructor of College of Music, Bansomdejchaopraya Rajabhat University, Thailand
(anurakjae@hotmail.com)

This survey research was intended to investigate the requirements of graduate students in western music of College of Music at Bansomdejchaopraya Rajabhat University in terms of 1) music teaching and learning management in various courses to support further study at the doctoral level, 2) styles of music teaching and learning management, 3) learning design, 4) instructors and thesis advisors, 5) media, equipment, and classrooms, and 6) management of various departments in the university. The population used in the study was 87 students studying in the Master of Arts program in western music. The research instrument was a questionnaire that was created by researcher, examined by experts, and tried out with 25 non-sample students and its reliability was .87. Data analysis was conducted by using frequency, percentage.

According to the results of this research, 1) for music teaching and learning management in various courses to support further study, they needed special courses outside office hours especially during 8.00 – 17.00 hrs. on Saturdays and Sundays and various music courses to support further study at the doctoral level, 2) for styles of music teaching and learning management, the instructors were needed to allow their students to practice, discuss, and give opinions through various music seminars and activities for learning through actual practice, 3) for learning design, educational options should be added to provide students to choose studying in subjects they are interested in and skillful, including online teaching, 4) for instructors and thesis advisors, thesis advices should be provided online, 5) for media, equipment, and classrooms, classrooms should be proportionately arranged along with having a music library, and 6) for management of various departments in the university, the proper management could benefit the image of the university both in terms of having more students and the university's credibility.

KEYWORDS: Requirements; Music Teaching and Learning Management; Graduate Level

(H2-2)

A Comparative Study the Military Band Management of Nawamintharachinuthid Horwang Nonthaburi School and Horwang School

Sakda Thongthipmak

Western music of Bansomdejchaopraya Rajabhat University, Thailand
(zaxyguy@hotmail.com)

The objective of this research is to study the marching band administrative factors that affect their output performance. The qualitative and casual comparative study research theory was deployed as a research analysis tool. Two secondary schools were chosen as samples, those are Nawamintharachinuthit Horwang Nonthaburi School and Horwang School. The data from each school was obtained from fourteen school members, which includes school administrators, teachers, and marching band members. Data collection tool was mostly by interviewing and questionnaires. The result was presented and discussed in the descriptive format.

The results based on 4M's management found that both school share similarly management strategy and comparable amount and quality of the instrument. However, couple differences were found on man and money issues. One is the working experience of marching band supervisor of Horwang School and Nawamintharachinuthit School are 30 years and 10 years, respectively. This factor make Horwang School has an advantage on performance than Nawamintharachinuthit School on the early years. Two is financial support of Nawamintharachinuthit School is four time greater than Horwang school, which mostly come from external sources. This is acritical factor that accelerate Nawaminthara-chinuthit School performance on the recent years.

KEYWORDS: Management; Marching Band; Comparative

(H2-3)

The Study of Curriculum, Teaching and Assessment about Keyboard Skills for Pre-college Students, College of music, Mahidol University

Chaline Suriyonprengsang

College of Music, Bansomdejchaopraya Rajabhat University, Thailand

(wow_aum@hotmail.com)

The purpose of the study was to understand the elements of curriculum, teaching and assessment of keyboard skills for non - keyboard major pre-college students. Moreover, was to understand the problems of curriculum, teaching and assessment of keyboard skills for pre-college students, College of music, Mahidol University and looked for the way to develop teaching and learning.

Data collection relied on interview methodology since semester of 2018. There were 1 keyboard skills coordinator, 2 instructors and 20 students. All of students are non - keyboard major pre-college students included vocal, guitar, violin, viola, cello, saxophone, trumpet, clarinet, flute, jazz guitar, bass, drum and percussion. The element of curriculum used Alfred's Group Piano book (E.L. Lancaster and Kenon D. Renfrow) which designed for collegiate non – keyboard music majors with little or no keyboard experience, included Theory Technique, scales and arpeggios, chord progressions: aid students in developed a feel for the keyboard and sense of the key. Sight – reading: reading notes were eclectic, combined the best elements of intervallic and multi-key reading. Sight – reading was improve and try new things in keyboard skills for student because the reading examples were a mixture of standard repertoire and newly composed pieces. Repetioire, Harmonization, Ensemble Activities and Improvisation were also included in curriculum. Students could improve sense of multiple keys by transpose key signature fluency. This curriculum was suitable for non - keyboard major pre-college students and has used for 8 – 9 years.

The results of this study were found that the main problems were non – keyboard music major not be expected to perform extensively in recitals for assessment in final examination. They could be able to perform for peers in non - pressured situations. These students may lack technical skills at the keyboard, they can be expected to rely on their experience as musicians in their major musical instruments. There were only vocal music major students, most of them were get used to warm up their voice, using keyboard. They fluently and repeatedly played keyboard or piano in chord progression, scales and arpeggios. They called vocal warm up exercises. Vocal music major students could be get advantage from keyboard skills to improve their music majors. There were few students could be success in both their music major and piano skills. One student was saxophone music major, received distinction scores for grade 8 ABRSM piano performance exam. Another student, vocal music major received distinction scores for grade 8 Trinity Guildhall school of music piano performance exam. The other problems

were specific case by case. Some jazz major student was lack of sight – reading skill. Most of students were lack of sight – reading skill in different clefs of their music majors and lack of practicing before the in - class examination.

KEYWORDS: Curriculum; Teaching Keyboard Skills; Assessment;
Non – Keyboard Major

(H2-4)

A Construction of Learning Activity Package for Blowing the Pi Mangala by using the Songs of Pi Mangala by S. Ratchapruek Band Sukhothai Province

**Palakorn Tipmala, Pimonmas Promsukkul, Ekachai Phuhirun,
Worasorn Netthip**

College of Music, Bansomdejchaopraya Rajabhat University, THAILAND

The purposes of this research were: 1) to design the Learning Activity Package for Blowing Phi Mangala by Using the Songs of Phi Mangala by S.Ratchapruek Band, Sukhothai Province 2) to compare the students' achievement before and after using through the Learning Activity Package for Blowing Phi Mangala by Using the Songs of Phi Mangala by S.Ratchapruek Band, Sukhothai Province. A purposive sampling of this research was the students who study in a bachelor's degree of Music Education passed the basic skill assessment and they are able to blow the wind and blow Thai flute.

The results of the research were as follows:

1. The Learning Activity Package for Blowing Phi Mangala by Using the Songs of Phi Mangala by S.Ratchapruek Band, Sukhothai Province was concordant and efficient learning activity package. The professional evaluated a construction of learning activity package of seven students which had the average in the highest levels ($X = 4.77$, $S.D = 0.14$). It was able to use and organize activity package for blowing Phi Mangala.

2. The learning achievement score of samples of this research was thirty students who study in a bachelor's degree of Music Education, passed the basic skill assessment and they are able to blow the wind and blow Thai flute. After using the activity package was higher than before using the activity package for blowing Phi Mangala statistically significantly at .05 level.

KEYWORDS: The Learning Activity Package; Blowing Phi Mangala; Music Education

(H2-5)

The Study of Educational Management on Teaching Music Practice a Case Study of Music Program Students in Sarasas Witaed Bangbon School

Yongyuth Wannasathop, Pimonmas Promsukkul, Ekachai Phuhirun
College of Music, Bansomdejchaopraya Rajabhat University, THAILAND

The Objective of this qualitative research is to study the instructional practices of performance music student (Music-English special program) about contents as follow: 1) Curriculum 2) Instructor and learner 3) Instructional practice and extra-curricular activities 4) Media, equipment, and facility 5) Measurement and evaluation. Problems and obstacles studied by related documents, observation and participation the event, and also in-depth interview with 2 music managers, 5 music instructors, and 10 senior high school students. (Mathayom 5 and 6).

The result indicates that the instructors and students agree on the evaluation suitability because the instructors evaluate based on student development individually every semester. Mostly, the instructors are experience and own bachelor degree in related field of teaching requirements while students don't have basic of music practice. The instructional format and extra-curricular found that students learn the correct way of practice, holding the instruments, and playing posture. There are also extra-curricular activities; the school has established various bands so students need to be in a band for developing other areas of skill as well. Media and music instrument meet requirement of the students. The instructional documents are appropriate and student can research and study those from local music library. Both solo and band music rehearsal facility is also acceptable for the amount of the student too. In measurement and evaluation found that there are assessments during the study from the exercises and songs that the teacher assigned and individual performances at the end of the semester.

Problems and Obstacles in this instructional management is the facility when multiple classes happen at the same time, the noise is the main problem and need to be improve. Also, the quality of evaluation that based on student development sometime is not accurate. The others side, there was no problem in teaching and learning.

KEYWORDS: Instructional Practice; Music Performance; Music Education

(H2-6)

**Development of Computer Assisted Instruction on
Music Natation and Rest of Matthayomsuksa 4 Students
Pitchalai Preparatory School, Hatyai District,
Songkhla Province**

Suthep Chotitham

College of Music, Bansomdejchaopraya Rajabhat University, THAILAND
(suthep074@hotmail.com)

The purposes of this research were 1) to construct computer assisted instruction in Music Notation and Rest on basic of 80/80 efficiency criteria and 2) to compare the students' learning achievement before and after using computer assisted instruction for Mathayomsueksa 4 Students at Pitchalai Preparatory School in Songkhla Province. The sample group included 30 Mathayomsueksa 4 Students at Pitchalai Preparatory School in Songkhla Province obtained through purposive random. The research instruments consisted of 1) computer assisted instruction and 2) achievement test.

The findings revealed as follows:

- 1) The efficiency of construct computer assisted instruction in Music Notation and Rest measured 80.06/86.33 which was higher than 80/80 criteria
- 2) The students' learning achievements before and after using computer-assisted instruction were significantly different ($p < 0.01$)

KEYWORDS: Computer-Assisted Instruction; Music Notation; Mathayomsueksa 4

(II-1)

Establishment of Laboratory Safety Standards: Chemical Management

Wiriyasomtua, Kanokkorn Posiw and Khanitta Hathaisamit

Department of Environmental Science and Technology Faculty of Science and
Technology, Bansomdejchaopraya Rajabhat University, THAILAND
(kanitta.ha@bsru.ac.th)

Chemical Management in Environmental Science and Technology Laboratory Bansomdejchaopraya Rajabhat University is collecting information from chemical safety documents to develop chemical storage in the laboratory of the field. To study safety practices in the laboratory of the National Research Council of Thailand to upgrade the laboratory to comply with the safety standards of the research laboratory in Thailand (ESPREL). The results of the data collection were classified the chemicals hazards from Globally Harmonized System for Classification and Labeling of Chemicals (GHS); Flammable liquids, Flammable solids, Oxidizing substances, Toxic substances, Corrosive substances and Miscellaneous dangerous substances. The chemical management system was chemical incompatibility property accordance to United Nations Committee of Experts on the Transport of Dangerous Goods (UN). The list book of chemicals composed of hazard categories and Chemical movement. The results of the evaluation of chemical safety management in laboratories used the gap analysis method by ESPREL checklists program showed that the score of chemical management systems increased by 47.9 percent.

KEYWORDS: Chemical management; Safety of Laboratory; Laboratory Standards

(II-2)

Diurnal Variations of Seawater Quality at Klong Khone, Meang District, Samut Songkhram Province

**Duangjai Khewkasem, Jadsada Lalchuen, Chayarat Srisunont,
Treeranut Srisunont, Orapim Mongkolkeha, Khanita Hathaisamit**
Environmental Science and Technology Program, Faculty of Science and
Technology, Bansomdejchaopraya Rajabhat University, Thailand
(khewkasemd@gmail.com)

Environmental Science and Technology Program, Faculty of Science and
Technology, Bansomdejchaopraya Rajabhat University, Thailand
(oojustincrazyoo@gmail.com)

Environmental Science and Technology Program, Faculty of Science and
Technology, Bansomdejchaopraya Rajabhat University, Thailand
(scchayarat@bsru.ac.th)

Disaster Management and Public Hazard Mitigation Program, Faculty of Science
and Technology, Valaya Alongkorn Rajabhat University under Royal Patronage,
Thailand (treeranut@vru.ac.th)

Environmental Science and Technology Program, Faculty of Science and
Technology, Bansomdejchaopraya Rajabhat University, Thailand
(junebct@yahoo.com)

Environmental Science and Technology Program, Faculty of Science and
Technology, Bansomdejchaopraya Rajabhat University, Thailand
(jeapjer@hotmail.com)

The purpose of this study was to study the changes in physical and chemical water quality in the area around Khlong Khon Subdistrict, Mueang District, Samut Songkhram Province. By collecting samples every hour For 24 hours, 3 times, including December 2016, April and September 2017 By collecting water samples for analysis of water quality in physical and chemical aspects and applying the results of the analysis to statistical testing using the t-test method. Physical water quality, including salinity, transparency, temperature, conductivity, total dissolved solids, suspended solids There is a value between 15-28 ppt, 12.5-106 cm, 27.1-39.1 °C, 23.2- 38.7 ms, 14.31- 24.00 ppt and 7.50- 1,028 mg/L respectively. For chemical water quality, include pH, Dissolved Oxygen, Ammonia, Nitrate, Total Kjeldahl Nitrogen, Phosphorus There is a value between 6.54- 7.54, 2.31- 8.65 mg/L, 1.42-99.80 µg-N/L, 0.08-0.97 mg-N/L, 0.24- 7.14 mg-N/L and 0.02- 1.46 mg-P/L respectively. Results from statistical tests showed that Water quality, both physical and chemical, between High-Low Tide and between day and night, there is no significant difference statistically at 95% confidence level. However, while low tide, there will be more total dissolved solids and suspended solids. However, at low tide, all solids and suspended solids are added. Due to the flow of water from the shore into the sea Which is a blow to waste water and garbage into the sea While the daytime period affects the photosynthesis process of phytoplankton And various

activities of tourists Resulting in dissolved oxygen, water, ammonia, nitrate, Total Kjeldahl Nitrogen And phosphorus tends to increase.

KEYWORDS: Water Quality; Klong Khone; High-Low Tide; Diurnal

(II-3)

Study of Physical Water Quality, Chemical and Nutrient Factors in Water at Dendrobium Orchid Garden in Nakhon Pathom Province and Samut Sakhon Province

**Malee Likitchaikul, Sarayat Khan, Kanitta Hathaisamit,
Chayarat Srisunont, Thanyada Varasit, Supaporn Chantatong,
Nuttha Charoensom, Ratchanee Khamnongphai**
Environmental Science and Technology Program Study,
Applied Science Department, Science and Technology Faculty,
Bansomdejchaopraya Rajabhat University, Thailand
(ipd_flower@hotmail.com)

Objectives of this research are to study the physical, chemical and water quality factors in water in the orchid garden: Dendrobium, Nakhon Pathom Province and Samut Sakhon Province. By study at 3 Dendrobium Orchids, Bang Len and Phutthamonthon Nakhon Pathom And Krathum Baen District Samut Sakhon Province Collect water samples for 3 months, 1 time each in October, November and December 2018, by collecting 3 water samples, namely the orchid garden area that uses the canal branch to consist of 1 Phutthamonthon district and 2 ponds in the orchid garden in Bang Len District and Krathum Baen District Receiving water from the Tha Chin River By measuring water quality, physical, chemical and nutrient concentration And analysis of variance statistics using One-Way ANOVA, Duncan's New Multiple Range Test and One Sample T-test.

The results of the study of the water quality collected from the 3 gardens during the 3 months period showed that the temperature, salinity, turbidity, Transparency and pH value was between 26-30 (°C), not detecting salinity, 5.62-34.23 NTU, below 100 centimeters and pH 6.32-7.0 respectively, with the appropriate mean and standard that Department of Agriculture designated 2014, except for the electrical conductivity of all 3 orchid gardens in November. And December With values exceeding the standards set by the Department of Agriculture Due to the use of pesticides in the three orchid gardens area were high rates And with dissolved oxygen values in the range that was not suitable for water quality standards, surface water sources and was classified as surface type 4, except October. And the statistical analysis results showed that the temperature, salinity, turbidity, pH and dissolved oxygen values of the three gardens (3 districts) that collected water samples were not significantly different. At the level of 0.05 except the conductivity and the transparency of the water samples with different statistical significance at the level of 0.05

The results of the study of nitrogen (N), phosphorus (P) and potassium (K) content of all 3 plantations in October, November and December 2018 showed that the average Nitrate-nitrogen, Total-nitrogen, Phosphorus-phosphate and Available-potassium with a very low average in the range of 0.66-2.11 mg./l, 0.21-0.62 mg./l,

0.05-0.16 mg./l and 3.35-6.60 mg./l, respectively. The analysis was compared with the 20-20-20 chemical formula by using One Sample T-test and when comparing three gardens (3 districts) of the nutrient content for 3 months using One-Way ANOVA, there was no difference statistically different at the level of 0.05

KEYWORDS: physical water quality factors; Chemical water quality factors; Nutrient content in water; Dendrobium orchid

(II-4)

Study on the Change of Organic Matter in Each Sediment level at Klong Khone, Meang District, Samut Songkhram Province

**Aranya Kansingha, Chayarat Srisunont, Treeranut Srisunont,
Malee Likitchaikun, Sarayut Khan**

Department of Environmental Science and Technology Faculty of Science and
Technology Rachbaj Somdej Chao Phraya University, Thailand
(aranya01302@gmail.com)

Department of Environmental Science and Technology Faculty of Science and
Technology Rachbaj Somdej Chao Phraya University, Thailand
(scchayarat@bsru.ac.th)

Disaster Management and Disaster Relief Faculty of Science and Technology
Valaya Alongkorn Rajabhat University Royal patronage, Thailand
(treeranut@vru.ac.th)

Department of Environmental Science and Technology Faculty of Science and
Technology Rachbaj Somdej Chao Phraya University, Thailand
(ipd_flower@hotmail.com)

Department of Environmental Science and Technology Faculty of Science and
Technology Rachbaj Somdej Chao Phraya University, Thailand
(sarayutkhan@gmail.com)

This study aims to investigate the accumulation of organic matter in sediment at Klong Khone, Mueang District, Samut Songkhram Province. Sediment samples were collected in December 2016, April 2017 and September 2017. There were 15 stations which were divided into 3 zones: natural blood cockle zone (KK 1 – 6), no blood cockle zone (KK 7 – 12) and blood cockles farms (KC 1 - 3). Each station, sediment were collected in level 0-5 cm from the soil surface. All samples were analyzed for organic matter. Results show that in December the lowest of organic matter was found in station KK 5 at the sediment level 2-3 cm, with a value of 1.67%. The highest value was found in station KC 1 at the sediment level 0-1 cm with a value of 4.65%. In April the lowest organic matter was found in station KK 6 at the soil level 3-4 cm, with a value of 0.96%. The highest value was found in KC 3 at the soil level 0-1 cm with a value of 4.68%. In September, organic matter was found in station the lowest KK 5 at sediment level 2-3 cm, with the valve of 0.95%. The highest value was found in station KK 6 at the sediment level 0-1 cm, with the value of 4.20%. Results show that the amount of organic matter in the sediment which contain blood cockles decrease by depth. The areas that does not have blood cockle have the same amount of organic matter at every depth level. Finally, during the study period the sediment inside the blood cockles farms have the highest organic matter. The results of this research can help to evaluate the accumulation of organic matter in sediment which is suitable for living things including blood cockle.

KEYWORDS: Organic Matter; Sediment Layers; Klong Khone

(II-5)

Model of Household Solid Waste Management of people in Nang Laenai village Moo 7, Nang Lae Subdistrict, Mueang District, Chiang Rai Province

Pinatthinee Jitkham, Phatanit Khamtran, Aree Choyae, Warunee phunwong

Public Health Program School of Health Science,

Chiang Rai Rajabhat University, Thailand (pinut1@hotmail.com)

Occupational Health and Safety Program School of Health Science,

Chiang Rai Rajabhat University, Thailand (em_phatanit_k@cruu.ac.th)

Occupational Health and Safety Program School of Health Science,

Chiang Rai Rajabhat University, Thailand (choyae@hotmail.com)

Occupational Health and Safety Program School of Health Science,

Chiang Rai Rajabhat University, Thailand (p.warunee@hotmail.com)

The objectives of this research were to develop a suitable model for solid waste management at the household level of people in Nang Laenai Village, Moo 7, Nang Lae Subdistrict, Mueang District, Chiang Rai Province. The participants of this action research were 250 of households in Ban Nang Laenai household using purposive random sampling. Measurement tools used were participatory action of the people every process focuses on exchanging knowledge. The research found that appropriate solid waste management model at the household level should be under joint management between the community waste management fund and people in the community there is a campaign to reduce the use of plastic bags. Sorting waste before disposing create a garbage market and there are clear penalties in households that do not have garbage separation

KEYWORDS: Model of household solid waste management; solid waste reduction; solid waste separation

(11-6)

The use of cattail fibers for oil removal

Oatchara Sonman, Papitchaya Srithep

Environmental Science Faculty of science, Chandrakasem Rajabhat University,
Thailand

(f.nangfah@gmail.com)

Environmental Science Faculty of science, Chandrakasem Rajabhat University,
Thailand

(papitchaya.s@chandra.ac.th)

The use of agricultural residues as an absorbent material is an alternative for oil removal from wastewater. The advantage of agricultural residues is cost benefit and environmental friendly. However, it is still unclear whether the fresh cattail fiber can removal of high concentrations of oil. This research was applied the cattail fibers as an absorbent material for high concentration of oil (38 gL^{-1}) by using 1 and 10 g of fresh cattail fibers and different retention time (5, 10 and 20 minutes). The result indicated that fresh cattail fiber was high possible to removal high concentration of oil. Then, chitosan was mix with fresh cattail fiber to improve the oil removal efficiency. The findings of this study can further lead to an improvement of wastewater treatment design and operation.

KEYWORDS: cattail fiber; oil; chitosan; adsorption

(II-7)

Development of anti dandruff herbal shampoo formulation

Vanchai Khotame, Atchara Kaewnoi, Supharat Duanyai, Tien Theravorawong
Science and Technology Bansomdejchaopraya Rajabhat University, Thailand

This research found that the study on quality analytical and quantitative analysis of antioxidant properties of all five herbs found that the essential oils of lemon grass and lemongrass houses show the most antioxidant properties. 2) From the Malassezai furfur activity test, all five essential oils were found lemongrass houses oil is the most potential to inhibit Malassezai furfur which shown the clear zone as 13.4 militates. The second potential to inhibit Malassezai furfur is lemon grass oil which shown the clear zone as 11.4 militates. While essential oils of kaffir lime peel, Citrus aurantium L. peel and Pomelo peel were not shown inhibit Malassezai furfur. 3) The developed lemon grass house oil shampoo at a concentration of 5 percent oil and the developed base shampoo shown good stability. The stability test was determined by heating cooling cycle found that capsaicin gel formula is good stability, homogenous, no change of color and smell, the pH value was $5.14 \pm 0.000 - 5.52 \pm 0.00$.

KEYWORDS: antioxidant, essential oil, *Malassezai furfur* and shampoo

(I2-1)

Study of the Inhibition Ability of Nelumbo Nucifera for Mild Steel Corrosion

Atitaya Samontha, Natthawut Jitsamak

Chemistry Program, Department of Science, Faculty of Science and Technology,
Bansomdejchaopraya Rajabhat University, Thailand (rabbitsamontha@gmail.com)

Mild steel, which consists of carbon (C) mixed with other metals such as manganese (Mn), chromium (Cr), vanadium (V) and nickel (Ni) in order to improve its good properties e.g. strength, ductility, toughness, and thermal ability, has been widely used as raw material for various fields in Thai industry such as automotive industry, electrical appliance industry, and electronic industry. Therefore the protection / inhibition / reduction of mild steel corrosion is much more attention in Thai industries because properties of mild steel can be affected and decreased by its corrosion. Nowadays method for the corrosion inhibition of mild steel has been various studied including the use of natural inhibitor. Natural inhibitor or green inhibitor is the popular method for the inhibition of mild steel corrosion because of cost, availability, and non toxicity for human and environment. Natural inhibitor consisting of aromatic ring and heteroatom such as nitrogen (N) and oxygen (O) can be performed the inhibition ability of corrosion. Because of the importance of the corrosion inhibition of mild steel using natural inhibitor, NELUMBO NUCIFERA was extracted and studied the inhibition ability for mild steel corrosion in this research work. The result presented that extracted from NELUMBO NUCIFERA could be applied as natural inhibitor of mild steel corrosion at 1.2 M HCl. The increasing inhibition ability for mild steel corrosion was observed at higher concentration of extracted from NELUMBO NUCIFERA.

KEYWORDS: mild steel; the corrosion inhibition; NELUMBO NUCIFERA

(I2-2)

The Simple Extraction Method of Flavonoid from Averrhoa Bilimbi Fruit

Atitaya Samontha, Benjarat Yangpardit

Chemistry Program, Department of Science, Faculty of Science and Technology,
Bansomdejchaopraya Rajabhat University, Thailand (rabbitsamontha@gmail.com)

Averrhoa bilimbi, a small tropical tree, has been mostly founded in the south region of Thailand. Its origin is in Brazil. The difference medical properties of Averrhoa bilimbi have been widely performed from its differ composition. In example its root exhibited aphthous stomatitis activity, its leave acted the prevention of itches, and also its flower served as treating cough. Moreover Averrhoa bilimbi fruit is several used as raw ingredient for cooking in curry and soup because it is sour. The component and quality of Averrhoa bilimbi fruit were studied from previous work. Carbohydrate, protein, amino acid, flavonoid, tannin, and ascorbic acid were the composition of Averrhoa bilimbi fruit. Furthermore antidiabetic ability and hyperlipidemia treat were observed as the properties of Averrhoa bilimbi fruit. However the extraction of Averrhoa bilimbi fruit has been rarely published and also difficulty followed because of various extraction steps and chemical reagent. Consequently the objective of this research work was focused on the study of simple extraction method of flavonoid from Averrhoa bilimbi fruit. Flavonoid could be applied in variously future work. The result shown that in this work flavonoid can be extracted using the simply proposed extraction method and detected the quantity by UV-visible spectroscopy.

KEYWORDS: Averrhoa bilimbi fruit; extraction; flavonoid

(I2-3)

The Thermoelectric Cooling Box

Kavinchai Thongtongchap, Supachok Kaewkanok, Panawat Chimruang
Bansomdejchaopraya Rajabhat University, Thailand (kawinchai.t@gmail.com)

This research is present to design and construct the thermoelectric cooling box. The box uses thermoelectric 2 pieces are TEC1-12708 for cooling. Then test the cooling module to find electric current used for calculate battery. It is designed to operate continuously for more than 2 hours. The calculation, the box uses two 12 V 17 Ah batteries. After that, testing performance of the box. The test showed that. The box is no load, the lowest temperature is 19.10°C, average cooling load is 56.04 W and average coefficient of Performance is 0.77. The box is on load, the lowest temperature is 25.80°C, average cooling load is 61.51 W and average coefficient of Performance is 0.89. Which the box can be use for 140 minutes

KEYWORDS: Thermoelectric; cooling box; solar cell

(I2-4)

Study and Design of Electric Motor Torque Meter by Using the Brake Method

**Peerawat Meesuk, Kawinchai Tongtrongsub, Natthaphong Nak-Udom,
Kittiphong Phimyotha**

Department of Electromechanic Manufacturing Engineering,
Faculty of Engineering and Industrial Technology,
Bansomdejchaopraya Rajabhat University, Thailand
(scpeerawat@bsru.ac.th)

This article presents the study and design of a torque meter for electric motors. By applied the principles of the Prony brake dynamo meter type. In measuring the torque of the Prony brake type of the electric motor, it consists of a force-assist wheel and a claw that can adjust the distance with the extension arm extended. The forearm is attached to the weight support tray for adding loads. For the measurement method, by adjusting the claw to be used with the wheel to help increase the load of the motor, the speed of the motor decreases with the weight in the tray. Keeping the balance is always parallel to the floor. Torque values obtained via the screen.

KEYWORDS: Torque Measurement; Prony Brake; Electric Motor

(I2-5)

The Model Development of Cost Reduction for Mould Production of Automotive Part Industry

**Thawatchai Pongsanam, Boonmee Kavineseksan,
Vichai Weanphet, Sombat Teekasap**

Bansomdejchaopraya Rajabhat University, Thailand (thawatchai43@hotmail.com)

The purposes of this research were 1) to study the problem of mold production cost reduction in the automotive parts industry 2) to develop and evaluate the cost reduction model of the automotive parts industry and 3) to confirm the cost reduction model of the mold industry. The sample group of the study was 310 people from technicians working in the group of Thai Summit Group Company Limited and using sampling methods stratified random sampling by determining the proportion of mold technicians from the group of companies. Professional in focus group consist executives and experts total 10 people, professional in form assessment total 10 people and professional confirm the suitability of the cost reduction model total 6 people by random sampling. The instruments were a questionnaire and a semi-structured interview to collect data which were analyzed in terms of percentage, mean, standard deviation. And data analysis from group discussion using content analysis summary of the frequency of each conversation. The research findings were as follows: (1) the study the problem of mold production cost reduction in the automotive parts industry was at a high level for all aspects. It sorted from the high mean were transportation, inventory, defect, motion, process, production and waiting respectively. (2) Model production cost reduction model automotive parts industry consists of objective, rationale, cost reduction principles, procedures and guidelines for evaluating cost reduction models. (3) Confirmation of the mold production cost reduction found that 6 expert have commented that the cost reduction model was appropriate possible and agree at a high level.

KEYWORDS: Model development; Cost reduction;
Automotive parts mold industry

(I2-6)

Implementation of the Spectrum of Solar Simulator using 6 color Light Emitting Diodes by Simple Simulation Method

Napat Watjanatepin, Pattanapong Sinpitoon, Chaiyant Boonmee

Electrical Engineering Department Faculty of Engineering and Architecture
Rajamangala University of Technology Suvarnabhumi, Thailand
(napat.w@rmutsb.ac.th)

Electrical Engineering Department Faculty of Industrial Education
Rajamangala University of Technology Suvarnabhumi, Thailand

The terrestrial PV system AM 1.5 Global solar simulator is used for solar cell characteristic testing under IEC 60904-9 and ASTM E927-10 standards. Nowadays, light emitting diodes are applied as light sources. This paper presents the design and construction of an LED-based solar simulator that produces A class light spectrum, as well as the study of the distribution characteristic of the spectrum on the test plan. The LED Color Calculator version 7.59 software was applied for simulation of the spectrum and irradiance. The super high power LED such as blue LED (440nm), green (525nm), red (660nm), far-red (730nm), infra-red (850nm), and infra-red (940nm) were used as light source. There are assemblies on the PCB with active cooling heat sink. The results show that the spectrum of this LEDs solar simulator met class-A according to both standards. The irradiance on the test plan is 400 ± 2 W/m² when measured at 30 cm from the light source. The distribution spectrum on the five measurement point on the test plan also met class A. This idea could be applied for design and implementation for the large scale solar simulator in the next step.

KEYWORDS: solar simulator; light spectral; irradiance; light-emitting diodes; IEC 60904-9; ASTM E927-10;

(I2-7)

Development of Packaging Product Processing Goat Meat in Nakorn Srithammarat Province

Nittaya Maneewongse

Logistics Management, Bansomdejchaoproya Rajaphat University, Thailand
(msnittaya@bsru.ac.th)

This study of goat meat packaging development: A case packaging product process in Nakorn Srithammarat obtained the applicable benefit to the local community to create the identification of the product efficiency. It was a survey research which was divided into 2 groups; 1) purposive 3 Experts and 80 consumers

Result from the experts were viewed that the holistic of goat meat packaging development in Nakorn Srithammarat in the good rank with the mean of 3.23

Result of the customers' satisfaction from female target groups have been returned in 80% between aged 35 – 44 (22%), under graduated (32%), 10,001 – 15,000 Baht income. Revealing showed that the processing goat meat packaging development was efficient into three patterns; A pattern design was at good level with the mean of 4.80, B pattern design was at good level with the mean of 4.27, and C pattern design was at good level with the mean of 4.19 based on four aspects of product protecting, packaging, simplify and promotion.

KEYWORDS: Design; packaging

Acknowledgements

- Bansomdejchaopraya Rajabaht University, Thailand
- Mathayomwatsing School, Thailand
- Municipal School 1 (Sangkhawit), under the Office of Education, Trang City Municipality, Thailand
- Rajamangala University of Technology Suvarnabhumi, Thailand
- Rajamangala University of Technology Krungthep, Thailand
- Thonburi University, Thailand
- Khon Kaen University, Thailand
- Suan Sunandha International School of Art. Suan Sunandha Rajabhat University, Thailand
- Loei Rajabhat University, Thailand
- Bangkok University, Thailand
- Tapee University, Thailand
- Savitribai Phula Pune University, India
- University of Mataram, Indonesia
- Ahmad Dahlan University, Indonesia
- Universitas Sumatera Utara, Indonesia
- Universitas Gadjah Mada, Indonesia
- Padjadjaran University, Indonesia
- Brawijaya University, Malang, Indonesia
- Universiti Teknologi Mara
- Universiti Putra Malaysia
- Sunway University
- Universiti Malaysia Perlis
- Universiti Utara Malaysia



UUM EDUTOURISM



WAKTU OPERASI/ OPENING HOUR

SETIAP HARI/ EVERYDAY:

8.00 am to 12.30pm

2.30 pm to 4.30 pm

Sikal Elektrik

Pelajar/Student RM3.00 /jam (hour)

Staf/ Alumni RM 4.00 /jam (hour)

Awam/public RM 5.00 /jam (hour)

Rangcar RM15.00 (30 minit/minutes)

Tram RM30.00 jam/hourly

ATV RM15.00 (30 minit/minutes)

Kami juga menyediakan program Team Building

*We also conduct team
building program*

For further inquiries:

Division of Edutourism, Business Strategy and Development Department, Universiti Utara Malaysia

Office Tel. No: 04-928 3921/ 3926 Mobile: 019-5586699 (En. Mohamad Fisol Othman)

Organiser:



Co-Organiser:



Partner:

