“Rising to the Challenge of SDGs in Asia through University-Community Engagement”

BOOK OF ABSTRACTS

26 - 28 November 2018 Chiang Mai, Thailand
Technical Program Day 1 26th Nov 2018

08:15 - 09:00 Introduction (Room A)

09:00 - 09:05 Welcome Remarks

09:05 - 09:30 Plenary Panel 1: University – Community Engagement

09:30 - 10:15 Plenary Panel 2: University – Industry Engagement

10:15 - 10:30 Refreshments

10:30 - 11:15 Plenary Panel 3: University – International Agency Engagement

11:15 - 12:00 Plenary Panel 4: University – Government Engagement

12:00 - 13:00 Lunch

Technical Program Day 2 27th Nov 2018

09:00 - 10:15 Plenary Panel 5: University – Government Engagement

10:15 - 11:00 Refreshments

11:00 - 12:00 Parallel Sessions

12:00 - 13:00 Lunch

Technical Program Day 3 28th Nov 2018

09:00 - 10:15 Plenary Panel 6: University – Industry Engagement

10:15 - 10:30 Refreshments

10:30 - 11:15 Parallel Sessions

11:15 - 12:00 Lunch

12:00 - 14:00 Gala Dinner

Closing Remarks: YBhg. Prof. Tan Sri Dato’ Seri Dr. Noor Azlan Ghazali, President of Chiang Mai University, Chair of the 4th AsiaEngage Regional AUN-USR&S Steering Committee Meeting

7th AUN USR&S Steering Committee Meeting

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(26th November at 15:00-17:00)

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Introductory Remark

Chiang Mai University and Universiti Kebangsaan Malaysia, on behalf of the permanent secretariat of the ASEAN University Network, thematic network for University Social Responsibility & Sustainability, are pleased to host the 4th AsiaEngage Regional Conference 2018 at the International Convention, The Empress Hotel, Chiang Mai, Thailand.

The AsiaEngage Regional Conference is a regional platform organized bi-annually in fulfillment of the research, education, and engagement missions of higher education institutions to create mutually beneficial partnerships between multi-sector stakeholders – higher education institutions, communities, civil society, industries, government, international agencies, foundations and NGOs – to uplift the quality of peoples’ lives across ASEAN and Asia.

In response to the United Nation’s 17 Sustainable Development Goals (SDGs), the main theme of AsiaEngage Regional Conference 2018 is “Rising to the Challenges of the SDGs in Asia through University Engagement”. This year’s conference aims to bring all stakeholders on board to enable the SDGs and to facilitate dialogues, mutual learning, and partnerships between different sectors in addressing the challenges; while highlighting how universities can work with communities, civil societies, governments, industries and businesses, and international organizations, to collectively respond to the challenges of SDGs and accelerate action.

This year, the conference aims to create opportunities for sharing King Bhumibol’s Philosophy of Sufficiency Economy Towards Sustainable Development Goal (SDG), the Philosophy attaches great importance to human development at all levels and emphasizes the need to strengthen community’s capacity to ensure a balanced way of life and resilience, with full respect for the environment, innovative ideas, capacity development for carrying out meaningful and impactful engagements, forging collaborative community and industry-engaged research, as well as to enhance learning experiences.

The focus of this conference will be on the following five subthemes, which have been identified at the 6th AUN USR&S Steering Committee Meeting on 17 December 2017 in UKM Bangi, Malaysia, as essential considerations for driving forward meaningful and productive engagement efforts of higher educational institutions:

1. University – Community Engagement
2. University – Civil Society Engagement
3. University-Industry Engagement
4. University-Government Engagement
5. University-International Agency Engagement.

This conference is honored to have renowned scholars to deliver keynote speeches at the opening session on topic King Bhumibol’s Philosophy of Sufficiency Economy … Towards Sustainable Development Goal (SDG).

Assistant Professor Dr. Pisit Woraurai
- Chairperson of the Advisory Board of the Plant Genetic Conservation Project, Royal Initiative by Her Royal Highness Princess Maha Chakri Sirindhorn
- Advisor to Hoai Hongkhrai Royal Development Study Center
- Director, Service Center for Flower and Fruit Propagation Development under Royal Initiative
Activities in the conference include:
- Five Plenary Panels on five sub-themes with 16 SDGs case studies.
- Concurrent oral presentation of more than 100 abstracts on community engagement, engagement for empowerment, engaged education, experiential learning, empowering for health through engagement, technology and innovation for sustainable development, strengthening community through business and marketing, empowering community through engaged tourism, cultural empowerment and support system to strengthen community engagement will be orally presenting and discussing.
- Roundtable on Socially-Engaged Scholarship for Professorship (Thai system)
- Poster presentation
- Other side events such as book displays and distribution.

On behalf of the Chair of the 4th AsiaEngage Regional Conference 2018, I would like to extend my sincere gratitude to 9 universities, Chiang Mai Rajabhat University, Lampang Rajabhat University, Uttaradit Rajabhat University, Payap University, North-Chiang Mai University, Far Eastern University, Rajamangala University of Technology Lanna, Maejo University, and Universitas Indonesia, and 8 organizations: Thailand Research Fund, National Research Council of Thailand, Office of the Higher Education Commission, Council of University Presidents of Thailand, Thailand International Cooperation Agency – Ministry of Foreign Affairs, Engagement Thailand, Regional Research Network: Northern Region, and Upper Northern Research Network for their close and active collaborations in making this conference possible. Through our efforts and commitment, I am confident this conference shall be able to repeat the successes enjoyed in the first three conferences.

In addition, may I also extend my gratitude to all participants for their valuable contributions in making the 4th AsiaEngage (AE) Regional Conference 2018 a notable academic and engagement event.

Thank you.

Associate Professor Dr. Avorn Opatpatanakit
Vice President of Chiang Mai University
Chair of the 4th AE Regional Conference 2018
Message from the President

On behalf of the hosts, may I warmly welcome everyone to the 4th AsiaEngage Regional Conference 2018: Rising to the Challenge of SDGs in Asia through University-Community Engagement, co-organized with the ASEAN University Network thematic network for University Social Responsibility & Sustainability (AUN URS&S).

Following on from the successes enjoyed in the first three conferences and the benefits that it brings to the university-community-industry engaged practitioners in Asia and beyond, it is a great pleasure for Chiang Mai University to collaborate with Universiti Kebangsaan Malaysia, as the permanent secretariat of AUN URS&S, to host this conference together with active collaborations from a total of nine universities in Thailand and Indonesia as well as from eight organizations in Thailand.

The late King Bhumibol Adulyadej was a man of the people who worked throughout his life to improve the conditions of all Thais and whose efforts and achievements in doing so were recognized by the global community. In recognition of his life-long commitment to the well-being of the Thai people and sustainable development of Thailand, the United Nations Secretary General Kofin Annan in 2006 presented him with the first UN Human Development Lifetime Achievement Award. In 2013, the UN General Assembly, at the request of the Food and Agriculture Organization (FAO), voted to celebrate the annual World Soil Day on December 5, King Bhumibol’s birthday.

This year, the conference aims to create opportunities for sharing King Bhumibol’s Philosophy of Sufficiency Economy Towards Sustainable Development Goal (SDG), The Philosophy attaches great importance to human development at all levels and emphasizes the need to strengthen the community’s capacity to ensure a balanced way of life together with a strong appreciation for the environment, innovative ideas, capacity development for carrying out meaningful and impactful engagements, forging collaborative community and industry-engaged research, as well as to create opportunities that enhance learning experiences. Additionally, I am glad to learn that there are more than 16 SDG case studies on University Engagement with the community, civil society, government and industry international agencies that will be shared through 5 panels. Furthermore, it is so exciting to know that more than 100 abstracts will be orally presented and discussed on community engagement, engagement for empowerment, engaged education, experiential learning, empowering for Health through engagement, technology and innovation for sustainable development, strengthening community through business and marketing, empowering community through engaged tourism, cultural empowerment and a support system to strengthen community engagement.

This conference, in addition, will not only be a platform for the exchange of engagement approaches, knowledge and innovations, but will also build ties among executives, researchers and practitioners. I am also certain that this conference shall encourage and strengthen our joint efforts, in achieving the Sustainable Development Goals for all sectors involved.

I would like to thank all the educational institutions and organizations that have given their active support to this conference as well as many thanks to the organizing committee for all of their hard work that has ensured the conference’s success.

Lastly, my sincere best wishes to you all for a successful conference and an enjoyable stay in Chiang Mai. Thank you.

Clinical Professor Niwes Nantachit, M.D., FRCP(T)
President of Chiang Mai University
Message from the Vice-Chancellor

Assalamualaikum wbt. and greetings.

Welcome to the 4th AsiaEngage Regional Conference 2018. This year marks the fourth year of the regional conference, and the third time it is held outside Malaysia. Today, we celebrate the fruit of the strategic partnership between Universiti Kebangsaan Malaysia, as the permanent secretariat of the ASEAN University Network – University Social Responsibility and Sustainability (AUN USR&S) and Chiang Mai University as the host of the 4th AsiaEngage Regional Conference 2018, which aims to create mutually beneficial partnerships in research, education, and engagement missions of higher education with industry, community, government agency, civil society, and international agency stakeholders across ASEAN and Asia.

Being a part of ASEAN, Universiti Kebangsaan Malaysia always give the best commitment in striving to clock the highest ASEAN mileage amongst other regional players in Malaysia. This is also done through membership of several regional networks such as the ASEAN University Network, AUN USR&S and AUN AEC, through academia, research, and engagement, where ASEAN@UKM is the tagline we use to put forth the branding of UKM’s commitment.

The theme of “Rising to the Challenge of SDGs in Asia through University-Community Engagement” is both timely and relevant, whereby the University has the capacity to generate, translate, and disseminate relevant knowledge to achieve the United Nations’ Sustainable Development Goals. Higher education institutions can collaborate with policymakers and other stakeholders to identify current issues, create options and implement solutions as well as evaluate policies. It is important to note that the University is capable to transform the challenges of SDGs into measurable goals and opportunities by humanizing academic capital to public policy and making existing knowledge and resources available to the government, industry, and the community.

With this in mind, UKM applauds the effort put in by all partners, especially Chiang Mai University, for successfully making this conference a reality and bringing about like-minded ASEAN- and Asia- engaged practitioners to work synergistically and together, advance the development of a learned, dynamic, and moral society.

I trust all participants of the 4th AsiaEngage Regional Conference 2018 will benefit from the sharing sessions and the chance the network and learn from each other at this conference that would open the doors to future collaborations across ASEAN and Asia.

Thank you.

Prof. Tan Sri Dato’ Seri Dr. Noor Azlan Ghazali
Vice-Chancellor
Universiti Kebangsaan Malaysia
The 4th ASIAENGAGE REGIONAL CONFERENCE, 26 – 28 November 2018, Chiang Mai, Thailand

Conference Organising Committee

Patrons

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Associate Professor Dr. Avorn Opatpatanakit, Chiang Mai University
The 4th ASIAENGAGE REGIONAL CONFERENCE, 26 - 28 November 2018, Chiang Mai, Thailand

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<td>Assist. Prof. Terapatt Vannaruemol</td>
<td>Dean, Faculty of Mass Communication</td>
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<td>Associate Professor Dr. Wichai Chattinnawat</td>
<td>Faculty of Engineering (Industrial Engineering)</td>
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<tr>
<td>Assist. Prof. Dr. Narissara Eiamkanitchat</td>
<td>Deputy Director, Social Research Institute</td>
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<td>Miss Alicha Treerojananon</td>
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<tr>
<td>Miss Supaphan Krairoek</td>
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<tr>
<td>Mr. Naropagon Sittiwon</td>
<td>Societal Engagement Office</td>
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- **Registration and ceremony Team**

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<td>Assistant Professor Dr. Wasawat Nakkiew</td>
<td>Head of Department (Industrial Engineering)</td>
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<td>Miss Woraluck Suteerawantana</td>
<td>Director of International Relation Division</td>
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<td>Mrs. Sansanee Srinorakut</td>
<td>Head of Liaisons and Special Affairs Section, International Relation Division</td>
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<tr>
<td>Ms. Suparat Chowkasern</td>
<td>Head of International Partnership Promotion Section, International Relation Division</td>
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<tr>
<td>Mr. Thammanoon Noumanong</td>
<td>Secretary of Research Administration Center</td>
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- **Social Team**

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<td>Ms. Atsana Piyasuraparthip</td>
<td>Head of Research Administrative Section, Research Administration Center</td>
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<td>Ms Tuangtip Monkoldee</td>
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<td>Mr. Naropakorn Sittiwong</td>
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<td>Ms. Nopchulee Nuanon</td>
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## Technical Team

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<td>Mr. Thammanoon Noumanong</td>
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<td>Ms. Priraya Rithaporn</td>
<td>Head of CMU Press and CMU Journal Section, Research Administration Center</td>
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<td>Ms. Atsana Piyasuraprathip</td>
<td>Head of Research Administrative Section, Research Administration Center</td>
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<tr>
<td>Mr. Yongyuth Boonma</td>
<td>Head of Financial Section, Research Administration Center</td>
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<td>Miss Tuangtip Mongkoldee</td>
<td>Societal Engagement Office</td>
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The 4th ASIAENGAGE REGIONAL CONFERENCE, 26 - 28 November 2018, Chiang Mai, Thailand
## Finance Team

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<td>Mrs. Sukanta Yardmithnund</td>
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<td>Mr. Pongsak Nukhampun</td>
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<td>Mr. Wasan Intarangsri</td>
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<td>Mr. Akkrapong Duangta</td>
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Scientific Committee

Chair
Professor Dr. Aree Wiboonpongse

Co-Chairs

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<tr>
<th>Name</th>
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<tr>
<td><strong>University – Community Engagement</strong></td>
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<tr>
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<td>Director, Northern Science and Technology Park, CMU</td>
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<tr>
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<tr>
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<td><strong>Dr. Chayan Vaddhanabhuti</strong></td>
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</tr>
<tr>
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</tr>
<tr>
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### Scientific Committee Coordinator

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<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Associate Professor Dr. Piyapong Niamsup</td>
<td>Acting Assistant to the President for Academics, Chiang Mai University</td>
<td>Committee</td>
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<tr>
<td>Mr. Andrew Adams</td>
<td>Chiang Mai University</td>
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<tr>
<td>Ms. Piraya Rothaporn</td>
<td>CMU Press and CMU Journal Supervisor, Chiang Mai University</td>
<td>Assistant Secretary</td>
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</tbody>
</table>
Program

Conference Day 1: Monday, 26 November 2018

08.30 - 09.00 Registration

09.00 - 09.15 Opening Ceremony

Welcoming Speech:
Clinical Professor Niwes Nantachit, M.D., FRCP (T)
President of Chiang Mai University

09.15 - 09.30 Welcoming Speech:
YBhg. Prof. Tan Sri Dato’ Seri Dr. Noor Azlan Ghazali
Vice Chancellor of University Kabangsaan Malaysia

09.30 - 10.20 “King Bhumibol’s Philosophy of Sufficiency Economy …
Towards Sustainable Development Goal (SDG)”

Keynote Speaker:
Assistant Professor Dr. Pisit Woraurai

• Chairperson of the Advisory Board of the Plant Genetic Conservation Project, Royal Initiative by Her Royal Highness Princess Maha Chakri Sirindhorn
• Advisor to Hoai Hongkhrai Royal Development Study Center
• Director, Service Center for Flower and Fruit Propagation Development under Royal Initiative

10.20 - 10.30 Refreshments
### Panel: University-Community Engagement

**26 November, 10.30-12.00 a.m.**

<table>
<thead>
<tr>
<th>Speaker</th>
<th>Title</th>
<th>Institution</th>
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<tbody>
<tr>
<td>Dr. Phonpat Hemwan, Associate Dean for Administration, Faculty of Social Science, Chiang Mai University</td>
<td>Participatory GIS for Land and Forest Management Program in Northern Thailand: A Case Study of Galyani Vadhana District, Chiang Mai Province</td>
<td></td>
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<tr>
<td>Prof. Datuk Dr. Rokiah Hj. Omar, Director University Community Transformation Centre, university kabangsaun Malaysia</td>
<td>Empowering Youths for SDGs through University-Community Engagement</td>
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<tr>
<td>Assoc. Prof. Dr. Somkiat Saithanoo, President of Lampang Rajaphat University</td>
<td>Lampang Rajaphat University and Community Engagement</td>
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**Moderator:**

Dr. Pongsakorn Suppakittpaisarn, Department of Plant and Soil Sciences, Faculty of Agriculture, Chiangmai University
12.00 - 13.00  Lunch Break

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<tr>
<th>Panel: University-Civil Society Engagement</th>
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<td>26 November, 13.10-14.40 p.m.</td>
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| Assoc. Prof. Dr. Woralun Boonyasurat, Director of Social Research Institute, Chiang Mai University | Dr. Bung-on Chartrungruang, Chiang Mai Rajaphat University | Dr. Nwafor Lloyd, North Chiang Mai University | Prof. Dr. Lakkana Thaikruea, MD., Faculty of Medicine, Chiang Mai University |

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<tr>
<td>University-Civil Society engagement to Enrich Local Art and Culture of Chiang Mai ... A Route to World Heritage City</td>
<td>Social Engagement Projects of CMRU According to the King’s Philosophy for Sustainable Development</td>
<td>University-Civil Society Engagement to Improve Doi Pu Muen Tea Farmers; Using Clean Energy Technology (CET)</td>
<td>A decade of fighting the lethal jellyfish health problem: lesson learnt on University-Civil Society Engagement</td>
</tr>
</tbody>
</table>

Moderator:
Assist. Prof. Dr. Choopug Suthisa, Director, Thailand Research Fund, Community-Based Research Division
14.40 - 15.00  Refreshments
15.00 - 18.00  Breakout sessions (4 parallel sessions)
15.00 - 18.00  Socially-Engaged Scholarship for Professorship (Thai System)

Assoc. Prof. Dr. Marasri Chaiworawitkul,
Department of Orthodontics and Pediatric Dentistry,
Faculty of Dentistry, Chiang Mai University

Assist. Prof. Dr. Chedsada Mingchai,
Faculty of Agriculture, Uttaradit Rajabhat University

Assist. Prof. Alicha Treerotchananon,
Faculty of Mass Communication, Chiang Mai University

Moderator: Assoc. Prof. Dr. Avorn Opatpanakit,
Vice President for Academic Services, Chiang Mai University

18.30 - 22.00  Gala Dinner: Multi-cultural night
**Panel: University -International Agency Engagement**  
27 November, 8.30-10.15 a.m.

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<tr>
<th>Assoc. Prof. Dr. Lertrak Srikitjakarn, Participatory One Health Disease Detection project (PODD), Faculty of Veterinary Medicine, Chiang Mai University</th>
<th>Mr. Daniel Marco Siegfried, Co-Founder &amp; Head Projects, Child's Dream Foundation</th>
<th>Assist. Prof. Dr. Taien Leramun, Vice President for Academic and Research, Payap University</th>
</tr>
</thead>
</table>

**Moderator:**  
Assist. Prof. Dr. Ora-on Poocharoen, Director, School of Public Policy, Chiang Mai University

**Title**  
PODD (Participatory One health Disease Detection) - the community owned digital surveillance system for outbreak control, pandemic prevention and mitigating disastrous risk

**Title**  
Child's Dream - Empowering people to responsibly shape their communities!

**Title**  
University for International Agency Engagement
10.15 - 10.30 Refreshments
10.30 - 12.00 Breakout sessions (4 parallel sessions)
12.00 - 13.00 Lunch Break

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<td>Assist. Prof. Dr. Tanyanuparp Anantana, Director of Science and Technology Park, Chiang Mai University</td>
<td>Professor Dato’ Dr. Imran Ho Abdullah, Deputy Vice-Chancellor for Industry and Community Partnerships and Chair of the ASEAN University Network University Social Responsibility and Sustainability (USR&amp;S) Secretariat</td>
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<td>University – Industry Linkage by University Science Park</td>
<td>Smart Partnerships and Strategic Engagement</td>
<td>Network-Based Industrial Educational Model for Engineering and Technical Program</td>
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</tbody>
</table>

Moderator:
Assoc. Prof. Dr. Wassanai Watanutchariya, Department of Industrial Engineering, Faculty of Engineering, Chiang Mai University

14.40 - 15.00 Refreshments
15.00 - 18.00 Breakout sessions (4 parallel sessions)
19.00 - 21.00 7th AUN USR&S Steering Committee Meeting (Closed meeting)
Conference Day 3: Wednesday, 28 November 2018

08.30 – 09.30 Breakout sessions (3 parallel sessions)

08.30 - 10.00 Plenary Panel 5: University – Government Engagement

Panel: University -Government Engagement
28 November, 8.30-10.00 a.m.

<table>
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<tr>
<th>Dr. Kitti Mueangtoom, Deputy director of Research and Development Institute, Uttaradit Rajabhat University</th>
<th>Drs. Triarko Nurlambang, Director, Research Center for Developmental Institution, University of Indonesia</th>
<th>Assoc. Prof. Dr. Siriporn Kiratikarnkul, Vice President for Academic Services, Maejo University</th>
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<tbody>
<tr>
<td><strong>Title:</strong> A Case Study of Engaged Management Systems of Uttaradit Rajabhat University with Local Organizations and Networks for Sustainable Development</td>
<td><strong>Title:</strong> University Government Engagement in Indonesia</td>
<td><strong>Title:</strong> Empowering the Pradu Hangdum Native Chicken Farmers through University and Government Engagement</td>
</tr>
<tr>
<td><strong>Moderator:</strong> Assoc. Prof. Dr. Nuttha Potapohn, Dean, Faculty of Agriculture, Chiang Mai University</td>
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10.00 - 10.50 Concluding Remark:
“Next Step ... University-Community Engagement towards SDGs in Asia”
Prof. Vicharn Panich, M.D
CMU Council Member,
Director, the Siam Commercial Bank Public Company Limited DCP Class,

10.50 - 11.00 Refreshments

11.00 - 11.30 AYVP Alumni CE Project Presentations

11.30 - 12.00 Voices of Delegates

12.00 - 12.30 Closing Awards Ceremony (Distribution of Certificates)

12.30 - 13.30 Lunch

13.30 - 17.00 Community Tour
Powering Local Farming Community via the Implementation of Biogas as Waste and Alternative Energy Management: A Case in Desa Trinsing, Indonesia

Munawar Khalil1,* Anawati2 and Asystadiah Kartika Ilmiya1
1Department of Chemistry, Faculty of Mathematics and Natural Sciences, Universitas Indonesia
Kampus UI Depok, Depok 16424 Jawa Barat, Indonesia
2Department of Physics, Faculty of Mathematics and Natural Sciences, Universitas Indonesia
Kampus UI Depok, Depok 16424 Jawa Barat, Indonesia

Abstract
As one of the efforts to boost the creation of energy resilient local community in underdeveloped village areas in Indonesia, Universitas Indonesia has committed to becoming one of the key players to empowering local communities in implementing the utilization of sustainable renewable energy resources. Therefore, this work is motivated by the urge to assist local farming community “Maju Jaya” in underdeveloped Desa Trinsing, Central Kalimantan, Indonesia in improving their understanding and capability to utilize animal waste as an alternative source for energy production using biogas digester. The implementation of biogas technology from animal waste was proposed by the fact that the local farming community “Maju Jaya” could potentially generate up to 189 Kg of animal wastes per day and yet most of them are still not maximally utilized due to the lack understanding in waste management. Before the implementation of biogas technology, very small amount of the waste was used as fertilizer and most of them were thrown away and causing environmental issues. In this work, an expert research team from Universitas Indonesia are working closely with local authorities form the office of environmental agency and agricultural and livestock office to improve the local farming community “Maju Jaya” in improving their awareness and knowledge of biogas technology by conducting a seminar and training. This work is also aimed to aid their ability to independently build and manage the biogas digester. The level of awareness and understanding of the member of the farming community before and after the implementation of the program were scientifically assessed by means of survey and questionnaires method. In addition, the production of biogas from the biogas digester was also periodically monitored. Based on the result, it can be concluded this program has successfully improved the level of awareness and create a deep understanding of each member of the local farming community “Maju Jaya” in waste management and its utilization for an alternative energy source. It is also believed that the implementation of this program would benefit not only in terms of the level of their technological skills in building their own digester but also their income.

Keywords: Biogas, Animal Waste, Alternative Energy, Waste Management
Investigating the Attitudes & Motivation among the of Young FELDA Generation in Raising Awareness towards the Palm Oil Industry in Malaysia

Siti Hamin Stapa, Kesumawati A Bakar and Fuzirah Hashim
Universiti Kebangsaan Malaysia

Abstract

Malaysia is currently one of the largest producers and exporters of palm oil in the world, accounting for 11% of the world's oils & fats production. Consequently, the industry is providing employment and livelihood to an estimated one million people in Malaysia. Despite the strength and vast potential of our palm oil industry, engaging the youth in this industry is a challenging task as most perceive the industry and agriculture in general unattractive as a career, without realising the importance of the sector in their everyday lives. Furthermore, the development of sectors such as e-commerce, digital technology and real estate is a compounding factor behind the decline of interest among the younger FELDA generation. The present study is designed to examine the attitudes and motivation of young generation FELDA settlers towards the palm oil industry. A simple random sampling technique was adopted to select 50 working respondents from the age of 22-40 at 2 FELDA settlements. Questionnaire was distributed for primary data collection, where a four-point Likert scale was used to examine differences in attitudes and motivation towards 64 statements regarding aspects ranging from working conditions to promotion opportunities. The findings point to an overall positive attitude towards all aspects of the industry. The highest mean is revealed in the area of social status, with the majority feeling respected and proud to be a part of the palm oil community. Interestingly, 57% of the respondents feel that the promotion opportunities are not handled fairly in the industry. 50% of the respondents agreed to the statement that promotion opportunity is limited and unfortunately, nepotism is perceived as one way of gaining promotion within the industry. Initial findings suggest that an empowerment of FELDA youths must start with awareness raising and encouragement for them to take advantage of the expanding industry and to claim their space in the palm oil sector.

Malaysia is currently one of the largest producers and exporters of palm oil in the world. Despite the strength and vast potential of our palm oil industry, engaging the youth in this industry is a challenging task as most perceive the industry and agriculture unattractive as a career, without realising the importance of the sector in their everyday lives. Furthermore, the development of sectors such as e-commerce, digital technology and real estate is a compounding factor behind the decline of interest among the younger FELDA generation. The present study is designed to examine the attitudes and motivation of young FELDA generation towards the palm oil industry. A simple random sampling technique was adopted to select 50 working respondents from the age of 22-40 at 4 FELDA settlements. Questionnaire was distributed for primary data collection, where a four-point Likert scale was used to examine differences in attitudes and motivation towards 64 statements regarding aspects ranging from working conditions to promotion opportunities. The findings point to an overall positive attitude towards all aspects of the industry. The highest mean is revealed in the area of social status, with the majority feeling respected and proud to be a part of the palm oil community. Social status is ranked the highest (3.31), followed by managers (3.24), industry person congeniality (3.18), co-workers (3.13), nature of work (3.07), physical working conditions (3.02), commitment (2.91) and finally promotion opportunities (2.84). In general, the majority of the respondents display positive attitude and motivation towards the palm oil industry. Based on the findings we would recommend trainings to empower FELDA youths to take advantage of the expanding industry and to claim their space in the palm oil sector. These programmes will certainly benefit the youth. We would also recommend to the national policy about the impact of this research.

Keywords: Attitudes, motivation, young generation, palm oil, palm oil industry
Development of “Chiang” rice planting to organic rice field at Tambon Pak Ro, Singka Nakorn Distric, Songkhla Province through University-Community Engagement

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Abstract

In former, the area of Pak Ro was destitute because land had drought, thus people at Pak Ro earn their living with one-year of rice farming, which they made to be adequate within their families. In addition to the rice farming, this activity was interchanger with receiving Palmyra palm sugar involving brackish water fishing, such as Anchovy fisheries, Tilapia and so on. At present, the young homeland labors abandon their motherland to other places, leaving for children and old people. In 2015-2016, Department of Marketing, Faculty of Management Science from Prince of Songkla University was hold the project of “Heart through Community” for organic rice farmer. The aim of this project was introduced “Chiang” rice, local rice at Pak Ro toward the commercial marketing. For first result, they could bring this variety of local organic rice to Malaysia market. In the year 2017, project of Social Engagement through Community of Prince of Songkla University had the policy to construct the smart farmers, solving a problem themselves and self learning processes, by using the scientific method in rice field. The research used “Chiang” rice as a model. Therefore, the project of “Local Safe Rice, “Chiang”, from Pak Ro, Songkhla Province” had begun. Its purpose aimed to differentiate between “Chiang” organic rice and chemical rice farming based on doing experiment in systematic process for solving their problems, which may happen in the cultivation without using the chemicals. The methodology involved the determination of soil quality of the rice field. Subsequently, the tiller period and the grain development were observed. The weight of the paddy rice grain from using organic fertilizer was compared with one of using chemical fertilizer, as well as the observation of fragrance from ear of rice. The research compared the determination of soil quality from three Chiang rice fields, including soil with adding controlled chemical fertilizer, soil with adding non-controlled chemical fertilizer and soil with adding organic manure fertilizer. The result showed that the major mineral contents including N, P and K in soil from three systems of rice fields were accounted by 0.174%, 0.15% and 0.19%, respectively. The contents of organic matter, as their specification not exceed for 30%, were accounted by 2.48%, 2.30% and 3.18%, respectively. The ratio of carbon to nitrogen in these soils were 9:1, 9:1 and 10:1, respectively and pH values were 4.61, 4.64 and 4.21, which the suitable soil for rice field is at pH 5.5-8.5. According to the minor mineral, (such as Zn, Mn, Fe, Mg, K, Na, Cu, Se) and heavy metal (such as Cd, Cr, As, Pb), they had also been lower than the specification of the national of standard of fertilization in the year 1973. The characteristics of these soils were coherent clay and brown color. It was hard when soil was dry. On the comparison between the field using the chemical and organic fertilizer, the verdure and fertility of rice from these fields were similar. Moreover, amount of the tiller rice from organic field had more than one from the chemical field. For the indirect seeding, amount of tiller rice for a seed per pit had more than ones for 3-4 seeds per pit at interval of 30-centimeters. Chiang paddy rice grains with using the chemical fertilizer had more weight than ones with organic fertilizer per 100 grains of paddy rice grain. Furthermore, the ears of rice of both chemical and organic rice fields had not fragrance. Finally, the expenses of organic rice field was higher than chemical rice field because the cultivation of organic rice required to bring up from adding the organic fertilizer throughout eliminating the pesticide and plant diseases. Although the systems of irrigation water for rice field in this area did not expand thoroughly, the people earned their living with other agricultures during planting rice yearly. Therefore, the agricultural products was deficient the processing to be value-added reseller. Keywords: Chemical rice field, organic rice field, verdure, tiller rice, manure fertilizer
PH-EIS System for Local Administrative Organization Chief Executive Decision Support

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Abstract

This research aims to study the local policies formulation process that considers the planetary health at Makhamtia Sub-District, Muang District, Suratthani Province for local administrative organization chief executive decision making. This work leads to the tool of local planning support, decision making and management to achieve a balance between human needs and sustainable planetary health. Thus, a system called PH-EIS system (Planetary Health for Executive Information System) is proposed as the tool.

The planetary health refers to the interconnections between the processes of environmental change and its impacts on human health, namely the activities involved in everyone’s life. To prevent and address the environmental impact from human activities, the cooperation among everybody is needed. The best way to prevent the environmental impact is to monitor and join the community in creating something. Thus, this research will present PH-EIS system generated from the cooperation of the members of community. This system applied information technology to assist environmental monitoring before the real situation will happen by using the previous case learning. The research methodology is divided into 3 phases i.e. study background, system development, and system deployment in policy formulation of local administrative organization. In the first phase, the researchers gained background of local structure, current situation, problems and obstacles of climate changes. It was found that the building infrastructure in the community have a part of environmental impact such as the road building effect to the resource and quality of life. From this study, the list of environmental impacts will be presented to the representative of the members of the community. The cooperation of the members of the community is the first phase to process our methodology. The partnerships and stakeholders (eight local administrators officer, seven local council members and 40 local community representatives) brainstormed and discussed the problems and obstacles of climate changes in the community. The groups focused on assessing environmental impact on their villages and what requires a developed system. The summary of the discussion was made as the system that support planning, decision marking and management of building infrastructure.

From these requirements, the second phase is developed according to software development life cycle. This phase applied information technology with web-based GIS to support decision making. The system is designed for three user groups i.e. general users or people, local head officers, and administrators. The first group can see and search for the details of infrastructure and environmental impact assessment that occurred in their village. They can learn the results from creating infrastructure together. The second group is the local administrators and local officers, local council members, and local people that is representative person in village to vote for new the building infrastructure. They evaluated the new project of building infrastructure and the system assessed the environmental impact. Thus, the local head officers compared the environmental impact of each project to make a decision through web application or mobile application. The final user group is the administrators who prepared data management of infrastructure and environmental impact assessment. Then, the PH-EIS system was tested with the local head officers before implementation. The final phase is the system deployment in policy formulation of local administrative organization. The satisfaction levels after using the PH-EIS are good level for the representatives of village and local council members, and very good level for local administrators. The results indicated that the satisfaction levels are concern with the understanding of users. This research has transformed PH-EIS system to people in community led to planetary health policies and affected to the well-being of the local community.

Keywords: Planetary Health, Local Policy Formulation Process, Local Administrative Organization Chief Executive, Executive Information System, Web-GIS
Abstract

From the conceptual framework, "Sustainable development in the context of Ban Klong Yong Cooperative" is based on the concept "Sufficiency Economy Philosophy" which requires 3 dimensions: (1) social (2) economic and (3) environment. The community of Ban Klong Yong Cooperative has area 800 Rai (3.2x10^5 square meters) and be the first of community title deed in Thailand which preserves for agricultural area. Therefore the community is strength cooperative in social dimension due to share ideas and unity. While the economic dimension depend on natural climate, agricultural prices and fertilizer. Typically, farmers use artificial fertilizers for long times and has bought at market. Currently environmental awareness, leaders and members of the cooperative campaigned for organic farming such as rice fields, bio-organic fertilizer and did not use herbicides for eliminating water hyacinth in canal. The community was able to remove water hyacinth from canals and threw it away as garbage. Water hyacinth has an environmental impact and socio-economic serious aquatic ecosystems from tropical regions. This plant has a rapid growth, large biomass. It can be processed into compost/fertilizer, animal feed and the production of biogas. The proximate composition of its analysis revealed 14% protein, 16.8% fiber, 7% fat, 8% ash content and 54.2% carbohydrate. Project 9101 was organized by department of Agricultural Extension, Ministry of Agriculture and Cooperatives for supporting fund to communities which followed by the 9th Reign for Sustainable Agriculture Development. The members of the cooperative were agreement of a bio-fertilizer production using water hyacinth as a raw material. The aim of this project was to engage the community and students from Mahidol University with participant of environmental impact, to produce the bio-organic fertilizer with local knowledge and to compare fertilizer nutrients (nitrogen, phosphorus, potassium) from local knowledge formula, hydrothermal technique with local formula and market brand. Project 9101 received the government funding for materials cost as 95,000 baht. The study was divided into 3 parts: part I) the community and Mahidol University students helped to remove water hyacinth from along Chai Khan canal in length 1.5 km and width 3 meter, then water hyacinth was dried by solar energy at the Ban Klong Yong Cooperative place, part II) the community fermented water hyacinth, another raw materials and effective microorganisms(EM) with local knowledge formula at 40-70 days for fertilizer production and part III) the experiment was carried out to integrate local knowledge formula with application of hydrothermal technique for bio-organic fertilizer production at Mahidol University. The results showed that water hyacinth weight was removal 36 tons from the Chaikhun canal before drying, the canal was clean and clear. The community listened to feedback about the data analysis of bio-fertilizer along with fermentation times (every 10 days per one result time) and found the suitable fermentation times for an efficient bio-organic fertilizer as 60 days before a distribution to members of the cooperative. They produced 12 tons of fertilizers to give all members that reduced the cost for buying fertilizers (50 baht/kg) amount 600,000 baht. The appropriate conditions for hydrothermal technique of water hyacinth were temperature of 200°C for digestion time 45 min., and then it was dried and fermented with microbiology. The results showed that the integration of local fertilizer formula and fermentation with pretreated water hyacinth and addition new microbiology produced the efficient bio-organic fertilizer as standard nutrients compliance (nitrogen, phosphorus and potassium) at only fermentation times as 8 days and costs of this as 10.93 baht per kilogram. In market, bio-organic fertilizers have selling prices between 45-60 baht per kilogram. In summary, Project 9101 of sustainable development at Ban Klong Yong Cooperative has been successful in three dimensions: 1) to have a strong commitment to contribute for social responsibility, 2) to reduced expense of farmers for buying fertilizer 3) to conserve the clean and clear canal for preventing water pollution, and then it facilitated water transportation, and 4) to transfer the new research knowledge from university to community for continue producing the bio-organic fertilizer using water hyacinth and agricultural wastes, according to higher nutrients and shorter fermentation times than local knowledge.
Dissemination of Innovation in Environmental-Friendly Transportation to Develop Sustainable Transportation

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Abstract

Urban transportation system, which propped up to the use of personal vehicles, has been proven for excessive energy consumption, disruption of public health, and the decreasing level of service albeit the increasing investment. Total loss due to traffic congestion in Jakarta is currently hitting the level of 1.25 million rupiahs per capita each year.

Becak – or pedicab – was once Jakarta’s most popular conventional transportation. Housewives who shop in traditional markets often use this vehicle as it can carry more groceries and reach narrow areas unapproachable by any other public transportation. However, the number of becak is decreasing each year as its less-ergonomic form and ‘outdated’ driving system which relies solely on manpower is deemed unfit for metropolis.

Regional Regulation No. 8 of 2007 on Public Order issued a restriction on this vehicle to operate within the capital city, causing a stir as becak is still needed by certain groups of urban people. Furthermore, becak – as nonmotorized vehicle – is a mode of transportation in accordance to world agreement towards Sustainable Development Goals of 2030.

As the contradiction between regulation and public demands occurred, a program is initiated to disseminate an ergonomic, environmental-friendly transportation as a mode of sustainable public transportation. An improvement within becak’s mechanism system is to be made so that it could have higher mobility and makes its driver less tired, less ‘exploited’, thus further improves their health and work safety.

Being an innovation in science and technology, the program is hence opted in the form of Bekin – Becak Kinetik – or kinetic pedicab. The conventional becak has been improved with a new ergonomic design in addition to save up and convert the kinetic energy which generated from pedaling to lighten the pedal. This alternative also enables the system to re-charge itself, making it easier for daily use.

The program is divided into two stages; design dissemination of ergonomic public transportation and disseminating traffic law to public transportation drivers. To engage the drivers of Sebaja – Komunitas Senikat Becak Jakarta (Jakarta Pedicab Community Confederation) – into the design process, focus group discussions with total participation of 103 drivers were held on several occasions, concerning the mapping and area distribution of the remaining drivers in Jakarta, the issues regarding current design and the users.

The main outcome of this program is aimed for the empowerment of the becak drivers; 1. To improve their independency in assembling, repairing, modifying and maintaining their own vehicles, 2. To enhance their capacity and knowledge of innovation in environmental-friendly transportation, 3. To raise awareness of both drivers and the society on the importance of sustainable transport, and 4. To create driver’s better understanding of safety and secure driving.

The succession rate of this program could not be verified yet as this innovation has not been deployed publicly, however, the prototype has been given to becak drivers of Sebaja and recently in probation. The feedbacks have all been received
and the final form is currently under development to be socialized. There are no negative impacts towards environment as this innovation produces zero waste of remission.

In general, the purpose of this program is to meet the demands of society for an ergonomic, environmental-friendly public transportation, to empower the drivers to independently create environmental-friendly transportation, and also to give a direct impact on the environmental improvement regarding air pollution in Jakarta.

Keywords: Sustainable Transportation, Environmental-Friendly Transportation, Ergonomic
The Study of Factors Affecting the Accuracy of Accounting and Financial Statements of Community Business Group

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Abstract

This paper aims to test what factors impact on the accuracy of the accounting and financial statements of the community business by using participatory action research and data which collected from primary sources, such as observation, in-depth interview, and the use of questionnaires to members of waste management group located in Tambon Rimnuar, Mae-Rim District, Chiang Mai Province. The group was formed by members from the community conducting various types of waste in their community, including compressing waste plastic into bales, in order to reprocess them into useful products for sale to earn money for the community. However, due to the lack of knowledge in accounting amongst their members, their actual performance outcome was unknown. For this reason, workshops and training were organized for the group's accountants. The results of the test and validation of 6-month practical training to accountants from the waste management group including 5 villages, the total scores of the test are 10; 3 scores for the accuracy of recording income; 3 scores for the accuracy of recording expenses; 2 scores for the accuracy of calculating depreciation; 2 scores for the accuracy of financial statements. The 3-time evaluation results showed that the accuracy were improving each evaluated time. The latest evaluation results showed that the accountants from group 1 and group 2 marked 9 scores of accuracy classified as high level, group 3 and group 4 marked 7 - 8 scores of accuracy classified as medium level, and group 5 marked 3 scores of accuracy classified as low level. By using the correlation analysis method, it showed that factors which impact the accuracy of the accounting and financial statements were 1) endeavour and training 2) gender 3) basic knowledge of accounting 4) occupation 5) age. If the group keeps practicing to improve their accounting performances, the outcome will be accurately and efficiently assessed. Also, by following the royal project's financial planning, it will make the group work effectively and sustainably.

Keywords: accounting, financial statement, community business group
The Role of Blockchain Technology in Sustainable Development

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Abstract

Throughout the history, exchange of information among people is essential for every aspect of their lives socially, economically and politically. Traditionally data and information are recorded in books and databases. Blockchain is an innovation in database technology for record keeping in a permanent, immutable, decentralized, global, and trustless ledger. Hence, it allows people to digitize their current relationships as well as forming new secure digital relationships that were impossible before since data is disclosed, secured and recorded differently in a decentralized system. A revolution is taking place where individuals are being empowered in a strong system of digital identity in managing their individual data from social and economic interactions to health care records. At the same time, seamless and prompt inter-organizational data flow and data sharing are reshaping the organizations, both public and private. Examining the potential role of blockchain technology in sustainable development is a timely and worthwhile effort and is the topic of this presentation.
Engaging the Local People to Develop Online and Social Media Marketing for Lamphun’s Brocade Thai Silk and Mae Chaem’s Tin Jok Weaving Cloth

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Abstract

The project of engaging the local people in developing online and social media marketing for Lamphun’s brocade Thai silk and Mae Chaem’s Tin Jok weaving cloth aimed to get an online and social media entrepreneurial network established to help promote the handmade items made from Lamphun’s brocade Thai silk in Lamphun Province and Mae Chaem’s Tin Jok weaving cloth in Mae Chaem district, Chiang Mai Province, Thailand. The idea is based on getting a diversified online distribution channels for the products to be highly exposed in the market and recognized in the form of public relations using social medias by the local people and the fabrics’ entrepreneurs and their staff.

The methodology used consisted of 4 stages, those were: (1) scope & select (2) solve (3) sustain and (4) spread out. The Scope & Select stage was the method to explore on the considerable factors in developing an online site and social media in promoting Lamphun’s brocade Thai silk and Mae Chaem’s Tin Jok weaving cloth merchandises for small entrepreneurs located in Lamphun Province and Mae Chaem, Chiang Mai Province, Thailand. A data collection of interviewing and group discussion, having a conversation, and partaking in a training seminar, a SWOT and TOWS analysis was conducted to foresee the areas to be considered in terms of online development, online marketing and sales. This stage resulted in the collaboration between a researcher of Chiang Mai University and the local people who wanted to take part in the development.

The Solve stage was a method to develop the local people, fabric operators and staff to be knowledgeable in marketing, public relations and online sales, and utilizing social media. The researcher had the local fabric operators and the personnel to have trainings in order to increase knowledge on marketing, public relations and online marketing operations. Including the use of social medias for promotional and marketing purposes.

The Sustain Stage, aimed to make the fabric entrepreneurs and staff had got knowledge and understanding to conduct and continue their own online trading. After receiving trainings, the fabric entrepreneurs and staff understood how to put themselves into the online trading world, with online sales and marketing channels in addition. Thus, they could perform the online trading by themselves rapidly with confidence.

In the Spread Out Stage later on, these businesses have got more attentions from customers by different channels. Moreover, the local Lanna handicraft products, Lamphun’s Brocade Thai Silk and Mae Chaem’s Tin Jok Weaving Cloth also got interested in exhibiting at an international fashion show. This could be the good starting point for engaging the local people in developing online and social media marketing for local entrepreneurs which could sustain the knowledge and ‘know how’ for running the local fabric business in the competing world also introducing Lanna local fabrics to the international markets.
Challenges faced by women’s business groups producing seafood-based products in Jeneponto Regency, South Sulawesi Province of Indonesia

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Abstract

Jeneponto regency is the third highest regency/district with poor residents in the South Sulawesi province of Indonesia. However, the regency has a high production of seafood as more than 63% of its area is located on the coastline. According to Indonesian Statistic Bureau (BPS), this area produced 16,470 tons of fish and 17,045 tons of seaweed in 2016, but almost all of the entire catch was sold in its raw form, without any added value. The Division of Marine and Fishery in Jeneponto has encouraged women in the district to form business groups and process seafood into products, such as seaweed crackers, cooked fish, fish balls, and fish sticks. However, the groups face challenges to run their businesses, such as lack of expertise and experience in doing business. As a result, they have not been able to improve the family income significantly.

The objectives of the paper are to investigate challenges faced by the groups in Pabiringa village of Jeneponto regency to run their businesses and propose ways to overcome the obstacles. We use qualitative approach by conducting focus group discussion with five groups, and in-depth interviews with representatives from the local government (Head of Pabiringa Village, Head of Division for Cooperative and SME, and Head of Division for Marine and Fishery). The results show that challenges faced by the groups can be grouped into unclear product definition and seasonal raw materials availability, low product attractiveness, limited marketing capability, and limited bookkeeping skills. Thus, the groups need a comprehensive approach consisting of mentoring and creating a market for their products.

We propose a community engagement program which is a partnership between Universitas Indonesia (UI), PT. Pertamina (a state-owned oil and gas company), and the local government. The primary objectives of the program are to increase the groups’ managerial capability, improve the product attractiveness, and identify the potential market for the products. UI and PT. Pertamina (through their corporate social responsibility (CSR) program) provide funding for the program. Furthermore, UI also provides expertise in business management, while the local government supports the program by providing expertise in product licensing and seafood-based products.

The program consists of five parts, namely the capacity building of the groups (to improve their managerial capacity), supports in the forms of product improvement (selecting unique product brand, and designing attractive product packaging), grants for production equipment and supports for obtaining product license, identifying marketing outlet for the products, and mentoring and monitoring. The capacity building is needed to improve the groups’ managerial skill in entrepreneurship, product and production management, marketing, and finance. The groups also need input or feedback to improve their products, to make them more attractive to the market. Therefore, we propose a small-scale organoleptic test for each product and the redesign of current product packaging. As they have limited production equipment, no product license, and limited funding, the groups also need grants and supports for these purposes. Furthermore, since the purchasing power of Jeneponto residents is low, we also propose to cooperate with retail outlets in neighboring regency with higher purchasing power to market the products, such as Bantaeng regency. Lastly, continuous mentoring and monitoring of the groups is needed to ensure the sustainability of the program.

Keywords: Women business groups, micro business, processed seafood, Indonesia
From Belitung to Banyuwangi: To Create Agent of Change on Coffee’s Sustainable Agricultural and Entrepreneurship

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Abstract

Indonesia is now arising for its Nusantara Coffee. West to East, Indonesian Coffee keeps showing its attractiveness. Facing this phenomena, Universitas Indonesia showed its participation in the form of community engagement with the theme of coffee’s sustainable agricultural and entrepreneurship. Beginning with attention to the unique character of the East Belitung community in consuming coffee, this activity focused to coffee’s farmer in one and only coffee producer in East Belitung, that is Lilangan Village.

The community engagement consists of three activities. First, the identification and assessment of program feasibility, second is designing community engagement program based to the feasibility result, and the third is implementation phase that consist of education and workshop. Based to the feasibility studies, unique culture of consuming coffee in East Belitung does not significantly produce good agricultural practice of coffee in the region. In fact, plantation field are scattered, and height of most tree is unstandardized. Therefore, the community engagement program is designed to create agent of change of coffee’s sustainable agricultural and entrepreneurship. The idea is to select eligible farmers from Lilangan Village and representatives of local government to learn from coffee experts about best practice coffee from seeds to cups. The program chooses Java Preanger Gunung Tilu and Kopi Osing Banyuwangi as subject area. Both of the areas were chosen because of recommendation from all coffee experts that joined in Kopi Nusantara exhibition in Jakarta.

This paper focuses on community engagement phase to draw linkages between the principles, approaches and applications of community-based participatory through the case study on good agricultural practice of coffee, value co creation and experiential marketing. During first to third activities, one book, papers, three videos, and press release were developed. The content of these materials were developed based on interviews and observational learning. After receiving trainings, farmers and local government knowledge and awareness of good agricultural practice of coffee increased significantly. That includes new ways of thinking, problem solving, and sustainable agriculture from hatchery, plantation, harvesting, and processing coffee from seeds to cups with manual brewing. Their knowledge of coffee’s value co creation and experiential marketing also improved. With this program farmers and local government aware that community house can transform into homestay, and place to experience the living nature of coffee’s farmer.

Although this program was successful in increasing knowledge and awareness of the farmers, the long-term impact and sustainability of these agents of change need to be examined. Furthermore, co-operation with other relevant institutions or professions are suggested to produce valid coffee’s sustainable agricultural and entrepreneurship in Lilangan Village, East Belitung.

Keywords: From Seeds To Cups, Coffee Sustainable Agricultural, Good Agricultural Practice, Participatory Action Research, Community-based Participatory Research
Supply Chain Risk Management for Community Business
of the Chemical Safe Chili Pepper Growers Group

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Abstract
Community agribusiness is a venture difficult to attain business and organizational growth and sustainability due to many high risk factors involved. This is particularly true if it strives to turn out green products from crops highly vulnerable to many pests and diseases but grown using minimum chemical inputs for the concern about food safety for consumers and environmental stewardship. This study adopted participatory action research approach and the so-called “Supply Chain Risk Management Process” model to assist an agribusiness group of 100 members namely “Chemical Safe Chili Pepper Growers Group” in Chaturat District, Chaiyaphum Province, Thailand to identify risk factors, risk assessment and determine risk management strategies throughout the supply chain from the level of production to processing and marketing of chemical safe chili pepper produce and products. Eight main risks were detected. Three critical components in descending order needing immediate remedies are inadequate water, uncertain market, and plant diseases. The group members determined and successfully chose one strategy capable of dealing with all three problems simultaneously that is securing water for early cultivation of chili pepper before the onset of rainy season. The research found that 15 tube wells were constructed. This enabled growers to not only reduce production risk from water shortage but also, as a consequence, obtain higher quality chili output. With confidence, the group exploited information about its quality produce and products for marketing promotion. As a consequence, its total sale volume has been doubled. Furthermore, the group implemented five additional strategies which successfully helped its members to cope with the other five risks. The success of learning clearly manifested itself in the third year when the level of all three risks became lower to the degree satisfactory for the group. The case study illustrates how a business risk management model commonly employed by large enterprises could as well be adaptable to and practiced by rural community enterprises when the group members and researchers together strongly committed to risk alleviation.

Keywords: risk identification, risk assessment and strategy, supply chain, chemical safe chili pepper, food safety
The Development of Internet Marketing Activities for Potential Product of Eastern Indonesia

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Abstract

Indonesia has many potential products that are diverse and based on the advantages of local resources, both natural resources and socio-cultural resources. Generally, these products have their own peculiarities and uniqueness because they are influenced by local culture and wisdom. Likewise with superior products from the Province of East Nusa Tenggara (NTT). The Province have superior products based on local resources. One of them is shredded beef (beef floss) products that are cultivated by SME entrepreneurs.

The quality of superior shredded beef (beef floss) products because they made from selected beef and quality natural seasoning and reliable production processes have not been able to compete in a wider market, for example at the provincial, national, and regional levels. This is due to limited market access and minimal marketing costs, so that UKM has not been able to optimally utilize existing market opportunities. Effective internet marketing needs to be done to optimize market access and market potential of shredded beef (beef floss) from Kupang, NTT.

Mapping the potential and needs of internet marketing is done through in-depth interviews with stakeholders, namely SMEs and the NTT Province Industry Office. The results of the in-depth interview were processed with analytical hierarchy process (AHP) and descriptive statistics to formulate product development proposals and proposed strategies to improve the ability of SMEs to do internet marketing.

Keywords: Superior Products, Internet Marketing, Analytical Hierarchy Process, Descriptive Analysis, Global Markets
The Role of SME in Developing the Potential Product of Eastern Indonesia

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Abstract

Indonesia has many potential products that are diverse and based on the advantages of local resources, both natural resources and socio-cultural resources. These products mostly created by Small and Medium Enterprises (SME) who happens to have their own peculiarities and uniqueness because they are influenced by local culture and wisdom. This research is aim to map and to develop the roadmap of the potential product of eastern Indonesia, especially in West Nusa Tenggara and East Nusa Tenggara Province. Therefore, we can identify further what is specifics role that SME have in developing the potential product in their region.

This research consists of two phases. The first phase it to map the potential product of the province in eastern Indonesia, especially for West Nusa Tenggara and East Nusa Tenggara. Second, to develop the roadmap on how to increase the role of SME in developing the competitiveness of those potential products. The first phase of the research was utilizing two approaches that are secondary data and primary data collection. This research conducted secondary data collection such as data related to products such the Gross Regional Domestic Product (GRDP), the number of employments, coverage area, the potential nature of selected area, as well as economic factors related to regional development that includes the results of studies conducted by relevant agencies and long-term regional plans. Thus secondary data were analyze to make a list of potential product of West Nusa Tenggara and East Nusa Tenggara Province, and to develop the questionnaire that is used in the primary data collection. According to the secondary data collection, we select top three of potential product in each province, that is: "Abon Sapi – shredded beef (beef floss)", "Gula Lempeng – Sugar Plate", and "Abon Ikan – shredded fish (fish floss)" for East Nusa Tenggara; and "Dodol Rumput Laut – Seaweed Jelly-strips", "Madu – Honey", and "Kerupuk Kulit Sapi – Cowhide crackers".

Next, this research arranged a primary data collection utilizing a quantitative and qualitative approach using survey, while the second phase was conducted thru in-depth interview. The analysis was utilizing the concept of analytical hierarchy process, to define which product goes to what province. Almost 100 SME were participating as respondents in the survey, and those who selected as the candidate of each province potential product were interviewed to strengthen the findings. Local government of each province is also involved thru discussion and interview in shaping the findings.

According to the analytical hierarchy process analysis, the research-selected product from East Nusa Tenggara was Abon Sapi – shredded beef (beef floss), while Dodol Rumput Laut – Seaweed Jelly-strips is the selected product from West Nusa Tenggara province. And according to the finding, roadmaps that include specifics role that SME have in developing the potential product have been made.

Keywords: Analytical Hierarchy Process, Global Markets, Potential Product of Eastern Indonesia, Small and Medium Enterprises (SME) Competitiveness, The Role of SME
The Quezon City Community College: An Exploratory Study

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Abstract

Driven by mission, many universities around the globe have embarked on university-community engagements aimed at improving the quality of life in partner communities and in the process, contributing to a better society. In the Ateneo de Manila University, the Ateneo Center for Educational Development (ACED) was created to spearhead the University’s mission to close the poverty gap through improving public basic education in particular.

One of the many challenges confronting Philippine society today is an unemployment rate of 5.3% (Philippine Statistics Authority), which is the highest rate among members of the Association of Southeast Asian Nations (ASEAN). Mindful of this serious problem, ACED has recently attempted to adapt the Indian Community College model which has been envisioned and implemented in India as an ‘education for employment’ program. Implemented by ACED in partnership with the Local Government of Quezon City and the Department of Education, the first Quezon City Community College began with a cohort of 100 out-of-school youth. These students were provided a course that had three component: Bread and Pastry Production, Cookery, and Food and Beverage Services. The course included modules on Technical Skills, Communication Skills, and Life Skills. Four months after completing the program, 84% of the completers were gainfully employed.

This exploratory study aimed to identify the enablers and constraints in the different phases of the implementation of the Community College program, from the recruitment stage to job placement vis-à-vis the roles of the Local Government, the Department of Education and ACED. The results of the study are encouraging specifically in terms of the students’ perception of the significance of the course modules and the job placement rate but several improvements are needed to improve the recruitment strategies, completion rate of students, and the roles of the different stakeholders in the effective implementation of the Community College program. This study can benefit the Ateneo Center for Educational Development, Local Government of Quezon City, and the Department of Education as they continue to work towards strengthening the community college program and replicating this in other areas of the city.

Keywords: community college, out-of-school youth, university-community engagement
Experiential Learning for Quality Education through Triple Helix Partnership and University – Industry Engagement

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Abstract

Effective teaching is not just via the classic classroom model but can be conducted through experiential learning. Experiential learning in school is a process that will help children to visualize, think and experience the learning process rather than the old chalk and talk style. This cognitive learning will enhance the children’s ability to understand better on the subject matter. Experiential learning engages children in critical thinking, problem solving and decision making in contexts that are personally relevant to them. In Malaysia, teaching pedagogy through experiential learning at school is still limited. This paper will discuss on two experiential-based programmes involving primary (11-12 years old) and secondary (16-17 years old) schools.

These programmes were carried out by the University in collaboration with the government and industry creating the triple helix partnership. Triple helix partnership in community program is a win-win collaborative relationship for all parties involved. Each of the entity plays different roles but leading towards a common objective. Government plays the lead role of driving both the academia and industry, the academia is taking the non-traditional role of innovating for ultimately sharing the knowledge with the community and the industry provides the driving force for this synergy.

UMCares has initiated the experiential-based learning initiatives in 2017 by introducing two flagships programmes. The first program was known as ‘Walking Football Clubs’ (WFC) which aimed to provide sports for obese children in order to motivate them to lose weight in a fun and engaging manner. According to the latest statistics from the National Health Morbidity Survey (NHMS 2015), 38 percent of the children in Malaysia are overweight and the obesity rate for population below 18 years old is approximately 11.9 percent. The sports-based program was introduced since access to structured fitness programs for obese children were limited. Through this program, the children were taught about risks in obesity including diseases and practical measures to mitigate the problems. The program has demonstrated positive effects on anthropometrical, psychological and fitness changes among the school children who participated. This program had received tremendous support by the schools in Malaysia where the number of WFC clubs had increased from 8 in 2017 to 17 clubs this year. To ensure the sustainability of this program, UMCares hopes to establish as many WFCs in schools and with the support of industry, the University will be able to hold annual competitions at national level. To date, this program has successfully secured financial support from 2 sports companies and an international hypermarket in Malaysia for this year’s competition.

The second project is an inter-school competition which involved the upcycling of waste for functional purposes to improve school facilities. Tools and materials used in the competition were provided by the company. In the initial phase, the students had identified facilities and areas in school which needed facelifts. By using waste materials, creative and innovative products were constructed by the students mentored by lecturers from the Faculty of Built Environment, University Malaya. This program not only promoted the ‘upgrading’ (adding value) and ‘recycling’ (reusing) of discarded materials but also to instill creative and innovative thinking at a young age. Students’ creativity dimensions were nurtured and enhanced as a result of the problem solving process involved in this experiential-based learning activity. Creative approaches to solving problems...
resulted in innovative solutions. From this program, about 112 school students benefitted not only basic technical skills but important soft skills abilities such as leadership capabilities, communication skills, teamwork and lifelong learning skills which are essential for the students' development.

Both programmes were managed by the University, driven by industries and facilitated by the Ministry of Education Malaysia. The outcome of the programmes were commendable with positive feedback and had received good publicity. It can be concluded that experiential learning is a valuable and exciting learning opportunity for all parties involved. We hope that the knowledge shared and the values inculcated in the students and all parties involved will be embedded in their daily life in the future.

**Keywords:** Experiential learning, obese, do-it-yourself, participatory action research, industry, government, university, schools, triple helix partnership
The situation of Education Management in Public and Private Upper-Secondary School:  
A case study of the three southern border provinces

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Abstract

This research aims to study the situation of education management in both public and private upper-secondary schools in three southern border provinces of Thailand. Tools used to collect data for this research included structured interview. The primary data was collected through in-depth interviews from 25 key informants. The data was analyzed by using content analysis. The findings were as follows:

1. Education management by budget. The annual budget contributed to the schools by government subsidiaries is disbursed according to the actual number of students in each school. The policy of contributing budget was analyzed and found to be an easy method. The direct supervision, control, and monitoring of the budget were not strict enough and it was found that the schools received funds and more support from various agencies such as sub-district administrative organizations.

2. Education management by personnel management. There were not enough religious teachers in state schools and their quality. Thus, the managers who look after Muslim students in the state schools have to pay for special tutoring sessions hiring religious teachers who were paid the same as general teachers.

3. Education management by academic administration. There were different between small and big schools in term of teaching general subjects and quality of teaching and learning. The big schools normally had the teachers who had the knowledge to teach all level groups of students. The science teachers also had the knowledge of physics, chemistry and also teachers of arts could able to teach many subjects. However, not all subjects were available in the small schools and sometimes those teachers taught the other subjects which were not their own fields of studies.

Keywords: Education management, Three southern border provinces, Upper-secondary school
Management of STEM Education through Sufficiency Economy Philosophy with Case Study in Ban Kløng Sawang Arom School

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Abstract

STEM education is a multidisciplinary approach that integrates the knowledge in four fields of study which are Science, Technology, Engineering and Mathematics. Teaching STEM in school enable the students to gain better understanding in real-world problem solving. Quality education is important for sustainable development of Thailand. Thailand is an agriculture-based country whose economy depends largely on the agriculture. In order to sustainably develop the country, the improvements in agricultural productivity through modernization of the quality education are required. Therefore, the STEM education suitable for Thai community is necessary for the country’s development. According to the Sufficiency Economy Philosophy of His Majesty the late King Bhumibol Adulyadej, the moderation, reasonableness and self-immunity together with the conditions of appropriate knowledge and morality are the key principles for the success of sustainable development. Moderation is based on the middle path that is not too much or too little. The moderate living leads to long-term success and happiness. All choices in life should be selected by reasonableness, careful consideration and justified by ethics and law. Self-immunity is the ability to tolerate and cope with both internal and external factors such as social, environmental and cultural changes. This project aimed to adopt the principles of Sufficiency Economy Philosophy in managing the STEM education at Ban Klong Sawang Arom School via 2 recycled bicycles and chemical-free plantation in the agricultural plots that was transferred knowledge by Mahidol University staff. This School is located in Phutthamonthon District, Nakhon Pathom Province, Thailand. The pesticides and other chemicals are not used in the plantation of the vegetables, according to have a greenhouse. Most of the students come from the families that do the agriculture. In the concept of moderation, the STEM education was conducted by Mahidol University lecturer and students via 2 recycled bicycles for spraying water substitute watering can. The chemical-free vegetables were in the agricultural plots that were in a greenhouse. The home-grown vegetables were developed and taken care of by the students in 3 months. Students have known about measurement and calculation of agricultural area, principles of bicycle motion, syphon system, nutrition etc. and learned from the real situation at outside the classroom. It was founded that 57 students has been fun and understood for the knowledge content test which increased their score in mathematics from 13.2 (pretest) to 17.7 (posttest) from 20 points in average and satisfied in this project as score 4.6 from 5. The vegetables used for meals on lunch time of the school which reduced the school expenses 5%. Moreover, this project has shown the social engagement between University and school in context of transfer knowledge and help to increase mathematic scores of sixth grade. In summary, the chemical-free plantation is selected as the educational method for growing the vegetables for good health of the students corresponding to the concept of reasonableness. For the concept of self-immunity, the students are able to grow the vegetables by themselves for lunch time. Additionally, the excess amount of vegetables can be sold in the nearby market. Therefore, the students are self-reliant corresponding to the concept of self-immunity. This project is participated by various sectors such as university, school, governmental organizations and people in the community. All sectors have been closely working together for the project’s achievements. As the project has been carried on for two consecutive years, the school expenses related to the lunch activities have been reduced, due to the use of vegetables grown by the students. The developed 2 recycled bicycles for spraying water and chemical-free plantation in the agricultural field has been employed in the STEM education which successfully gains the attentions and interests of the students.

Keywords: STEM education, Sufficiency Economy Philosophy, Ban Kløng Sawang Arom School, Community
Tourism development on the identity of secondary cities:
Case study of Tai Lue community

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Abstract

Cultural tourism and lifestyles contribute to employment in the community and provide opportunities for children and women and older people to have economic and social activities. However, many communities do not have the opportunity to benefit from cultural capital because of being out of the main tourist destination areas. In the present, the government has a policy to promote tourism in the secondary cities. It is a great opportunity for the provinces to develop tourism to benefit the community. Lamphun is an example of historical and cultural destination which has been seen as only way to get to the major tourist cities of Thailand. The development of the community in Lamphun province as a tourist attraction and systematic management is a challenge. This study uses participatory research and qualitative analysis to study the potential of cultural tourism and lifestyle. It also designed the marketing channel to attract foreign and Thai tourists as well as to develop skills in business management by PDCA cycle.

The results of the SWOT analysis showed that the potential of the area was good. The history arts and culture of Tai Lue ethnic, food, agriculture, safety and folk handicrafts especially Lue cloth are well known. In addition, the community environment benefits to create new homestay or support the existing one. Tour operator should be involved with proactive marketing management and link with business community networks. Improve the quality of cleanliness and use of communication technology. In the development section, researchers provided knowledge in business management covering corporate management, finance, marketing, and development of travel products and services. This case study can be a lesson for other areas which are overlooked and can be launched into the interest of tourists.

Keywords: tourism development, cultural identity, secondary tourism destination, Tai Lue community
Power of Language: Co-Creation of Mutual Values and Thai Language Abilities in Transmission of Innovation of Local Organic Rice Farming Operated by Thai-Malay Muslim Farmers in Ban La-han, Waeng District, Narathiwat Province

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Abstract

The objectives of this current article are to (1) change farmers’ thinking paradigm: from believing that they could not communicate in Thai to believing that they can do it and (2) transform their intangible knowledge into concrete practices. The conceptual framework employed in the development includes an application of sharing and values gained from the sharing for co-creating mutual values among local farming-based communities and academic experts, an application of transformative learning that is particularly appropriate to adults, a consistent articulation of lessons learned, and participatory research studies. This study on developing the Thai language competency involves 23 participants from 3 villages: Ban La-han, Ban Krue-so, and Ban Ba-hoe Ha-leng. These villages are in Waeng District. The development emphasises group learning, using farmer leaders’ houses as the classrooms. The activities for developing their Thai speaking and writing were carried out by using several techniques and instruments: brainstorming, questioning, expressing feelings, sharing information, mapping organic rice farming, mapping the quantities of paddy-sown fields and transplanted rice fields, making charts demonstrating organic rice farming procedures, making brochures showing organic farming procedures, and publicising contents and updates concerning rice farming procedures on their Facebook page. Through activities arranged in 18 months, the farmers have been provided with guidance on Thai grammar and opportunities to speak and write in Thai. The findings revealed that they have changed their beliefs and have been more confidence about using the language. Nevertheless, their Thai proficiency varied depending upon their Thai language background. At the initial stage (2016-2017), there were 13 farmer experts capable of using Thai to disseminate their innovation of their local rice organic farming in forms of explanations, demonstrations, and operations. Those benefiting from the project in 2017-2018 included 1,196 people: pre-university students, university students, and farmers. These learning activities can be set as good examples for other communities.

Keywords: power of language, co-creation of mutual values, Thai language communication, innovation of local organic rice farming, Thai-Malay Muslim farmers
The inside out explosion for encourage teenager to be Citizen in the new era

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Abstract

Game addict, drug, Pregnant before marriage, leaving school, leaving home since childhood, no volunteerism are the main problem among teenager. Local leader still not have solution for managing these problem clearly. This research is aimed at 1) analyze the problem situation and teenager’s needs and 2) to do an experiment of teenager group building. The researcher do this study with 55 teenagers in U-mong sub-district. The group composed of teenager from U-mong sub-district children and youth council, U-mong sub-district youth network and youth from U-mong Wittaya School. This research applied explosion from inside out theory with building various activities and structures to draw youth’s capacity for solving problems.

The result is youth need opportunity from the powerful people or who has competency to pull the youth to be part of locality. The youth also want to have space for their activity needs in order to decrease their problem. The youth group building experiment are projects following: Brotherhood project, B-Boy Dancing project, Religion Sunday project. All projects are the method to draw the youth capacity to building group together for doing social activities. It is able to say that the application of explosion from inside out method for this study achieved the purpose. The project made by the youth group is funded by the “Why 1 Why project”, funding by office of Health Promotion fund. The project is selected from many representative of each district youth group for social work. The youth group get the national prize from Thai senate under the Democracy innovative project also.

Keyword: Youth problem, drug, youth’s capacity, social activity group, participation in local development
Exploring the needs and challenges of detainees: A basis for a sustainable FEU Project HOPE

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Abstract

Project HOPE (Harnessing Offenders’ Personal Empowerment) is one of the community extension programs of the Far Eastern University (FEU), a higher educational institution in Manila, Philippines. It is a program maintained by FEU at the Manila City Jail Female Dormitory (MCJFD) which aims to holistically address the diverse needs of the detainees. This program came all the more relevant when the war on drugs in the country was started by the government and there has been a rapid increase in the number of detainees, making Philippine jails congested and the detainees’ basic needs barely satisfied. Using descriptive research method, particularly survey, a total of ninety four detainees took part in the needs assessment conducted through a combination of questionnaire and interview. Results revealed that the foremost needs of the detainees include livelihood programs, psychological services, and literacy and health programs. Majority of the respondents expressed a strong interest to join these programs and their primary reasons for wanting to do so include wanting to acquire new knowledge and skills, having the desire to change oneself, productively make use of their time, and have a form of recreation. Challenges experienced by the respondents in prison often include meeting their basic needs, receiving legal assistance, having limited education, lack of source of income upon re-entry to the community, dealing with interpersonal difficulties with fellow detainees, maintaining their physical wellness, and handling negative emotions while in prison. Some of the hindrances to participation in the Project HOPE programs cited by the respondents include conflict in schedule of court hearings, health condition, limited number of participants accommodated per program, laziness to participate, lack of self-confidence, favoritism in choosing participants, bad weather, and giving chance for others to participate. Having a prison as the University’s partner community makes this extension service a unique experience for community volunteers. It also brings challenges for community volunteers in terms of logistics and security procedures within the partner community. In this light, FEU Community Extension Services (CES), in response to these assessed needs and challenges, planned with the stakeholders, including the volunteers from the University and members of the MCJFD community, the detainees and jail administrators alike, in order to provide relevant programs that will have a sustainable impact in the community. On the basis of the needs assessment results, planned Project HOPE programs will take on a holistic approach and include an array of livelihood trainings, literacy and numeracy programs, psychological interventions, psycho-educational programs, health education and medical services, wellness and recreational activities, food sanitation and preparation demonstrations, urban gardening, and environmental beautification. To further meet the needs of the partner community, in the pipeline are Project HOPE programs covering paralegal education and gender equality, as well as infrastructure development and other skills training. This will benefit the detainees as these programs will address their different needs. It will also benefit the FEU community since all these Project HOPE programs will utilize the expertise of the faculty, staff, students, and alumni volunteers coming from the different programs in the University.
Developing community-based agroindustry by empowering women and disabled people: a case study in Kidal Village, Malang Regency, East Java, Indonesia

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Abstract

Kidal Village is located in Malang Regency, East Java, Indonesia, known for their jackfruit, chicken eggs, and its historical temple of Kidal. Furthermore, the village is also in the route of popular tourism destination of Bromo, Tengger and Semeru Mountains. Indonesian Government has also chosen Kidal Village as one of the self-reliance village model in Indonesia. Therefore, it is crucial to engage and advance the network and collaboration between government and university or other relevant stakeholders. However, there are some problems faced by the community in the village. For example, during the harvesting season, the price of jackfruit is cheap and no proper storage systems make the fruit to rotten. Another problem is the high rate of poverty, human resource quality, bad village’s image, and lack of fruit-based product diversification. Problem of waste from rotten fruit which are disposed directly into the environment has created pollution to the nearby environment. Therefore, it is necessary to introduce technology for the valorisation of fruit waste. Universitas Brawijaya (UB), through Program Doktor Mengabdi, has a community engagement program together with the Kidal Village Government and their communities in tackling these problems, with the principles of empowerment and working for the community. The aims of this study were to explore local resource and their potential for agroindustry, form and assist a community-based agroindustry, and develop Kidal Village as self-reliance village model. The program targeted poor women (who are the member of Program Keluarga Harapan/PKH) and the people with disabilities in Kidal Village. Furthermore, within the program, five undergraduate students were also sent to stay in the village for one-month period (from July to August 2018) to help the UB team in assisting the targeted villagers. Several alternative solutions proposed in this study were (1) empowering communities through the creation of creative agroindustries (food and non-food based), (2) increasing the selling value of jackfruit through jackfruit-based diversification product, (3) involving people with disabilities and unemployed youth in the productive activities through t-shirt design and printing, (4) creating an icon product using the local resource known as one village one product (OVOP); and (5) initiating the establishment of Kidal Village as the self-reliance village model in Indonesia.

Up to date, there are various activities were carried out, include training on making of jackfruit-based products (i.e. jackfruit drink, jackfruit jam, and jackfruit dodol); basic design and screen printing training (i.e. Kidal Temple motif); workshops on quality control, cleaner production, legalisation of home-scale industry, waste valorisation, marketing, and business economic analysis; technology introduction, and creation of community-based agroindustry. Three groups of community-based agroindustries were created to valorise jackfruit, involving 30 women of PKH members. Waste from cloth/fabric will also be used to create souvenirs i.e. wallet and bags with Kidal temple motif. The results of this activities demonstrated that workshops and assistance activities have provided a new perspective and skill to all participants. The skills on food-processing and basic industrial system have increased. Where, all participants of design training, were able to create their own design and carried out the print screen themselves with a very good results. Such findings indicated that the collaboration between UB and Kidal Village Government has given opportunities and benefits to increase the life skills of the targeted participants, as well as to contribute on preserving the nature and local resources. This assistance program has also enabled the rural women to initiate productive activities through a group-based home-scale business. In conclusion, the findings confirmed that the engagement program between University-Community has provided a platform enabling the academic staff to transfer their knowledge and skill to the benefits of the community.

Keywords: Agroindustry, self-reliance village, community empowerment, disability, poor women
A Survey of Time Banking: Time Banking- A survey of interest

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Abstract
Thailand will be entering full-scale aging society in 2021, when 20% of population will be over sixty years old. This will cause significant societal changes, and it is very important that the country is prepared to deal with problems that may arise from aging society. Lower birth rate and decreased percentage of working generation lead to the reduction of national tax income which is needed to run the country. At the same time a large amount of money is required to take care of the elderly population who need increasing physical care. Deteriorating physical health is common among old people, and there is a growing tendency for senior citizens to live alone. Unfortunately substantial number of senior citizens are financially unprepared for retirement due to low financial literacy. A good social welfare system is necessary, and it will require a large amount of financial support. Time banking is a concept that involves community networking where each member agrees to give and take credits for service. Time credits can be earned by providing services to those in need. Such system is a kind of community support which can help relieve financial burden on the government and strengthen community relationship. Time banking can be applied to all generations, and it is especially suitable for aging society.

This paper explores the interests in joining time banking among people living in Bangkok and Pathum Thani areas. It investigates the respondents’ lifestyles and the present needs for social welfare. By investigating two groups of respondents: 18-23 years old (young adults), and 60 years old or more (senior citizens), it was found that nearly all respondents (90.2%) had never heard about time banking. When asked about satisfaction towards social welfare from government, the respondents expressed moderate satisfaction and showed strong desires for health care education from government. Both groups have active social activities, and it is interesting to note that young adults show greater demand for the establishment of time bank (77.78%) than the senior citizens (51.14%). As for the types of service required from the time bank, the young adults indicated “doctor visits”, followed by “need help with household chores”. The senior citizens needed most help in “doctor visits”, followed by “need help with physical exercise”. On the part of giving service, young adults expressed interests in “tutoring young students”, followed by “helping out with physical exercise”. This reflected that there was a match in at least one area, and that the younger group could fulfill the needs of the older group, in terms of physical exercises.

The results reveal existing gaps and may be used in further study for establishing time banking. If time banking is to be operated in practice, some form of concept testing needs to be performed in the future. University can play an important role in the introduction of time banking. Even though university operates in a different context than the general society, it can be a place for concept and system testing.

Keywords: Time banking, aging society, community engagement
The Role of Kampung Tongkol Inhabitants in Safeguarding VOC’s East Warehouse and Remains of Batavia City Walls

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Abstract

In order to safeguard the cultural heritage, society often have to give in to the pretext that their beings will threaten the survival of the sites or buildings. The existing regulations regarding cultural heritage conservation shows a questionable tendency to isolate the tangible heritage, such as historical building or ruins, from the living communities surrounding it, that is, a group of inhabitants who have lived on the areas since a long period of time and become a part of its environment. Inevitably, people sometimes do contribution to the degradations of cultural heritage. However, humans also have the potential capability to take a significant role in safeguarding those buildings, given that humans are able adapt to their environment.

Kampung Tongkol is one of three kampung (village) that lives alongside a branch of Ciliwung river (also known as Komunitas Anak Kali Ciliwung). However, unlike the other two kampungs, Lodan and Kerapu, Kampung Tongkol is living side by side with a wall that is part of the eastern grain warehouses (Graanpakhuizen) left by Dutch trading company named Verenigde Oostindische Compagnie (VOC) since 1700 to 1752. After the evictions that occurred in 2015, the inhabitants of Kampung Tongkol have tried to overcome the new conditions of their environment by cutting off some part of their house in order to follow government regulations, and also tried to better understand the values of the historic wall that exactly exists behind their house. These actions are part of the ‘Village of Tourism’ (kampung wisata) theme they are trying to convey as the concept of their living environment.

Up until these days, the people of Kampung Tongkol continue to independently strive in maintaining the remains of the grain warehouse and the Batavia city walls, to ensure their presences as the essential piece colonial period in Batavia (now Jakarta). On 30th October of 2015, a program was proposed by themselves to form a guide map for the ‘Village of Tourism’. It also included some efforts such as practical history training, heritage building clinics, and the forming of English courses training group, so that in the future, they would be able to explain to any tourists coming about the environment around their village. This effort gives a positive impression to show the awareness of the local inhabitants to better understand and adjust themselves to the existence of historical buildings.

Continuing the process of adaptation that has occurred, the community development team of Universitas Indonesia takes contribution by involving the people of Kampung Tongkol in building masterplans and arrangements to support the process towards a better design and planning direction. In addition to the physical arrangement, there is a need to maintain the regulations in the form of rules for the inhabitants living alongside the city wall. This regulation is made in the form of a guideline which states what permissible (do) things are and what permissible (don’t) things are not regarding any activities against the heritage areas.
This paper will focus on the process of the residents of Tongkol Village in improving the quality of their living space next to the VOC’s east grain warehouse and Batavia city wall through practical implementation in the fields of architectural science, urban space design, and heritage values. The method of these activities is carried out by the actively participation of kampung Tongkol inhabitants, called by Participatory Action Research to engage and facilitate the community more in designing and building the solutions for their own living spaces. The activities are done for about ±6 months, involving a total 20 settlements and more than 30 inhabitants of Kampung Tongkol.

We argued that the actions would be also driven by any enthusiast who have interest in environmental issues that are reviewed, offering a democratic model of who can produce, own and use the produced results, and becoming collaborative at every level, which involves intense discussion and cooperation taking place in their own village. In the long run, this program aims to ensure the people of kampung tongkol to continue to maintain the existence of the East Grain Warehouse VOC and Batavia city wall, and becomes an example as the empirical evidence that humans can adapt to the environment, and any individuals are able to becoming a part of the community that helps to maintain cultural heritage.

Keywords: architecture, urban kampung, participatory action research, heritage, history.
Empowering a new Generation of Change Agents to Address the Sustainable Development Goals in Myanmar

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Abstract

At the core of development is the desire to empower others with the skills, knowledge, and resources necessary to become autonomous, secure, thriving individuals. In 2013, Payap University, together with the United States Agency for International Development (USAID), the International Rescue Committee (IRC) and the Project for Local Empowerment (PLE) designed and delivered a capacity-building program in Organisational Development and Management. Now in its sixth year, the goal has been to empower a new generation of change agents working in civil society organisations to create meaningful and lasting social impact in marginalised communities in order to address some of the challenges in implementing and achieving the sustainable development goals on a community, regional and national level.

The project has so far delivered twenty-six certificate courses in Mae Sot, Thailand, refugee camps along the Thai-Burmese border and within Myanmar itself in five different states. As of June 2018, a total of 750 students from over 100 different civil society, government and international aid organisations have graduated from the program. Alumni have since founded their own schools and community-based organisations. They have pursued further education, secured senior roles within civil society organisations and been appointed to political positions within local governments. Feedback from graduates has been that the program helped develop them on both personal and professional levels. Improvements in personal advocacy ability, employment mobility, work skills and networking, together with a holistic view of community development and non-profit management, all contributed to their success. The program also included an application module in which students were required to develop projects with positive social impact outcomes. Over the years, these have included training for a village community development committee, a town waste-management and recycling plan, a conflict-resolution and peace building initiative, a community library and a handicrafts social enterprise.

Throughout the six years of the program, there have been several challenges. In 2014, events in Myanmar radically changed the context within which the certificate program was developed. Access to target communities within Myanmar became easier and this change allowed the project to significantly expand its scope with courses offered at a state university as well as educational foundation partners in several areas in-country. As the project developed and morphed as a result of the contextual changes, so did the target beneficiaries. Originally designed for the capacity-building of community based organisations, students in the later years increasingly came from varied backgrounds and levels of experience including academics, business people, youth activists and aid organisations. This change in beneficiaries necessitated a restructuring of the program delivery framework as well as teaching materials and assessment criteria.

As with the many donor-funded development projects, mainstreaming after the initial funding cycle was an issue. In order to ensure longevity and sustainability, a restructuring of the costs and delivery partners was necessary year four onwards. Currently, the program is primarily delivered to community youth activists who are part of Myanmar Community Academies Programme (MCAP) which aims to empower young adults with skills to develop civil society through education. Differences in organisational culture between academia and civil society took time to overcome. This was further complicated by the fact that the backgrounds of the key figures in the management of the project from the various partners was so different. Issues around project planning, deadlines, monitoring and quality assurance frameworks all had to be ironed out and implemented in an efficient and effective way. Lastly, overcoming the reputational risk for an institute of higher education to engage in cross-border development work was a key initial barrier to the implementation of the project.

Keywords: Organisational Development, Change Agents, Myanmar, Empowerment, Capacity Building
The Role of Community in Rejuvenating Kampung Lodan’s Extended Domestic Space in response to Jakarta’s CAP Program

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Abstract

Since 1998 reforms, words such as ‘resident’, ‘community’, ‘participant’ empowerment and bottom-up design as a sustainable design approach have become jargons to promote a democratic development in Indonesia, especially in the urban context, to initiate participation in kampung. Local’s participation is important to create a fitting program to answer people’s needs and to ensure a sustainable program. In theory, participatory approach has a good intention to promote equal power between the authority and community. However, in all counter argument designed by experts, communities are rarely included during the design process. Similar attitude displayed by Indonesian government to achieve the 0 percent slums in 2019 as a covenant with UN Habitat. In fact, participatory program in Indonesia serves as a government’s platform to socialized their regulations while the community is excluded in the decision making and designing process. The end result often left out of context and unsustainable for the community.

To accomplish target of 0 percent slums, from 2018, the government of Jakarta applied the Community Action Plan (CAP) method to 16 kampungs in Jakarta which included a cluster named Kampung Anak Kali Ciliwung (KAKC) consists of 3 kampungs: Tongkol, Lodan, and Kerapu located in the Old City North Jakarta. However, due to their location, in 2015 this cluster was under a treat of forced eviction from the riverbank of Ciliwung River to create inspection road and future expansion for said river. In response to the government’s demands, people in the cluster decided to cut 5 meters off their houses followed with some changes, such as repairing the façade of their houses, building collective septic tanks, as well as reducing and recycling waste. These small changes are the continuation of a concept to reinvented KAKC as Kampung Inspeksi Wisata means kampung that guard river and heritage. The concept created by the community of KAKC in collaboration with Universitas Indonesia. The success of rejuvenating their kampungs had made KAKC now recognized as Kampung Percontohan (Pilot Kampung) by Anies Baswedan, the current governor of Jakarta. However, careless understanding of CAP as a method or process to rejuvenate kampungs had made CAP fall into a category as a merely public work project. Once again, the community is excluded in designing, workshops, and the decision-making processes. Stepping back to alienating the community of their own program will result in an ‘action plan’ with no contextual meaning, unsuitable, and unsustainable for the future.

This paper focuses on the process and involvement of residents in Kampung Lodan in a rejuvenating their extended domestic space program to serve as a design example. This program gives power of decision making to the community as well as a total participation in design process. By sampling 10 houses as a precedent for future exterior project in other kampungs, we argue that the result of our action research will give people some counter arguments against misguided practices in planning that will not include the community in the whole narrative. Our action research program embraces KAKC community as the stakeholder that will receive positive impacts from this engagement. Through this approach, action and research by participants who had interest in the environment issue will ensure a democratic model on who will produced, owned, and used the output. The 10 houses in Kampung Lodan are example; a positive approach on challenges between kampungs, urban, and government’s regulations. The long-term goal of this project is to be a benchmark for the future kampung regulation and assessment for the government in Jakarta.

Keywords: Extended domestic space, kampung rejuvenation, participatory action research, community-based participatory research
ISO 17025 with Food Safety Laboratory Practice with Community Participation for University Standards

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Abstract

Agriculture and food production is a major manufacturing sector in the country both in terms of production for domestic sales and exports to generate income in the country. Linking sector Farmers and community-based enterprises, which are key producers for the country, need to adopt standards and monitor their products. At present, the trade of agricultural products and food is complicated and many obstacles especially, the use of tax measures hygiene measures environmental measures to protect producers and consumers. While the country also has the potential to monitor the quality of its products, both quantitatively and scientifically, and the technology of analysis, testing, current unit testing, monitoring of both the public and private sectors, the capacity is not sufficient to provide fast and adequate inspection services to rapidly increase demand.

Food safety and Inspection Service Center (FOSIC) established with the approval of the governor of Kamphaengphet province with vision providing quality service with morality for the society to ensure food safety and people can live in a happy community and have sufficient life. The goal is to strengthen and meet the country’s demand for quality of agricultural and food products in the four important areas listed below.

1. Development of the ability to monitor agricultural and food products to produce quality food according to international standards to be accepted nationally and internationally. To meet the high demand in terms of the quantity of items required the inspection and the complexity of the inspection by providing fast, flexible services.
2. Extension to inspect agricultural and food products especially High-risk products and goods produced in the community as a guarantee for raw materials and processed foods. As well as the protection of consumers in the country to consume quality food throughout the chain of food consumption.
3. Enhancing national capacities in science and technology related to food safety as information for promoting trade negotiations and resolving consumer disadvantages in negotiating or fixing allegations of food quality and safety.
4. Develop a laboratory to increase the capacity of inspection services.

This paper focuses on ISO 17025 is the main standard used by testing and calibration FOSIC laboratory. There are many commonalities with the ISO 9000 (9001, 9002) standard, but ISO 17025 adds the concept of competence to the equation and it applies directly to those organizations that produce testing and calibration results. Updates to ISO 17025 have introduced greater emphasis on the responsibilities of senior management, and explicit requirements for continual improvement of the management system itself, and particularly, communication with the customer. Laboratories use ISO 17025 to implement a quality system aimed at improving their ability to consistently produce valid results. Since the standard is about competence, accreditation is simply a formal recognition of a demonstration of that competence. A prerequisite for a laboratory to become accredited is to have a documented quality management system. Regular internal audits are expected to indicate opportunities to make the test or calibration better than it was. The laboratory is also expected to keep abreast of scientific and technological advances in relevant areas.

The results found that FOSIC Laboratory have a standard of work that results in more reliable community testing, the community is confident to send samples for testing before shipment, the community is strong because it can produce quality products according to standard and help promote products to be accepted by export standards. The university has a better quality assurance evaluation score.

Keywords: ISO 17025, food safety, good laboratory practice, community-based participatory research.
Evacuation Assessment in the historic city Communities using Agent-based Simulation Focusing on the Street Obstruction Scenario

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Abstract

A historic city with a deformed grid is one of the most extreme fragile to various types of disaster hazard. Labyrinth, narrowness combine with clusters of settlement is highly vulnerable in terms of evacuation planning due to lost in orientation. These streets could easily be blocked by building debris, vehicles, and bottleneck in the street by evacuees. Moreover, buildings in the vulnerable condition in historic city is close to the narrowness streets and created higher risk in evacuation planning. Evacuation route with obstruction is caused the problems leading the need in decisive solution. The risk reduction is the part of Sustainable Development Goal especially in better urban planning and management are needed to make the world’s urban spaces more inclusive, safe, resilient and sustainable. In this study, Analysis of simulation demonstrated in different situations of obstruction. Risk magnitude of obstruction measured by its total time, time to exit and accumulated of evacuation, simultaneously. Specific assessments will propose the precise evacuation information to prioritize the proper response in evacuation strategies according to the risk in the specific community.

This paper focuses on the initial data to be implemented in the next stage. In terms of management, evacuation assessment and prioritize the risk area should be established to ensure the safety of residents and mitigate the disaster hazard. To reduce the hazard from disaster, many researchers proposed the simulation and/or predictive data to represent the actual situation, especially in urban areas. Many scenarios have been presented to analyze the complexity of evacuees and predict managerial problems. The primary objective of this assessment is to simulate the evacuation situation when determined religious places as designated evacuation place. The egress point which is the connection between building entrance and the street has been determined as evacuee origin. The religious places are determined as a destination of the evacuee. Important factor considering evacuation is an obstruction, in urban scale major obstruction is an unmovable feature that possible to create a street blockage. Thus, street blockage could be obstructed by vehicles, building rubble. This blockage added more high risk to evacuation and may cause a street blockage. These results both simulation animation and statistic focus on pinpointing the vulnerable affected by obstructions. Finally, the results of the topics will be compared and discussed in term of disaster mitigation to provided urban design guideline and/or control in obstruction issue.

Finally, in the comparative result, all scenarios shared the similar risk location, in the north-east of city and outer-rim of western part, with numbers of evacuees and a lesser number of evacuation place than other areas, traveling time to evacuation place is the highest at more than 500s. The total evacuation time (maximum time usage) in each scenario, ranged from 1) no obstruction at 682.8s, 2) Building rubble obstruction at 1073.1s, 3)vehicle obstruction at 1,404.3s and 4) Combined obstruction at 2,638.0s. In all cases, the reinvention of the religious place, Buddhist temples, has high potential and a possibility to act as evacuation place. Even the highest obstruction, combined with a vehicle on the street and building rubble obstructions, the evacuation able to be finished with no evacuee stuck in the system.

However, the risk of congestion and overcapacity derived, from the isolated of the reinvented temple as evacuation place in labyrinth area. These risks are, likewise, able to mitigate through specific strategy depend on its location and morphology.

Keywords: Risk Assessment, Evacuation, Historic city, Area-based research
Initiating collective shellfish aquaculture program in a subsistence fishing community

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Abstract

Subsistence-based fishermen in Quilitisan, Batangas Province, Philippines, are engrossed in a vicious cycle of overfishing, environmental degradation and worsening poverty. These fishermen belong to the economically, socially and politically marginalized sector in the Philippines. They reside in remote, rural communities where there is a general lack of education and each family consists of a large number of dependents. Consequently, fishing communities do not have proper organization and decision-making skills crucial for natural resource management. Worse, there are very limited alternatives to fishing, leading to overexploitation of marine resources. The resulting overfishing degrades the community’s natural resources. Diminishing supplies of wild-caught marine resources significantly reduces income from fishing. It inevitably leads to continuous overfishing, increasing poverty and further marginalization. These problems were reflected in the interview of 20 local subsistence fishermen of the small fishing community of Quilitisan, Batangas Province, Philippines. Results from this interview indicate a glaring need for basic necessities like stable income-source, potable water, education, healthcare and alternative livelihood. Also, the respondents have been experiencing a lot of challenges in their main source of income. For instance, the fishermen are forced to rely on crude fishing implements and techniques due to lack of available capital. In addition, the local government efforts to equip the fishing industry failed to make a tangible impact in their beneficiaries. These two factors hamper the productivity of local fishermen, preventing the locals from accumulating enough surplus products. Most of the time, their catch is barely enough to feed their extended families. They also noted that the landed fish catch have been dwindling over the years. To make matters worse, the Philippines is situated in the path of the infamous ‘Typhoon Alley’ of the West Pacific region. Frequent occurrence of typhoons in the region disrupts all fishing activities, leaving the fishermen with no reliable source of income. These people are forced to work in short-term and low-paying occupations such as sugar cane farm hands and construction workers. These jobs often require the residents to travel to adjacent localities and even provinces in order to make a living. The locals admitted that there are instances where they do not have the means to feed their own families. Thus, the respondents were very eager to learn new skills and knowledge. They are interested in participating in alternative livelihood training programs. Thus, it has been the objective of this initiative to develop a sustainable livelihood in the Far Eastern University partner community, Quilitisan, Batangas Province, Philippines. The study presents the marine shellfish aquaculture as an alternative livelihood to achieve the community’s conservation and development goals. The shellfish aquaculture program will serve as a sustainable income source and create a high-value alternative to wild-caught, marine animals. To support the initiative, the program includes trainings and seminars in cooperative organization, entrepreneurship and aquaculture technical skills. It will be a collaboration of the partner community members, university faculty, staff, students and alumni volunteers. Taken together, the Far Eastern University Community Extension Services (FEU-CES) strongly believes that economic and social prosperity stems from the collective effort of the university, partner community and professionals.
Social Engagement for Building Off Grid Photovoltaic Systems for Rural Community Electrification of Baan Sor-Ae, Om Koi District, Chiangmai, Thailand

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Abstract

Thai government enacted a policy to promote the development of energy security and its foundation into rural area since 2007 in order to ensure the better quality of life of rural communities in remote area. The Energy Act of 2007 supports the government agencies to expand electric power into remote rural area while also concern environmental balance, customer fairness and renewal energy. However, the government’s operation lacks of progress and continuity. The mountainous terrain of Northern Thailand and the disperse of the village settlements inside the National Forest Reserve prove to be too difficult for the expansion of cable-wired electrical energy system. The low demand for energy in rural households and fluctuation of usage in the evening made the investment for wired system infeasible. The freestanding solar house became the most suitable solution for generating clean energy in rural Thailand. Various government agencies, between 2004 to 2005, installed solar houses in the highland villages in Chiang Mai and set up task groups in communities for maintaining solar system and repairing basic problems. However, the field research by King Mongkut’s University of Technology Thonburi in Om Koi District over past decade found that most villagers still lacked of technical skills and management causing the failure of solar systems.

The key success in rural development is to building capacity of local community to have stable work and sustainable living in locality. Clean electrical energy is one of the factors supporting social and economic development. It provides better living condition, more reliable communication and longer working period with less consumption of fossil fuel. However, most of off-grid solar energy system in rural area became malfunction a few years after its inauguration due to the lack of maintenance system in local level and shortage of supply for equipment in the country due to the inconsistency of the government policies to support solar energy industry.

In 2015, collaborative team of Rajamangala University of Technology Lanna (RMUTL) and King Mongkut’s University of Technology Thonburi (KMUTT) initiated clean energy system for the Informal and Non-formal Education Center at Sor Ae Village in Om Koi District of Chiang Mai Province. The team introduced the dual system that use both Pico hydro turbine and solar cells to generate electricity. The volunteer teachers at the Non-Formal Education Center became leaders to organize community to construct and maintain micro dam, turbine and water channel while also looked after solar power system. The researchers regularly visited Sor Ae Village for assisting the volunteer teachers. The team gradually began to engage with community to train them for knowledge of electrical system. Within 2 years, 6 villagers became semi-professional electricians and could maintain solar electrification system at Non-Formal Education Center. The team also trained approximately 10 electricians in nearby villages that already possessed access to electricity.

With the network of semi-professional electricians in the area, the researchers can assure that the villagers can repair and maintain larger power generating system for the entire village. Therefore, the research team can secure enough funding for building the system at the end of 2017. However, the villagers also need to learn how to manage and maintain the system in the future without regular assistance from the expert team. This article discusses the solution in engaging community to participate in both the technical maintenance and financial management for off-grid Photovoltaic Electrification system. Moreover, this research paper also explores the methods that researchers and the village community will collaborate to formulate the co-operative framework of management to generate sufficient sinking fund for replacement of the system equipment in the future and participate in municipality council for local government support. If the village of Sor Ae can sustainably manage this solar electrification system as a self -reliant community enterprise, it can be the successful model for other highland communities to operate independent and clean energy system for better environmental friendly and rural development projects.

Key words: Off-Grid Photovoltaic Electrification System, Solar Energy, Om Koi District, Co-operative framework, Highland Community, Social Engagement

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Quality Improvement of Toba Samosir Regional Souvenir Products Based on Commodification of Heritage in Order to Support Lake Toba as a National Tourism Strategic Area (KSPN)

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Abstract

The project was started as part of a program to support the Central Government regarding National Tourism strategic areas (KSPN). The location of the project was held at Lake Toba, Indonesia which is included into one of the strategic areas. Lake Toba is considered as an area that has the main function of tourism or has the potential for national tourism development which has an important influence in one or more aspects, such as economic, social and cultural growth, empowerment of natural resources, and environmental carrying capacity.

One impetus for the development of tourism industry is certainly very concerned with the role of the creative economy. The creative economy and the tourism sector are two things that are mutually influential and can synergize if managed properly.

Creative economy is inseparable from how the role of the community that can develop their ideas and creativity is based on the characteristics of culture and local identities that contain values. One example of the utilization of cultural heritage for the benefit of the creative economy is very promising in the context of the development of cultural values and the economy of a community. In addition, a cultural heritage with cultural value, history, economy, and collective memory has a vital aspect in the development process. Utilization of cultural heritage for regional development and economic improvement is known with the term commodification of heritage. In simple terms, commodification can be interpreted as a process that makes cultural heritage a product or commodity for commercial purposes (La Salle, 2014: 1). The use of cultural heritage as a tourism commodity also helps preserve the culture and traditions of the local people and avoid the extinction of the culture.

A team of Researchers from the Department of Archaeology – Universitas Indonesia has been conducting research on traditional Batak houses in 2016-2017. The results of this study indicate that there are differences in the form of ornamental and ornamental variations in each traditional Batak house. Because the ornaments found are varied and have different characteristics to each other so it is not redundant if then the ornaments can be applied in the design of a wide range of products souvenirs that became the hallmark of Batak culture. Souvenir craftsmen tried developing motif and the characteristic ornament that can be used as Batak cultural identity.

The program stages have been carried out, including: (1) Socialization and Dissemination of Research Results, dissemination of research results of the UI team in 2016 and 2017, related to traditional Batak house ornaments, with the research title "Batak House as the Embodiment of Cultural Identity". From the results, it is obtained about 57 Batak Toba buildings that are successfully researched and recorded which includes 29 houses and 28 sopo located around 14 villages in the district of Toba Samosir. Participants present at this activity consists of 19 perpetrators of SMEC (Small Medium Enterprises) around the region of Balige, North Sumatra; (2) the production of souvenirs, At this stage, the activities carried out were producing various varied dummy souvenir products by the first partner, namely PT. Ratio Seri Perdana. This activity aims to make product benchmarking to be a measure of quality that is highly competitive. These products will be used as a model in the next activity; and (3) Mentoring Group of SMALL MEDIUM ENTERPRISES, at this stage, an activity that took place was the accompaniment to create product souvenirs in the form workshop facilitated by the partners, namely Museum TB Silalahi.

This program has a fundamental purpose as the development of the local economy through local products with strong competitiveness. On the other hand, the Effort to develop the craft souvenir-based commodifying heritage is not solely oriented to economic interests alone but also as an effort to preserve the work culture of their ancestors as well as maintaining identity and community identity as the Batak culture.

Keywords: commodifying heritage, creative economy, souvenir, small medium enterprise, community engagement.
Health Service Network Analysis: The Case Study of CMU Craniofacial One Stop Service Center

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Abstract

Basic Health Service is one service that governments provide to their people. In Thailand, public healthcare face with insufficient resources, i.e. doctors, nurses, technicians, supporting-staffs, and equipment. In addition, communications among departments in health service network and internal operations are multi-level and complicate. This study aims to analyze the craniofacial service of the upper northern region of Thailand. The center of this service is located at Maharaj Nakorn Chiang Mai Hospital under the Faculty of Medicine, Chiang Mai University. To serve craniofacial patients, the process is intersectoral and interagency coordination. Patient-flows are controlled by information-flows passing many departments and multi-organization. The one stop service center for craniofacial service was initiated to facilitate mainly on information-flows to support patient-flows with in the upper northern region of Thailand. The scope of this study focuses on Maharaj Nakorn Chiang Mai Hospital and networking hospital. The results of this study presented both patients and information flows within the network. Critical points and operations in the network were identified. Further tasks were to propose solutions for improving the service at this center in order to bring better healthcare service to the cleft lip and palate community. Not only the improvement in term of logistics cost and time is considered, but the effectiveness of the treatment is also enhanced.

Keywords: health service, intersectoral, interagency, coordination, network analysis, patient flows, information flows
Community Impact Assessment from Economy Steamed Mushrooms System at PONGYANGKHOK Village

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Abstract
The result of the survey of energy use in the mushroom process in the PONGYANGKHOK Village. The energy consumption of the 20 members in Ban THUNGBOPAEN mushroom occupational community enterprise. The energy consumption are 150 kilograms of solid fuel (firewood) per 300 mushroom lumps which one mushroom-growing house can grow 4,000 mushrooms and one member has average 5 mushroom-growing houses. The total amount of solid fuel (firewood) consumption in this community is 65,000 kilograms or 65 tons per once mushroom cultivation. Each member will use the house on an average of 3 times a year which directly affects the community, both economically, socially and environmentally.

The issue has become a source of community based research since 2013 until now, contribute to the involvement of knowledge between the community and academics in the creation and development of inventions and innovations. Appear as a Single Pass, Double Pass and Trible Pass mushroom steamer. The use of integrated conditions due to the lack of solid fuel (firewood) of the community as a problem for design and construction a combined steam generator with biomass and LPG. While the awakening of the community to the learning process leads to the adaptation of the group to its own innovation in the name “D.I.Y. Boiler in THUNGBOPAEN Style”. This situation creates economic impact by reducing more than 50% the cost of using solid fuel (firewood) and social impact by creating better life and sustainable growth together in PONGYANGKHOK Village. And reduce more than 50% of smog due to burning solid fuel (firewood) in the steamed mushroom culture process.

Keywords: community impact assessment, economy steamed mushrooms system
Rising to the Challenge of SDGs in Asia through University-Community Engagement

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Abstract

Thailand under the circumstances of globalization has got an influence from outside the country rapidly. Not only does it expand to societies of urban areas but also to communities in remote areas. Over time problematic situations have developed and have not stopped. While the original problems have not been solved and have been more complex, they have been linked to new problems continuously. In particular, the inequality between urban and rural areas have expanded. Sob Kong sub-district, Omkoi district, Chiang Mai province is considered a remote area. Most of the population is the Sgaw Karen people who are low living standard and live on a mountainous area. The density of population is sparse. As a result, government services are difficult to access and the development has been delayed. People lack of the opportunities to access to resources of government services in almost every aspect, such as education, profession/economy, healthcare, social, culture, natural resources, and environment. The problems have been prolonged and the gaps have grown rapidly.

This project implementation to enhance and improve the quality of life of people in Omkoi district, Chiangmai Province is a collaborative effort between the communities in remote areas and the various sectors based on the Area Based Approach. Also it is to bring out the potential strengths of each agency to work together based on a multi-disciplinary approach by using information and knowledge to lead to solutions and by using the principles of the work, "Understanding, Accessing and Co-Developing” of King Rama IX is the most important way to solve the problems. Hence, they can achieve a self-reliant approach.

The processes of the project implementation can be divided into three phases; creating a participatory mechanism of community and an acceptance in terms of technology transfer, the technology transfer that is appropriate to the context of the community and the follow-up process on the implementation. Work processes have a focus on the technology transfer of knowledge from a research on renewable energy and on forest utilization that can be beneficial to the community through academic services and social engagement as a tool for the community to access quality services on the sufficient way. People have been supported by the installation of DC12 V solar power system or household light in 4 villages, 200 households. People can apply knowledge of forest utilization by using local plants as a natural dye and herbs. Moreover, there is cooperation from the volunteer network to build new school buildings for the needy community, one building each year.

The achievement of the implementation can meet the needs of the community to access development and quality service. People can use the knowledge and the technology for self-development to create skills in adaptation to survive in the present context knowingly and their living conditions have been improved as well. The 4 communities have had solar powered system in every household along with a mechanism of maintenance by using community participation. People have skills in using local plants and herbs to make products for self-reliance, to earn extra income and to get basic healthcare services. In terms of education, new school buildings and appropriate media are provided by the cooperation of volunteers. Furthermore, it leads to decrease the gap between urban and rural areas concretely and to create trust between villagers, the working group of the project implementation and the volunteer network that work together continuously. The related agencies have supported and facilitated to create collaboration between agencies and to support the community in remote areas to gain strength. Therefore, people can enhance a good quality of life and can create self-reliance to achieving sustainability.

Keywords: Technology transfer, Academic service for society, Self-reliance, Development of good quality of life, Sustainable development
Free Lending Home Incubator as a Community Engagement for All

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Abstract
Since long time, people have been witnessing a mismanagement in our health care’s system. Indonesian babies’ tragic death is one of the evidence. Two of three cases occurred in every 24 hours. But something has to be asked, “Were they all merely about health issues?” There are varied hardships in urban and rural areas as well: expensive charge; beyond the reach of accessibility; complicated and tricky shipping across the islands; and so on. Producing in dozen unit monthly, our portable small home-incubator with 13.5 kg only and 50 Watts electrical power consumption, help a lot premature baby especially those who have financial problem due to the expensive charge in NICU facility at the hospital. Moreover, our collaborations with small-medium enterprises (SMEs) on the whole process of production maintaining the good quality of product by implementing a TQM (Total Quality Management) system. The policy is to make a cooperation with health and care foundation, community, or institution. And volunteer agents are the primary key of success to our activity by carrying out the roles as the followings: covering the production cost; accompanying and coming after the incubator; not turning the equipment to earnings; doing the maintenance. As the result, from the year 2012 to 2018 with the assistance of the volunteer agents, there were more than 2000 babies have already been saved, over 68 cities in 24 provinces all over the country. Being the mastermind of the activity, our team’s role does matter enormously. For instance, the development as well as the socio-technopreneurship program continues with more medical-equipment such as phototherapy, infant-warmer and others. Not to mention we are to choose the right equipment (both material and component) and enter the design along with construction for the manufacture. Also, we intend the next product to reach small clinic and remote health-center in the village and rural area. Thus means the expansion for the higher aim in this prospering work.

Keywords: Home Incubator; Community Engagement; Premature Babies; Volunteer Agents; Health; Local Wisdom
Key factors for achieving Social Engagement in Community Development of Highland Villages: Case Studies of Mon Ngor, Mueang Kai, Kai Noi and Thung Luang Villages of Chiang Mai, Thailand

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Abstract

This article is an investigation on the ongoing social engagement projects that research team (of Rajamangala University of Technology Lanna (RMUTL) and King Mongkut’s University of Technology Thonburi (KMUTT) Collaborative Center for Royal Project Foundation and Activities) has worked for over 4 years. The research team began to engage with the villages of Mon Ngor, Mueang Kai and Kai Noi in Mae Taeng District for developing local produce and services for tourism business in 2014. Most of the highland villages in the area were struggling with aging and short labor force and unstable income from agricultural work. Their oversupply produces in agriculture became waste and their offspring left villages for higher education and professional work in urban area. The researcher assisted local community for developing new products from leftover produces, designing package and running small enterprises within the area. The research team applied 7-step method for engaging with community as followed; 1.) conducting intensive field work with community, 2.) identifying natural leaders or change agents in community, 3.) analyzing capacity of change agents and communities, 4.) identifying advantages of the areas, 5.) developing and transferring knowledge to other generations and different occupations in the area, and 7.) conducting self-development thus regenerating new ideas and methods. After 2 years, the villagers at Mon Ngor could develop small businesses completely processing local Arabica coffee from fresh beans in their plantation to roasted coffee and serving tourists local cuisine from fresh produces of their backyard garden. As a major tourist destination in the neighborhood, the tea plantation worked with group of housewives in Mueang Kai Village developed complete package of tea and snacks processed from local produces. The weaving group at Kai Noi Village could expand weaving skills for new materials, modernize their basketry products and participate in modern art exhibitions both in national and international levels. The crafts master of Koi Noi became resource person in locality to develop skill of craftsmanship for other villagers and in the northern region. The villagers of Thung Luang in Mae Wang District were introduced to the research team in 2017. They were supported by the Royal Project Foundation for growing wheat for dry florist but generating leftover wheat. Within a year, the villagers develop skill for baking cake, pumpkins pies and puff using all ingredient within the vicinity of the village therefore increasing their revenue ten folds while also reducing expense, providing social security, saving and gaining opportunities for more business outside the area. Similar development projects had been introduced to highland communities in the region by other agencies in both private and public sectors but failed to create long-term solution for communities. The farmers of 4 villages that Researchers of RMUTL-KMUTT have involved, although have common problem of aging causing labor shortage, are in different social, cultural and economic contexts. As a result, they are facing different everyday life tasks, shortage of specific necessities for continuing their lives and developing their particular skills. This paper aim to analyze and evaluate the process of engagements and communication strategies that researchers applied into each community and its natural leader(s) or change agent(s). Moreover, by comparing these 4 highland communities, this paper also reveals key factors in each engaging process that contribute to the accomplishment of community and research team in developing oversupply produces and local materials into unique products that generate new jobs in neighborhood and supplementary income to community.

Keywords: Social Engagement, Highland Community, Change Agent, Supplementary Income, Weaving Crafts master
Enhancing University-Community Engagement through Community Capitals
Using Multi-Disciplinary Approach

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Abstract

Strategies for solving community problems by most Thai universities are rarely focused on community as a whole that leading to lacking knowledge integration from multiple disciplines. Result-oriented was more emphasized than the process of building community partnership. Community development framework was focused on traditional supportive approach was generally adopted for short-term benefits of a small group of community dwellers. In addition, community capitals were overlooked that causing unsustainable development.

The study was participatory action research which divided into two phases of capacity building for community engagement: internal and external engaging phases. The internal engaging phase, two volunteering organizations within Prince of Songkla University, Thailand: Faculty of Medicine vs. Arts and Cultural Center co-operated in order to foster young researchers to work for community development by using university-social engagement framework comprising four major conditions need to be developed, such as partnership, mutual benefit, scholarship /knowledge sharing, and measurable impacts. A research team was formed and knowledge sharing plan was set up. Series of the workshop on community assessment, community partnership, and knowledge management were operated. The external engaging phase, the community capitals of Bolon Don Island, a Muslim community located in Andaman ocean, Satun province, Thailand were analyzed. Three groups of community members, such as school teachers with students and village teens were identified as major agents for the community development. Focus group, observations, and field study were used in data gathering regarding the needs for promoting the growth and development of primary school children and fostering cultural value of local food in the community. Brainstorming and action planning was conducted to solve those problems and respond to their needs.

Two projects were mutually created to strengthen community action on promoting growth and development of primary school children and fostering cultural value of local food in the community. Mutual understanding between university researchers and community residents was made on nutrition for primary school children and local food culture, especially how to improve the nutritional problems and foster unique cultural values of the community. Benefits of the university and community engagement were designed. Capacity building of medical students and village teens were operated. Field studies and researches were conducted by the medical students and researchers whereas community working groups composing the guardians of 0-5-year-old children, local village health volunteers, community leaders, village teens, and school teachers were set up. Knowledge sharing has occurred in two major areas: 1) promoting growth and development in primary school children through assessing nutritional status, reinforcing child development, setting up self – hygienic living for individual child, and building up a program providing nutritious diet suitable for child development, and 2) searching for cultural food and accelerating a learning program on food culture.

The initial outcomes were claimed through three existing social movement: engagement between university faculties and change agents representing the community capitals in the underserved minority group, scientific process on understanding the situations and designing interventions for community development, and mutual plan for further development on the well-being of the community-dwellers.
Key success factors of the study were on the multi-disciplinary approach to recognizing the community capitals for sustainable development. Relevant stakeholders and change agents are significant. Obstacles on raising community awareness on their health problems and unique culture, building the partnership with community leaders, identifying stakeholders and community capitals specifically to community problems concerns, and evaluating measurable outcomes/impacts for sustainable development are major concerns for future implementation.

Keywords: university-community engagement, community capitals, multi-disciplinary
Enhancing University-Community Engagement through Multi-Disciplinary Approach

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Abstract

Strategies for solving community problems especially in the marginal area generally focus on taking control and support the community dwellers in tailor-made direction without enhancing community engagement. In addition, most measures rarely focus on the community as a whole that leading to lacking knowledge integration from multiple disciplines in order to promote sustainable development. Result-oriented was more emphasized than the process of building community partnership.

Through participatory action research, this study aimed to develop community strengthening through the multi-disciplinary approach in Pak-Ro sub-district is claimed as an underserved community in Songkhla province. The community is located in the coastally rural area of the eastern peninsula in the South of Thailand which majority of the population is rice and caged fish farmers. The social engagement scholarship framework comprising four major conditions need to be developed, such as partnership, mutual benefit, scholarship/knowledge sharing, and measurable impacts.

The study was divided into two phases of capacity building for community engagement: internal and external engaging phases. The internal engaging phase, three volunteering organizations within Prince of Songkla University, Thailand: Faculty of Veterinary Science Faculty of Law and Interdisciplinary Graduate School of Nutraceutical and Functional Food were provided granting support in order to foster young researchers to work for community development. A research team was formed and knowledge sharing plan was set up. Series of the workshop on community assessment, community partnership, and knowledge management were operated. The external engaging phase, the community partners comprise multiple parties from political, public and private sectors, especially community leaders were involved in community development for their own community. Focus group, observations, and field study were used in data gathering regarding the problems and needs of the rice and caged fish farmers. Brainstorming and action planning was conducted to solve those problems and respond to their needs.

Benefits of the university and community engagement were mutually designed. Capacity building of university students and community leaders were operated. Field studies and researches were conducted by university students whereas community learning centers supporting for rice and caged fish farming were set up by community leaders. Knowledge sharing has occurred in three major areas: organic home-grown rice farming, geographical identifications registration process, and sustainable development of cage culture fish farming. To enhance organic home-grown rice farming, comparison of soil quality, tiller period, and grain development between organic and inorganic farms were demonstrated. To raise awareness and value of geographically-registered products, a community task group was formed to transfer knowledge and prepare for application. To promote the sustainable development of cage culture fish farming, scientific process on data collection of health status and environment of fishes were created.

The initial outcomes were claimed through three existing social movement: engagement between university faculties and community leaders representing two major groups of farmers in the communities, scientific process on problems solving in farming among community leaders, and mutual plan for further development on the well-being of the community-dwellers.
Key success factors of the study were on the multi-disciplinary approach with open-mind and broad perspective members. In addition, relevant stakeholders and community leaders representing rice and caged fish farmers who are knowledgeable and experienced on community development projects were significant.

However, long-term support for forming networking among all parties is needed. Obstacles on changing community development framework from the traditional supportive approach to partnership building, identifying stakeholders and community leaders specifically to community problems/concerns, and evaluating measurable outcomes/impacts for sustainable development are major concerns for future implementation.

**Keywords:** university-community engagement, multi-disciplinary, community development
Enhancing Social Capital and Societal Learning Through Participatory Public Beach Area Development: The Implementation of Policy Networks for Strengthening Local Governance in Rayong, Thailand

Phrueksaphong Visuthduangdusdee

Abstract

This paper aims to represent the knowledge gained from the participatory research project on public beach development in the Noen Phra municipality area, Muang Rayong, Rayong, Thailand. The researchers have selected participatory action research among stakeholders in the area as a guideline for the study. The purpose is to develop public beach area, Saengchan-Suchada beach, on the basis of local resources. It also builds a network of stakeholders in the development of public beach area both public and private sector. It also aims to seek alternatives to develop public beach area through interorganizational learning and public and private partnership to establish a consensus of community development based on the social capital in local area.

The problem of this public beach is diversified in terms of issues and areas. There are problems in the environmental management, safety of tourists, illegal commercial activities and others. However, the author found that the stakeholders in the community needed to develop the beach to be a famous tourist attraction of Rayong. The vision of development is on the conservation of coastal resources, both Blue swimming crab and three kind of the forest area and also the need to develop infrastructure for exercise and cycling for the public.

As the results of the community-based research process are awareness and societal learning among stakeholders on key issues of the problems. Moreover, policy networks of development were formulated. The process has created a discussion area between the various sectors. It leads to the solution of the problem and serious consequences between the relevant agencies by mobilizing resources from stakeholders both inside and outside the community. In addition, the impact has continued after the research project ends. It has occurred in the form of several kinds of projects. For example, No-foam beach project, Sustainable municipality project by cooperation between networks such as, Noen Phra municipality, Friend of Community association, Savings bank, Bangkok Rayong hospital and partners

In this paper, the researcher proposes several mechanisms for the development of the Saengchan-Suchada beach area, such as the creation of a network for the development of Saengchan-Suchada beach area in the form of a committee, establishment of a regional development fund, collaboration in the management of beach areas between three municipalities, Rayong City municipality, Noen Phra municipality and Map Ta Phut municipality. Rayong provincial administrative organization should be centralized in a multilateral format. Moreover, preparation of local regulations for public beach management and development of infrastructure for tourism in both safety and environment is needed.

The benefits of this research can be concluded that participatory action research is a technique that used to effectively manage public sector and create social learning development in network policy to strengthen local governance. It also creates alternatives and consensus resolutions among stakeholders in the community. However, during research production, there are several challenges that need to be addressed while conducing field research. It is a limitation in the knowledge of local authorities to manage public space. Lack of ability to coordinate between neighboring local administrative organizations for joint public area management in a uniform format. In addition, the issue of sustainability of the public beach area network remains a powerful and effective management mechanism.

In conclusion, the findings of this research have gained insight into public management and contributed to policy network theory as follows: 1. “Trust” should be considered in the network as a social capital of relationship between the key actors and stakeholders. 2. An assessment in network effectiveness is one of the biggest challenges in public governance which vary in expected outcomes of the network. 3. The university or academic institutions in the local area should be placed into the network as a manager and facilitator.

Keywords: Policy networks, social capital, societal learning, local governance, participatory action research, community-based research
MommyGo Project: Rising Awareness For Public Breastfeeding Through Participatory Design

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Abstract

The World Health Organization (WHO) emphasizes the importance of breastfeeding for the foundation of their early life, and also for the babies’ future, even with such recognition, the everyday practice of breastfeeding is still poorly undertaken by the public. Oversexualized image of women’s breasts have caused a lot of difficulties for mothers trying to breastfeed openly in public space. They have to face unwanted glare and even rejection from others. In result, the condition has created a psychological barrier for mothers, and discourage them to perform direct breastfeeding while being in public spaces. Nursing rooms are generally accepted to be the solution for this issue, although as a result, nursing activities are being pushed away from the main public space, and located further in ancillary spaces. On another note, a lot of public public facilities still has not provided a proper nursing room to facilitate the needs.

Regarding to the issues, our community engagement project is trying to address the need of breastfeeding mothers in public space, especially at the outdoor public facilities. The project is an initiative from the Interior Architecture Study Program of Universitas Indonesia which is funded by the University’s Community Engagement grant, as the application from previous research on lactation spaces in 2014. Through the design of outdoor nursing space, which we call “MommyGo” pod, we try to facilitate the need for nursing in comfort. More importantly, the pod can facilitate mothers to nurse comfortably without hesitating and not having to do it far away from their main destination. The design explores the principle of portable architecture for the ease of providing more nursing spaces in public and the possibility to depend less on conventional architectural construction to provide nursing space. We chose unique form and bold graphics for the pod to make it standout from its surroundings, thus, making it Recognizable from afar.

This project uses participatory design approach which involved local breastfeeding mother’s community. Mothers were involved in the initial design process and give their feedbacks on the final design. We also collaborate with the operator of a public zoo in Jakarta, where the design prototype will be placed. The zoo is chosen to give the project a specific outdoor context and real constraint for the development of the prototype. Furthermore, significant number of zoo visitors are young families with babies, which makes the need for nursing space become apparent. The biggest challenge we met in this project is to fulfill mothers’ aspiration for a comfortable nursing space within a compact portable structure and limited budget.

Another important objective of this project is to utilize the MommyGo pod as a campaign strategy for better public awareness on the importance of breastfeeding. The campaign involves an event with the breastfeeding community and the use of several social media platforms to socialize the event to the public. By placing the pods in a strategic location within the zoo, the public can be more aware and respectful of the activity. In the future, we hope that the zoo operator and the municipal government will support and continue the ideas to widespread in more locations. Furthermore, we hope the initiative will have impact on policies for breastfeeding mothers. The MommyGo pod which has just installed recently inside the zoo will be observed frequently and its performance will be evaluated for further development of the design. Our preliminary findings after the installation show that mothers assessed the pod through its materials, cleanliness and situation of the surrounding, before deciding to use the facility. Many mothers are keen to use it, but few are reluctant because it cannot contain more family members inside, due to its small capacity.

Keywords: Breastfeeding, Nursing Mothers, Portable Architecture, Public Space, Participatory Design
Public participation in the transboundary hydropower dam development in the Lower Mekong Basin (LMB): the case of Thai NGOs and the Xayaburi hydropower dam

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Abstract
Since the early 21st century, Thailand has shifted hydropower dam construction to its neighbouring countries in the Lower Mekong Basin (LMB), especially Laos and Myanmar. Although the Mekong hydropower dam projects can generate energy supply to Thailand, the projects could bring transboundary impacts on local communities across the Mekong basin. NGOs and civil society have called for the participatory mechanisms which can address the transboundary impacts caused by the Mekong hydropower development. However, the participatory mechanisms existing in the LMB, both at the regional and national level, are criticized as ineffective to manage the transboundary impacts of hydropower development, and to promote meaningful public participation in the hydropower policy and process. Thai NGOs have stepped in to advocate for public participation in the hydropower’s decision-making process in the LMB. The previous literature on NGO advocacy in the Mekong context tends to focus on Thai NGOs and their anti-dam advocacy in Thailand, particularly the anti-Pak Mun dam. The studies in this field have focused less on Thai NGO advocacy against the hydropower dam construction beyond Thai boundary. Therefore, this paper aims to fill this gap by examining advocacy strategies used by Thai NGOs to advocate for public participation in the new context where Thailand’s hydropower development has shifted toward neighbouring countries. The Xayaburi dam project being built in Laos on the Lower Mekong mainstream is used as the case analysis for this study. The qualitative interview was conducted to collect data from NGOs, state officials, academics and other civil society actors involving in the anti-dam campaign. The data was analysed by using thematic analysis method. The study finds that Thai NGOs and their alliances adopt both confrontational strategies and persuasive activities to advocate for public participation in the Mekong hydropower policy. Although anti-dam activism by Thai NGOs and their anti-dam alliances was unable to force the pro-dam decision-makers to cancel the dam construction, their anti-dam activism has brought public scrutiny to the roles of public and private pro-dam actors involved in developing and financing hydropower development in the LMB. This public scrutiny has put pressure on the pro-dam decision-makers to address the major concerns raised by Thai NGOs and their alliances over the adverse impacts of the hydropower dam-whether through conducting the study of the dam impacts, spending millions of dollars to redesign the dam project to mitigate the dam impacts and seeking more sustainable energy options to meet future energy demand. The on-going pressure has resulted in the shifts in the decision and behaviour of the pro-dam decision-makers which could lead to a possibly more sustainable hydropower development in the Mekong region.

Key words: Hydropower Dam Development, Lower Mekong Basin, Public Participation, Advocacy Strategies
Evaluating the School Feeding Programs in the Philippines

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Abstract

Absenteeism due to hunger is one of the associated factors in poor academic performance of children in the Philippines. In response to this, several school feeding programs have been initiated in the Philippines by the Department of Education (DepEd) through its School-Based Feeding Program (SBFP), the Department of Social Work and Development (DSWD) through its Supplemental Feeding Program (SFP), and non-governmental organizations such as the Ateneo Center for Educational Development (ACED) through the Blueplate for Better Learning feeding program and Gawad Kalinga (GK) through Kusina ng Kalinga. These programs primarily aim to improve the nutritional status of children classified as severely wasted and wasted, increase their classroom attendance, and alleviate short-term hunger in public schools in the Philippines. The ACED Blueplate is also a template-building initiative which seeks to develop a sustainable, replicable, and cost-effective large-scale school feeding model. To this end, they developed and introduced what we refer to as the ACED Blueplate Centralized Kitchen (ABCK) model, which is a template for large-scale school feeding. The ABCK model has been implemented by ACED and GK in more than 20 communities in the Philippines. The largest and most mature implementations to date are the municipality-, city-, and provincial-wide feeding programs in the Municipality of Mercedes, Valenzuela City, and Compostela Valley Province, respectively. These three sites currently provide nutritious lunches to a total of around 30,000 students every day. Furthermore, these implementations of the ABCK model are fully funded by the LGUs, DepEd and DSWD resulting in a unique inter-sectoral collaboration.

In 2016, the research team approached ACED and GK with the aim to do comprehensive impact and process evaluations of the ABCK model and its implementations all over the Philippines. The main goals of this comprehensive evaluation are to scientifically assess the impacts and operations of the programs and to establish the role of government policies and community participation in their implementation. Externalities such as benefits to local farmers and beneficiaries’ behavioral changes could give valuable insights and must be identified as well. The research team is composed of researchers in mathematics, statistics, economics, operations management, sociology, and nutrition and dietetics. Given the interdisciplinary composition of the team, we employ both quantitative and qualitative research methodologies. Data gathering tools include key informant interviews, focus group discussions, direct kitchen observations, household survey, and 24-hour food recall, as well as, secondary data analysis.

The study has promising impact in the areas of public education reform, health systems development, and sustainability in both local and national contexts. Evaluation of an innovative school-based program such as the ABCK template will not only lead to the program’s enhancement, but will have significant contributions to the enhancement and sustainability of other school-based interventions which seek to address the interconnected but urgent need for child nutrition and health, basic education, and hunger alleviation.

A supply chain analysis of the ABCK model reveals that the implementation is effective and efficient, and most importantly, sustainable given the strong political support, policy environment, and community support for the program. However, there is a need to improve its data collection and management for monitoring and evaluation. To analyse the energy and nutrients (protein, iron, vitamin A) intake and adequacy of 334 randomly selected school feeding beneficiaries (undernourished) and non-beneficiaries (normal), we employed repeated 24-Hour Food Recall. Results shows that after 120 days of school feeding there is no significant difference between the mean energy and nutrient intake and adequacy of beneficiaries and non-beneficiaries, regardless of gender. This means that the undernourished schoolchildren were able to catch up with the non-beneficiaries in terms of calorie and nutrients intake and adequacy.

Keywords: malnutrition, child health, school feeding program, impact evaluation, process evaluation
Developing the system and provincial mechanism for early childhood development

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Abstract

In promoting development and improvement of education and care services for young children on a provincial level, the most effective approach is one based on the engagement and integration of all parties, sectors and relevant units for collective operation and establishment of objectives. The aim of this project is to build and strengthen the collaborative effort between local and provincial sections, which requires the implementation of a reliable and thorough database system to aid supervision, monitoring and evaluation situations with identification any complications which may occur regarding situations in order to perform the necessary modifications and ensure continued, effective implementation of the project. In Chiang Mai, a process has been developed to help further development, promotion, and improvement of standard of quality of care and education for young children on a provincial level, based on eight initiatives: (1) increase awareness and motivation of unit representatives operating on a provincial level; (2) forge partnerships within civil and public sectors; (3) strive towards development of strategies and action plans for early childhood development on a national level; (4) consideration and development of proposals on a provincial level, requirements regarding co-ordination between parties, and analysis of operational strategies and objectives; (5) development of learning centres; (6) expansion of early childhood development models; (7) monitor, evaluate, and supplement progress of operations; (8) summarize and evaluate results and outcomes for the deduction and establishment of guidelines for development within the area. Emphasis is placed on the inclusion and participation of local government organization, teachers, parents, primary healthcare service staffs, and community leaders, involved with the care of young children in the area, for participation all of the process.

The Early Childhood Development Promotion Sub-Committee is the primarily responsible for district and provincial level regulation, administration, organization, development of methods for gathering information regarding issues, situations, and requirements of those involved with early childhood development. Development of database systems, collection of information regarding social capital and community potential, exchange of data and information between parties. The aim of this project is to build and strengthen the collaborative effort between local and provincial sections, which requires the implementation of a reliable and thorough database system to aid supervision, monitoring and evaluation situations with identification any complications which may occur regarding situations in order to perform the necessary modifications and ensure continued, effective implementation of the project. The result showed that development of provincial level focus on five systems including management system, environmental system, educational system, health system, and collaboration between every sectors which working about early childhood. Several factors are conducive to success, however: universal realization and recognition of the importance of early childhood development, facilitation of collaboration and collective deliberation, formation and integration of a provincial task group.

Keywords: early childhood development, provincial level, participation

Tentative Book of Abstracts
Increasing the sense of self-worth in the elderly through participation in community events that transmit local wisdom about food to younger generations in Lampang province, Thailand

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Abstract

Elderly members of the community should be considered valuable human resources due to their extensive knowledge of local wisdom on topics such as local food and traditional healthcare, and if the elderly are given a chance to participate in the development of local wisdom regarding traditional food and to pass their knowledge of this on to younger generations, this might lead to their feeling a raised sense of self-worth. This research thus investigated the effects of providing the elderly with an opportunity to participate in the development of local wisdom and then to assist in passing this knowledge (in particular that which relates to local foods) on to younger generations. The research evaluated how far this improved the sense of self-worth experienced by the elderly, raised their self-reliance and increased feelings of wellbeing and optimism. Also, the positive relationship between the elderly and the young could help to build feelings of intimacy and affection between the generations. In addition to this, the research looked at how relations between the elderly and the young may be positively affected by such a move and it is hoped that projects of this kind will build feelings of intimacy and affection between the generations, that the transmission of local wisdom will be established on a more stable and secure basis, and that communities will pay more attention to providing care for the elderly.

This research utilized a participatory action research methodology. Participants in the research came from Mae San sub-district, Ban Pao sub-district, Ko Kha sub-district, and the Jae Hom Sub-district Health Promoting Hospital and included 120 village health volunteer leaders, 120 young people, and 280 elderly, who were recruited to receive training in healthcare for the elderly, the use of technology to communicate with the elderly, dietary advice on the use of local foods to improve health, gathering and collating information on local wisdom as it relates to food, and developing diets for the elderly to help improve their health.

The results of the research show that life satisfaction levels of the elderly in the four sub-districts of Jae Hom, Mae San, Ko Kha and Ban Pao (all in Lampang province) were at the normal levels of, respectively, 33.44, 32.79, 32.84 and 33.14. The 20 elderly experts reported that they were highly gratified with the project and were very happy that the young participants were interested in learning about local foodstuffs and that they helped to create new products for the community. The latter included puffed rice crackers that could be produced without frying and herbal drinks prepared from cassumunar ginger (phlai in Thai). The research also helped the village health volunteer leaders feel more confident when educating elderly members of the community about their health and in addition, it led to the setting up of the ‘health buddy’ project in Mae San sub-district, a new way of providing ongoing healthcare to the elderly that depends on the participation of other community members. Beyond this, pushing forward the healthcare of older community members in a number of different ways helped to change community policy and to highlight the importance of sustainable development. Thus, training of the village health volunteer leaders in Ban Pao sub-district was provided in order to increase their knowledge of healthcare for the elderly and their ability to communicate this knowledge and to confidently participate in providing sustainable healthcare.
Rabies Prevention and Control: How to Deal with Community Dogs and Cats using University-Community Engagement

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Abstract

Rabies, the life-threatening, infectious disease caused by a virus belonging to the Rhabdoviridae family, remains a public health problem worldwide, including Thailand. All the warm-blood mammals can become infected and transmit the disease to humans. Recently (September 2018), 16 Thai people from 14 provinces died from rabies, and the disease causes approximately 10,000 human deaths around the world annually. Moreover, dogs are the primary species reported as positive for rabies (86.18%), followed by cats (4.56%) and other species, such as cattle and pigs (9.26%). To address this situation, the United Against Rabies collaboration has put forth a global strategic plan to end human deaths from rabies by 2030.

In Thailand, to combat the virus, Her Royal Highness Princess Chulabhorn initiated the project “Animals Free of Rabies: Humans Are Safe from the Disease” in 2016. The project is composed of eight strategies, including: (1) the surveillance, prevention, and control of rabies in animals; (2) management of the animal shelter system; (3) the surveillance, prevention, and control of rabies in humans; (4) driving rabies operations at the community level; (5) public relations; (6) rabies data integration and management; (7) tracking and evaluation; and (8) innovation development and technology transfer.

A heavy focus on the second strategy—management of the animal shelter system—involves critical activities, such as the provision of regional shelters, preparing the animal shelter standardization process, and training the shelter volunteers for performing surgical sterilizations and vaccinations in non-government facilities. Due to the limited space and number of animal shelters, the population of stray dogs and feral cats is increasing rapidly, and these animals may serve as rabies carriers. Consequently, the number of positive rabies cases in animals and humans is increasing. Some of these street dogs and cats are called “community animals,” which means that the people in the community take care of them but do not take the responsibility of an owner. To provide successful sterilizations and vaccinations in the community animals, the locals serve as the main stakeholders who catch the animals by various techniques, administer medicine to the animals after sterilization, and care for the surgical wounds.

In this project, our team provided university-community engagement through surgical sterilizations and vaccinations performed by veterinary students, veterinary practitioners, and instructor-volunteers for 200 animals (male and female community dogs and cats) in schools, temples, villages, and government offices in the district of Phutthamonthon (including the Salaya, Maha Sawat, and Klong Yong sub-districts), in the province of Nakhon Pathom, Thailand. Then, we followed both the surgical wounds and the animals’ general health one week later through cellular devices. No community animals have suffered or died from the sterilization process.

Rabies prevention and control by surgical sterilization and vaccination at the community level is a useful strategy to the extent that it saves time, eases the communication of useful and effective information before and after the process, and includes locals who possess the volunteer mind for taking care of these animals. However, further action should be...
taken soon: Community animals should be husbanded and managed in the temporary sub-district shelters, and any shelter campaign should include an adoption program.

We successfully provided surgical sterilizations and rabies vaccinations for 200 community dogs and cats using the strategy of university-community engagement. The volunteer community network was crucial to our team in achieving this goal. The outcome from these activities could be the prevention and control of the rabies virus in the district of Phutthamonthon, and this model could expand to the other areas of Thailand. Hopefully, this is a jigsaw to motivate Thailand to become a rabies-free zone by 2030, as the World Health Organization has proposed.

**Keywords:** Rabies, community animals, university-community engagement, sterilization, Phutthamonthon district
Creating Psychological Well-Being for the Elderly with Creative Basketry Design and Production based on Ergonomics Concept

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Abstract

Thailand is transforming into the complete aging society. The elderly need to adapt with the effects of aging to the physical body. The effect of aging can cause stress from illness, despondency, decrease self-esteem, and lack of hope and life goals. This project gave the importance in creating elderly psychological well-being to support the changes in physical health and transforming society. The main goal for designing the activities was to create psychological well-being for the elderly in Kued Chang Sub-district, Maetang District, Chiang Mai Province. The focus areas were daily activities, physical fitness and environment for the elderly. This project focused on the safety and freedom while working as well as the approach and recognition for adaptation. Basketry, the occupational daily life activity, was chosen as the approach to create the psychological well-being, lift self-esteem and decrease loneliness with the relationship of family and similar age group. This work used qualitative. The project objective was to transfer knowledge to the elderly regarding basketry production and creative packaging designs with ergonomics concept. The goal for the outcome was to create psychological well-being for the elderly. This project has 100 participants for participatory action research. The participants designed, planned and facilitated the activities with academics, municipality, community developer, community leader and private entrepreneur. The important activity development tools consisted of 3 methods which were 1) Community development plan and regulation from municipality organization to facilitate collaboration and community sustainability; 2) Enhancing knowledge skills with utilizing production design technology, new packaging and new pattern training workshop to increase creative design skills with a corresponding community identity; increase safe-working manner, and decrease hazard and lassitude accumulation by ergonomics; 3) Honor and awards/self-fulfillment from the new basket product, new packaging, new pattern and new orders - assist in building psychological well-being of the elderly. This research used the annual fair for the competition and exhibition of the basketry production and packaging to tourists and entrepreneurs. The psychological well-being was evaluated from questionnaires after the activities by purposive sampling from participant of the whole project. The elderly participants exhibited the same psychological well-being trend with significant. The evaluation revealed that Purpose in life, Positive relations with others and autonomy, Self-acceptance, Environmental mastery and Personal growth have the score of 95.52%, 93.79%, 93.17%, 93.14% and 92.64%, respectively. Therefore, using basketry production and packaging creative design with ergonomics could create the environment suitable for psychological well-being of the elderly.

Keywords: Psychological well-being enhancing, the elderly, production design, packaging design, ergonomics
A community engagement model targeting SDG in dependent Thai older adults: A case study from Phayao, Thailand

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Abstract

Thailand has been moving towards an ageing society since 2014 and will become a super-aged society in the next decades: Thai senior citizens will constitute over 30 percent of the population. A large number of older people and enhanced longevity may produce more health problems and self-care limitations. The Thai government, particularly the Ministry of Social Development and Human Security and the Ministry of Public Health, has been raising both national and community concerns regarding the rapid growth of ageing populations and dependency. Several policies have been launched to support older people such as Elderly Persons Act, B.E. 2546 (2003) and ministerial regulations on elders’ protection and welfare. However, sustainable development needs more consideration.

This academic service project was established by community engagement to promote caregiving volunteers in Rong-Ha community, Bantom Sub-district, so that they could assist in taking care of dependent older adults in their area of responsibility. The sustainable community development project was launched in a suburban village in Phayao Province. It comprised four steps. First, there was a gathering of stakeholders which was composed of health volunteers, community leaders, health professionals and the researchers to commence collaboration in care for dependent elders in the community. Second, a package of care for the dependent older adults in the community was developed and validated by a multidisciplinary team, including rehabilitation physicians, geriatric nurses, social workers and community health workers. The package was composed of basic knowledge and assistance procedures such as assessment tools for the elderly, basic daily living assistance, personal hygiene care and infection control precautions. Third, five voluntary caregivers were recruited by community leaders to attend a five-day training module comprising scenario discussions, elderly care simulations, demonstrations and reflections. Fourth, each trained volunteer had been assigned to assist one dependent elderly person in their community with close supervision by a registered nurse, researcher and nursing students. Feedback and refection were done after each assistance for improvement planning purposes. These processes were repeated until the supervisor ensured that the voluntary caregivers achieved their competencies in assisting the elders. Then, the volunteer could increase number of the dependent older adults to be assisted if so desired. Finally, outcomes and impacts evaluations were performed after 12 months using questionnaires, observation and reflection and focus-group techniques.

The sustainable community development project showed that the five trained caregiving volunteers reached their competencies in providing assistance to the dependent older adults in the community. They gained significantly better knowledge, attitude and assistance skills after participating in the training. One year later, there were 26 dependent older adults receiving assistance provided by the caregiving volunteers compared to only five elders at the beginning. One voluntary caregiver could provide effective assistance to as many as five or six dependent older adults. Moreover, we found that there were six new active elders who volunteered to become caregivers providing daily living assistance to the dependent older adults in their community because they perceived that caregivers enjoyed an enhanced level of life satisfaction and happiness and felt able to be part of community development in the future. Their lives were more meaningful as a voluntary caregiver. This community engagement is an example of a good practice model to sustain community development in taking care of the dependent older adults. Voluntary caregivers are significant actors in empowering and encouraging people to raise awareness of community and social responsibility to drive the national policy on long-term care for ageing people. These insights may be applied to other fields of community development project with long-term monitoring and evaluation.

Keywords: community engagement, sustainable community development, dependent older adults
Child Rearing in Skipped Generation Family in North Region of Thailand

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Abstract

The influence of grandparents on raising a child as a parent is not a new characteristic of family relationships in Thai society. Children who were reared by their grandparents might be found to have a higher chance of health problems than those who were taken care of by their parents. Skipped generation family is the type of family in which the biological parents are absent from the home for an extended period of time and the grandparents have to take care of their grandchildren. The number of skipped generation families is an increasing phenomenon in northern Thailand. This first phase of mixed method exploratory sequential design was conducted to explore the characteristics of child rearing in a skipped generation family in order to establish program for the next phase. Eleven grandparents who are the caretakers of skipped generation families and twenty-two village health volunteers who were representative of each village in Lamphun province were in-depth interviewed. An interview questionnaire guide of grandparents and village health volunteers based on literature review and three expert reviewers were developed. The interviewing guide and recording system were used to verify the data. Data were transcribed and analyzed by using content analysis.

Demographic data indicated that parents migrated from their home to work in industrialized or urban areas and left their child behind. So that grandparents were then the primary caregivers for their grandchildren. The urbanization of Thai society increases the phenomenon of parents leaving home for work and let grandparents to take care their grandchildren. In the skipped generation families at Lamphun province, grandparents raise one or more grandchildren without the support of the parents. Although the majority of primary caretakers showed a positive attitude towards the idea of providing child care for their grandchildren, they also mentioned that there is no choice and this is the grandparenting norm. They think what they are doing is for their children.

The weakness of grandparents-grandchildren relationships mainly depended on personal factors of grandparents such as unemployment and lack of knowledge and skill for caring in the skipped generation family of grandparents. Three main themes of early childhood raising by grandparents were identified (1) lack nutritional knowledge leading to an improper growth process (e.g. slow weight gain, stunted growth, and tooth decay), (2) permissive parental practices influencing child development (e.g. separation anxiety, temper tantrum, a difficult or slow to warm child, and late initiation of toilet training), and (3) a neglectful parental style which increases child health risks (e.g. picky eater, baby bottle addiction, smartphone addiction, and constipation). The qualitative data revealed that the comprehensive program for strengthening primary child caretakers in the skipped generation family is needed in order to ensure the normal growth and development of healthy early childhood in Thai children, especially in northern region. The village health volunteers who were a representative of each village and were involved in working with early childhood caring in Lamphun province confirmed all the information from caretakers. During this first phase, they also raised awareness about the lack of knowledge and skill for caring in the skipped generation family of grandparents. The increasing grandparent role of early childhood caretakers in a skipped generation family appears to be continuing. The health care providers, academic staff members from university, and government organizations in Thailand should provide child rearing programs for the grandparents about child care practice in terms of promoting growth and development, health risk prevention and protection. If the program to strengthen the parenting skills for grandparents is implemented, there will be better family care and child outcomes. For maintaining the activities and helping to implement the program, village health volunteers are key people who can support child caring in the skipped generation family of grandparents.

Keywords: early childhood care, skipped generation family, grandparents, mixed method design
Utilising Local and Global Collaboration for University-Community Engagement

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Abstract

The ultimate goal of higher education has been shifted from identity development to life-changing milepost. Each course and degree programme in the university aims to create significant learning outcomes. Not only excellence in the discipline, providing courses in higher education nowadays become committed to different purposes such as local wisdom and cultural conservation, technology and innovation enhancement, and sustainable economic development. This study examines an initiative programme for promoting the university-community engagement for Economics undergraduate students of Thaksin University, Songkhla. The programme called “Socioeconomic and Cultural Learning Programme” is a distinctive activity combining applying economic theory with fieldwork practice in selected villages together with social and cultural exchange and English language skill practice activity with foreign volunteers from around the world.

By establishing partnerships with local and international stakeholders including local volunteering organisation called VSA (Volunteering Spirit Association), local schools, temples, savings and occupational groups and agricultural learning centres, international organisations including Mladiinfo, supported by Erasmus+ programme of the European Union, this programme has potential to serve variety of academic and community engagement purposes. In order to put forward this programme, all stakeholders, permanent and new members participate the annual meeting and together plan for the monthly activities. Stakeholders exchange their inputs, goals and expected outcomes, for example, in the case of Economics programme of Thaksin University, “Socioeconomic and Cultural Learning Programme” is set for Economics undergraduate students to apply Economic theories into practice in the community with foreign volunteers. These foreign volunteers help encourage students to practice English skills to communicate to local people in social responsibility or sustainable environment awareness activities. At the beginning of the programme in 2012, communication difficulty between participants, the English barrier and the attitude of Thai students on speaking English, and culture shock were the main challenges. To tackle these issues, English camps for Thai students and the introductory seminar week regarding cultural learning and adaptation to Thai culture for foreign volunteers were formulated.

For the last six years of the implementation of this programme, there were different stakeholders in Songkhla and Phatthalung province taking part including Nongplakwa agricultural learning centre, Pa-Phayom organic farm, Kuankob primary school, Bangdan primary school, Pangkok primary school, Chana crab bank group (sustainable crab aquaculture project), Uncle Kamneung self-sufficient farm. There has been many foreign volunteers from around the world helping for this programme including Japan, Vietnam, Malaysia, Indonesia, Switzerland, France, Belgium, Netherlands, Spain, Poland, Austria, Czechia, Slovakia, Macedonia, Hungary, Mexico, and Peru. It was found that the benefit of this university-community engagement programme was satisfactory and beyond the prior expected outcomes. Students perceived different culture and socioeconomic background and got the insights from foreign volunteers. Also, they had a chance to improve their English skills. Local people, students and foreign volunteers appreciated and exchanged each other cultures and ideas. Local people transferred their local wisdom and knowledge about self-sufficient economy, permaculture and exchanged with students how to apply organic and hydroponic farming, how to manage household budget.

In conclusion, quality education in the 21st century seems to be challenging but manageable. University can be a pivotal link between local partners and global community. This programme is one example of an attempt to create education excellence focusing on transforming students to become a responsible consumption and production, raise awareness of local people to be more self-sufficient and responsible to the environment and bring together partnerships from around the world to reach the SDGs.

Keywords: University-community engagement, social responsibility, sustainable development, self-sufficiency, English skills
KEY INSIGHTS ON ENGAGING 12 PARTNER CIVIC ORGANIZATIONS IN IDENTIFYING SERVICE LEARNING OUTCOMES WITH THE ACADEME FOR EFFECTIVE TRANSFORMATIONAL PARTNERSHIPS

Jean Abigail Victoria

Abstract

People’s Organizations and Non-Government Organizations (NGOs) in the Philippines champion issues experienced by their respective sectors they represent, which contributes to pushing for policy reforms and creating sustainability projects for their communities. Forging partnerships with universities like the Ateneo de Manila University is a way for them to push advocacies and find support for their objectives in their communities. However, the complex nature of the advocacies may be difficult to be appreciated by students to gain support and meaningful projects for students to participate in.

For more than three decades, Ateneo de Manila University implemented immersion activities in various marginalized sectors through partnering with people’s organizations and NGOs. However, through the years of partnership, partner organizations were not engaged in a structured discourse on how the service learning partnerships have made an impact on students and the partners. Thus, the Office for Social Concern and Involvement implemented an annual symposium that would serve as a learning activity between implementors and stakeholders of service learning under the Praxis Program. The theme for the Second Praxis symposium held in January 2018 was “Doing Immersion Through Transformational Partnerships,” 12 people’s organizations and Non-Government Organizations, along with 11 faculty from 6 different fields of study, participated in the event. The symposium, an annual learning activity for both faculty and partner organizations, was designed to present case studies of their experiences in service learning partnerships. The topic was focused in answering key questions: what are the significant learnings, challenges, and achievements by faculty, student and a people’s organization while partnering with Ateneo de Manila University to implement immersion as an activity of service learning in their communities. A workshop was also held where participants list responses to the question: what learning outcomes in terms of personal and civic growth can students gain from community and faculty in the service learning partnerships. The intention of this exercise was to map out opportunities for students and ensure more productive activities to be designed for both students and communities. At the end of the whole symposium, the overall learnings of the participants were shared through personal testimonies in front of the plenary.

The output of the symposium provided key insights in implementing service learning by the academe and community. One insight is realization of the myriad of possible learning outcomes which open various opportunities for student engagement. Another is the identification of outcomes on personal and civic growth of students resonated with the desired outcome of the communities. Lastly, expressed difficulty in identifying outcomes on civic growth during the exercise may be further explored in designing future symposium with partner civic organizations.

This whole exercise is worth exploring further as it refines student engagements in marginalized communities. Much of the activities in the communities have been replicated but may produce little results. But engaging civil society organizations in the design and planning stage of service learning will help both parties plan out measurable and realistic activities that are aligned to their own long term plans for the communities they serve.

Keywords: Planning methodology; service learning; civic organization; Transformational Partnerships; Focus group discussion
CEFR Self-ratings among International, Chinese, and Thai Students at Payap University:

Preliminary Report

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Abstract

Payap University is a Thai university responding to globalization by expanding programs to international students in English since 2004. More recently Payap University is also admitting Chinese-speaking students to a new major in Thai language called “Thai for Communication,” as well as English, and Banking and Finance. Requirements for Thai students from the Thai part of the university to speak and study English are also being strengthened. Students at the International College are required to have a minimum TOEFL score of 61 (iBT) for admission. The minimum requirement for Chinese students to study in Thai curriculum is level 4 of PYU Intensive Thai Program. Both the International and Thai for Communication programs are largely conducted in English, even though few Chinese students or Thai instructors are native speakers of English. In this context, we surveyed students in order to understand their range of language capabilities.

In order to evaluate the linguistic resources students bring to Payap University, they were asked to do a CEFR self-evaluation across five oral and written categories. This survey tool was translated into both Chinese and Thai. This paper is a preliminary report on what we are learning about the varied language skills that Payap students bring to the Thai, International, and Chinese language programs. The preliminary results, describe varied competencies in a variety of “spoken production” skills in various languages. Particularly notable are the broad numbers of national and local languages brought from throughout Asia, even though there is no formal languages of instruction besides English and Thai. Also notable is the dominant role of English as a second language for all three groups of students.
University’s Role in National Level Volunteerism: The Experience of Universiti Kebangsaan Malaysia in Conducting Volunteer Training Program for the 29th SEA Games Kuala Lumpur 2017

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Abstract

After 16 years, Malaysia has once again hosted the South East Asian Games (SEA Games) in 2017. In line with its theme ‘Rising Together’, the 29th SEA Games was the first major sports event which held just after the launch of ASEAN Community. Therefore in the spirit of ASEAN unity through sports, Universiti Kebangsaan Malaysia (UKM) as the national university has come forward with our expertise, experience and resources to contribute towards the success of the SEA Games through a training program for the volunteers. This paper aims to share the experience of UKM in collaboration with the Ministry of Youth and Sports Malaysia conducting the training program for 13,000 volunteers for the 29th SEA Games Kuala Lumpur 2017. The volunteers played a crucial role in ensuring the daily sporting events run smoothly and involved in the pre and post-game preparations. They also served as the front-liners with the athletes, delegations, officials as well as spectators from all over ASEAN countries. Therefore the volunteers has to be prepared and equipped accordingly to carry the image and hospitality of Malaysia. The journey started in 2016 when The Ministry of Youth and Sports Malaysia has called for a bidding for training providers. UKM went through the process and was selected with the merit of comprehensiveness of the content and the campus facilities to run the program. The training program was divided into two parts, General Training and Specific Training. General Training was made compulsory for all volunteers and conducted fully by UKM. The volunteers then shall went for Specific Training conducted accordingly by each sub-committee and sport events coordinator under MASOC which the volunteers has been assigned. The General Training program focused mainly on patriotism, volunteerism, and communication skills for the volunteers. There were seven modules for this session: (i) Patriotism; (ii) Background of ASEAN and SEA Games; (iii) Effective Volunteerism; (iv) Inter-cultural Communication; (v) Communication in Challenging Situations; (vi) Grooming Professional Image and Protocol; and (viii) Managing Emergency Situation. As there were large numbers of volunteers to be trained, selected volunteers by MASOC were divided into cohorts and being called to undergo the training in UKM campus in stages across the period from December 2016 to July 2017. To address the time constraint and increase the effectiveness of the training, UKM has made the seven modules available online via Massive Online Open Courses (MOOC) platform. By utilizing the MOOC platform, volunteers could go through the modules even before they came for the 2 days 1 night training session in UKM. The impact of the training was seen during the event itself. The volunteers has contributed their time, effort and energy with passion and always appear to be excited, enthusiastic, eager and highly motivated. Their dedication was even acknowledged and applaud during the closing ceremony as well as in the media. Looking at the perspective of university - government engagement, this program has been a success in creating high impact results, minimizing costs and fast implementation in line with the National Blue Ocean Strategy. More importantly the engagement has benefited the citizen by transferring the knowledge to the volunteers and they served the country and ASEAN with the knowledge in contributing to the success of the 29th SEA Games. This program could be an example on how universities can come forward and engage with government agencies by sharing knowledge, expertise, experience and resources to reach out and benefit a large group of communities.

Keywords: SEA Games, volunteerism, university-government engagement, training.
University for Civil Society-cum-Community Engagement: Your Language My Culture – a Supplementary English Language Programme in Terengganu, Malaysia

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Abstract

As a signatory of the Agenda 2030 Sustainable Development Goals (SDGs) in 2015, the Malaysian government has committed itself towards achieving the 17 goals. The focus of this paper is on SDG#4 Quality Education through Civil Society-cum-Community Engagement. In addressing Target 4.4, language skill is identified as a required skill that is needed to increase the proportion of youth for employment, decent jobs and entrepreneurship. With English accepted as the lingua franca of a globalised communication system and the de facto language of business and international communication, the premise is that empowering youth with this language will enhance their competitiveness for lucrative employment in the public and private sectors as well as upward mobility both professionally and socially. Herein lies the problem. The state of Terengganu Darul Iman, with a population of 1.125 million people, depends on three economic sectors: oil and gas, tourism and fishing. Tourism is a people-centric industry that must be served by those with excellent interpersonal and language skills, and in Terengganu, the demand for such skilled manpower is high. The industry is dependent on school leavers to fill the demand. However, current secondary school leavers who enter the workforce in Terengganu are not equipped with the English language. Official government statistics have shown that from 2014 to 2017, the failure rate for the subject (after 11 years of schooling) is at a high rate of about 23%. This high rate is alarming as the overall performance for Terengganu (other subjects) is the highest in Malaysia. With this particular concern, a university-CSO engagement between Universiti Kebangsaan Malaysia, Sultan Mizan Royal Foundation and Terengganu State Education Department was brought to fore to solve this problem of low proficiency in English. This engagement resulted in the designing, writing and publishing of a supplementary, local culture-based reading programme in English for secondary schools in Terengganu. Developed in 2015, the three-year programme, Your Language My Culture (YLMC) has a two-pronged objective: to upgrade both English proficiency and local culture awareness. While the target of English language proficiency was based on the school syllabus, a local culture matrix based on Terengganu, highlighting its heritage, language, literature as well as values and society, was developed. This culture matrix was then mapped against a reading matrix, developed from Hess Cognitive Rigor matrix, that was inspired by Bloom’s revised taxonomy and understanding of Depth of Knowledge levels to facilitate the textbook production. The team kept the different levels of competence in mind thereby producing a differentiated curriculum while adhering to 21st Century learning principles. In its quest to meet the objectives, the YLMC programme is structured into 3 components: the materials development unit is tasked with the writing and publication of textbooks; the research unit is tasked with conducting pilot and trace studies as well as programme evaluation; and the training unit is tasked with designing a special training programme for master-trainers to pass on the new methodology to English Language teachers across the state. This paper will present the motivations and challenges that drove the engagement, in particular, the role of gatekeepers in the institution, civil society and community, as well as the importance of adhering to and mutually respecting The Stakeholder Theory of Community Engagement. A mixed-method data collection procedure was carried out to seek the effectiveness of the programme. Questionnaire survey of the students and teachers supported by classroom observations and focus group interviews were carried out. In terms of quantifiable output, there are, as of 2018, 54 secondary schools in Terengganu that are using as supplementary reading materials the three textbooks produced for Form 1, Form 2 and Form 3. The total number of students currently using the three textbooks are 29,600. The research component of the YLMC programme investigated the two main stakeholders’ (teachers and students) perceptions of the module and its effectiveness in helping improve culture awareness and English
language proficiency. Data were collected from 53 schools (85 teachers and 3,319 students) based on focus-group discussion, classroom observation and Google-survey questionnaire. Preliminary findings on performance have revealed highly positive reinforcements for both students and teachers, supporting the proposition that when students do not have to grapple with culture unawareness, English language learning is easier and more productive. Familiarity with local content knowledge facilitates the learning and use of the English language. Quantitative findings from the teacher-questionnaire reveal young English language teachers make up the highest category; hence, there is a need to inculcate local culture appreciation among these young teachers for future classroom use. However, there is no significant statistical difference between teachers’ knowledge of local culture pre- and post the use of the textbooks. This programme has produced three textbooks used as supplementary materials for teaching, and teachers have reported that the books are relevant not only for the classroom but also for their English club activities. In conclusion, a systemic University for Civil Society-cum-Community Engagement can help towards achieving SDG#4.4 specifically among the students involved in the YLMC programme in Terengganu.

**Keywords:** university-CSO engagement, supplementary English programme, local culture-based reading programme, local culture matrix
Democracy and the Active Citizen: Revising Perception

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Abstract

Democracy may be not the best system, but we cannot reach any system better than this right now. Democracy in Thailand is under the Parliamentary system and it had members of parliament elected by the people. Participation by the people is the core of democracy. At the same time people have rights and duties under this system. Being a good citizen, they have to be aware of their duties and responsibilities and care for the public interest. This will thrust the country forward and bring prosperity. It needs the support of both democracy and the good citizen.

Thailand does not have a perfect democracy, especially at the current time with Thailand under military government since the coup in 22 May 2014 at 16.30h. This followed a long conflict of political opinion across Thailand. However, Thailand does not as of September 2018 have the exact date for an election and political parties are prohibited from undertaking any political activities.

According to the Economist Intelligent Unit in 2017 Thailand’s democracy score was 4.63 out of 10. Also, its ranking dropped from 100 to 107 amongst the sampling group of 165 countries. Basically, when there has been a higher level of democracy there has been a higher level of the active citizen in the form of ‘reciprocity’. The low score and low ranking of Thai democracy are a worry to society as this can be the cause of low-level civic activity of its citizens.

This article focuses on whether the imperfect democracy can be a factor of the active or passive of citizen. The Country Model of Thai Health Promotion Foundation was used as the tool to study the characteristics of a citizen. The research studied the people at Kho Rum Sub-district of Uthaitani Province, Thailand where the people are mainly involved in agriculture; as are the majority of the Thai people. The research was conducted using a mixed method in which questionnaires were distributed to 425 residents and 25 community leaders were interviewed. The aim of the research was to determine the ranking of participation of the community in local affairs; role of the community in resolving local issues; level of community participation; honesty; cooperation; feeling of embarrassment when considering participation in undesirable activities; confidence and desire to be a good person.

The study found that the sampling group have high level of the characteristics of an active citizen with an average score of 71.14 out of 100. The international democracy indicator is, therefore, a poor indicator of the likely civic involvement of Thai citizens. This shows that even people who are in remote areas like those of the sampling group can be ‘active citizens. It also shows that whatever the political system the most important factor is the character of its citizens. They are, therefore, the key to Thailand’s growth.

According to policy advice in long term the government should promote the ‘active citizenship character” to the people as this is the fundamental to the sustainable growth.

Keywords: democracy, active citizen, identity, rural Thailand, agriculture
Abstract

Ministry of Health Malaysia disposed nearly RM 2 million (USD 446,678) worth of expired or spoil drugs and medicines over a two-year period from 2014 to 2016. Most of the medicines was returned to the government pharmacies by patients under “Return Your Medicines” program. This figure only includes patients who returned the medication to the hospital, however it is expected that this figure to be higher. In an open healthcare system in Malaysia, doctor-pharmacist hopping among patients also contributes to medication wastage, as there is overstocking of medication. Among all group of patients, chronic disease patients are on continuous medication supply and if they do not consume the medication appropriately at home, this will also lead to huge wastage of subsidies medications. It was reported that one of the main causes for medication wastage is patient non-adherence to the medication prescribed. Since significant amount of budget is allocated to purchase subsidized medication, this project is important to ensure the patients understand the impact of not taking the medication accordingly since non-adherence towards treatment will lead to significant wastage of medications, increase cost due to uncontrolled disease condition and increase risk for hospitalization. Therefore, understanding the factors which contribute to this problem is crucial especially among the lower income group whom majority received the subsidized medications. This project was conducted among the rural and urban lower income population to identify treatment related issues due to inappropriate use of medications at home, assessing their level of knowledge and perception regarding their treatment with appropriate intervention by the pharmacists.

The first part of this study involves FELDA community in the rural area of Johor. This health community project was organized by the Faculty of Pharmacy UKM and Pharmacy Students Association of UKM with the involvement of the Pharmacy Alumni of UKM, Ministry of Health Malaysia, pharmaceutical company and the FELDA community. This program consists of innovative pharmacy related services to the community such as monitoring medication among chronic disease patients via home visit, organizing health promotion activities through health screening and increasing their awareness on the safety use of medications, cosmetics, supplements, counterfeits medicines, smoking cessation, non-communicable diseases and treatments through health promotion campaigns.

Around 80 pharmacy students were involved in this project. On the first day, 40 students were divided into 10 groups and each group was led by a pharmacist either from the faculty, alumni or Ministry of Health to monitor patients on chronic disease medication via home visit. This was followed by another 40 students on the second day of the program. A total of 129 patients were visited at home and almost 40% of them were found to be non-adherence to their treatment. Around 204 issues related to their medication and treatment at home were identified with 151 issues were intervened by the pharmacists. Appropriate education was provided to the patients and follow up visit was conducted a year after the first visit and it has been found that the patients’ knowledge, perception and adherence score towards their medication improved significantly (p<0.05). Since the first project provide promising findings, this project was continued and conducted at the FELDA community in the rural area of Pahang followed by the lower income community group in the urban area of Kuala Lumpur.

This community outreach program is the way forward in instilling the awareness to the community which involves the university, associations and organization to provide significant impact to the community.

Keywords: Chronic disease patients, medications adherence, lower income population, pharmacists’ intervention, patients’ education
Social Engagement Course for Engineering Program, University of Phayao

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Abstract

Based on the core Determination Statement of University of Phayao (UP), “Wisdom for Community Empowerment”, UP is well known of encouraging and supporting research works and academic services of all schools and colleges to stand by the community and support community strengths and capacities. However, most of the projects are mainly performed by academic staffs. Engaging students in these missions has not been included in the process.

According to one of the Program Learning Outcome (PLO) of Engineering program, student should understand the impact of engineering solutions in a global, economic, environmental, and societal context. To achieve this learning outcome, students should have the experience on working with community and realize the role of engineer as a social changemaker.

To serve this goal, we designed the free elective course named “Creativity and Innovation for Community (CIC)”, first launched on January 2018, for 2nd year Engineering students funded by Startup Thailand project. The aim of this course is to 1) develop skill in design thinking process to understand root causes of social problem and solve problem creatively 2) develop students’ ability to apply knowledge and skills to solve social problem and meet social needs and 3) develop social entrepreneurial skill. In 2018, the course is also collaborated with the “One School One Success Model (OSOM)” project funded by UP to support academic staffs to engage with Phayao community and develop academic research problem from community.

In the recent course, School of Engineering, under the OSOM project and CIC course, collaborated with Jun District team and villagers in 4 pilot villages applied Pid Thong Lang Phra Royal model to find the root cause of poverty in villages and develop sustainable solution. This model is based on His Majesty King Bhumibol Adulyadej’s Guiding Principles which consists of five steps; understanding, accessibility, development, community-owned solution and sustainability. In the course students are guided to perform the human centered design process consists of 1) Understanding/Empathizing villagers 2) Define the root cause of the problem 3) generate idea to solve the problem and 4) create prototype of the solution.

Students spent four weekends to learn the process of empathizing by interviewing villagers and do the survey around the areas in the pilot villages. Tools used in this course are survey forms by Pid Thon Lang Phra and Idea Development Toolkit by School of Change maker Company. After four weeks of empathizing by interviewing villagers, students selected the problem situation from village and perform root cause analysis and idea selection in class. Students spent 4 weeks to develop engineering-based prototype for solving their selected problem. The prototypes were presented in the Social Innovation Gallery Walk day at UP. A total 72 students in the course created 17 prototypes to solve the agriculture problem in the pilot villages. Student performance were evaluated by 2 means; 1) Student in-class observation by staffs. This assessment aims to evaluate their creative thinking skills. And 2) the popular vote from Gallery walk day. This assessment aims to evaluate their communication skills.

Two prototypes were selected by Jun district officer and teaching staffs for further development. The selected prototypes are 1) soil quality detector to give information about the quality of soil, i.e., soil humidity, pH, and current amount of nutrients in soil, to help farmers in selecting appropriate fertilizer. The detector also records the location of the test sample. 2) Soil quality map for giving suggestion to farmers on how to improve the quality of soil and type of crop that are suitable for the soil in each area. These selected ideas showed that students can apply engineering or related knowledge and skill to create creative solution.

Keywords: Creativity and Innovation for Community, Social Engagement course, human centered design, One School One Success Model
Research in the age of extinctions: a field biologist’s tale from the remote islands off Central Sulawesi, Indonesia

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Abstract

Humans have unwittingly triggered the cascade of mass extinctions, and subsequently released the disastrous age of climate change on earth’s entire living sphere in ways unbeknown before. New ways for doing business is urgently needed, including for the conduct of research and realizing impacts on the ground. This modestly scaled case study from the Togian and Banggai archipelagoes illustrated how research combined with outreach may contribute to societal changes in more fundamental manners. We describe how scientific discoveries of some “lost” and new species gradually paved the way for improved recognition for traditional ecological knowledge, and eventually direct policy advocacy for sustainable use of resources. Along the way, and over the course of the last 13 years, the ethos of the indigenous people was rebuilt to the extent the local communities would take initiatives to conserve the reef and rainforest heritage, and even filled the newly established community conserved areas with the local art and knowledge. In the end though, this will give rise to doing natural history as part of participatory and inclusive science and knowledge, urgently needed to ensure the sustainability of life on earth.

Keywords: extinctions, sustainability, participatory action research, indigenous people, biodiversity, climate change
Participatory Development Process for Increasing 21st Century Skills of Future Agricultural Extentionists in Thailand

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Abstract

Such developing countries as Thailand need agricultural extensionists who play a key role in driving agricultural development of the country. To facilitate the farmers’ learning more effectively, agricultural extensionists must have 21st century critical as well as problem solving. The question is how to develop the participatory learning process for increasing 21st century skills. Accordingly, agricultural extension students are expected to be 21st century skills learners, including critical thinking, creativity and imagination, collaboration and teamwork. Century skills of the future agricultural extensionists in Thailand. This article presents lessons learned of researcher as facilitator who facilitate five groups of agricultural extension students in five semesters in 7 local schools in Umong Sub-district, Lamphum Province. Community-based research (CBR) was applied as a research methodology.

The results revealed that there were 8 steps of the participatory learning process as follow: Firstly, surveyed and identified goal of agricultural extension students through practice of data collection from them in each semester. Secondly, collected participately expected data of target groups including the director, teachers and students in Umong school as well as Umong local wisdom. Thirdly, agricultural extension students and teacher facilitated Umong students about skills selection that practice was a need of student groups. Fourthly, agricultural extension students and teacher coached Umong students for design session plan of projects. Fifthly, implementation by collaborating and working with the students and teachers as a team work to apply the action plan. Sixthly, evaluating and reflecting the learning process with Umong students, and teachers as well as agricultural extension students through each school. Seventhly, students presented result of implementation from 7 schools meeting. Finally, agricultural extension students concluded knowledge through the report writing.

Keywords: 21st century skills learning, Agricultural extension students, Community-based research
Monitoring SDG Access to Medicines Indicators in the Philippines through the WHO Pharmaceutical Situation Assessment (PSA) Surveys

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Abstract

Recognizing that many of Millennium Development Goals (MDGs) were not met, 195 countries including the Philippines adopted the Sustainable Development Goals (SDG) for 2016 to 2030, to replace MDGs. The health-specific agenda, SDG No. 3 states “Ensure healthy lives and promote well-being for all of all ages.” Specifically, target number 8 of SDG No. 3 aims to achieve universal health coverage (UHC) including financial risk protection, access to quality essential health care services & access to safe, effective quality, & affordable essential medicines and vaccines for all.

A survey was conducted in 2017 by the Ateneo de Manila University, Institute of Philippine Culture to provide inputs to the Department of Health (DOH) to come up with policies that would make medicines more accessible to the Filipinos, and monitor the SDG access to medicines in the Philippines. The WHO protocol for the Pharmaceutical Situation Assessment, used in 2009, was adopted as the methodology for this study.

Access is measured in terms of the availability and affordability of essential medicines, especially to the poor and in the public sector. Availability of prices of innovator and generic medicines at the public procurement, public sector and private sector sources were studied in the survey. Overall, 46 public health facilities, 41 private health facilities, 64 private pharmacies, four (4) health NGOs, and six (6) warehouse were included in the study.

The mean availability of originator brand and generic medicines in the public sector was 12% (compared to 8% in 2009) and 42% (27% in 2009), while in private sector it was 29% (14.7% in 2009) and 45% (20% in 2009), respectively. This indicates a huge jump in the availability in both the public and private sector outlets but more in the private sector. The overall picture indicates that generic medicines have become more available in the public and private sector outlets but more in the private sector.

In the public sector, the public procurement price, measured as Median Price Ratios was 3.33 for branded medicines and 3.63 for generic medicines. Public sector patient prices, on the other hand, decreased significantly from 30.23 (2009) to 3.52 for innovator brands, and from 9.78 (2009) to 3.31 for generic medicines.

Affordability of medicines for certain disease conditions and treatment, defined as the number of days’ wages of the lowest paid government worker needed to purchase standard treatments, are the same for lowest price generics in the public and private sector outlets. Some conditions are: adult Pneumonia [Amoxicillin] (0.2 days) and Hypertension [Captopril] (0.6 days). The affordability of lowest priced generics in the public sector improved but most conditions would still require at least half a day’s wage. In a context where many outpatient medicines are not covered by the national health insurance, and where client targeting is still an issue, price determinant can further exacerbate existing barriers to medicine access.

Keywords: Access to medicines; Pharmaceutical situation assessment; sustainable development goals; essential medicines
Development of the Driving the Public Policy Model to Health Care Management in Community

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Abstract

Enhancing all community sectors engagement strategy contributes towards driving of the public policy for health care management in community in order to solve health problem according to community’s needs and context. Concrete outcomes from community’s strengths and capacity in health care will be obviously reflected from this significant strategy. The objectives of this study were to develop the driving of the Public Policy Model to health care management in community and to document (obtain/compile) lesson learned from outcomes and impacts of model utilization. All processes consisted of; study baseline data, develop and implement the Public Policy Model to health care management in a community, evaluate and summarize the effects of using model. Data were collected from October 2015-September 2017. Study tools were developed in accordance with concept of the national health act and other tools related to national health care system. These tools were used as a guideline for community health management leading by volunteer group named “Ar-sa-pan suk: happiness sharing volunteer”. Study tools were a structure questionnaires and topic guides to be used for data of social capital, in-depth interview, focus group discussion, and satisfaction of activities relevant with the public policy model to health care management in community. The quantitative data were analysed using descriptive statistic and the qualitative data were analysed using content analysis and thematic.

The results of this research revealed that the community have mobilized social capital to support the development of the driving the Public Policy Model to health care management in community. Community have engaged in development process of Public Policy Model to holistic health care management in a community under the home visit activities from the “Ar Sa Pan Suk” or happiness sharing volunteer. The continuing activities were mainly organized by people in the community, all community sectors and researchers from faculty of nursing, Chiang Mai university, also engaged in home health care services which provided for bed-ridden and home-ridden patients, older adults and elderly, disability and disadvantaged people in a community. These process facilitated community’s learning and enhanced their knowledge management competency. The systematic lesson learned also connected to knowledge synthesis and refinement. Therefore, the strengthen of community-engaged and the collaboration networks support from all community sectors; government and non-government, inside and outside community were important for integration of the health care management with holistic approach including physical, mental, social, spiritual health. Community engaged can influence the driving of the public policy to health care management in community with concrete and sustainable.

Keywords: Public Policy Model (PPM), health care management, health care in a community, community engagement
Bridging Academic and Industry to Promote Self-Initiative of Workers and Employer for Improving Occupational Health and Safety in a Small Scale Enterprise

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Abstract

Small scale enterprises (SSEs) have a major role for national economies. They are often major employers of a nation’s workforce, but typically are underserved by occupational health and safety (OHS) policies or services in the workplace. The Thai government is making progress to develop OHS strategies and mechanisms for all community workplaces. A critical element for improving sustainable workplace OHS is to see collaboration at many levels, including the input of local academics with expertise and knowledge. The occupational health nursing master degree at Chiang Mai University, northern Thailand, has integrated field practice for students in community workplaces. The field activities have involved academic teams of students and faculty helping to improve OHS in various SSEs for 16 years. We describe the exemplar case of a brick-making factory.

Traditionally, brick-making is considered a dirty operation and workers labor under difficult conditions. The factory owner wanted to take responsibility for OHS of his workers, but was challenged by a lack of OHS technical knowledge and resources. All 16 employees were Burmese immigrants with no previous OHS training and knowledge. The widely-used International Labour Organization checklist, Working Improvement in a Small Enterprise (WISE), was introduced by the academic team to the owner, workers and some family members living at the factory. This checklist emphasizes worker and employer involvement in generating ideas, prioritizing improvements and making workplace changes. It covers both physical and social work aspects, including materials storage and handling, machine safety, work station, control of hazard sources, and welfare facilities. The WISE-Thai version was translated into Burmese, for worker identification of OHS hazards and actions to employ better work practices.

The checklist findings revealed three major concerns: unorganized work area, materials, and equipment; sanitary issues including toilets, washbasins, and living environment; and musculoskeletal complaints caused by strenuous physical workloads for extended periods, and poor working postures. The academic team discussed these findings with the employer, workers, and family members and stimulated suggestions for low-cost workplace improvements, using available local materials. Implementation plans were made with enthusiasm involving creative ideas and everyone worked together to rearrange the workplace and living accommodation, making them safer, cleaner, and helping to promote their health and wellbeing. They created some appliances using available and cheap local materials, and toilets began to be cleaned on a regular basis. Both workers and owner participated in daily stretching exercise sessions, completing a weekly self-record of stretching exercises, and documenting muscle pain scores. In this case exemplar the working and living conditions in this brick-making factory were much improved in terms of safety and health issues. Workers were highly satisfied with the workplace and accommodation improvements, and the average muscle pain scores significantly decreased over time.

In conclusion, migrant workers are considered a vulnerable workforce, and need to be empowered to improve their work situations. Workplaces need to be assessed in collaboration with both workers and employers, to enable the planning and implementation of effective measures to promote capacity development and self-initiation for a sustainable safe and healthy working environment. Any remaining OHS issues in an SSE need to be addressed, and ongoing OHS reassessment
needs to be implemented to create sustainable safe and healthy workplaces. There are many more SSEs in Thai communities and elsewhere that require replication and reevaluation of OHS assessment and action. Future collaborative research projects between academics and SSEs are also required. This will help to drive initiatives to achieve Sustainable Development Goal 8, especially Objective 8.8 to protect labor rights, and promote safe and secure working environments for all workers, including migrant workers.

**Keywords:** small scale enterprise, brick factory, WISE checklist, university industry engagement
Good Practice of Rabies Prevention in a Rural Rabies-free Community of Thailand

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Abstract

Rabies has been a veterinary and public health problem in Thailand for decades. In January 2018 many provinces across the country were announced as temporary rabies epidemic zones, especially in rural areas, but Chiang Mai was not on the list. This study aimed to look at knowledge and attitude regarding rabies and its association with rabies prevention practice in the rural population in Chiang Mai in order to provide a model for establishing rabies-free zones nationwide. A cross-sectional study was conducted in Sob Tia subdistrict during March and April 2018. The study participants were enrolled by systematic random sampling method. The study protocol, questionnaire and interview questions were ethically reviewed and approved by the Chiang Mai University Research Ethics Committee. The data were collected from 464 respondents. The overall score and the separate scores for knowledge, attitude and practice were categorized as good when the score was >80%. The results indicated that more than half of the participants (69.4%) had good practice in relation to the prevention of rabies outbreaks. The socio-demographic profiles showed that the largest proportion of respondents were females (62.3%), 50-59 years of age (31.3%) and Buddhists (97.8%). In addition, the highest proportion of respondents had attained primary education (60.1%) and worked as farmers (36.2%). Chi-square tests revealed an association between knowledge about post-exposure prophylaxis and the practice of participating in a rabies vaccination campaign or education program (p<0.001). Furthermore, a cautious attitude to family risk from rabies was significantly associated with the practice of taking immediate action on a wound at home after a suspected animal bite. Although three-quarters of the respondents had a misunderstanding about the season of the disease outbreak, and half of the participants believed that animal owners should engage more actively than other people in taking responsibility for protecting the community from rabies, there were no association between these items and the overall rabies prevention practice score. Generally, good rabies prevention practice can help in rabies elimination even in the rural communities. An education campaign which focuses on the impact issues of knowledge and attitude is one of the most effective techniques for improving practice about rabies prevention and control. The findings provide policymakers and key stakeholders in rabies epidemic zones with crucial recommendations for successful prevention and consequently for the nation to achieve the goal of zero human rabies deaths in Thailand by 2030.

Keywords: Knowledge, Attitude and Practice (KAP) survey, rabies prevention and control, rabies-free zones, rural community, Chiang Mai
A decade of fighting the lethal jellyfish health problem: lesson learnt

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Abstract

In 2008, when author started to solve the lethal jellyfish health problem in Thailand, the situation was difficult and complicated because of conflict of interest, denial of lethal jellyfish existence, misdiagnosis (led to inappropriate treatment and underreport), inappropriate traditional first aid (could lead to death), lack of effective first aid, politically and diplomatically sensitive issue, mass media attention, the negative image of Thailand among international journalists, and lack of laboratory and expert. The problem affects large population in various fields including communities, fishery, tourism, public health, marine biology, academic, and politics. Eight reported deaths during 1999-2017 were underestimated.

The initial obstacles were as follows: 1) Local community level: stakeholders were afraid that existence of lethal jellyfish and intervention would affect their business and tourism-related occupations 2) National level: the government officers either were in denial about the existing of lethal jellyfish or hesitated to involve themselves and 3) International level: perceived that Thailand ignored and concealed the problem.

Communities and stakeholders play important roles in surveillance and prevention because lethal jellyfish stings can kill people within 2-10 minutes. Thus, we developed initiative solution that included social engagement scholarship (using the capabilities of experts from universities to cooperate with the community’s knowledge), financial and human resource sharing, evidence-based management (i.e. convincing, decision-making, risk communicating, and cooperation and engagement building), mutual benefit, executing operation plans through networks, multidisciplinary organizations, using unofficial approach, and social impacts.

In the beginning, the author and epidemiologist from Ministry of Public Health (MOPH) proved the existing of lethal jellyfish. Then, they educated public and disseminated pieces of evidence to non-health personnel for further cooperation and partnership. Ad hoc toxic jellyfish surveillance was established, which became the National surveillance system. Officers from Ministry of Natural Resources and Environment (MNRE) were invited to join this steering team. Steering team established three toxic jellyfish networks, namely working, expert, and community networks. Steering team was the core member of all networks in order to conduct researches, execute strategic plans, cooperate, and expand networks.

To handle complicated and sensitive health threat with conflicts of interest, steering team patiently work and used epidemiology knowledge (Outbreak investigation, surveillance, research, evaluation, and monitoring) to gather evidence for convincing and executing strategic plans. They continuously educated, communicated, and built trust among partners and stakeholders, who gradually engaged in surveillance and prevention measures (i.e. funding, communicating the risk, and creating innovative intervention tools). Mutual benefit makes communities and stakeholder (all provinces in both coasts) engage themselves in activities. Knowledge sharing based on the context and resources availabilities enhanced sustainable and transferable.

Some outcomes impacts were as following: national surveillance system of death and injury caused by toxic jellyfish establishment; toxic jellyfish network establishment (National and international); Affirmation of lethal jellyfish envenomation in Thailand; creating educational materials, clinical practice guideline, and reference books and articles, and knowledge management; developing innovation and implementing in the risk areas (i.e. vinegar station, educational warning sign, first aid, surveillance, stringer nets); and developing prevention model of community. There has no reported death of box jellyfish stings since 2016. Reported injuries have increased lately due to increased detection and jellyfish blooms. Furthermore, the MOPH and MNRE signed a memorandum of understanding (MOU) as policy commitment. The second MOU was signed (2014–2018) after the first MOU contributed good impacts. Based on the latest situation, rapid test for early warning is needed. Thus, the author developed and tested a new technique named “vacuum sticky tape for nematocyst identification” that covered all processes (Specimen collection, specimen transferring, and nematocyst identification). Partners, stakeholders, and communities accepted technique because it was cheap, simple, durable, and easy to transfer knowledge.

Keywords: dead, jellyfish, sustainability, community-based surveillance, engagement
Local Wisdom of Using Medicinal Plants in Umong and Si Bua Ban Communities

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Abstract

Local Thais throughout Thailand have effectively used medicinal plants for treatment of diseases or disorders for a long period of time. Many remedies have been formulated and the knowledge has been continuously transferred from generation to generation. Nowadays, some local wisdom concerning herbal or medicinal plants has been gradually faded away due to the emergence of modern drugs and/or treatment methods. Recently, one of the adverse effects of using modern antibiotics was the emergence of drug resistance of many pathogens; hence, local wisdom of using medicinal plants has gained vastly attention to replace some modern drugs or enhance good health and wellness of people. Medicinal plants and their local uses in Umong community have been investigated previously. A book regarding medicinal plants, natural products and compost making in the community has been written to use as a guideline for young generations to study their valuable local knowledge. Additionally, a constructive workshop about medicinal plants, from basic to applied perspectives, was performed on school juveniles. Subsequently, the survey team has observed the types and usage of plants in Si Bua Ban community by the methods of village scholar interviewing and plant observing. There were 96 plants so far which have been generally used. Among these, the use value of Aloe vera (L.) Burm.f. was the highest following by Andrographis paniculata Ness., Chromolaena odorata (L.) R.M.King & H.Rob. and Jatropha podagrica Hook. with the use values of 1.02, 1.01, 0.75 and 0.71, respectively. Furthermore, the other plants have been used as well but in the lesser extent. The highest Informant Agreement Ratio (0.91) was on the injury group which included wounds, burns and abscesses. The Si Bua Ban community was different from the Umong community in some aspects especially in the medicinal plant point of view. No recognized group commercially manufactures medicinal plant product but for household use only. Some agricultural products have been processed for value addition and product preservation, for example, dried banana. Interestingly, some villagers are career successful on the compost making and distribution reflecting how people have concerned about green environment and organic agriculture. Unfortunately, the tendency of local medicinal plant usage is seemingly decreased and could be vanished from the community. Therefore, the local wisdom of using medicinal plants for curing both infectious and non-infectious diseases should be carefully preserved to prevent the extinction of valuable plants and treatment methods as well as to protect people from harmful pathogens existing in the community. Information gathered has been analyzed and a book described the medicinal plants and local wisdom found in Si Bua Ban community has been documented. Ultimately, a network created for communities to connect and share information about local wisdom of using medicinal plants and treatment methods will be a useful tool for conserving the valuable knowledge and tradition of Thais.

Keywords: Diabetes mellitus, Natural products, Diversity, Organic fertilizer
Prevention of noise-induced hearing loss among Malaysian school-age children: bend the willow while it is young

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Abstract

In recent years, noise-induced hearing loss (NIHL) among school-aged children has received a considerable amount of attention. The advancement of technology and the increase popularity of portable music devices had been blamed for the increase in the prevalence of NIHL among children. Noise exposure can cause deleterious effect on their academic performance even if the NIHL may only be mild. Prolong noise exposure since young has also shown to accelerate age-related hearing loss adding a more serious impact to the individual. These cumulative and permanent consequences of noise exposure can be prevented from the implementation of a hearing awareness program. In this study, we adapted the Dangerous Decibels® hearing loss prevention program to improve schoolchildren’s knowledge, attitude, and behavior towards noise and hearing loss. Dangerous Decibels® is a 50-minute interactive classroom program that educates on sound physics, hearing mechanism, how loud is too loud, the effect of hearing loss and hearing loss precautionary steps. The study was divided into two phases: the planning stage and the implementation phase. In the Planning Stage, the Universiti Kebangsaan Malaysia (UKM) engaged with the founders and several accredited faculty members of Dangerous Decibels® program from Oregon Hearing Research Centre (OHRC), United States and National University of Singapore in adapting the Dangerous Decibels® manual and materials to Malay language and in the Malaysian context. The program was later incorporated into the curriculum under the Hearing Conservation (NA 3823) course. All Year 3 Audiology UKM students were certified as the Dangerous Decibels® educator after completing a two-day workshop offered by the faculty members. In this phase, we also established a collaboration with 3M Malaysia. Through this collaboration, 3M Malaysia helped to train the UKM Audiology students on hearing protection devices as well as supply the devices to be used during the Dangerous Decibels® program. In Phase Two, the certified Dangerous Decibels® educators performed the Dangerous Decibels® program to 10-year-old primary schools students in Kuala Lumpur. The focus of this phase was to evaluate the effectiveness of the Malay version of Dangerous Decibels® program in improving the knowledge, attitude and behavior towards noise and noise-induced hearing loss. A baseline questionnaire was completed by 219 students. The 150 students received the Dangerous Decibels® classroom presentation and answered the same questionnaire immediately after the presentation. Students that served as the control group (n=69) did not receive any hearing awareness program. All students answered the questionnaire again at 3-month after baseline. Dangerous Decibels® themed badges were distributed to both study and control groups at the end of the classroom presentation as a reinforcement for peer communication between the groups. The study group exhibited a significant improvement (p<0.05) on the overall score of knowledge, behavior and attitude at the immediate post evaluation when compared to the baseline score but the score decline at 3-month post evaluation. Nonetheless, the 3-month post scores were still significantly better than the baseline scores (p<0.05). Surprisingly, a significant improvement of total scores (p<0.05) was observed in the control group at the 3-month post evaluation which could be due to peer learning effect. In conclusion, the study found that the Malay version of the Dangerous Decibels® is effective in giving a short term improvement of the schoolchildren knowledge, attitude and behavior towards noise. The smart-partnership between UKM and other universities and industry has twofold benefit, which are empowering the UKM students as advocates for hearing health and cultivating healthy hearing habits in young children to reduce prevalence of noise-induced hearing loss. Although the Dangerous Decibels® program was successful in increasing knowledge, attitude and intended behavior of the school-aged children, the long-term impact and retention of the knowledge need to be examined.

Keywords: Noise-induced hearing loss, Dangerous Decibels®, Malay, hearing conservation program, schoolchildren
Abstract

Knee Osteoarthritis is the most common cause of disability in older adults, and most patients with the condition will be managed in the community and primary care. The development of academic services for sustainable community and social development, according to policies of the university were set to be in accordance with ‘1 province, 1 university’ policy and it was applied in Srakaew and Nakorn Nayok provinces, in addition with the measure to encourage university students’ public consciousness, the needs of the community to participate in the screening of knee osteoarthritis, and the increase of self-reliance in health care for older adults with knee osteoarthritis within the community. This is a research to develop and solve social and community problems. By applying the concept of community participation, it draws the potential for the community to develop and benefit the community itself. To enable the community to participate and drive the implementation of the problem. This participatory action research was conducted to develop a community participated health promotion program among older adults with Knee osteoarthritis. The research was conducted during November 2017 –May 2018. This research was composed of two phases as follows: The first phase consisted of problem assessment and situation analysis about caring older adults with knee osteoarthritis. The second phase were focused on implementation and evaluation the program. The research instruments were the situation analysis questionnaires and the oxford knee score. Qualitative data was used content analysis and descriptive statistics was analyzed quantitative data. These results indicated that the community participated health promotion program for elderly with knee osteoarthritis including; (1) the development a natural network as promotional channels for a knee osteoarthritis screening test campaign, (2) peer leader training,(3) training course for promoting health in older adults, (4) knee osteoarthritis guidebook for older adults, (5) exercise program for older adults with knee osteoarthritis such as muscle strengthening exercises and, (6) set a club for exercise promoting campaign among older adults. In the community participated in health promotion programs examined, two hundred fifty older adults participated in a knee osteoarthritis screening test campaign, one hundred older adults participated in the training course. This results in the study indicated developed a community participated health promotion program increased positive outcome of older adults with knee osteoarthritis also revealed that their satisfaction with physical function, increasing in physical activity behavior, Lifestyle Changes for knee osteoarthritis prevention. Therefore, the community participation should be involved in effecting and sustainability, promoting health in elderly with knee osteoarthritis in the community.

Keywords: Health Promotion, older adults with Knee osteoarthritis, Community participation, participatory action research
Building journalism education in Myanmar

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Abstract

Problem: The quasi-civilian government of President Thein Sein which came to power in 2011 marked an end to decades of direct military rule in Myanmar. Since then Myanmar has undergone significant political, economic and social reforms that signaled a transition towards a liberal, capitalist democracy. Among these reforms was the relaxing of media censorship.

As the press experienced greater freedoms, mass media establishments – print, broadcast and multimedia - began to proliferate, exacerbating an already existing deficit in professional journalists within the industry. Findings of a study of media training needs pointed out the lack of experienced journalists in Myanmar.

Against this backdrop, only one educational institution offered a degree in mass media: the National Management College which offers a four-year bachelor’s program in journalism.

Description of the project: In response to this situation the Ateneo de Manila University, a private, Catholic university in the Philippines, offered its services to a project seeking to develop an undergraduate four-year journalism degree program at the Myanmar Institute of Theology (MIT). Ateneo offers a master’s degree in journalism that is designed for Asian journalists. This master’s program has enabled Ateneo to enhance its capability in journalism training and education for learners at all levels, and for an Asian student body.

The development of an undergraduate journalism program at MIT was initiated in 2014 by the University Boards for Christian Higher Education (UBCHEA). Through Ateneo’s UBCHEA representative, Ateneo was tapped to help. UBCHEA has provided MIT a grant that sought to establish a journalism department at MIT that would offer a bachelor’s program major in journalism. The ultimate goal of the journalism program is to help build a free and responsible press in the country.

The plan was to implement the project in stages. In a first stage, the undergraduate journalism program was to be offered as a block of four electives in a bachelor’s degree program, for instance, management, English, social sciences, music, religion. Once this is achieved, other journalism courses will be developed until all the courses needed to offer a full bachelor’s program have been created. This was to take place within four years.

For two intensive years, Ateneo offered the following services: expertise in curriculum development, actual teaching of courses, training of teachers, provision of library resources, networking and program evaluation. As the project progressed, two other universities – one from Hong Kong and the other from the US – became involved in the program. The representatives evolved into an informal group which provided services requested or needed by MIT. Moreover, a German development agency deployed a curriculum consultant.

As of this writing, the following has been achieved: a curriculum for the program has been developed; faculty members have been recruited from among local professionals; the program’s lead person has obtained experiential training in project management; the number of students taking the program continues to increase each year.

Work continues. The end goal – a full blown bachelor’s program in journalism – may still take a few years. In the meantime a number of hurdles involving logistical issues as well as state policy may need to be overcome.
Development Model on Solving a Problem of Students’ Illiteracy for Small-sized Schools in Chachoengsao Province through the PLC process of University Instructors in the Role of Mentoring

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Abstract

The development of small-sized schools in the academic year 2017-2018 has emphasized on problem solving of students’ illiteracy under the program called, “Joining Hand in Hand between Home and School to Build the Reading & Writing-Loving Community through Professional Learning Community (PLC) Process of University Instructors in the Role of Mentoring.” The objectives of the program were to increase teachers’ capacity to manage effectively the classroom and encourage students’ literacy capacity as well as to provide school administrators an opportunity to develop a closer relationship with students’ family and Educational Service Area Office to participate in teachers’ learning management. By this, Rajabhat Rajanagarindra University (RRU) was responsible for developing school teachers and administrators and providing a monetary support for the PLC workshops and learning media development. The target groups were 20 small-sized schools in Chachoengsao province. The study process comprised the following stages: 1) to evaluate students’ reading ability before, during, and after joining the program, 2) to organize a seminar for RRU instructors and external academic mentors on the PLC operation for school teacher’s quality development, 3) to develop teachers’ active reading and writing skills to make instruments and use technology in order to encourage students’ reading and writing skills through the integration with eight subject areas, 4) to hold a meeting at least once a month between school administrators and teachers about the PLC operation, and 5) to organize a forum and presentation stage about building up a reading-loving community in small-sized schools in Chachoengsao Province at Rajabhat Rajanagarindra University to assess the project operation results. The findings revealed that 1) 80 percent of student could improve their reading and writing skills; the average of their learning achievement in the Thai subject was higher, 2) 90 percent of teachers could develop their teaching capability, create teaching media and use technology in order to encourage students’ writing ability. The average of teacher’s satisfaction in joining this project was 4.52. School administrators and educational supervisors held a meeting on the PLC operation with teachers and school administration committee at least once a month, 4) the average of students’ parents’ satisfaction in participating with the program was 4.50, and 5) the average of teaching media created by teachers and students were 10 sets in each school. The obstacles found in this study were the inappropriateness of some learning activities to students with mental disability and special needs and the lack of adequate family participation because most of parents had worked in a factory and were unable to participate the program. The obstacle required for further continuous research.

Keywords: Small-sized schools, PLC process, illiteracy, family participation
Composing Community

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Abstract

Situated in Bang Yi Khan, an old Bangkok district, Princess Galyani Vadhana Institute of Music (PGVIM) established in 2012 with the aim to promote classical music in Thailand. With its ambitious mission to foster music of the foreign culture which often perceived as an ‘elite’ and uncommon to the area, the institute faces the challenges of how to nurture new talents in western music while remaining in contact with surrounding community which deeply rooted in the richness of south-east Asian cultures.

Starting with our philosophy of “Musique de la Vie et de la Terre (Music of life, Music of Land)”, PGVIM launch our Music for Society program with different activities which include Bang Yi Khan children choir, drum club and other short-term projects. As a result, PGVIM has a regular display of community service activities, but the challenge remains on how can we continuingly engage our surrounding community while making the integration with our teaching of classical music mission possible.

This paper focuses on how creative music process can initiate new dialogues with a community. Taking from an example by PGVIM’s production of Children’s Opera ‘Rossignols en cage’, a children’s book by Madeleine Treherne, based on the 1960s Paris and a story of a group of children and their adventures; the book inspires young readers with its story of courage and friendship beyond differences. During one year, selected children from Bang Yi Khan community participated in the process of composing new songs and creating their performance through music, acting and art workshops. All these activities prepared them to have a better understanding of the story, and help them to be conscious of the connection between different art forms which will later combine into the performance of the opera.

One unique process in the production of Rossignols en cage is a composition method which allows children to be involved in the process of creation that matched the children’s musical ability and the characters interpreted by the children. This process allows them to make an association between their personal stories and experiences they wanted to communicate, thus enhancing the dialogue between their real-life situation with the music of their creation, surpassing the prejudice of music genres (classical, pop, etc.). During the project, participated children and our undergraduate students who were involved, showed significant development in their character regarding self-confidence, creativity and social interaction, as well as the sense of belonging to the new ‘musical community’ which extend beyond our institute. The project has its inaugural performance with the presence of Her Royal Highness Princess Maha Chakri Sirindhorn in the Celebrations to the Auspicious Occasion of HRH’s 5th Cycle Birthday, with other three performances for the audiences from the surrounding community and public (www.pgvim.ac.th/opera).

The outcome of this project leads to the stakeholder’s (Community, Public & Private sectors) continuing support, in both funding and further collaborations, for the institute’s Music for Society program which also expands to other projects such as Community Singers (age 6 – 80 yrs.) and Music for Hospital. Children from Bang Yi Khan who participated, remain crucial for the organisation of our Music for Society course which every student at the institute must enrol for three years during their study. This integration of the music for society activities with our curriculum has encouraged new dialogues for our students to find their creative voices as well as extending their boundaries and understand who they are within the constant flux of our 21st-century’s society.

Keywords: music for society, music in the community, creative music project
Harmonizing Faculty-Industry Partnership: Graduate Workplace Preparation

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Abstract

Universiti Kebangsaan Malaysia (UKM) has six key result areas (KRA) that underpin the vision and mission of the university in its planning and operationalization of initiatives. One of the six KRAs focusses on the need for the graduates to have national aspirations and to be competent, competitive and innovative in life beyond the university. However, based on the recent tracer study conducted by the Ministry of Education Malaysia (2017) the employability rate of UKM graduates is a cause for concern. It is found that there is a need to bridge the gap between academic content and workplace demands with employability skills. In order to address this problem, the Faculty of Social Sciences and Humanities (FSSK) initiated a tailor-made program, Insan Budiman FSSK©, to develop personal and professional skills that will nurture students into mature and effective individuals. The faculty members’ diverse areas of expertise are optimised to run the program.

The on-going program is designed into five main modules with topics and tasks aimed to improve students’ employability chances when they go for job interviews after they complete their studies. The modules are:

1. Personal Qualities for Employability
2. Professional Knowledge and Skills
3. English Language Skills and Competency
4. Volunteerism and Corporate Social Responsibility (CSR)
5. Entrepreneurial skills

One of the signature components incorporated in the Insan Budiman FSSK© program is the involvement of the industry/community as part of the activities in the modules. Representatives from the industry/community are invited to share their experiences with the students. These sessions are considered to be good practices as they provide a platform for the faculty and the students to engage with industry and community stakeholders.

Nevertheless, the faculty faces a number of challenges in the running of this program. One of the challenges is the need to select and invite suitable and relevant individuals, who not only represent the stakeholder from the industry and community, but also an individual or a group of individuals who are inspiring and motivating. This is important because another challenge that the faculty faces is the problem of sustaining the students’ interest, as some do not fully realise the value of these engagements.

Regardless of the challenges faced, the faculty and industry collaboration in the employability program has provided a suitable meeting platform where both parties are able to gather useful information from one another. On the one hand, the industry is able to inform students of the necessary practical skills for the future workforce while the faculty could incorporate input from the industry in the overall design of the academic programs. Students are also able to explore their future employment options based on the various ideas given by the industry in general. At the same time, the feedback from the industry created an awareness, among the academic staff, of the current changes which are taking place in the real workplace contexts. For the faculty, having closer ties with the industry leads to establishing
more smart partnerships and strategic engagements for future collaborations to add to the already existing partnerships in the form of student internship and employment opportunities as well as staff attachments. For the students, the industry’s involvement in this employability program has led to some positive feedbacks. After participating in the program, the students indicated that they were more aware of the current workplace context based on the input from the industry. The students were also able to examine the strengths and weaknesses of their own employability traits and the need to plan their future endeavours so that they can prepare for the job market of their choice. Finally, the implication based on the university and industry smart partnerships and strategic engagements is significant in sustaining productive employment and in doing so provide decent work for the students upon graduation.

Keywords: Employability; Personal skills; Professional skills; University-Industry Partnerships; Workplace
Sustainable Infrastructure Requires Sustainable Institutions – a Role for Universities

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Abstract

International Development Banks (IDBs) such as the Asian Development Bank (ADB), Asian Infrastructure Investment Bank (AIIB) and International Bank for Reconstruction and Development (IBRD) – part of the World Bank Group are providing billions of dollars of loans for infrastructure on an annual basis. In addition, they provide technical assistance and grant aid. Technical assistance is usually contracted to an international consult with an associated local firm to strengthen the capability of the executing agency, usually a Government ministry responsible for delivery of the project. As this paper is focused on infrastructure it is more likely to be an organization such as a Department of Public Works or a Ministry of Construction.

The processes of the banks ensure that the specifications are robust and that provided they are followed the infrastructure is fit for purpose. The work will be overseen by the agency’s Project Management Unit (PMU) with consultant support. Whilst there will be consultant support it is critical that there be an informed client. For a road construction project a wide range of trained and skilled agency staff are required including: planners, construction engineers, road safety engineers, bridge engineers, geotechnical engineers, materials engineers, social scientists (resettlement, gender, poverty alleviation and empowerment), environmentalists, information technology professionals, drafters, procurement specialists, occupational health and safety professionals, and accountants. During the planning and preparation stage this is particularly critical as the consultants are working on behalf of the client agency and the agency needs to ensure that the requirements of both the client agency and all associated laws and regulations are met. The problem in many developing countries is that many of required professionals are not employed by the organization and if they are they are too busy to commit the required time to the project.

To be able to effectively cooperate with the international team local project staff need to be suitably qualified and experienced. Unfortunately, many local staff lack knowledge and experience. This is compounded by the fact that their study background is often inadequate for the current needs of a developing country.

The international consultants and contractors have the required technical skills and are keen to train the agency staff but their time in-country is limited and in the end they do the work in isolation without required immersion of the staff in the process.

This is where universities should play a key role. There are four key areas:

- Ensuring that the tertiary education syllabus is relevant to the country’s and industry’s needs. This is not a call for a “dumbed-down” degree but rather that it be relevant to the development goals of the country;
- Work with stakeholders to provide on-going short courses and extension activities to enhance staff skills and competencies. International guest lecturers should be engaged as required. It must be borne in mind that in-country training that reaches large numbers of staff is of much greater benefit than sending a select few overseas for training;
- Develop centers of excellence in conjunction with other universities and government agencies to develop strategies and techniques relevant to the stage of development whilst, at the same time, seeking to be innovative; and
- Provide ongoing mentoring and guidance to staff in the various agencies.
Finally, the universities should encourage all students to undertake intensive courses in spoken and written English. Our connected world requires such skills.

Clearly, some of these initiatives will require additional funding. This requires the universities to build on their strengths and develop strategic partnerships with government agencies and seek their support. It is highly likely that the agency has limited funding. The key is to seek the funds and not wait until an opportunity arises. Even a small allocation from a donor budget would bring significant benefits to the country. The donor may be an international development bank, a non-government organization, a foreign government or even a philanthropic organization. Little will happen unless universities are proactive and drive the initiative!

**Keywords:** international development assistance, capacity building, institutional strengthening, sustainable development, infrastructure
Fostering Lifelong Learning through University-Community Partnerships

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Abstract

The internationalization of language learning with the inclusion of textbooks prepared in a foreign context has impacted exposure to local ideas, customs, and social behaviour of communities. In the context of multicultural Malaysia with the diverse communities and practices this is even more challenging especially when the community has limited exposure and knowledge of local culture. In the context of language learning the relationship between language and culture has been nebulous and whether they are inseparably bound or intricately woven has been the subject of much debate. The reality is there is no level of language which is free of culture as the two are inseparable. It is hypothesised that incorporating local culture into language teaching will help learners communicate and function effectively in the community that they live in. The contention is that for learners to communicate effectively with their own people, the knowledge and understanding of their own culture is important. This will help foster a community of literate individuals who are capable of lifelong learning.

Acknowledging the importance and benefit of including local culture into English language teaching and learning materials, the state of Terengganu has integrated local culture in its language textbooks. The Your Language My Culture (YLMC) project was structured to encourage interaction, communication and provide a stimulating environment for a community to learn the English language. A supplementary reading module was developed by a group of researchers from UKM focusing on local Terengganu heritage, literature, customs, traditions, food, games, and clothes. This novel project was initiated with a community of first year secondary learners then continued till year 2 and is currently in its third year with this community. This presentation will report on the results of a social impact assessment study that was conducted to elicit how the community was responding to the YLMC programme. Data was collected from surveys, focus group discussions and interviews with key stakeholders namely 3319 students and 85 education officers to elicit stakeholders opinions of the local content materials, the effect of these on the teaching and learning approaches and outcomes. The findings revealed that both teachers and students had positive opinions about the materials and claimed they were interesting and attractive and helped build confidence in the language. Teachers stated they could be more creative and tailor the activities according to the level of the students. There were clearly more 21st century skills like collaboration, cooperation and problem solving present. There was also improved student involvement in the learning with better motivation as they were keen to source knowledge about local tradition and culture. There were indications of improved performance but this needs to be further validated towards the end of the third year. The findings highlight the effectiveness of this project from the viewpoints of key stakeholders of the project and push for the inclusion of local culture materials into language teaching and learning. It is envisaged that this will help sustain the local values and culture of a community while still promoting mastery in a global language.

Keywords: Community university partnership, culture, interaction, communication, language learning
Experiential Learning for Quality Education through Triple Helix Partnership and University – Industry Engagement

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Abstract

Effective teaching is not just via the classic classroom model but can be conducted through experiential learning. Experiential learning in school is a process that will help children to visualize, think and experience the learning process rather than the old chalk and talk style. This cognitive learning will enhance the children’s ability to understand better on the subject matter. Experiential learning engages children in critical thinking, problem solving and decision making in contexts that are personally relevant to them. In Malaysia, teaching pedagogy through experiential learning at school is still limited. This paper will discuss on two experiential-based programmes involving primary (11-12 years old) and secondary (16-17 years old) schools.

These programmes were carried out by University of Malaya (UM) in collaboration with the government and industry creating the triple helix partnership. Triple helix partnership in community program is a win-win collaborative relationship for all parties involved. Each of the entity plays different roles but leading towards a common objective. Government plays the lead role of driving both the academia and industry, the academia is taking the non-traditional role of innovating for ultimately sharing the knowledge with the community and the industry provides the driving force for this synergy.

UMCares has initiated the experiential-based learning initiatives in 2017 by introducing two flagships programmes. The first program was known as ‘Walking Football Clubs’ (WFC) which aimed to provide sports for obese children in order to motivate them to lose weight in a fun and engaging manner. According to the latest statistics from the National Health Morbidity Survey (NHMS 2015), 38 percent of the children in Malaysia are overweight and the obesity rate for population below 18 years old is approximately 11.9 percent. The sports-based program was introduced since access to structured fitness programs for obese children were limited. Through this program, the children were taught about risks in obesity including diseases and practical measures to mitigate the problems. The program has demonstrated positive effects on anthropometrical, psychological and fitness changes among the school children who participated. This program had received tremendous support by the schools in Malaysia where the number of WFC clubs had increased from 8 in 2017 to 17 clubs this year. To ensure the sustainability of this program, UMCares hopes to establish as many WFCs in schools and with the support of industry, the University will be able to hold annual competitions at national level. To date, this program has successfully secured financial support from 2 sports companies and an international hypermarket in Malaysia for this year’s competition.

The second project is an inter-school competition which involved the upcycling of waste for functional purposes to improve school facilities. Tools and materials used in the competition were provided by the company. In the initial phase, the students had identified facilities and areas in school which needed facelifts. By using waste materials, creative and innovative products were constructed by the students mentored by lecturers from the Faculty of Built Environment, University Malaya. This program not only promoted the ‘upgrading’ (adding value) and ‘recycling’ (reusing) of discarded materials but also to instill creative and innovative thinking at a young age. Students’ creativity dimensions were nurtured and enhanced as a result of the problem solving process involved in this experiential-based learning activity. Creative approaches to solving problems resulted in innovative solutions. From this program, about 112 school students benefitted not only basic technical skills but
important soft skills abilities such as leadership capabilities, communication skills, teamwork and lifelong learning skills which are essential for the students' development.

Both programmes were managed by the University, driven by industries and facilitated by the Ministry of Education Malaysia. The outcome of the programmes were commendable with positive feedback and had received good publicity. It can be concluded that experiential learning is a valuable and exciting learning opportunity for all parties involved. We hope that the knowledge shared and the values inculcated in the students and all parties involved will be embedded in their daily life in the future.

**Keywords:** Experiential learning, obese, do-it-yourself, participatory action research, industry, government, university, schools, triple helix partnership
Magic Dolls: Anatomically Detailed Dolls for Forensic Investigation of Crimes Against Children

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Abstract
Anatomically detailed dolls are a tool used to assist investigators in conducting interviews with young victims in cases of alleged sexual abuse or assault. These dolls are unique in the respect that they are anatomically correct; they include genitals, rectum, and an open mouth. The purpose of this detail is to help provide unambiguous detail of where and how a child was touched during an incident. Children, because of linguistic or social limitations, may often face difficulty in communicating verbally to investigators the particulars of an incident. Even older children and adults may have difficulty putting into words what has happened because of a language barrier, developmental disorders, or extreme embarrassment or other social constraints. The use of a doll to demonstrate what has occurred becomes a valuable tool in the investigation of such crime, and in providing victims with appropriate care.

The objectives of these dolls are (1) to provide a much-needed tool to foster unambiguous communication between investigators and young victims in the investigation of sexual crime. And (2) to create a partnership between law enforcement and community through academic engagement in order to support young victims.

The project engaged three key partners as Chiang Mai University, The Children Women Families Protection Center and Anti Human Trafficking of the Provincial Police Region 5 and Chiang Mai Provincial Police.

Impact and Benefits of the project are supplying law enforcement officers with a much-needed tool and fosters a broad-based community response to address the tragedy of sexual violence against children.
Approaches to Student Formation: Community Engagements through Partnerships with Student Organizations

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Abstract

All university students in the Philippines are required to take a six-unit National Service Training Program (NSTP) course. This course promotes civic consciousness and inculcate values such as patriotism, nationalism and involvement in public affairs. At the Ateneo de Manila University, NSTP is taken in the students’ second year and is an opportunity for students to engage in community service in different forms such as teaching, profiling, and structured values formation activities. One of the challenges of implementing this program is having adequate manpower to facilitate the community service for over 2,000 students. One program innovation implemented in the last five years was the incorporation of student organizations with existing community services as partners of the implementers. These student organizations are selected according to their advocacy, established relationship with their partner community and capacity to facilitate. Members of these accredited organizations are also undergraduate students of the university, trained to be co-formators capable of mentoring and guiding the NSTP students. A criterion also considered for partnership would be the length of partnership with their identified communities/institutions, this is to ensure the quality of relationship and trust developed over the years, and plans for continuity. The office in charge of NSTP, the Office of Social Concern and Involvement (OSCI) assigns one professional and several employees to monitor the activities. With the partnership of OSCI and the existing student organizations, NSTP students facilitate values formation sessions and other activities among various marginalized children in the community the organization has chosen. NSTP students undergo training provided by skilled professionals and members of the organization as part of their advocacy. The purpose of this design is to empower student organizations to continue their respective advocacies and to encourage students to apply technical skills and finding their own advocacy. The purpose of this paper is to present the process of designing and implementing such program along with its challenges and evaluation. This paper will solely focus on the journey experienced by the student organizations and NSTP students in their community engagements.

In the year 2017-2018 there were 4 student organization partnerships that had 6 partner communities/institution. These student organizations facilitated service learning activities of 133 Psychology students who have chosen to participate in the program. The tasks and modules in the area integrated lessons learned from their Developmental Psychology class which also helped improve the formation modules of the student organizations to better their service to the communities. At the end of the program, NSTP students evaluated their experience and encouraged to volunteer full time in the student organizations to continue the advocacy.

Keywords: Student Organization led community engagement, advocacy, service learning
Using Design Thinking and Community-Based Participatory to Promote Social Engagement and Social Innovation

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Abstract

This research paper is based on the framework of Design Thinking (DT) which was developed by Singapore Polytechnic and Community-Based Participatory (CBP) approach. The objectives were to promote Social engagement and Social innovation in terms of comprehending better participants’ potential and implementing DT and CBP to social innovation. Appreciation Influence Control (AIC) technique and a semi-structured interview about teachers’ perspectives on participants’ performances throughout 4 phases of DT: Sense and Sensibility, Empathy, Ideation, and Prototype, were applied to collect data. The sample consisted of 30 villagers in 3 villages: Pong Krai, Kong Hae and Mae Sa Mai, in Pong Yaeng sub district, Mae Rim district, Chiang Mai province, Thailand, 23 Thai and 23 Singaporean undergraduate students who attended TFI SCALE (Temasek Foundation International Specialists’ Community Action and Leadership Exchange) at Rajamangala University of Technology Lanna in Thailand, during the second semester of the academic year 2017. Students in this program engaged in cross-cultural learning especially community issues, then apply practical abilities, technology and research in community social innovation projects. The data were analyzed using descriptive and content analyses. The study findings showed that after attending TFI SCALE, participants showed positive perception toward social engagement, social innovation understanding, cultural awareness, communication skills as well as critical thinking ability were increased significantly.

Keywords: design thinking, social engagement, social innovation, community-based participatory
WUA-LAI COMMUNITY AND KNOWLEDGE SHARING: from University’s pedagogical approach to Local “Neighbourhood” reality

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Abstract

There is always a problem whenever research outcome on Urban Study has been ignored by the community and this caused nothing to the community for the long-term goal as part of sustainable development approach. This paper is formulated from the idea that the public engagement and action-plan’s research are the key as a bottom-up approach in search for the better collaboration between the neighbourhood of Wua-lai, where was once famously called as a silver village of Chiang Mai, and a university pedagogical approach in architectural education. The research focuses on the problematic definition of “silver village’s neighborhood”, in this case there are two major temples (Wat Sri Supan temple and Wat Muen Sarn temple) that still rarely continue their silver craftsmanship works within the community. The production of Knowledge from “neighborhood” system within the area has been interfered by many daily-life changes and socio-economic transformations. By creating three-fold of initiative research tasks i.e. Roundtable Forum within the community along with the architectural research methods on site surveying, interviewing people and old teak house measurement. It is the challenge for the research team to be able to generate an action-research project with the community-based knowledge/learning actions in order to tackle the core of local problematic issues on silver craft village’s continuity and the neighborhood system at the heart of Wua-lai’s urban deterioration problem.

The research found four stakeholders that formed two network relationships in the means of “Wua-lai’s neighborhood” which are the Temples/ the "Sa-laar" or silver masters/ the group of young locals/ and the heritage agents. They are the key persons that will establish the future of Wua-lai recreating and redefining the possibility for sustainable growth and good practices among the communities, especially maintaining the “silver village” characteristics and local wisdom on silver craftsmanship. Out of 20 samples and surveys we did, there are almost 90% of the silver masters who still work at the community whereas the numbers of products are decreasingly low in demand. The research team finally come up with the establishing partnership using design studio initiative with the community in opening up the dialogue on design-knowledge engagement within the community. This will link at the multi-participation at any levels between University-Community lesson learning. This will enrich the university’s pedagogical role with research-base in the long-term plan for community engagement initiatives.

Keywords: Wua-lai, Chiang Mai, Knowledge sharing, Community participation, Sustainable growth
A CASE STUDY TRANSITION RĀMAṆṆA DHAMMĀCARIYA ASSOCIATION FROM A TRADITIONAL HIERARCHY TO A MODERN DECENTRALIZED ORGANIZATION

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Abstract

In this study, the researchers studied transition RāmaṆña Dhammācariya Association from a traditional hierarchy to a decentralized organization in Mon State, Myanmar. This research took the qualitative approach, utilizing data collected from documents, including electronic sources, as well as interviews and observation during fieldwork. For the case study, the research focused on the association in particular and RāmaṆña Mon Sangha organization in general, and it mainly focused only on the transformation of the association. The participants were interviewed on transitional studies and then asked to share their experiences of practicing in administration, decision-making of the association after being appointed from the general members. The results of the study showed that the approach of decentralization phase in the transition from hierarchy to decentralized organization was the deconcentration phase and the process towards to the stage of delegation. However, at the period of the commission, the association transforming was also stepping on devolution, its transform was weakening traditional hierarchical power and growing of democratic and decentralized power. These approaches slightly conformed that transforming of the association had transformed the attitude and practice of the executive members and the mission to reform the movement was active implementation. Besides these, the study will have contributed to the literature on transition, in Mon version, to the summit of RāmaṆña Mon sangha, RāmaṆña Dhammācariya association, and especially RāmaṆña Rottha Buddhist University.

Keywords: Transition, Modernization, Democratization, Decentralization
A Four-Wheel-Bike for University-Community Engagement

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Abstract

A growing city, like Chiang Mai, is facing various problems including traffic and air pollution. Chiang Mai University has announced a policy for a green and clean campus and in 2016 provided a bike lane network around the campus. However, the number of people who use bicycles are still very low compared with those who use motorcycles. The challenge was how to encourage people to increase bicycle use. A four-wheel-bike project was carried out in the mechanical engineering department at Chiang Mai University. This project was plan to help people experience bicycle riding. Two special bikes were constructed. The concept of these bikes was to apply engineering knowledge in designing human-powered vehicles. Six undergraduate final year students were involved. After completing the design process the bikes were built. Two events combining both the university and the community were arranged. In both events the four wheel bike was tested with volunteers who found it amusing. Finally, the bike was given to a municipality and used in a youth camp. The municipality youth, like the university students treated the bike like an amusing “new toy”. The youth from both events were encouraged to use bicycles.

Keywords: motorcycle, air pollution, municipality, four-wheel bike, incentives
Preliminary Provisions of University-Certified English Language Courses to Myanmar Refugees Living in Camps along the Thailand-Myanmar Border

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Abstract

As of December 2017, 99,956 Myanmar refugees (UNHCR population statistics) reside in nine camps along the Thailand-Myanmar border. Having fled Myanmar from conflict and persecution to Thailand since the 1980s, many Myanmar refugees who currently live in Thailand were born and raised inside the camps. Since Thailand is not a signatory to the 1951 Convention and Protocol Relating to the Status of Refugees, those living in the camps are not permitted to leave, and are not formally recognized or protected by the Royal Thai Government unless they remain in the camps under the protection of the United Nations High Commissioner for Refugees (UNHCR). Refugees, therefore, rely solely on humanitarian assistance from various non-governmental organizations (NGOs) and community-based organizations (CBOs), including the International Rescue Committee (IRC), for essential services, such as healthcare, food, shelter, legal support, and capacity building/vocational skills training. General education is provided to children in the camps by refugee-led organizations teaching neither the Myanmar nor the Thai national curricula; the refugee children’s certifications/qualifications will not be formally recognized outside of their home states if they decide to return to Myanmar, or attempt to enter into the Thai education system. NGOs and CBOs endeavor to offer capacity building and vocational skills training to complement general education in the camps in various subjects; however, these only reach the minority of the refugee population and are limited in scope and scalability. As the majority of refugees is of working age (or will soon be of working age), it is vital that they are provided with formally recognized skills building opportunities that are scalable, in line with outside labor market demands, and can be applied across many different sectors and disciplines. In light of the ongoing economic development in Myanmar and Thailand, particularly along the border, the Language Enhancement Center (LEC), Payap University, and the IRC have become partners to accomplish this initiative, in view of Payap University’s longtime partnership with the IRC and its understanding of issues facing displaced people in Thailand.

This cooperative project aims to provide Myanmar camp-based displaced people an opportunity to study English in a course that is formally certified and recognized so that their prospects for future employment or further studies outside camps, located along the Thailand-Myanmar border, can be improved. Its preliminary operation consisted of two primary phases which were Phase 1: An English Proficiency Assessment (Pre-Test) and Phase 2: An Essential English Course Curriculum Development. As for the former, a pre-test was given to 78 refugees in three camps (Mae La in Tak Province, Tham Hin in Ratchaburi Province, and Ban Mai Nai Soi in Mae Hong Son Province) in order to (1) identify the level of knowledge of the target refugees with respect to their English ability prior to their English study and (2) provide guidelines for LEC on what content and format to incorporate into the English curriculum delivered at the designated camp as a pilot. The pre-test scores, i.e. quantitative data, were analyzed using frequency, percentage, and Mean, while qualitative data were analyzed using content analysis. Based on the analyzed data, it was found that the Mean of the total scores among the three camps was 36.17 which could be classified as A2 or Elementary based on CEFR criteria. The very first domain that were supposed to be intensively improved in all of the three camps was the “Use of English,” as its average score was 23.34 or 29.18% of the total 80 points, while the “Essay Writing” and “Listening and Speaking” average scores were 5.33 or 53.30% and 7.50 or 75.00% of the total 10 points, respectively. When compared each average score result among the three camps, it could be seen that in both the “Use of English,” “Essay Writing” and “Listening and Speaking,” as well as the “Total Scores,” the average score results of Mae La Camp were the highest. The second highest results belonged to Ban Mai Nai Soi Camp while...
the average scores of Tham Hin Camp came last in all domains. According to the results, it could be concluded that those in Tham Hin Camp were supposed to be prioritized and given an opportunity to enhance their knowledge of English. As for Phase 2, based on the assessment results gained from Phase 1, LEC designed an essential English course curriculum for elementary English to be delivered in Tham Hin Camp in Ratchaburi Province on a basis of Brian Street’s ideological model (1995) which both located English skills as a social practice rather than technical skills and involved studying English as it occurred in social life. In order to create effective instruction, the course curriculum content was developed and comprised of three key elements which were (1) affirming the identity of the students, (2) engaging the students, and (3) extending the students’ language.

Keywords: cooperative project, displaced people, course curriculum development, teaching refugees, effective instruction
Publishing Area-based Research and Social Engagement Articles Beyond Traditional Journal Writing Style

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Abstract

Area Based Development Research Journal has been commissioned by The Thailand Research Fund since 2008 as a showcase of Area-based Collaborative (ABC) Research implemented for the benefits of local communities. Although the core of such research lies in its utilization, the publication increases the exposure to stakeholders of the same issue and encourages the applications in other areas. In 2018, the journal is in its 10th and its concept is in accordance with the worldwide trend of social engagement. The interest of researchers has steadily increased with the submission as much as 70 a year and the launch of other journals with the similar theme of social engagement. The unique feature of this bi-monthly journal is that the submitted manuscript can be either in a traditional format or the novel structure for socially engaged scholarship. The traditional format includes Introduction, Materials and Methods, Results and Discussion as well as Conclusion sections. The new format was adopted by the journal since 2015, emulating the regulation of professorship application by The Thailand Commission of Higher Education. The manuscript, composed of 7 sections, begins with 1) description of the past situation and problems in the community providing readers with the background and local context. Instead of Materials and Methods section, the next 3 sections are 2) participation of targeted community 3) process to improve the situation and 4) knowledge and/or expertise to initiate positive changes. The results are expressed in forms of section 5) description of the changing situation after implementation process. Then, the outcome and impact on social and economic aspects are assessed in section 6). The articles conclude with 7) the suggestion for the sustainability. The peer review then assesses the suitability for publication according to evident in this 7-section narrative. Based on the two options of the writing style, 18 out of 68 articles have elected to present their ABC research and social engagement in this novel socially engaged scholarship format during October 2016- October 2018. One article in such format was published in October-December 2016 and the numbers are increased to 9 articles in 2017 and 8 articles from January until October 2018. By highlighting the social and economic impacts instead of the new discovery of knowledge, the socially engaged scholarship format serves well as the platform for cross-discipline research originated from the need of communities and local entrepreneurs. The benefit from this initiative is also evident in the case of academic services and cultural conservation, which is sometimes overlooked missions of the university. Such works are further improved via the peer review process since the academic aspects are examined and the merits are highlighted. On the personal level, the authors can use the manuscript writing as a practice for their future application of socially engaged professorship. In the institutional level, the socially engaged articles can be used, along with other criteria, as indicator for the socially engaged university ranking.

Keywords: area-based collaborative research, university-social engagement, area based development research journal, socially engaged scholarship, community-based participatory research.
ASEAN Vocational and Engineering Camp: The Model of Engaging Industrial, Capacity Building and Creating Network

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Abstract

21st century skills are to be emphasized and embedded into new programs and courses at Rajamangala University of Technology Lanna (RMUTL) to prepare students for employment and lifestyle opportunities in their future. However, it is not easy to transfer some of these skills in the traditional classroom or normal situation. Skills such as global awareness, social and cross-cultural interaction as well as creativity and innovation require active participation and roles outside the traditional classroom. Therefore, an innovative project which could solve this problem was introduced by RMUTL. As a member of the Regional Association for Vocational and Technical Education in East and Southeast Asia (RAVTE), RMUTL presented a project called “AVEC” (ASEAN Vocational and Engineering Camp). The camp was offered to students who studied in Technical and Vocational Education Teacher and Engineering programs in ASEAN countries. The aim of the camp was to encourage students to work together using a Design Thinking Framework to solve a problem statement within a one week timeframe. The new technology used in the camp was supported by the sponsors from industry such as: ST Microelectronics (Thailand) Co., Ltd. and Maker Asia Co., Ltd. The activities in the camp comprised 1) ice breaking and team bonding games, 2) Design Thinking workshop, 3) training in trending technology (IoT: Internet of Things) and 4) using IoT as a tool to develop a prototype. Each session was introduced and conducted by experts and specialists from each field so that the students could learn effectively in a short period of time. The workshop was provided to students as a tool for solving a problem that was set up by a panel of judges. After reviewing the circumstances, each team finalized their idea, then they had to use IoT as a tool to bring their idea to fruition as a prototype in a timely, practical and efficient way. The finished prototype was presented to the committees, stakeholders and public for feedback and evaluation. Cultural immersion was also provided to the students at the last day of the camp to supplement their initial bonding. Design thinking has been introduced to TVET and engineering students’ education because we feel that TVET teachers and engineers of the future should identify user and stakeholder insights when designing solutions to real world problems.

The first AVEC was held in Chiang Mai, Thailand in 2016 under the theme of “Smart University”. This initial camp hosted participants from 7 institutes of 6 countries: Cambodia, Indonesia, Laos, Malaysia, Philippines and Thailand; 53 students and 3 lecturers in total. The 2nd AVEC was hosted by Universiti Tun Hussein Onn Malaysia, Johor, Malaysia in 2017 under the theme of “Toward Schools 4.0.” The camp involved participants from 8 institutes of 7 countries: China, Cambodia, Indonesia, Laos, Malaysia, Philippines and Thailand; 60 students in total. This camp gave students the chances to visit and conduct interviews with teachers and students in 10 schools within Malaysia. The result was ten innovative prototypes.

Data regarding 21st Century Skills from each camp were collected in the forms of semi-structured interviews and performance observation throughout the phases of design thinking. The data from both camps were analyzed using descriptive and content analyses. The findings showed that after attending AVEC camps, student experiences demonstrate significant outcomes in three areas. Firstly, the camp helped to develop and extend a rapid improvement in student bonding and networking. Secondly, Industry engagement proved to be significant, supportive and beneficial for university and society. Lastly, adapting oneself in multicultural and communication skills was improved significantly.

Keywords: 21st century skills, design thinking, engineering education, technical and vocational teacher education, industrial engagement.
Improving Ecotourism at Kampung Bungin, Bekasi as Effort to Synergize Renewable Energy Technology and Community Business Based on Local Potential

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Abstract

Energy resources are natural resources that are very important in supporting the sustainability of regional development activities, especially in the economic sector. Recalling the strategic role of energy resources, energy management which includes the provision, utilization and exploitation must be carried out in a fair, sustainable and optimal manner so as to provide the greatest added value for the people's welfare.

Currently there is an increase in the demand for electrical energy every year in various sectors, along with the increase in population and increasing development activities in the region. This condition turns out not to be in line with the increase in electricity supply where installed power capacity is still fixed, while electricity demand continues to increase. The consequence is that as a result of the blackouts of rotating electricity, especially during peak hours as a result of usage loads exceeding the available power.

Hybrid Power Plants, which combine more than one type of power plant, become one of the environmentally friendly energy choices, which can generate electricity for people in rural or remote areas. In accordance with the natural conditions in Indonesia, solar and bayu are configurations that are very suitable for the construction of hybrid power plants that utilize new renewable energy.

In Kampung Bungin, the northern region of Bekasi City, around 80 km from the capital city of Indonesia (DKI Jakarta), is an area suitable for the construction of a Hybrid Power Plant due to frequent power cuts by PLN, which is the sole electricity supplier in the region and in Indonesia.

The construction of a Hybrid Power Plant is expected to be one of the opportunities to improve the economy of coastal communities in Kampung Bungin, Bekasi. The community is greatly helped to get street lights, lighthouse lights, and home light electricity assistance from this hybrid system. In addition, in Kampung Bungin there is also a desalination system for saltwater into fresh water, which can be used for drinking water from desalination devices that use sources of light and solar heat.

In order for all these systems to be used continuously, a maintenance system that is not cheap and not easy to operate and maintain is needed. Therefore, it is necessary to empower the economy of the community in order to realize a balanced and developing economic structure; grow and develop community business skills to become a strong and independent business; increasing the role of the community in regional development, job creation, income distribution, economic growth, and community alleviation from poverty.

Community economic empowerment in Kampung Bungin, Bekasi is one of the opportunities and at the same time a dilemma in improving the regional economy and community welfare. Because the economic potential of the people in Kampung Bungin is relatively large and varied, but the management is limited due to the lack of facilities, lack of supporting infrastructure, and the pattern of economic activities of the community which are still largely oriented towards the fulfillment of everyday life.

The concept of empowering the community of the fishermen of Kampung Bungin will be influenced by the internal and external environment, which can determine the level of success in improving community welfare. For the internal environment synergistically will determine strengths and weaknesses, while the external environment can determine the opportunities and threats that will be faced by the people of Kampung Bungin.

From the results of the SWOT analysis, shows that the component of increasing productivity of fishermen has the highest weight value in the selection of the Kampung Bungin, Bekasi community empowerment program, then followed by the component of increasing the role of local institutions. Both of these can be formed into a large program with the theme of ecotourism.

To realize ecotourism development that is able to provide a multiplier effect on the local economy and environmental benefits in coastal areas, a long process is needed whose success depends largely on the consistency of all parties involved and the active participation of the community.

Keywords: Ecotourism, coastal, renewable energy, community, economic
Conceptual Framework for Innovation Leverage in Tourism Industry

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Abstract

Global tourism statistics have indicated that the tourism industry has continued to grow despite economic and political difficulties. Throughout the year 2015, the number of world tourists has reached 1.184 billion with an increasing rate of 4.4 percent from the previous year. China increasingly exports international tourists and the number is significantly increasing. In Thailand, the tourism sector has directly and indirectly contributed over 2 trillion baht or equivalent to around 20% of overall GDP. According to the World Economic Forum (WEF), the competitiveness of tourism in Thailand in terms of price competitiveness and tourist service infrastructure has been found to be relatively high. However, the competitiveness in terms of ground and port infrastructure, environmental sustainability and availability of cultural resources and business travel, has been found relatively low. These limitations along with complicated problems arising from overtourism will ultimately bring about negative impacts to the tourism industry and hence falling into the stagnation or decline periods.

Therefore, this study has the objective to leverage innovation in the tourism industry based on the study of the linkage between the industry and science, technology and innovation in order to develop a conceptual framework and definitions of innovation in tourism that can be applied to evaluate and enhance innovation in the tourism industry. This guideline can encourage the development of innovative products and services throughout the value chain of the tourism business. In addition, Chiang Mai province was selected as a case study to participate in the first engagement workshop for evaluating this conceptual framework and knowledge sharing among tourism stakeholders. Furthermore, recommendations and strategies on enhancing service capabilities were brainstormed to promote the competitive advantage of provincial tourism industry.

In order to develop an innovative assessment for the tourism industry, the research team proposed four criteria for this assessment: 1) Identifying the type of innovation 2) The importance of the innovation level 3) The importance of the impact of innovation based on demand side, supply side, and social side using both qualitative and quantitative indicators, and 4) The potential of the activity. Approximately 200 participants in the workshop and respondents of the online survey were asked to evaluate this conceptual framework as well as to weigh the importance of these criteria. The data collected from 55 responses of both group of stakeholders indicate that the majority of the innovation level in the tourism industry was at the incremental level (41.8%), while the product & service innovation (47.0%) was the common innovation type of their activities. The impact of innovation once developed within the tourism industry should respond to demand (36.6%), supply (32.4%), and social sides (31.0%), while the potential of the innovation activity should also be feasible in terms of budget and time. Furthermore, recommendations from 3 major innovation criteria were purposed consisting of product & service innovation, process & organizational innovation, and communication & marketing innovation. Finally, this report has suggested policy recommendations and innovation sandbox for the tourism industry as a guideline for the government to leverage tourism industry with innovation.

Keywords: Conceptual Framework, Leverage Innovation, Innovation Assessment, Tourism Industry, Stakeholder Engagement, Policy Recommendation, Innovation Sandbox
Finding the Heart of Lan Saka to Fulfil Its Potential as the Top Destination in Southern Thailand

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Abstract

Lan Saka district of Nakhon Si Thammarat province in the south of Thailand has all it takes to become a top tourist destination. Renowned for the best air quality in Thailand once evaluated by the Pollution Control Department, its mountainous landscape is complete with beautiful scenery, waterfalls and orchards. To fulfil its potential with sustainable development, the local community has collaborated with Upper South Innovation Hub (Creative Economy) linking two universities in the province. In the first stage of this research, the areas of Lan Saka is classified into 3 types. Type A is the successful tourist area including Khiri Wong community, famous nationwide for its scenic view and local souvenirs. However, Type A area is endangered from overcrowding as well as substandard restaurants and accommodation. Type B area is ready to transform from the bypassing to the attraction itself. Khao Kaeo and alike need development and promotion plans. Finally, the area not yet to develop for tourism with unprepared locals is classified as Type C. Based on the potential and needs of particular area of Lan Saka, Innovation Hub implements different approaches. For Type A area, the courses on the standard of local hotel and homestay are provided in Khiri Wong community. Besides the upgrade of the tourist accommodation, the product development is also in demand to increase the values of abundant durian, Senna and bitter bean in this area. For Type B area, a creative market called “Suan Sang Boon” is set up in Khao Kaeo community as an outlet for local products. In addition to the shopping, visitors are drawn by the cultural performances. The local economy is also boosted by the open of new shops and restaurants around this market attributing to 30 millions baht revenue. To strengthen Type C area, the travel itinerary is designed to link lesser known locations. The one day trip, available through famous “Local Alike” agency, includes visits to temple, ancient mangos teen tree, orchards, waterfalls and the mountain with sunset view. Furthermore, Innovation Hub guides the advertisement which truly reflects the identity of Lan Saka. Due to the large quantity and quality of the fruits in Lan Saka area, the branding and then the mascot are conveyed in forms of mangos teen. The charming essence is captured on a short film entitled “Finding the heart of Lan Saka”. In addition to this short film on the internet, the television program has filmed its episode in the area. Such exposure has increased the number of tourists and, hence the local income without losing the identity and the heart of Lan Saka. This collaboration is in accordance with Thailand 4.0 policy and the Amazing Thailand Go Local campaign in which Nakhon Si Thammarat currently leads as the top province to visit. Furthermore, the collaboration template of Upper South Innovation Hub linking academic, government and private sectors is currently implemented in Phang Nga province.

Keywords: Lan Saka district, Nakhon Si Thammarat province, community-based tourism, creative economy
Rendering Compliance Tools to Educate Hotel Tax Payers in Tourism Village, Does It Work?

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Abstract

Guci Village is a famous tourism object located in Tegal District, Central Java, Indonesia, which contributes significantly to the local economy. Most of people there having business activities as lodging providers. In every holiday moment, Guci will be fulfilled of tourists, most of them are local tourists. However, the innkeeper feels that this condition is not optimal. The problem is that they still use conventional marketing strategies by assigning innkeepers outside the inn to attract quests. They have not used online marketing with a variety of applications on mobile phones or social media that are currently rife. Eventually, this problem impacts on the local tax revenue from hotel sector which is remain stagnant. Main factor found as determinant of hotel tax payer’s compliance here is about their lack of knowledge in how to do their tax obligations and why they must do that. They always think that taxes are not important, they are just burdensome, and the implementation is complicated. Therefore, the Local Tax Management Agency (LTMA) in collaboration with university students, initiated a program to render some compliance tools to educate hotel tax payers in Guci about what hotel tax is and how to comply the tax obligation. The compliance tools mentioned are banners, safes, and notes. The LTMA gives the tools for free for all of the innkeepers in Guci gradually. For the first step, there were 84 inn/lodges involved. The banner is intended to teach about the subject, object, tariff, and procedure for paying hotel taxes. Safes is intended to help them separate the tax money form gross income. While notes is intended to make them record income from their lodging. The purpose of this study is to analyze whether the program works or not to increase hotel tax payer’s compliance.

The study was divided into phases: online marketing training to develop the innkeepers marketing strategy; and rendering the compliance tools (banners, safes, and notes); then finally measuring the effectivity of mentioned treatment towards tax compliance. The training was given to the member of community of innkeepers in Guci in collaboration with the Government Tourism Office. The participants varied from small inns to villas and large hotels in Guci who were share and change experiences. At the first training, the community was enlightened by a marketing expert about how important of using online marketing nowadays to promote their facilities, the training end up with practicing of using one of social media as their online marketing. The second activity was giving the community the compliance tools and explain them how to use it. Finally, the study evaluates the effectiveness of two trainings toward the tax compliance by using questionnaires. As result, the treatments only affect about 52% of the community behavior change in tax compliance. LTMA also said that there is no significant raise yet to tax revenue, considering the program is still in the early probation stage. Another factor that affect them related with their characteristics as low education level society.

Keywords: Online marketing, hotel tax, innkeeper, tourist village, community-based participatory research
The **Wat Kate** Community’s Participation in Cultural Tourism Initiative: A University-Urban Community Engagement in Chiang Mai, Thailand

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**Abstract**

The **Wat Kate** community is located in the city of Chiang Mai, Thailand, dating back to at least the late 18th century. The community has a diverse cultural background and its members are of different ethnic origins, and religions (i.e. Buddhism, Christianity, Islam, and Sikhism). The **Wat Kate** community is thus unique, and rich in history and culture. However, the community’s historical information has never been collected in a systematic manner. Although a large number of information is available, it has never been widely distributed to the community members, tourists and the general public. Neither has it been arranged to fit with cultural tourism activities. To address this issue, participation from the community and other parties concerned is required to collect historical information, and identify ways for the community to take part in these activities. The present study was then developed together with the community aiming to collect the historical data and circulate through cultural tourism with the **Wat Kate** community serving as a ‘living museum’.

To this end, various activities were organized jointly with the community to collect the historical information and raise awareness of history and culture preservation as well as encourage cultural tourism development. For example, at the beginning of the study, participating students from Chiang Mai University conducted a community survey by way of a questionnaire and the community member interviews covering such items as historic buildings, safe routes for bicycling/walking, and local food history. The data were then used to build a tourist map of the community. A forum on the community’s history was also arranged with a goal for the primary school children to learn about the past from local experts and raise their awareness of this area. Some children also participated in a ‘young guide’ activity organized together with a local school. In this activity, they learned about the tour guide profession and had an opportunity to practice as a tourist guide. Towards the end of the study, a community walking tour based on the tourist map created was also tested, where local experts provided information to the participants.

The activities organized enable learning for all parties involved, especially the **Wat Kate** community. Information and insights gained could be used as a basis for developing cultural tourism in the community, while preservation of the history and culture could also be achieved.

**Keywords:** The **Wat Kate** community, community participation, cultural tourism
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The Wat Kate Community’s Participation in Cultural Tourism Initiative: A University-Urban Community Engagement in Chiang Mai, Thailand

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Abstract

The Wat Kate community is located in the city of Chiang Mai, Thailand, dating back to at least the late 18th century. The community has a diverse cultural background and its members are of different ethnic origins, and religions (i.e. Buddhism, Christianity, Islam, and Sikhism). The Wat Kate community is thus unique, and rich in history and culture. However, the community’s historical information has never been collected in a systematic manner. Although a large number of information is available, it has never been widely distributed to the community members, tourists and the general public. Neither has it been arranged to fit with cultural tourism activities. To address this issue, participation from the community and other parties concerned is required to collect historical information, and identify ways for the community to take part in these activities. The present study was then developed together with the community aiming to collect the historical data and circulate through cultural tourism with the Wat Kate community serving as a ‘living museum’.

To this end, various activities were organized jointly with the community to collect the historical information and raise awareness of history and culture preservation as well as encourage cultural tourism development. For example, at the beginning of the study, participating students from Chiang Mai University conducted a community survey by way of a questionnaire and the community member interviews covering such items as historic buildings, safe routes for bicycling/walking, and local food history. The data were then used to build a tourist map of the community. A forum on the community’s history was also arranged with a goal for the primary school children to learn about the past from local experts and raise their awareness of this area. Some children also participated in a ‘young guide’ activity organized together with a local school. In this activity, they learned about the tour guide profession and had an opportunity to practice as a tourist guide. Towards the end of the study, a community walking tour based on the tourist map created was also tested, where local experts provided information to the participants.

The activities organized enable learning for all parties involved, especially the Wat Kate community. Information and insights gained could be used as a basis for developing cultural tourism in the community, while preservation of the history and culture could also be achieved.

Keywords: The Wat Kate community, community participation, cultural tourism
A Participatory Action Research on Preservation of Intangible Cultural Heritage “Ba-nor Drum Playing” by Cooperation between Thaksin University and Thai Malays’ Communities in Narathiwat Province, Thailand

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Abstract

Ba-nor drum playing is an intangible cultural heritage in a form of an ancient art performance of Thai Malays in border districts, Narathiwat Province. The heritage has been passed on through at least 5 generations. Almost every village has its own Ba-nor band. In 2014, (B.E. 2557) Ba-nor drum playing confronted the decadence and the risk of loss. Currently (B.E 2561), there are merely three villages playing the Ba-nor drum, namely they are (1) Ban Hin-sung, Arawan Subdistrict, Waeng District, (2) Ban Ya-hor, Mae-dong Subdistrict, Waeng District, and (3) Ban Ba-nor Ma-ya, Sa-kor Subdistrict, Su-ngai Padi District. The communities saw the risk of losing Ba-nor drum playing tradition which was inherited from ancestors and considered that this was the duty of the descendants to inherit this precious heritage.

Thaksin University with the passion to serve the society has set the challenge in the strength of art, culture and local wisdom, aimed at collecting and restoring data concerning the Ba-nor drum playing. The collection and the restoration were undertaken through the cooperation between the communities and Thaksin university researchers. This was expected to cultivate good relationship among local people in the communities and instill their conscience toward the preservation of the heritage, resulting in its sustainability. The formation of community participations applied the participatory action research including 6 research activities: (1) group discussions, (2) group meetings, (3) demonstration of Ba-nor drum playing, (4) map-making showing family relations, (5) Ba-nor drum playing competitions, and (6) restoration of the data for the communities. The participants involved 72 villagers which were five groups of people from the three villages. The norms for Ba-nor drum playing included 4 components. Firstly, they realised the importance of seniority. Secondly, they believed that Ba-nor drum playing descents were transmitted through generations. Thirdly, Ba-nor drum playing descendants were to play or support it. Lastly, the heads of Ba-nor drum playing bands had to be from Ba-nor drum playing descents. As a result from the collaboration between Thaksin University and stakeholders, their preservation of the heritage was carried out through (1) forming Ba-nor drum playing community connection in Narathiwat Province and collaborating in restoring the heritage in others village: Ban Ae-wae, Arawan Sub- district, Waeng District and Ban Rigo Rigo Sub-district Su-ngai Padi District, (2) re-arranging the long loss competitions of the drum playing among the villages from B.E. 2559 to present, (3) teaching how to play the drum to students in 3 schools in the 3 villages: Sukasongkroh Narathiwat School Lochut Sub-district Waeng District, Termayu School Erawan Sub-district Waeng District and Banbangomayae School Sako Sub-district Su-ngai Padi District, and (4) establishing “Ba-Nor Community Network of Narathiwat” in terms of cultural strength and forming an informal group for making and selling related-Ba-nor drum souvenirs. Given these, it can be said that the preservation could bring two significant components to the development of community strengths: sustainability and sense of belonging. In addition, these activities were pointing out on better changing of cultural conservation of “Ba-nor Drum Playing” after the cooperation between Thaksin University and communities and could be ensured that this heritage will continuously live on the path of the Thai-Malay’s community.

Keywords: participatory action research, preservation of intangible cultural heritage, Ba-nor drum playing, Thaksin University, Thai Malays’ communities in border areas of Narathiwat Province
When We Start to Sing”, the Community Initiative Project on Preserving Cultural Heritage of Phleng Rua Lam Pho

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Abstract

The traditional top-down model of services and provisions has long been used in Thailand government policy. There were many findings from prior literature that discussed on top-down and bottom-up policies, as well as advantages and drawbacks of both models. However, the situation was improved in a recent decade when many societal parties focused on the community development and they began to promote the bottom-up model. This article demonstrates the community initiative project on preserving cultural heritage in Bangklam district Songkhla province, south of Thailand. The important challenges of the project were the risk of disappearing of folk performance which was called Phleng Rua Lam Pho. Therefore, university, community, and local government organisations were chosen as actors for the discussion. So, the article aims to understand how the actors cooperate and foster a bottom-up model of community development. Moreover, the article investigates how the stakeholders help sustain the cultural heritage.

A qualitative methodology was employed for this research. The data were gathered between September 2017 to January 2018 by means of semi-structured interviews with 13 persons from different sectors, workers, university lecturers, local philosophers, and leader of local government organization. Participant observation and roundtable discussion were also used in this study. Interviews were digitally recorded and transcribed. Thereafter, the transcripts and other textual data were classified and analyzed by using content analysis method. The results showed that Bangklam district and its neighborhood encountered rapid socio-economic growth. People in the community immigrated to the urban area. Elderly and young children were left behind and this strongly led to the poor social interactions and poor socio-cultural activities. The local folk performance like Phleng Rua Lam Pho was abandoned and it eventually discontinued performing in the community. The harmful risk of the disappearing cultural heritage was commonly found in many urban fringes area of Thailand. Thus, the Rajamangala University of Technology Srivijaya (RUTS), the Bangklam district cultural council and the Institute for Southern Thai Studies aimed to reestablish the folk performance of Phleng Rua Lam Pho. The project started by RUTS and the Bangklam district Cultural Council launched research project on collecting the cultural heritage data. The research project helped support local people participate in every stage of data collection procedure. By employing participatory method, villagers were able to raise their voices and shared their knowledge as well as suggested possible ways of sustaining their cultural heritage.

After the project was initiated in the area by supporting from many stakeholders, the Phleng Rua Lam Pho clubs were set up by local philosophers. More importantly, villagers learnt how to form a formal club and they were able to negotiate with other government agencies. This resulted to collaboration between, Kutao municipality and Bangklam district office; they encouraged these clubs to perform in many cultural events, for instance, during the Buddhist lend festival and also at the floating market in order to support community tourism. The support from the local government was clearly noticed as the means of preserving cultural heritage significantly. The efforts within the community improved the condition of sustaining cultural heritage while, the stakeholders also played an important role in empowering people and undermining structural challenges in order to achieve transformative change.

Keywords: Preserve cultural heritage, community-based participation, Phleng Rua Lam Pho
Rising to the Challenge of SDGs in Asia through University-Community Engagement

Contemporary urban reflections of Phayao

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Abstract

Nowadays, the international trend focused to sustainable development worldwide. Thailand was also a country where confronted of the problems from urbanization of modernity. Therefore, the main issues for rehabilitation were social, economic and environment developments. Phayao was a perfect developing city model for sustainable development because it had suitable functions of healthcare and tourism. Moreover, it stepped to aging society already. This city case study was helpful to figure the rehabilitative method out. The research objectives were the contemporary cultural study for flexible change, created value of local cultural conservation for new generation and good participations of government, private sector and people for city development sustainably. To the methodology of the research was area-based collaborative research with architecture survey and essential data collection about contemporary culture. Finally, the research outcome presented the factors of social change in developing country with Phayao’s context and the solutions. It proved that technology had influence in the city developments of digital age. Apart from sustainable community being, the way to reach smart city was a new goal including the identity of city concept. Creative city was a good universal image of Phayao in various people groups’s connection and contemporary urban reflections. Following creative city concept, the powerful function which lifted the communities was educational institution. University of Phayao was the main hub of community engagement with high technologies and smart people creation. It concluded that educational sector was important to develop the urbanization in this new generation correctly.

Keywords: Phayao, Contemporary urban and Smart city
Development of System and Mechanisms for Academic Support from Uttaradit Rajabhat University for Provinical Development Prevention and Surveillance of Teenage Pregnancy in Uttaradit Province

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Abstract

Background: There has been a continuous increase in statistics for teenage pregnancy in Uttaradit Province. In addition, the number of HIV infections for pregnant teenagers has increased. The prevention and surveillance teenage pregnancy had no integrated system among the different agencies in community. In addition, a working system was not designed base on the information of the community. The purpose of this study was to develop a system of mechanisms and academic support from Uttaradit Rajabhat University to implement the prevention and surveillance of teenage pregnancy by stakeholders in community.

Methodology: This research uses Action Research which research areas were selected specifically in the area of potential and readiness for operation. The first year consisted of five areas; afterwards, the success was achieved in the second and third years with five areas in each year, for a total of fifteen areas. Stakeholders include schools, local administration and health service in the community. The research phase is divided into four phases: Phase Ⅰ, analyze teenage pregnancy in each area and problem management in the community; Phase Ⅱ: raise awareness in the community and initial action plan; Phase Ⅲ: use the research to find answers to the problems and design the work of each team and implementation and Phase IV: evaluate their performance. The research tools consisted of participatory community analytical tools, in-depth interviews, and focus group discussions.

Results: Community-based analytical process helps the community to learn about teenage pregnancy problems. In addition, the community is made aware that it is a collective problem must be resolved by a partnership with community agencies. The network analysis of problem solving resulted in the integrated work of the community. The local government organization provided a database and a map which shows where teenage families live, which is supported by the academic team of Uttaradit Rajabhat University. The social outcomes of the research were community-oriented, such as schools, health services, health care providers, community, children and youth. Schools have adapted the sex education curriculum to be consisted with the context of the community and have expanded the learning process on communication about sexual information in the family. Health services have adjusted sexual health services from being reactive to being proactive. Health care providers train service providers to have a more appropriate attitude towards pregnant teenagers. The community works with the network. Youth have come together to create the center area as the learning area in community. The results of the participatory learning contributed to the social outcome in terms of the prevention and surveillance teenage pregnancy in community. The local administrative start to cooperate working system with school, health services and youth group in community. An academic team from the university integrated the disciplinary knowledge and spatial research to create participative working strategies. The impact of this study was decreasing of teenage pregnancy rate 15-19 year olds in some area such as Lablae district (6.35% t0 4.01%) Thapla district (24.10 to 11.21). All teenage pregnancy groups receive better care. The communities have in place participatory preventive public policy and surveillance of the teenage pregnancy situation on both the sub-district and provincial levels.
Conclusion: Pregnancy prevention in the community should integrate work among the agencies by using the information and research to design a working system. Teenage pregnancy must be addressed within the context of the individual, family, and community. Local government organizations should coordinate with other local agencies in order to maintain the resolution mechanism. The existence of a sustainable spatial resolution mechanism in the community.

Keywords: teenage pregnancy, system and mechanisms, community-based participatory research
A Decision Support System for Examination of Questioned Documents

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Abstract
If someone questions the authenticity of a signature or a handwriting in a document, the document becomes a questioned document. Every day, millions of documents are generated. Some of these become part of questioned documents in line for examination. Inside a Crime Laboratory, only very few are trained to examine a questioned document. In some offices, they do not even have experts to handle the case. This paper talks about how researchers in the academe who are into the same field of expertise help the Crime Laboratory of the Philippine National Police by sharing the information and knowledge about the latest trends in technology. Sharing of knowledge expands to the contribution of technical expertise in digital computing to create digital tools to help expedite their work in the laboratory. The use of latest trends in technology will help speed up the analysis of the document and expedite legal battles.

The practitioners in the field do not have enough time to examine the latest practices in technology due to the bulk of work that they need to handle. This becomes a good service for a University who has experts in similar field, and is actively doing research or is developing solutions using the latest in technology to help scientifically solve the problem. Finding the right scientific solution may consume a lot of time. Existing systems or tools can be incorporated, but the idea of making it fit to the needs of the crime laboratory examiner is more useful but challenging due to its complexity. A researcher from the academe is in a perfect position to help find the right solution.

There are two types of service used in this project: an awareness campaign, and development of a tool to help the examiners in technical decision making. In awareness campaign, elicitation of information is the key activity. It is regularly done to ensure that the examiner is ready to adapt the technology. While awareness campaign is ongoing, the tool is developed in the laboratory. Constant communication with the examiner through campaign is also a key factor in developing the tool.

In tool development, a method to automatically examine the document is created. Part of this is the use of digital image processing to accurately measure the features of the content of a questioned document. In this study, the tool or system will not be used to replace the human examiner, but will aid the examiner in examining the specimen.

One of the challenges encountered is the creation of a knowledge base of signatures. Creating a dummy signature database can greatly affect the creation of a knowledge base. Actual signatures in the laboratory cannot be used as test beds for privacy reasons. This is where Artificial intelligence comes in. It is greatly needed to help solve the problem. The tools introduced are able to produce a clearer understanding of the specimen. This in turn produces a more accurate examination reports which can lead to the conviction of the right person. The initial activities prompt the examiner to request for a more sophisticated tool that they can use to help produce more scientific results.

This paper focuses on the awareness campaign. It was able to attain its goal by producing a hundred percent conviction on the incorporation of recent technology to improve the way examiners track culprits. It created a great impact on the way the examiners do their work. Equipping them with knowledge on how to use digital technology made them more confident with their job.

Keywords: Decision support system, questioned documents, artificial intelligence, technology awareness campaign, crime laboratory, knowledge base.
The Development of Local Research Database System for Rajabhat University Network

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Abstract

Rajabhat University is the educational institution for the local community, and it is one of the largest network of educational institutions in the country. However, it has not been fully integrated and immersed with all the local community development projects. This developmental research study, ‘Development of Local Research Database System,’ used community collaboration to engage and Rajabhat University Network associate. Action research is considered one of the most important strategies in use appropriately and to apply effectively to each local development project. The purpose of this study was to explores issues and identifies needed information in the community context related the vast university resources.

The study was divided into two phases: a development database system phase, and an implementation phase. Both qualitative and quantitative methods were used in Phase One to explores issues and identifies needed information in the community context related the vast university resources, and Phase Two to develop a network of Rajabhat University Network to implement this system for their university, as well as to develop a mechanism for their community. This paper focuses on university implementation phase to draw linkages university knowledge of community-based participatory action research through this case study on community issues. Each Rajabhat University will also support and train the local community to become an independent entity. This system consisted of the essential data 6 groups which are: 1) Research information 2) Researcher information 3) Specialist information 4) Creative work information 5) Community information and 6) Community issues. There are the concepts of local research database to uses this information to create a knowledge linking system of the academic and community contexts which are interrelated to support and to enhance the local development projects. After implementation also improved, the Local Research Database consisted of 10 Rajabhat University, 520 research information, 730 researcher information, 305 specialist information, 2 Creative work information, 405 Community information and 190 Community issues.

Finally, this project was successful in increasing knowledge of the universities and the communities with the Rajabhat University Network engagement and the system implementation has resulted a strong academic and skills in problem identification and problem solving were learned for community development, the impact of co-operation with other relevant institutions are suggested to produce and use the model for other institutions to improve knowledge and community development.

Keywords: Local Research, Rajabhat University Network, University Engagement, participatory action research
Curriculum Development of Master’s Degree in Industrial Engineering  
for Thailand Sustainable Smart Industry

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Abstract

Nowadays, companies are being challenged to change from utilizing technologies individually (Industry 3.0) to applying information technology to connect technologies together (Industry 4.0) to better respond to customer needs with security, prosperity, and sustainability in a highly competitive globalization market. Recently, in Thailand, the government also foreseen the need of change from production-based economy (Thailand 3.0) to value-based economy (Thailand 4.0) in order for Thai industries to be more competitive. One important strategy is to focus on producing innovative products and services which require high potential and skilled knowledge workers. Thus, development of high skilled workers at all levels is essential for companies in order to be successful. Unfortunately, existing curricula in both undergraduate and graduate levels, including industrial engineering, cannot effectively deal with this change.

For this reason, the project of Curriculum Development of Master’s Degree Program in Industrial Engineering for Thailand Sustainable Smart Industry (MSIE4.0) is initiated. MSIE4.0 is a joint capacity building project between six universities in Thailand and three EU partner universities, funding by 2017 EU co-funding for Erasmus + Capacity Building in Higher Education. The objective of MSIE4.0 is to enhance the capacity and ability of universities in Thailand for the delivery of a high quality competence-based curriculum for Master’s degree in industrial engineering that supports sustainable smart industry (Industry 4.0), conforms to European Qualifications Framework (EQF) and is applicable to EU partner universities. The goal is to achieve a modernized curriculum containing 15 new courses that will be developed for student-centered learning and equipped with teaching and learning materials. The course will also be prepared for online learning. Laboratory with remote access will be built to support student learning. More importantly, teaching and technical staffs will be trained by experts in the areas from EU partners.

In order to achieve the goals, MSIE4.0 will perform the following approaches. First, a curriculum for Master’s degree in industrial engineering, in Thailand, to support sustainable smart industry is to be developed. To do this, industry requirement analysis is performed to a) identify the strengths and weaknesses, the common points, the difference, and the good practices concerning curricula, teaching methods and tools in Thailand and EU universities b) identify the gap between the need of industry and the competence of graduated students from current curricula offered by Thailand and EU universities and c) recommend the specifications and focus areas of the new proposed MSIE curriculum. In this step, an intensive survey with questionnaires is conducted using 77 industries (Thailand and EU companies) from several sectors, including manufacturing, electronic, automotive etc., and 450 students (Thailand and EU students). After the general requirement of MSIE is attained, the courses, learning and teaching tools, delivery processes and platform for student-centered learning of the curriculum are developed. Next, modern ICT tools and methodologies for effective student-centered learning of the curriculum are implemented. In addition, the quality assurance and the EQF approach for the delivery of the curriculum meeting international accepted education requirements must be carried out. Finally, establishment and continuation of partnerships among partner universities need to be maintained.

Keywords: Industry 4.0, Thailand 4.0, industrial engineering, curriculum
A Study on Key Business Knowledge, Government Support, and the Expected characteristics affecting the Perceived Business Success of Thai Small Business Entrepreneurs

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Abstract

The Thai Government has implemented the Thailand 4.0 model which focuses on security, prosperity, and sustainability. The Government has attempted to create projects for Thai sustainability by including local communities and SMEs, for example through public-private partnerships which collaborate between SMEs and the Government sector. The Ministry of Commerce created this important and unique project to support local small commercial stores and community enterprises around the country. This project was expected to sustain small businesses and community enterprises for them to be the source of the daily products and services to support their local communities. The ‘Pracharat-Blue-Flag’ project was a government project to develop and improve local small businesses to develop business owner knowledge, competencies and confidence. The ‘Pracharat-Blue-Flag’ project was a collaboration between the Provincial Commercial Office with the local University to create a core business training program and train each Pracharat-Blue-Flag store about business management for success. The purpose of this study was to examine how the key factors, including key business knowledge, government support and the expected characteristics affect the perceived business success of the Pracharat-Blue-Flag stores after passing the core business training program.

This was a quantitative research study and the data was collected using questionnaires. The key independent variables used included key business knowledge in management, product, and marketing and sales. Other independent variables used were government support and expected characteristics such as honesty. For the dependent variable, the study used balanced scorecard perspectives to measure the perceived business success. This consisted of four perspectives: financial, customer, internal process, and learning and growth improvement metrics. The participants in this study were small business entrepreneurs who had joined the Pracharat-Blue-Flag project in Roi Et province, which had a total of 743 registered commercial stores in the province. The data was collected from all the participants who took part on the training courses at Roi Et Rajabhat University. 388 respondents were used in this study after the data screening process. The quantitative data was analyzed using descriptive statistics and stepwise multiple regression analysis.

The results show that: (1) the respondents included 54.6% females and 45.4% males; (2) the majority of respondents were over 35 years-old; (3) 62.9% of respondents had undergraduate degrees; (4) knowledge in accounting and financial management, product selection and ordering, links with local and community products, and government support in terms of market stimulation had positive significant influences on the financial improvement metrics; (5) knowledge of customer relations and services, accounting and financial management, product display and store decoration, links with local and community products, and government support in terms of image promotion and public relations had positive significant effects on the customer improvement metrics; (6) knowledge of inventory and stock management, links with local and community products, and government support in terms of image promotion and public relation significantly influenced improvements to internal processes; (7) knowledge of technology management, inventory and stock management, links with local and community products, expected characteristics, and government support through market stimulation significantly influenced the learning and growth improvement metrics; (8) the key variable affecting all four perspectives of the balanced scorecard was marketing and sales knowledge and its link with local and community products; and (9) the expected characteristics significantly affected the learning and growth perspectives.
This study suggests that knowledge of management, products, and marketing and sales can help to improve small business entrepreneur competencies and confidence to run their businesses to achieve success after participating Government’s Pracharat-Blue-Flag project. In addition, government support and the expected characteristics were the key factors for their business success.

Keywords: Key business knowledge, Government support, Expected characteristics, Perceived business success, Small business entrepreneurs
Increasing Competitive Advantage of Correctional Institutions Thru Digital Marketing Strategy

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Abstract

This paper focuses on community engagement in term of inmate empowerment utilizing technological aspect, which aims to increase the capacity of inmate, so they can become entrepreneurs after being free from prisoners. Beginning with attention to the negative stigma of ex-inmate, which resulted in difficulties of finding regular jobs, this program is trying to provide ways for them being entrepreneur.

The community engagement consists of three activities. First, the identification and assessment of program feasibility, second is designing community engagement program based to the feasibility result, and the third is implementation phase. Based to the feasibility studies, this program choose inmate with the lowest crime charges, excluding the drugs charges, and prioritize to those who have the shortest time of being free from prisoners, and those who have the skilled and eagerness of entrepreneurship. Then, the community engagement program is designed to deliver knowledge and training of digital marketing. The idea is to enhance the packaging of product produce inside correctional institution, also to integrate the marketing channel and distribution using website entitled "pas mart". The Pas Mart is design to be filled with information of products produce by inmate that can be trade online to public. And this activity can be continuing even after the inmate being free from prisoners.

This paper focuses on community engagement phase to draw linkages between the principles, approaches and applications of community-based participatory through the case study increasing competitive advantage of correctional institutions product thru digital marketing strategy. During first to third activities, one website, book, videos, and press release were developed. The content of these materials were developed based on interviews and observational learning. After receiving trainings, inmate knowledge and awareness increased significantly. That includes new ways of thinking, problem solving, and the ability of basic packaging design and digital marketing. Also, inmate knowledge on how to build a standard operating procedure in creating products that have competitive advantages both in national and international market, and how to develop strategic system using technology are improved. That knowledge would integrate the process of producing goods, marketing, and distribution. With this knowledge and skill, it is hope that ex inmate can create their own jobs, since the good, and the system are develop, create, and maintain by them self. This, of course not only value the inmate, but also value the correctional institution.

Although this program was successful in increasing knowledge and awareness of the inmate, the long-term impact and sustainability of these activities need to be examined. Furthermore, co-operation with other correctional institution or else The Ministry of Law and Human Rights or other relevant institutions or professions are suggested.

Keywords: Inmate Empowerment, Participatory Action Research, Community-based Participatory Research.
The Importance of Online Marketing Practices for Enhancing Success of Destination Branding and Town Tourism Development

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Abstract

The growth of Indonesia’s national tourism is a fast-growing due to some destinations are promoted overseas and locally. One of famous destination, namely Guci destination in Tegal City, Central Java – Indonesia has not revealed expected growth as well as other destinations. Accordingly, the township is awarded with beautiful scenery, hot spring, sunny and cold climates and welcome people. This condition is viewed as a manifestation of problems in marketing activities. Thus, a research is necessary to demonstrate how hotel/ homestay owners may get a success of marketing strategies and activities. Accordingly, the research attempts to identify what matter triggers hotel and homestay occupancy in Guci destination perform unwell is the first activity to be followed by a collaborative program with the Government in doing workshops.

To address this issue, the research is developed used a quantitative approach by doing survey and secondary data analyses. Indeed, the survey is held to 84 members of hotel/ homestay owners community in Guci as respondents. The findings demonstrate that the success can be achieved by a progressively online marketing performance, not only to promote the business as well as the destination, but also the owners are encouraged to create their hotel/ homestay is proper to be promoted. The society can obtain benefits also i.e. they will be involved as employee in hotel/ homestay management and organizing online marketing, participate in events held and increase their household income/ welfare.

Yet online marketing has been found as a successful way to gain destination image, the success of this online marketing requires simultaneous endeavor between several parties. They are first, local Government in supporting public services and facilities including internet network and the action for driving online marketing such as to activate the local Government website to promote tourist attractions and hotel/ homestay in Guci and to establish attractions well as with online marketing, owner and visitors allows to deliver wonderful experiences on pictures and stories. Second, community in organizing a collaboration of all members with local Government and fellow owners. Third, citizen in participating in Government program and performing well in business owners’ establishment; and fourth, its visitors to promote the destination continuously.

Hence, the owners need to be assisted to develop online marketing by advancing their ability to reveal what benefits or features to offer; to find out uniqueness to expose; to offer experience considering value for money; and to develop product/ services by proving their promise (assurance). We concern to assist owners to develop online marketing communication and actively do conversion by using a low-cost media as Facebook and zero-cost as Website, Instagram, Line@, and WhatsApp with influential impacts to reach target markets. Finally, the success of occupancy in Guci is not only encouraged by owners’ efforts in applying elements of online marketing communication, but also the supports by Government, community, and other parties. Therefore, interactions and collaborations are needed to develop to gain benefits and achieve sustainability.

Key words: online marketing, destination branding, township tourism