



TECHNICAL AND VOCATIONAL
Education
& Training International Conference
18 November 2016 - 20 November 2016
KSL Hotel & Resort, Johor

PROGRAMME BOOK



nurturing
future
talent
creating innovative leaders



RAVTE
Regional Association for
Vocational Teacher Education

PROGRAMME BOOK

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President of Rajamangala University of Technology Thanyaburi, Thailand

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Dean of Faculty of Education

President of Persatuan Pendidikan Teknik dan Vokasional Malaysia

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INTRODUCTION

The development of education in the international level has sparked the idea to educators and academia to find solutions on issues of education relevant to the 21st century. According to Education Development Index (EDI), Indonesia, Malaysia, Philippines, Vietnam, Myanmar and Cambodia are listed as mid-level countries in the EDI. Therefore, to improve the quality of education, strategies and efforts need to be strengthened and ensure that education in this region is competitive and recognize in the international level. Collaboration between higher institutions within the ASEAN region such as in this TVET International Conference could serve as one of the mediums in idea sharing amongst researches and practitioners in improving education quality. Universiti Teknologi Malaysia together with Rajamangala University of Technology Thanyaburi, Universitas Negeri Makassar and Universitas PGRI Semarang collaborate this year to organize the TVET International Conference. The first TVETIC was successfully organized on 25-26 August 2014 by Faculty of Education UTM and was co-organized with the Persatuan Pendidikan Teknik dan Vokasional Malaysia (PPTVM). It is hoped that the continuity of this program will attract interest from both academia and practitioner to come together and share their knowledge and aspiration in improving Technical and Vocational Education & Training.

CONFERENCE OBJECTIVES

The main purpose of this international conference is to produce innovative leaders and nurturing young talents in Technical and Vocational Education & Training. It is also hopes that through this conference it will:

- establish collaborative relation in educational research
- provide a platform for researchers to share research findings, knowledge and latest development in TVET



**FOREWORD BY THE VICE-CHANCELLOR
UNIVERSITI TEKNOLOGI MALAYSIA**

السلام عليكم ورحمة الله وبركاته and Sincere Greetings to All,

On behalf of Universiti Teknologi Malaysia, I would like to welcome all keynote speakers, presenters and participants to the Technical and Vocational Education & Training International Conference 2016 (TVETIC 2016), which is held at KSL Hotel & Resort in Johor, Malaysia. I would also like to congratulate the Faculty of Education, Universiti Teknologi Malaysia and Persatuan Pendidikan Teknik dan Vokasional Malaysia (PPTVM) for their great effort and success in planning and organizing this conference.

TVETIC is one of the platforms to build a global network and improve collaboration and idea sharing in research to improve the quality of education, mainly on Technical and Vocational Education & Training (TVET) and other related issues in education, in the face of globalization towards the development of human capital and territorial integrity.

Malaysia has embarked on various initiatives to propel the country towards its goal of becoming a high income nation and developed economy by 2020. The cornerstone of this aspiration is the availability of highly skilled human capital. In this context, TVET plays a pivotal role in providing the skilled workforce required for the country's economic transformation.

According to MOHE's Malaysia Education Blueprint (Higher Education), there will be an increase in demand for an additional 1.3 million TVET workers by 2020 in the 12 National Key Economic Areas (NKEA) identified under the Government's Economic Transformation Programme (ETP). TVET qualifications play a vital role in the country's economy by equipping our future talents with knowledge and skills from basic to advanced levels in various economic sectors. As a student, pursuing a TVET qualification enables you to acquire real skills that you will be able to build on with further training or provide job opportunities and become leaders of innovation. Hence, with this TVETIC, students and participants have a platform to share ideas and knowledge, particularly in TVET.

Finally, I would like to thank the distinguished keynote speakers, the scientific committee, presenters and all participants for their contribution in making this conference a success. Special thanks to the organizer, the Faculty of Education, Universiti Teknologi Malaysia and the co-organizers, Universitas Negeri Makassar, Indonesia, Universitas PGRI Semarang, Indonesia and Rajamangala University of Technology Thanyaburi, Thailand for the tremendous support and commitment to this conference.

Best wishes,

Prof. Datuk Ir. Dr. Wahid bin Omar
Vice-Chancellor



**FOREWORD BY THE PRESIDENT
RAJAMANGALA UNIVERSITY OF TECHNOLOGY THANYABURI,
THAILAND**

It is a true pleasure for me to welcome all to the Technical and Vocational Education & Training International Conference 2016 (TVETIC 2016). I would also like to congratulate the Faculty of Education, Universiti Teknologi Malaysia and Persatuan Pendidikan Teknik dan Vokasional Malaysia (PPTVM) for their great effort in planning and organizing this conference. Special thanks to the co-organizers of TVETIC2016, Universitas Negeri Makassar, Universitas PGRI Semarang, Indonesia and Rajamangala University of Technology Thanyaburi, Thailand.

Thailand has highlighted the importance of technical and vocational education where 40 to 60 percent of students have mastered in vocational and technical skills. The Thailand government has determined that the Technical, Vocational, Education and Training (TVET) sector is the main route to provide highly-skilled human resources and is also one of the key drivers in becoming a high-income nation.

Therefore, this conference is an opportunity for academicians of both local and international institutes of higher education, postgraduate and undergraduate students from various disciplines in TVET to present, share, exchange opinions and discuss research and execution of TVET. This conference is one of significant contribution of Rajamangala University of Technology Thanyaburi, Thailand as co-organizer in ensuring that the national agenda to becoming a high income country will be a success.

I sincerely hope that this conference will achieve its objectives to provide a platform for researchers in TVET to share research findings, knowledge and latest development in TVET.

Thank you.

Assoc. Prof. Dr. Prasert Pinpathomrat
President, Rajamangala University of Technology Thanyaburi, Thailand



**FOREWORD BY THE RECTOR
UNIVERSITAS NEGERI MAKASSAR, INDONESIA**

On behalf of Universitas Negeri Makassar I would like to welcome all participants of the Technical and Vocational Education & Training International Conference 2016 (TVETIC 2016). Special thanks to Faculty of Education, Universiti Teknologi Malaysia and Persatuan Pendidikan Teknik dan Vokasional Malaysia (PPTVM) as well as to the Universitas Negeri Makassar, Universitas PGRI Semarang and Rajamangala University of Technology Thanyaburi in their effort in planning and organizing this conference.

Vocational Education and Training (TVET) aims to improve the competence and capacity of skilled workers according to labour market demand, especially the demand of the business sector. However, there are still challenges and hurdles in the implementation of TVET in Indonesia as well as other countries in ASEAN.

We highly believed that coordination and cooperation in the form of new partnerships between education providers, public, private and international vocational training institutions are essential in the success implementation of TVET in Indonesia and globally. Therefore Universitas Negeri Makassar, Indonesia is so grateful to become one of TVETIC 2016 co-organizers.

TVET is growing and establishing its role at the heart of ASEAN development. Hence, this conference is a huge opportunity for academicians of both local and international institutes of higher education to share and exchange knowledge in TVET practices.

Thank you.

Prof. Dr. Husain Syam M. TP
Rector
Universitas Negeri Makassar, Indonesia



**FOREWORD BY THE RECTOR
UNIVERSITAS PGRI SEMARANG, INDONESIA**

I would like to express my great pleasure that Faculty of Education UTM is hosting the Technical and Vocational Education & Training International Conference 2016 (TVETIC 2016). Special thanks are also dedicated to the co-organizers of this conference from Rajamangala University of Technology Thanyaburi, Thailand, Universitas Negeri Makassar, Indonesia and Universitas PGRI Semarang, Indonesia.

The New Economy is creating new TVET globally opportunities as well as new challenges in Technical and Vocational Education & Training. Indonesia is undergoing a transition phase as it develops to increased competitiveness, growth and performance in human resource development. The Indonesian government is in the effort of developing the nation's education and training system in order to transform the Indonesian TVET system which aimed to improve employability and participation in lifelong learning.

TVET is concerned with the acquisition of knowledge and skills for the world of work to increase opportunities for productive work, sustainable livelihoods, personal empowerment and socio-economic development. Therefore, through this conference, it is hoped that the participants will take the opportunity to share and exchange knowledge in research and execution of TVET.

Thank you.

Dr. Muhdi SH M.Hum
Rector
Universitas PGRI Semarang, Indonesia



**FOREWORD BY THE DEAN
FACULTY OF EDUCATION
UNIVERSITI TEKNOLOGI MALAYSIA**

Assalamualaikum warahmatillahi wabaraktuh and Greetings

First I would like to express our gratitude to Allah SWT as with the grace, I was given the opportunity to share my thoughts in conjunction with the Technical and Vocational Education & Training International Conference 2016 (TVETIC 2016). TVET plays an important role in promoting the economic growth of a country. As a country that is developing towards developed countries, Malaysia requires adequate skilled manpower in the field of technical and vocational, which has competency and high workability in the job market. Future changes to the overall excellence of the educational system that can meet the needs of the job market, as well as they are supported by the strong development of education programmes and technical and vocational training to fit the context of the country's socio-economic and technology development around the world.

10th Malaysia Plan (RMK-10) for the period from 2011 to 2015 shows a significant change in the system of education and technical and Vocational Training in Malaysia. The goal is to provide human capital creative, innovative and skilled in the 21st century towards the economic prospects of the plan and the strategic direction of the country. Pool of ideas and strategies on the basis of achievement and improvement in foreign countries such as Korea and Germany as well as the results of research that has been done by scholars in the country will be able to propel Malaysia to continue to stride forward to compete in the global market. Hence, this conference, provides an opportunity for students and participant in particular to discover the talent of their creative and innovative in the world of research and sharing of knowledge in order to contribute to the development of academic, social and economy. This directly is also a platform for the IPT in the country to find creative solutions for improvement in technical and vocational education and training in Malaysia. The results presented in the conference should be used as a reference for process of improvement in TVET. That is to say, this should not be a mere paper presentation.

Finally, I would like to congratulate to all those involved in the success of this conference. Special thanks to the co-organizers Universitas Negeri Makassar, Indonesia, Universitas PGRI Semarang, Indonesia and Rajamangala University of Technology Thanyaburi, Thailand for the great support and commitment to this conference.

Thank you.

Prof. Dr. Baharuddin bin Aris
Dean
Faculty of Education
Universiti Teknologi Malaysia



**FOREWORD BY THE PRESIDENT PERSATUAN PENDIDIKAN
TEKNIK DAN VOKASIONAL MALAYSIA**

Assalamualaikum Warahmatullahi Wabaraktuh dan Selamat Sejahtera

It is my great pleasure to welcome you to the Technical and Vocational & Training International Conference 2016 (TVETIC 2016) here in Johor Baharu. It gives me great pleasure to extend my appreciation to the organizing committee for their foresight in choosing this year conference theme "Nurturing Future Talent Creating Innovative Leaders" that has a global relevance and in working very hard in making this conference a reality.

It is gratifying to note that the agenda of the conference covers a wide range of very interesting topics relating contemporary issues in Technical and Vocational & Training which is in line with the needs of Malaysia to produce highly-skilled human resources. Malaysia has determined that the Technical and Vocational Education & Training (TVET) sector as the main route in providing highly-skilled human resources and also one of the key drivers of the economy for Malaysia to become a high-income nation. Therefore, the purpose of the conference is to strengthen information sharing and promote partnerships among and across TVET institutions and organizations globally. The conference is hope to create a platform for dialogue and a channel for sharing information between international, regional and local TVET institutions and organizations.

Finally, I would like to extend thanks to all those involved in the success of the conference in various forms of cooperation and contributions. Special thanks to the Universitas Negeri Makassar, Indonesia, Universitas PGRI Semarang, Indonesia and Rajamangala University of Technology Thanyaburi, Thailand for their support in making this event successfully. May the spirit of this commitment and to be a catalyst to enhance success in efforts to strengthen the TVET locally and globally.

Thank you.

Dr. Yusri bin Kamin
President of PPTVM
Faculty of Education
Universiti Teknologi Malaysia

FOREWORD BY THE CONFERENCE CHAIR



Assalamualaikum w.b.t and Good day

On behalf of the Organizing Committee, I would like to welcome all keynote speakers, presenters and participants to the Technical and Vocational Education & Training International Conference (TVETIC 2016). The conference is held at KSL Hotel & Resort in Johor, Malaysia.

This conference is organized by Faculty of Education, Universiti Teknologi Malaysia (UTM) and in cooperation from Persatuan Pendidikan Teknik dan Vokasional Malaysia (PPTVM). The conference is a meaningful event to academicians and researchers. It provides huge opportunity to share knowledge, experiences and research findings in Technical and Vocational Education & Training and other related issues in education.

We would like to thank our distinguished keynote speakers, scientific committee, presenters and all participants for their contributions in making this conference a success event. Special thanks and appreciation to our co-organizers, Universitas Negeri Makassar, Indonesia, Universitas PGRI Semarang, Indonesia and Rajamangala University of Technology Thanyaburi, Thailand for the tremendous supports and commitment to this conference. Lastly, we would like to express our gratitude to the dedicated organizing committee, members of Faculty of Education UTM and those who have directly and indirectly given their support for this conference.

Thank you.

Dr. Mahyuddin bin Arsat
Conference Chair
TVETIC 2016



Keynote Speaker Sustaining Industry TVET Dr. Blinda Changkajonsakdi (BDI Group Co. Ltd)



Dr. Blinda Changkajonsakdi is the Vice President of BDI Group, the President of Thai-Taiwan (BDI) Technological College, the President of Borinda Tech Service 2015 Co. Ltd, and the President of Thai Car Show Co. Ltd. Having more than 25 years of experience in both industry and management allows her to hold several other positions such as the Chairman of Dhammakit Paisan Foundation, Vice President of Global Federation of Chinese Business Woman of Taiwan (Thailand Branch), Vice President of Thailand-Taiwan Business Association, Vice Chairman of Taiwan Association of Thailand, and Executive Director of Foundation of Thai-Chinese International School.

As an active and experienced practitioner, she had been invited to share her knowledge as a keynote speaker at several conferences such as Thailand-Taiwan Higher Education Forum in November 2013, Regional Association of Vocational Teacher Education (RAVTE) General Assembly Meeting in November 2015, and at RCCN Rajamangala University of Technology Lanna in March 2015.

Dr. Blinda earned a Bachelor of Business Administration from National Taiwan University, Taiwan in 1988 and Master of Business Administration from Assumption University, Thailand in 1994. She was awarded an honorary doctorate degree from Faculty of Industrial Engineering, Rajamangala University of Technology of Lanna, Thailand. Currently, she is a Ph.D. candidate in Innovation and Technology in Education at King Mongkut's University of Technology Thonburi (KMUTT).

Keynote Speaker
TVET, Leader of Future Talent and Green Skills
Assoc. Prof. Dr. Margarita Pavlova
Head UNEVOC Centre (Hong Kong)
Hong Kong Institute of Education



Assoc. Prof. Dr. Margarita Pavlova is the Head of the UNESCO-UNEVOC Centre (Hong Kong) and an Associate Professor in the Department of International Education and Lifelong Learning at the Hong Kong Institute of Education. She has more than twenty years of international work experience in education across a variety of contexts (Europe, Asia, USA and Australia). Her research focus is concerned on policy, planning and curriculum development in vocational education at both national and international levels. She is internationally recognized for her work. Her current research and development projects are in the area of education for sustainability, development and green skills. Assoc. Prof. Dr. Margarita works with such agencies as the Asian Development Bank; UNESCO; ETF where she has led a number of research projects that aimed at developing policies, approaches to and resources for vocational education, and exploring related issues such as capacity building and poverty alleviation. She has published widely in the fields of her expertise including a sole authored book on Technology and Vocational Education for Sustainable Development: Empowering Individuals for the Future (Springer, 2009). She currently serves on the editorial board of the International Journal of Vocational Education and Training and on the editorial advisory boards of two book series published by Springer: Technical and Vocational Education and Training: Issues, Concerns and Prospects, and Education in the Asia-Pacific Region: Issues, Concerns and Prospects.

As the Head of the UNEVOC Centre (Hong Kong) she is leading the process of planning, and implementing international cooperation projects in the Asia and Pacific region, liaising with stakeholders for formulating and implementing policies, writing commissioned reports and papers, establishing UNEVOC Centre network, organizing and facilitating international conferences and workshops, acting as a resource person for different activities.

Assoc. Prof. Dr. Margarita has two PhDs, one from La Trobe University (Melbourne, Australia) in comparative education and another one from The Academy of Pedagogical Sciences of the USSR (Moscow, Russia) on reform in technical and vocational education. She also has a master's degree in education administration and supervision from The University of Toledo (Toledo, OH, USA) and a bachelor's degree with Honors in industry and education from The Herzen State Pedagogical University (St. Petersburg, Russia).

PROGRAMME SCHEDULE

18.11.2016 (Friday)

Time	Tentative	Venue
8.15 am – 9.00 am	Registration	Foyer level 7
9.00 am – 10.00 am	Keynote Speaker 1 – Dr. Blinda Changkjonsakdi	Ballroom 1
10.15am – 11.45 am	Opening ceremony *Officiate by UTM Deputy Vice-Chancellor Research and Innovation	Ballroom 1
12.00 pm – 2.00 pm	Break (Lunch)	Infusion Café & Restaurant - Ground Floor
2.15 pm – 4.00 pm	Parallel Session 1	Muar, Mersing, Ledang and Segamat
4.00 pm – 5.00 pm	Workshop 1- RMUTT Workshop 2- UPGRIS	Muar Mersing
5.00 pm – 5.30 pm	Tea time	Foyer
8.30 pm – 10.30 pm	Gala Dinner	Ballroom 1

19.11.2016 (Saturday)

Time	Tentative	Venue
8.30 am – 9.30 am	Workshop 3-UNM Workshop 4- UTM	Muar Mersing
9.30 am – 10.30 am	Keynote Speaker 2 – Assoc. Prof. Dr. Margarita Pavlova	Lounge
10.30 am – 11.00 am	Morning tea	Foyer
11.00 am – 1.00 pm	Parallel Session 2	Muar, Mersing, Ledang and Segamat
1.00 pm – 2.00 pm	Break (Lunch)	Infusion Café & Restaurant - Ground Floor
2.00 pm – 4.00 pm	Parallel Session 3	Muar, Mersing, Ledang and Segamat
4.00 pm – 6.00 pm	Parallel Session 4	Muar, Mersing, Ledang and Segamat
6.00 pm – 6.15 pm	Tea time	Foyer

20.11.2016 (Sunday)

Time	Tentative	Venue
9.00 am – 12.00 pm	Free and easy	

*No meal provided on the third day of the conference.

PARALLEL SESSION 1
18.11.2016 (FRIDAY)
2.15 PM to 4.00 PM

TIME	ROOM: MUAR CHAIRPERSON: DR. NORNAZIRA SUHAIROM	ROOM: MERSING CHAIRPERSON: DR. NURUL FARHANA JUMAAT	ROOM: LEDANG CHAIRPERSON: DR. ZAKIAH BINTI MOHAMAD ASHARI	ROOM: SEGAMAT CHAIRPERSON: DR. HANIFAH BINTI JAMBAR
2-15-2.35 pm	UTILIZING CONCEPT MAPS ON CHARACTERISTICS OF SOCIAL PRESENCE IN SOCIAL COLLABORATIVE LEARNING ENVIRONMENT FOR NURTURING ENGINEERING STUDENTS' KNOWLEDGE CONSTRUCTION LEVEL May Ling, Tan & Jamalludin Harun	THE FUZZY DELPHI METHOD IN DEVELOPMENT OF INSTRUMENT RURAL WOMEN'S COMPETENCIES FOR HIGH INCOME Salpiah Suradi, Ruhizan Mohamad Yasin & Mohamad Sattar Rasul	EMBEDDING AGING SKILLS AND TRAINING INTO SOCIAL WORK PRACTICE COMMUNITY Khadijah Alavi	MOOD AND MODALITY PATTERNS IN AN ENGLISH CASUAL CONVERSATION BETWEEN NATIVE SPEAKER AND NON-NATIVE SPEAKER IN INDONESIAN CONTEXT Sunardi ,Siti Lestari , Dyah Nugrahani
2.35-2.55pm	THE EFFECTIVENESS OF INDUSTRIAL WORKING PRACTICES IN VOCATIONAL HIGH SCHOOL IN SOUTH SULAWESI Abdul Muis Mappalloheng, Riana Tangkin Mangesa, Dyah Vitalocca & Hartati Arif	KNOWLEDGE AND BEHAVIOR OF COASTAL COMMUNITY IN MANAGING HOUSEHOLD WASTE Faizal Amir	PREVENTION EFFORTS AT RISK BEHAVIOURS IN ADOLESCENT ON BRIEF COGNITIVE BEHAVIOURAL COUNSELING Dini Rakhmawati	A RHETORICAL ANALYSIS OF SELECTED SPEECHES OF INDONESIAN WOMEN POLITICIANS: PREELECTORAL STRATEGIES Suciati.S and Ambarini R



2.55- 3.15pm	IMPLEMENTATION OF INSTRUCTIONAL MODEL FOR THE DEVELOPING OF MORAL ETHICS AND CODE OF ETHICS Sutthiporn Boonsong, Pornpirom Lhongsap & Vinai Srikanok	STUDENTS' SOFT-SKILL IMPROVEMENT THROUGH PROBLEM-SOLVING BASED ASSIGNMENT LEARNING M.Th. Sri Rejeki Retnaningdyastuti. &G. Rohastono Ajie.	SMART INTERNETWORK OPERATING SOFTWARE (SMART IOS) Eza Monzaiq, Salina M. Said, Azman Hassan, Noor Hisham Jalani & Abdul Rahim Tahir	TWO WHEELS SELF-BALANCING ROBOT USING PID AND FUZZY LOGIC CONTROLLER Dechrit Maneetham
3.15- 3.35 pm	DEVELOPING OF CRITICAL THINKING AND PROBLEM SOLVING SKILLS FOR SECOND-YEAR APPLIED THAI TRADITIONAL MEDICINE THROUGH PROBLEM-BASED LEARNING Rungnapa Sranujit, Nakuntwalai Wisidsri & Natha Kuptasthien	FACTORS RELATED TO REFLECTIVE THINKING OF STUDENT TEACHERS OF RAJAMANGALA UNIVERSITY OF TECHNOLOGY Rossarin Jermtaisong	DEVELOPMENT OF THE ANALOG AND DIGITAL COMMUNICATION SYSTEMS EXPERIMENTAL SET TIME DIVISION MULTIPLEX TOPIC Chollada Pansong	VDT WORKSTATION: COMPARISON OF POSTURE BETWEEN MALE AND FEMALE COMPUTER USERS WITH MUSCULOSKETETAL SYMPTOMS Dechrit Maneetham & Thanawat Panchat



COMMITTEE

Organizing Committee

Patron	:	Prof. Datuk Ir. Dr. Wahid bin Omar Prof. Dr. Husain Syam M.TP Assoc. Prof. Dr. Prasert Pinpathomrat Dr. Muhdi SH M.Hum
Advisor	:	Prof. Dr. Baharuudin bin Aris Dr. Yusri bin Kamin Dr. Mohd Zolkifli bin Abd. Hamid
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Accommodation, Transportation & Meal	:	Mr. Mohd. Fa'iz bin Ahmad
Registration	:	Dr. Asha Hasnimy binti Mohd Hashim
Programme Book, Protocol & Invitation	:	Dr. Hanifah binti Jambari Dr. Jamilah binti Ahmad
Paper Submission & Publication	:	Dr. Nornazira binti Suhairom Dr. Mohd. Safarin bin Nordin Dr. Nur Husna binti Abd. Wahid
Graphic Design	:	Mrs. Fadhilah binti Othman
Sponsorship	:	Dr. Yusri bin Kamin Dr. Mohd Zolkifli bin Abd. Hamid
Website	:	Mrs. Azura binti Baharudin
Souvenir & Certificate	:	Dr. Noor Dayana binti Abd Halim Dr. Zakiah binti Mohamad Ashari
Technical and Tools	:	Assoc. Prof. Dr. Noraffandy bin Yahaya Mr. Shamsulrizal bin Abd. Shukor Mr. Ali bin Jawahir Mr. Nurhuda @ Mohd Helmy bin Daud
Gala Dinner	:	Dr. Abdul Halim bin Abdullah
Emcee	:	Dr. Nurul Farhana binti Jumaat
Photographer	:	Mr. Pua'at bin Ahmad

Scientific Committee

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Dr. Anas Arfandi

Dr. Yasser Djawad

Universitas PGRI Semarang, Indonesia

Prof. Dr. Sunandar

Dr. Listyning Sumardiyani

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Mr. Mohd Fa'iz bin Ahmad

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Universiti Teknologi Malaysia

Co-organizer

Rajamangala University of Technology Thanyaburi, Thailand

Universitas Negeri Makassar, Indonesia

Universitas PGRI Semarang, Indonesia

Sponsor

Pejabat Menteri Besar Johor

**KNOWLEDGE AND BEHAVIOR OF COASTAL
COMMUNITY IN MANAGING HOUSEHOLD
WASTE**

FAIZAL AMIR

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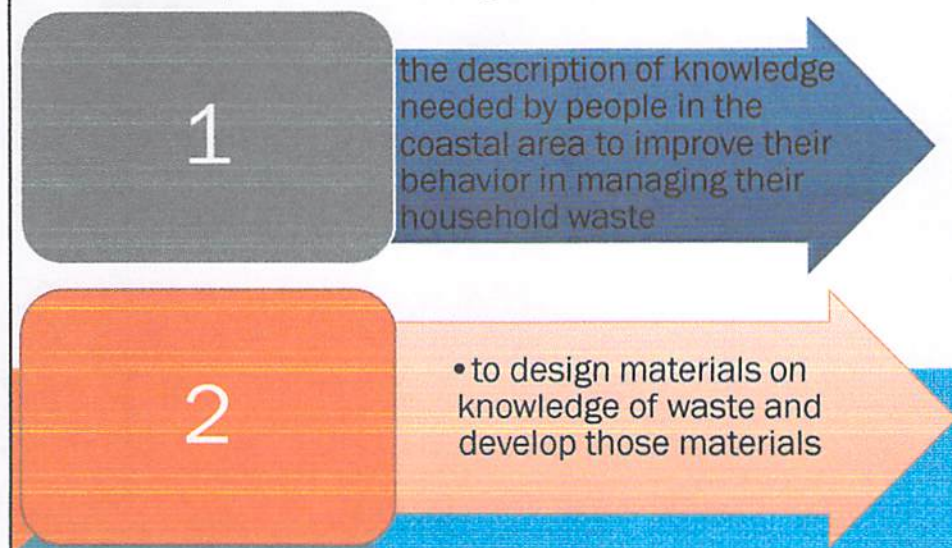
Email: faizalamin64@unm.ac.id

BACKGROUND

The majority of household waste of coastal communities in South Sulawesi was dumped into the beach. The behavior of these coastal communities is certainly not responsible for the environmental sustainability. Therefore, it is necessary to provide guidance for littering behavior by analyzing the knowledge needed so that their behavior would be more responsible

OBJECTIVE OF THE STUDY

The study aimed at obtaining:

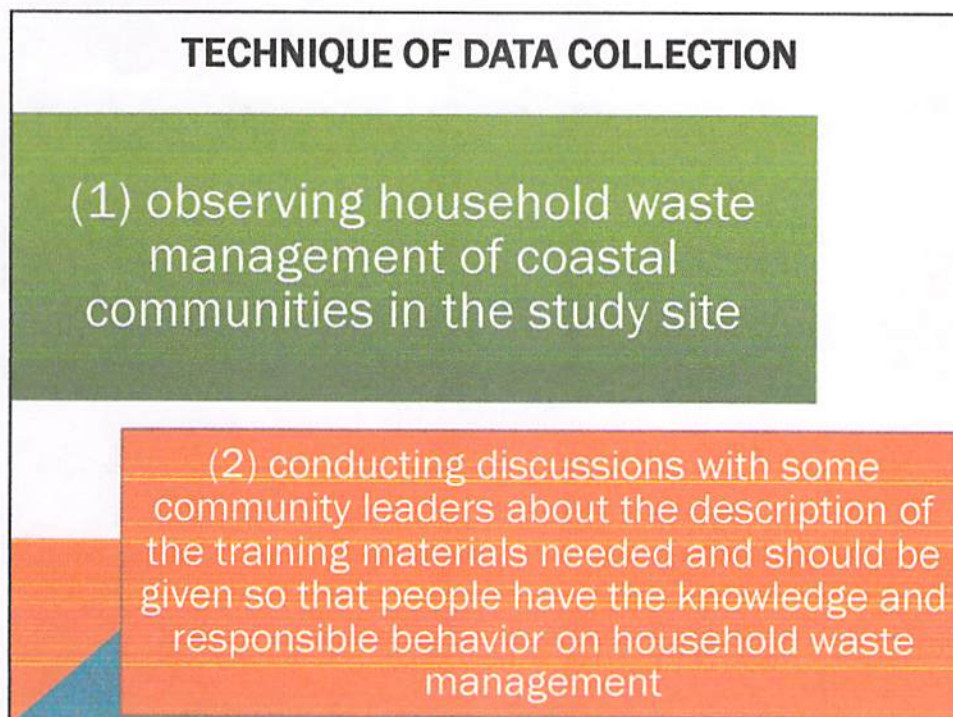
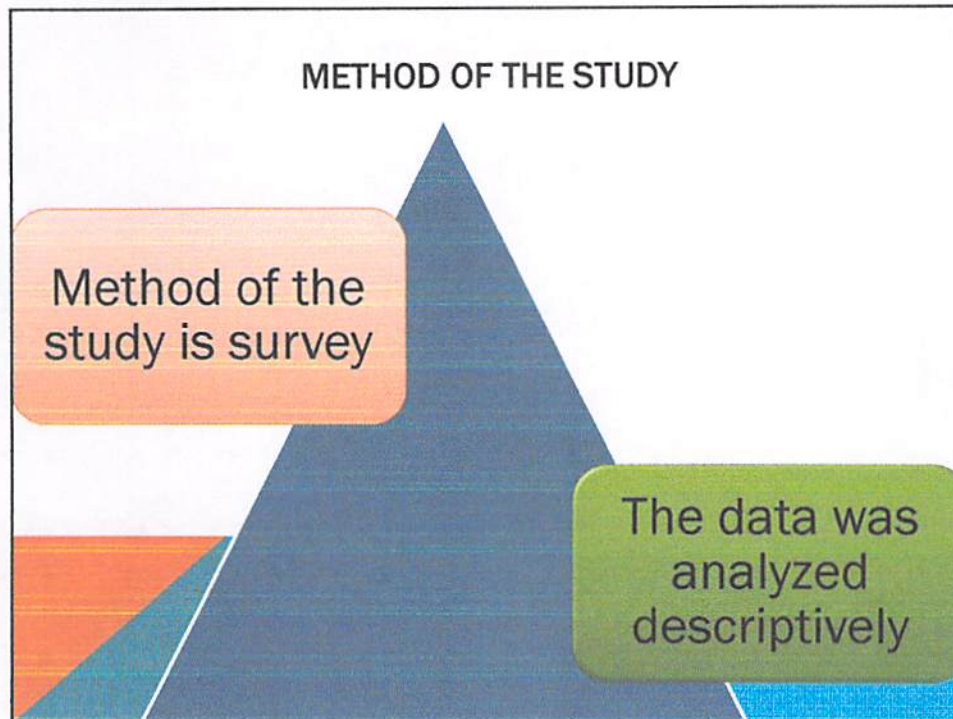


POPULATION OF THE STUDY

- coastal communities in South Sulawesi

SAMPLE OF THE STUDY

- were taken twice. Firstly, region selection samples were selected using purposive sampling method thus, the selected districts were Jeneponto Regency, Bone Regency, and Pinrang Regency
- Secondly, 150 households of coastal communities were selected using systematic random sampling method



FINDINGS

1

- (1) the description of training materials that people in the coastal area need in developing their knowledge and responsible behavior to manage their household waste are knowledge about: (a) waste, types, and ways of collecting it, (b) waste sorting, (c) temporary waste shelter, (d) landfills;

2

- steps of developing training materials were based on the relevant theories, validated by relevant expert, and prepared the materials for trial-error.


CONCLUSION

1

Description of waste management materials required by coastal communities in improving the knowledge and responsible behavior of managing household waste are: (a) knowledge of waste, types and ways of collecting it; (b) knowledge of waste sorting; (c) knowledge of temporary waste shelter; (d) knowledge of the landfill, and (e) the impact of waste on the environment.

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Steps of development and preparation of materials are: (a) prepare and develop materials based on the relevant literature, (b) validate the material through the relevant experts, and (c) prepare the material to trial error..



The developed training materials are: (a) knowledge of waste, types and ways of collecting it, which consists of: (1) definition of waste; (2) types of waste; (3) ways of collecting waste (b) knowledge of waste sorting, which consists of: (1) sorting of dry and wet waste; (2) sorting of paper and plastic waste; (3) waste sorting such as cans, plastic bottles, and scrap or old steel; (c) knowledge of temporary waste shelter consisting of: (1) temporary waste shelter in the house (near the kitchen); (2) temporary waste shelter in the yard; (3) temporary waste shelter in the settlement; (d) knowledge of the landfill, consisting of: (1) open dumping; (2) landfill; (3) sanitary landfill; (4) incineration, and (e) impact of litter on the environment, comprising: (1) the impact on the social environment; and (2) the impact on the physical environment.



THANKS FOR YOUR
ATTENTION