

International Academic Multidisciplinary Research Conference 2017

Proceeding of

**INTERNATIONAL BUSINESS ECONOMIC TOURISM SCIENCES TECHNOLOGY
HUMANITIES SOCIAL SCIENCES AND EDUCATION RESEARCH CONFERENCE**

*Berlin, Germany
23 – 25 October, 2017*

THE 2017 ICBTS



**Edited by Chayanan Kerdpitak, CK Research, Thailand
Kai Heuer, Wismar University, Germany
Ebrahim Soltani, Hamdanbin Smart University, UAE
Gilbert Nartea, Lincoln University, New Zealand
Vipin Nadda, University of Sunderland, United Kingdom**

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Conference Proceedings

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HUMANITIES SOCIAL SCIENCES AND EDUCATION RESEARCH CONFERENCE**

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Conference Three Themes

The International Business Tourism and Applied Sciences Research Conference

The International Education Social Sciences and Humanities Research Conference

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By Dr. Chayanan Kerdpitak & Professor Dr. Kai Heue & Professor Dr. Ebrahim Soltani, ICBTS Institute Conference Center & IJBTS International Journal of Business Tourism and Applied Sciences

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INTRODUCTION

We would like to welcome our colleagues to the International Business Tourism Transport Technology Social Sciences Humanities Education Research Conference. It is the seven series in 2016 of Conference on Business Tourism and Apply Sciences was held in Amsterdam. As always many members of the ICBTS 2016 community look forward to meeting, sharing and exchanging their research ideas and results in both a formal and informal setting which the conference provides. Likewise, the concept of alternating the international conference every one month on April to November between Europe and the rest of the world is now well established. This year's event in London (UK) Paris (France) Munich (Germany) Amsterdam (Netherlands) Boston (USA) Toronto (Canada) London (United Kingdom) Zurich (Switzerland) Berlin (Germany) Tokyo (Japan) and another continues with the cultural following the very successful and productive event held in London-Zurich in August 2016 in the field of various types for international academic research conference on Business Economics Social Sciences Humanities Education and Apply Sciences. As usual The ICBTS 2016 brings together leading academics, researchers and practitioners to exchange ideas, views and the latest research in the field of Business Tourism and Apply Sciences.

The theme of this event The 2016 ICBTS International Business Tourism Social Sciences Humanities and Education Research Conference is "Opportunities and Development of Global Business Economics Social Sciences Humanities and Education" It is also represents an emerging and highly challenging area of research and practice for both academics and practitioners a like, The current industrial context is characterized by increasing global competition, decreasing product life cycles, Global Business, Tourism Development, Social Sciences Humanities Education Apply Sciences and Technology collaborative networked organizations, higher levels of uncertainties and, above all, and customers. In our view holding this event in Tokyo represents a timely opportunity for academics and researchers to explore pertinent issues surrounding Business Economics Tourism Social Sciences Humanities Education Sciences and Technology.

Potential authors were invited to submit an abstract to the International Conference Session Chairs. All abstracts were reviewed by two experts from the International review committee and final papers were further reviewed by this volume with 30 contributing authors coming from 18 countries. This book of proceedings has been organized according to following categories:

- Business
- Management
- Marketing
- Accounting
- Financial
- Banking
- Economic
- Education
- Marketing
- Logistics Management
- Social Sciences
- Supply Chain management
- Industrial Management
- Information Technology
- Sciences Technology
- Transport and Traffic
- Tourism Strategic
- Tourism Management
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- Tourism Development Policy and Planning
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- Health care Management
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SPEAKER BACKGROUND



Professor Dr. Ebrahim Soltani

Prof. Dr. Ebrahim Soltani is a Professor of Business School at University of Kent Canterbury in England and he is Department Chair - Quality & Operations Management at Hamdan Bin Mohammed Smart University Dubai of United Arab Emirate. He was appointed associate professor in business management, total quality management, and operation management in 1989 at the University of Kent, he continued his research in the field of operation management, business management. He has published over 50 papers and reports in such journals as International Journal of Technology and Production Research. He supervised a considerable number of PhD theses and is a consultant on industrial and production industry in England and United Arab Emirate.

SPEAKER BACKGROUND



Professor Dr. Kai Heuer

Prof. Dr. Kai Heuer is full professor for business administration at the Business Faculty of Wismar University in Germany. Before, he served as a full professor at the Environmental Campus of Trier University of Applied Sciences. He studied business administration in Germany and the U.S.A. and holds an MBA and a doctoral degree. He has management experience from leading positions in different companies and as business consultant. His research areas are management accounting, organizational development, and international management where he has published numerous papers, reports and textbooks. He is the head of Master Program in Business at Wismar University and a member of the Schmalenbach-Society for Business Economics, Cologne; managing director of the Institute of Health-, Senior- and Social Management; and a former member of the board of the Centre for Aviation Law and Management.

SPEAKER BACKGROUND



Dr. Tariq Khan

Dr Tariq Khan is a Lecturer and Director of Postgraduate Programmes of Business School in Brunel University, Uxbridge, London, United Kingdom. He received his BEng in Aerospace Engineering from Kingston University, his MSc in Manufacturing Technology from University of Warwick, and his PhD in Intelligent Education Systems from University of Salford. He subsequently worked as a research associate in Heriot-Watt University Edinburgh and as a senior lecturer at London Metropolitan University. He has specialist teaching in Business Process Modelling, Web Programming, Software Engineering, Classical Logic, Human Computer Studies. He has Book and published over 20 papers and reports in such journals as Information Systems Evaluation and Integration (ISEing). He supervised a considerable number of PhD theses and is a consultant on business and supply chain and engineering industry in England and United Kingdom.

SPEAKER BACKGROUND



Dr. Chayanan Kerdpitak

Dr. Chayanan Kerdpitak is a Lecturer and management committee of Doctor of Business Administration Programmes of College Management Innovation in Valaya Alongkorn Rajabhat University in Thailand and a management committee of CK Research Consultant in Bangkok. I was a Lecturer of Principle Marketing, Sales Management, Consumer Behavior, and Marketing Research at The Suan Dusit University in Thailand. She received a Ph.D. in the field of Business Logistics within Industrial at Ramkhamhaeng University, Thailand. She has published over 20 proceeding paper and some reports in such journals as International Journal Business and Economics Research. She has been a consultant on Import Automobile Industry from Germany for International Marketing and Marketing Research. Chayanan graduated a B.B.A and M.B.A in Business Administration from The Ramkhamhaeng University, Bangkok, Thailand (Major in Marketing).

CONTENT

INTRODUCTION	
COMMITTEE	
Conference Program	
RENEWABLE ENERGY BY PROJECT-BASED LEARNING	1
Idan Halbi, Ifaa Banner, Bosmat Shalom-tuchin, Yulia Einav, Hen Friman	
INTEGRITY OF COUNSELLING INTERVIEW AND PERCEPTION OF CLIENT’S DIGNITY AMONG EDUCATION FACULTY MEMBERS OF THE UNIVERSITY OF CALABAR, NIGERIA	8
Matthew Ojong Achigbe	
“SPIRITUAL TOURISM” THE NEW TOURIST DESTINATION FOR THAI TOURISM CASE STUDY IN “ WAT TATON” CHAING-MAI THAILAND	19
Supakit Mulpramook	
THE DIFFERENCES OF SOCIAL AND POPULATION FACTORS TOWARDS TOURISTS’ ATTITUDES TO STAYING AT GREEN HOTELS IN BANGKOK	25
Rumpapak Luekveerawattana	
THE STUDY ON MEDIA EXPOSURE BEHAVIOR IN POLITICAL ISSUES OF UNIVERSITY STUDENTS	32
Veerapon Vongprasert	
THE STUDY OF APPLICANTS’ SATISFACTION OF UNIVERSITY ADMISSION SYSTEM : UNDERGRADUATE LEVEL, SUAN SUNANDHA RAJABHAT UNIVERSITY	39
Aphichart Kampoomprasert & Chontiya Ledanan	
THE STUDY OF THE PARTICIPATION OF THE PRESIDENT OF STUDENT COUNCIL ELECTION, UNDERGRADUATE PROGRAM, SUAN SUNANDHA RAJABHAT UNIVERSITY	47
Sudabhorn Arundee & Barameeboon Sangchan	
EVALUATION OF TWO FACTORS ON BEGINNER LEARNERS’ FLUENCY	52
Alireza Behfar, Meira Levinson, Nancy Hill	
BOROBUDUR TEMPLE WORLD HERITAGE SITE AUDIT	61
Anggi Marisa Lubis	
9/11 THE DOMESTICS CRUSADERS REGISTERS VIOLENCE AGAINST MUSLIMS FOLLOWING 9/11	73
Rehab Farouk and Mona Anwar	
THE STUDY OF SATISFACTION OF THE DEVELOPMENT OF GRADE VALIDATION SYSTEM BASED ON CURRICULUM STRUCTURE, UNDERGRADUATE STUDENTS, SUAN SUNANDHA RAJABHAT UNIVERSITY	104
Aphichart Kampoomprasert & Wanwika Sattaworn	
DEVELOPMENT OF A SOLUTION TO THE TRAFFIC ISSUES INSIDE SUAN SUNANDHA RAJABHAT UNIVERSITY	111
Wicha Khankham & Dr.Komol Paisan	
ROLE OF PROVINCIAL GOVERNOR IN CONTROL OF LOCAL ADMINISTRATION ORGANIZATIONS: CASE STUDY NONGBUALAMPHU PROVINCE	119
Barameeboon Sangchan & Sudabhorn Arundee	
ACTING AS A TOOL TO EXPRESS POWER OF MEDIUM	127
Kusuma Teppharak	
EQUIPMENT DESIGN TO CREATE TIE-DYE FABRIC PATTERN	132
Tanutpong Phriwanrat	
WICKERWORK PROCESS ANALYSIS APPLY FOR HOME DECORATION DESIGN: PRANEE HANDICRAFT SING BURI THAILAND	138
Akapong Inkuer	
SOUVENIRS DESIGN FROM ARTS AND CULTURAL	142
Noppadon Sangwalpetch	
GERMAN LEADERSHIP IN EU FOREIGN POLICY AFTER EUROZONE CRISIS?	147
Merve Yavuz	

ESL BASIC LEARNERS: PERSONAL HISTORIES OF WRITING	161
Ketkanda Jaturongkachoke, Supath Kookiattikoon and Supamit Chanseawrassamee	
THE INFLUENCE OF AN INTERVENTION PROGRAM IN THE FIELD OF TIME MANAGEMENT, AMONG STUDENTS WITH LEARNING DISABILITIES AND ADHD-STRATEGIC VIEW	169
Anat Frishman Shitrit and Ofira Tykochinsky	
THAI PERFORMING ARTS IN KING PRAJADHIPOK'S LAWS	170
Manissa Vasinaron	
FABRIC PRINTING DESIGN OF SARONG AS A RESULT OF A STUDY OF TEXTILE PATTERNS OF LAO-SONG (THAI SONG DAM) , SUPHAN BURI PROVINCE	176
Suwit Sadsunk	
THE ART OF THE FABRIC PATTERN DESIGN BY STUDYING THE WOODEN CARVING ON GINGERBREAD IN VIMANMEK MANSION IN THAILAND	185
Chanoknart Mayusoh	
MAINTAINING SIGNIFICANCE OF REALIA IN TRANSLATED PLAY	194
Nataporn Rattanachaiwong	
A WESTERN TREATMENT OF NONWESTERN NATIONAL IDENTITY: A CASE STUDY OF <i>THE KING AND I</i>	200
Chutima Maneewattana	
FINANCIAL STABILITY IN SAMUT SONGKRAM FROM HOUSEHOLD SAVING POTENTIAL	205
Krisada Sungkhamanee & Piyadhida Sungkhamanee	
VITAL FACTORS OF RECENTLY GRADUATES FOR APPLYING JOBS IN ASEAN LABOR MARKET	213
Natnaporn Aeknarajindawat	
TOURISM STRATEGY IN THE SUN TRIANGLE ANALYSIS WITH THE THEORY BASED ON RESOURCES AND INSTITUTIONAL THEORY	217
José G. Vargas-Hernández and Lic. Ana Yanetly Arias Orozco	
CULTURAL AND ART EDUCATION: A MEANS FOR SOCIAL STABILITY IN NORTHERN GHANA	226
Eric Appau Asante and Mavis Donkor	
EXAMINING MOTIVATION TO TEACH LEVELS OF PRE-SERVICE TEACHERS IN TERMS OF SOME VARIABLES	227
Ipek Som Onal	
FEASIBILITY STUDY OF IMPLEMENTATION OF COACHING IN TRAINING OF NURSES IN BAHMAN HOSPITAL IN TEHRA (IRAN)	228
Mohammad Ghahramani	
EXPLORING THE EFFECT OF TECHNOLOGY SUPPORTED COLLABORATIVE LEARNING ON CREATIVE THINKING SKILLS OF PRE-SERVICE TEACHERS	229
Erhan ÜNAL, Fatih ÖZDİNÇ	
ASTIN THEORY AND SOCIAL NETWORKS	230
Elham Akbari and Hamid Abdollahian	
FACTORS DEVELOPMENT OF PHYSICAL ABILITY OF STRIKER FOOTBALL PLAYER: A CASE STUDY OF THAILAND	245
AVM. Adinan Jarayapan & Bhasana Soraphetphisai	
HOTEL BUSINESS DEVELOPMENT WAY TO REACH SERVICE STANDARD FOR SUPPORTING SENIOR TOURISTS IN THE AREA OF AMPHAWA DISTRICT, SAMUTSONGKRAM	249
Benjaporn Yaemjamuang, Monrat Jaiuea & Tassanee Naksanee	
KNOWLEDGE MANAGEMENT FOR WRITING RESEARCH PROPOSAL	253
Wanvisa Saisanan Na Ayudhaya	
DEVELOPMENT FOR 21st CENTURY SKILLS BY USING PROCESSES OF RESEARCH BASED LEARNING	258
Poonyapon Chanfoy	
ACTIVE LEARNING BY USING PROCESSES OF PROBLEM BASED LEARNING	263
Suphanwadee Waiyaroop & Bhanit Yenkhæ	
KNOWLEDGE MANAGEMENT: GUIDE TO WRITE A RESEARCH PROPOSAL	270
Yanika Chuentako, Tassanee Siriwan, Taksina Bunbut, Nalin Simasathaiansophon, Supaksiri Prakarncharoen	

UNIVERSAL DESIGN FOR WARD PATIENTS GOVERNMENT HOSPITAL Jitravadee Roongin Kunkar & Niafifah Tohsareh	274
ORGANIZED ACTIVE LEARNING BY INSTRUCTIONAL MODEL WITH PROJECT BASED LEARNING Sirimanee Banjong, Kannikar Bhiromrat and Teerarat Tipjaradmetha	281
AMERICA FIRST, WHO IS SECOND? MEDIATION OF A DESTINATION IMAGE THROUGH HUMOR AND POLITICAL SATIRE Maja Turnsek Hancic and Petr Janecek	287
DESIGNING A SUITABLE E-LEARNING SYSTEM BASED ON A SURVEY OF THE USE OF SYSTEMS AT TOP UNIVERSITIES FROM THE ARWU RANKING Viktoria Fabusova, Juraj Fabus, Maria Matuskova	296
INNOVATIVE ACADEMY PROPECT-DISINFECTION OF EFFLUENTS WITH RENEWABLE Hen Friman, Faina Nakonechny	307
HOW PARTICIPATION IN CAMPUS RECREATION PROGRAMMING IMPROVES STUDENT RENTETION James G. Archibald	312
SPANISH FRANCHISING: EXPLAINING OWNERSHIP Rosa M, Mariz Pérez	313
ORGANIZED ACTIVE LEARNING BY CREATIVE BASED LEARNING Chompunuj Limlertmonkol & Weerapoj Ruttanawarn	322
PARTICIPATORY LEARNING: FROM THEORY TO PRACTICE IN PSYCHOLOGY FOR TEACHER COURSE Panuwat Sivaskunraj	327
THE DEVELOPMENT OF ONLINE ADMISSION FOR GRADUATE STUDENTS, SUAUN SUNANDHA RAJABHAT UNIVERSITY Somdech Rungsisawat & Khatcharin Thapthimthet	331
KNOWLEDGE MANAGEMENT FOR THE GUIDELINES OF INFORMATION RESOURCE ACQUISITION: A CASE OF ACADEMIC RESOURCE CENTER, SUAN SUNANDHA RAJABHAT UNIVERSITY Nitima Kaewmanee, Ganratchakan Ninlawan & Prapat Pawinun	337
DEVELOPMENT OF THE “I” SYSTEM FOR THE CORRECTION OF INTERNET LEARNING VIA THE INTERNET SUAN SUNANDHA RAJABHAT UNIVERSITY Somdech Rungsisawat & Pinyaphat Kongsorn	343
TECHNIQUE OF FOLLOW UP ON WORK PROGRESS IN OFFICE ADMINISTRATION Nipawan Tharasak & Sittichai Thammasane	348
KNOWLEDGE ON FOLLOWING-UP AND RECORDING ACCORDING TO PERSONNEL DEVELOPMENT TRAINNING Khwanchai Sukkon & Supassawee Morakul	354
PROBLEM-BASED LEARNING WITH MATHEMATICS TEACHING : PRINCIPLES AND GUIDELINES Teerawit Tinprapa	359
MERITS AND DEMERITS OF DECENTRALISATION IN HIGHER EDUCATION: A CASE STUDY OF ONE HIGHER EDUCATION INSTITUTION IN SOUTH AFRICA Cishe, Elphinah Nomabandla	364
CHANGES OF NATIONALISM AND WORLD ORDER IN LANGUAGE POLICY: MANDATORY SWEDISH LANGUAGE STUDY IN FINLAND Janne Väistö, PhD-student	365
THE EFFECT OF JOINT AUDIT ON AUDIT QUALITY: EMPIRICAL EVIDENCE FROM COMPANIES LISTED ON THE EGYPTIAN STOCK EXCHANGE Mahmoud Ghanem Mahmoud, Abd El Wahab Nasr Ali and Hebatallah Abd El Salam Badawy	366
PARENTAL EDUCATION BACKGROUND AND STUDY MATERIALS AS CORRELATES OF ACADEMIC PERFORMANCE OF SECONDARY STUDENTS IN ABIA STATE Beatrice Okore Ogbonnaya	367
THE EFFICACY OF EXPLICIT INSTRUCTION ON IMPLICIT AND EXPLICIT KNOWLEDGE OF ENGLISH ARTICLES Faten A. Alarjani	368
RBL : THE DEVELOPMENT OF LEARNERS' LEARNING SKILLS Teeraporn Plailek	378

THE NATURE AND USE OF RESEARCH-BASED LEARNING FOR ENHANCING PRE-SERVICE TEACHERS' RESEARCH SKILLS	384
Sasiporn Phongploenpis	
KNOWLEDGE MANAGEMENT FOR PROCESS DEVELOPMENT: INFORMATION RESOURCES CLASSIFICATION AND CATALOGING IN THE LIBRARY OF SUAN SUNANDHA RAJABHAT UNIVERSITY	390
Supaporn Wongsa, Supaporn Jaisook, Ganratchakan Ninlawan and Sirilak Ketchaya	
THE STUDY OF TECHNOLOGY ASSISTED OFFICE ADMINISTRATION OF SUAN SUNANDHA RAJABHAT UNIVERSITY	395
Suntaree Patcharaprateep, Pornkiat Phakdeewongthep & Wannee Sutthachaidee	
THE EXPOSURE AND SATISFACTION OF THE GRADUATE STUDENTS FOR THE CHANNAL OF THE INFORMATION AT SUANSUNANDHA RAJABHAT UNIVERSITY	399
Phakit Treesakult & Netdao Yooyong	
FLIP IT AROUND: THE POSITIVE IMPACT THAT THE REFINED FLIPPED CLASSROOM MAY HAVE ON REDUCING THE BLACK ASIAN MINORITY ETHNIC (BAME) ATTAINMENT GAP	404
Charles Wild	

2017 ICBTS CONFERENCE BERLIN PROGRAM

The 2017 ICBTS International Multidiscipline Research Conference	
23 October 17 9.00- 09.30 (M)	REGISTRATION & WELCOME Welcome meeting at The Park Inn by Radisson Berlin City West, Germany
	Academic Advisory & Session Chair Professor Dr. Kai Heuer, Germany Dr. Hen Friman, Israel
23 October 17(M)	Session A
23 October 17(M) 09.00-10.30 (M)	<p>Session A1</p> <p>Paper 1(23) DEVELOPMENT FOR 21ST CENTURY SKILLS BY USING PROCESSES OF RESEARCH BASED LEARNING Asst. Prof. Poonyapon Chanfoy</p> <p>Paper 2(24) ACTIVE LEARNING BY USING PROCESSES OF PROBLEM BASED LEARNING Asst. Prof. Suphanwadee Waiyaroop</p> <p>Paper 3(27) ORGANIZED ACTIVE LEARNING BY INSTRUCTIONAL MODEL WITH PROJECT BASED LEARNING Asst. Prof. Sirimaneer Banjong</p> <p>Paper 4(29) PARTICIPATORY LEARNING: FROM THEORY TO PRACTICE IN PSYCHOLOGY FOR TEACHER COURSE Mr. Panuwat Sivaskunraj</p> <p>Paper 5(35) PROBLEM-BASED LEARNING WITH MATHEMATICS TEACHING: PRINCIPLES AND GUIDELINES Mr. Teerawit Tinprapa</p> <p>Paper 6(132) LANGUAGE TEACHING AND LEARNING OPINIONS ON CULTURAL DIVERSITY Awwal Ibrahim Dansadau</p>
10.31 - 10.45	Morning Break
10.46 - 12.00	<p>Session A 2</p> <p>Paper 1(36) RB : THE DEVELOPMENT OF LEARNERS' LEARNING SKILLS Mrs. Teeraporn Plailek</p> <p>Paper 2(37) THE NATURE AND USE OF RESEARCH-BASED LEARNING FOR ENHANCING PRE-SERVICE TEACHERS' RESEARCH SKILLS Dr. Sasiporn Phongploenpis</p> <p>Paper 3(33) TECHNIQUE OF FOLLOW UP ON WORK PROGRESS IN OFFICE ADMINISTRATION Miss Nipawan Tharasak</p> <p>Paper 4(39) THE STUDY OF TECHNOLOGY ASSISTED OFFICE ADMINISTRATION OF SUANSUNANDHARAJABHAT UNIVERSITY Miss Suntaree Patcharaprateep</p>

	<p>Paper 5(144) Examining Motivation to Teach Levels of Pre-Service Teachers in Terms of Some Variables Ipek Som Onal</p>
12.01-13.00	Lunch Break
13.01-15.00	<p>Session A 3</p> <p>Paper 1(9) ACTING AS A TOOL TO EXPRESS POWER OF MEDIUM Dr. Kusuma Teppharak</p> <p>Paper 2(10) EQUIPMENT DESIGN TO CREATE TIE-DYE FABRIC PATTERN Mr. Tanutpong Phriwanrat</p> <p>Paper 3 (11) WICKERWORK PROCESS ANALYSIS APPLY FOR HOME DECORATION DESIGN: PRANEE HANDICRAFT SING BURI THAILAND Mr. Akapong Inkuer</p> <p>Paper 4 (12) SOUVENIRS DESIGN FROM ARTS AND CULTURAL Mr. Noppadon Sangwalpetch</p> <p>Paper 5(13) THAI PERFORMING ARTS IN KING PRAJADHIPOK'S LAWS Asst. Prof. Manissa Vasinarom</p> <p>Paper 6(116) ESL Basic Learners: Personal Histories of Writing Ketskanda Jaturongkachoke and Supat Kookiattokoon and Supamit Chanseawrassamee</p> <p>Paper 7(150) Feasibility Study of Implementation of Coaching in Training of Nurses in Bahman hospital in Tehran (IRAN) Associate Prof. Dr. Mohammad Ghahramani and Fatemeh Hydari</p> <p>Paper 8(127) Renewable Energy by Project-based learning Hen Friman and Idan Halbi and Ifaa Banner and Bosmat Shalom-tuchin and Yulia Einav</p>
15.00- 15.15	Afternoon Break
15.16- 17.00	<p>Session A 4</p> <p>Paper 1 (14) FABRIC PRINTING DESIGN OF SARONG AS A RESULT OF A STUDY OF TEXTILE PATTERNS OF LAO-SONG (THAI SONG DAM), SUPHAN BURI PROVINCE Mr. Suwit Sadsunk</p> <p>Paper 2 (15) THE ART OF THE FABRIC PATTERN DESIGN BY STUDYING THE WOODEN CARVING ON GINGERBREAD IN VIMANMEK MANSION IN THAILAND Mrs. Chanoknart Mayusoh</p> <p>Paper 3 (17) A WESTERN TREATMENT OF NONWESTERN NATIONAL IDENTITY: A CASE STUDY OF <i>THE KING AND I</i> Asst. Prof. Dr. Chutima Maneewattana</p> <p>Paper 4 (16) MAINTAINING SIGNIFICANCE OF REALIA IN TRANSLATED PLAY Dr. Nataporn Rattanachaiwong</p> <p>Paper 5(40) THE EXPOSURE AND SATISFACTION OF THE GRADUATE STUDENTS FOR THE CHANNAL OF THE INFORMATION AT SUANSUNANDHA RAJABHAT UNIVERSITY Miss Netdao Yooyong</p> <p>Paper 6(128) AN EVOLUTION PERSPECTIVE ON THE ROLE OF UNIVERSITIES IN REGIONAL INNOVATION</p>

	<p>Jong-Ho LEE</p> <p>Paper 7(124) PLANNING SCHOOL FEEDING POLICY TOWARDS ECONOMIC DIVERSIFICATION IN AFRICA</p> <p>Shuaibu Saminu</p>
23 October 17(M)	Session B
<p>23 October 17(M) 09.00-10.30 (M)</p>	<p>Session B1</p> <p>Paper 1(1) “SPIRITUAL TOURISM” THE NEW TOURIST DESTINATION FOR THAI TOURISM CASE STUDY IN “WAT TATON” CHAING-MAI THAILAND Dr. Supakit Mulpramook</p> <p>Paper 2 (3) THE STUDY ON MEDIA EXPOSURE BEHAVIOR IN POLITICAL ISSUES OF UNIVERSITY STUDENTS Mr. Veerapon Vongprasert</p> <p>Paper 3 (5) THE STUDY OF THE PARTICIPATION OF THE PRESIDENT OF STUDENT COUNCIL ELECTION, UNDERGRADUATE PROGRAM, SUAN SUNANDHA RAJABHAT UNIVERSITY Asst. Prof. Dr. Sudabhorn Arundee</p> <p>Paper 4 (8) ROLE OF PROVINCIAL GOVERNOR IN CONTROL OF LOCAL ADMINISTRATION ORGANIZATIONS : CASE STUDY NONGBUALAMPHU PROVINCE Dr. Barameeboon Sangchan</p> <p>Paper 5 (18) FINANCIAL STABILITY IN SAMUT SONGKRAM FROM HOUSEHOLD SAVING POTENTIAL Dr. Krisada Sungkhamanee</p> <p>Paper 6 (104) THE IMPACT OF “PIPELINE DIPLOMACY” ON CONFLICT RESOLUTION IN THE CAUCASUS-CASPIAN REGION-THE CASE OF AZERBAIJAN AND AFGHANISTAN Dogan Girgin</p>
10.31 - 10.45	Morning Break
10.46 - 12.00	<p>Session B 2</p> <p>Paper 1 (21) HOTEL BUSINESS DEVELOPMENT WAY TO REACH SERVICE STANDARD FOR SUPPORTING SENIOR TOURISTS IN THE AREA OF AMPHAWA DISTRICT, SAMUTSONGKRAM Miss Benjaporn Yaemjamuang</p> <p>Paper 2 (22) KNOWLEDGEMANAGEMENT FOR WRITING RESEARCH PROPOSAL Miss Wanvisa Saisanan Na Ayudhaya</p> <p>Paper 3 (26) UNIVERSAL DESIGN FOR WARD PATIENTS GOVERNMENT HOSPITAL Mrs. Jitravadee Roongin Kunkar</p> <p>Paper 4 (2) THE DIFFERENCES OF SOCIAL AND POPULATION FACTORS TOWARDS TOURISTS’ ATTITUDES TO STAYING AT GREEN HOTELS IN BANGKOK Dr. Rumpapak Luekveerawattana</p> <p>Paper 5 (111) MEDIATISATION OF URBAN PLANNING AND THE PUBLIC SPHERE: TOWARDS ENABLING AND JUST PLANNING PROCESS CASE OF EGYPT Mennatullah Hendawy</p>

12.01- 13.00	Lunch Break
13.01-15.00	<p>Session B 3</p> <p>Paper 1 (30) THE DEVELOPMENT OF ONLINE ADMISSION FOR GRADUATE STUDENTS, SUAUN SUNANDHA RAJABHAT UNIVERSITY Miss Khatcharin Thapthimthet</p> <p>Paper 2 (28) ORGANIZED ACTIVE LEARNING BY CREATIVE BASED LEARNING Mrs. Chompunuj Limlertmonkol</p> <p>Paper 3 (31) KNOWLEDGE MANAGEMENT FOR THE GUIDELINES OF INFORMATION RESOURCE ACQUISITION: A CASE OF ACADEMIC RESOURCE CENTER, SUAN SUNANDHA RAJABHAT UNIVERSITY Acting Sub Lt. Nitima Kaewmanee</p> <p>Paper 4 (19) VITAL FACTORS OF RECENTLY GRADUATES FOR APPLYING JOBS IN ASEAN LABOR MARKET Dr. Natnaporn Aeknarajindawat</p> <p>Paper 5 (25) KNOWLEDGE MANAGEMENT: GUIDE TO WRITE A RESEARCH PROPOSAL Miss Yanika Chuentako</p> <p>Paper 6 (34) KNOWLEDGE ON FOLLOWING-UP AND RECORDING ACCORDING TO PERSONNEL DEVELOPMENT TRAINNING Miss Supassawee Morakul</p> <p>Paper 7 (114) AGRICULTURAL TRADE UNDER WTO REGIME: OPPORTUNITIES AND CHALLENGES Dr. MOHD ADIL</p> <p>Paper 8 (115) RACE OF RELIGIONS AND THE RICE OF RADICALISM IN WEST PAPUA INDONESIA Umar Werfete and Suparto Iribaram</p>
15.01 - 15.15	Afternoon Break
15.16 - 17.00	<p>Session B 4</p> <p>Paper 1(7) DEVELOPMENT OF A SOLUTION TO THE TRAFFIC ISSUES INSIDE SUAN SUNANDHA RAJABHAT UNIVERSITY Mr. Wichar Kunkum</p> <p>Paper 2 (6) THE STUDY OF SATISFACTION OF THE DEVELOPMENT OF GRADE VALIDATION SYSTEM BASED ON CURRICULUM STRUCTURE, UNDERGRADUATE STUDENTS, SUAN SUNANDHA RAJABHAT UNIVERSITY Miss Wanwika Sattaworn</p> <p>Paper 3 (32) DEVELOPMENT OF THE “I” SYSTEM FOR THE CORRECTION OF INTERNET LEARNING VIA THE INTERNET SUAN SUNANDHA RAJABHAT UNIVERSITY Miss Pinyaphat Kongsorn</p> <p>Paper 4 (38) KNOWLEDGE MANAGEMENT FOR PROCESS DEVELOPMENT: INFORMATION RESOURCES CLASSIFICATION AND CATALOGING IN THE LIBRARY OF SUAN SUNANDHA RAJABHAT UNIVERSITY Miss Supaporn Wongsa</p> <p>Paper 5 (4) THE STUDY OF APPLICANTS’ SATISFACTION OF UNIVERSITY ADMISSION SYSTEM : UNDERGRADUATE LEVEL, SUAN SUNANDHA RAJABHAT UNIVERSITY Miss Chontiya Ledanan</p>

	<p>Paper 6 (116) THE EFFECTIVENESS OF USING GAMES IN LEARNING ENGLISH VOCABULARY: AN ANALYTIC IN THE SAUDI ARABIAN CONTEXT Ayedh Dhawi Mohammed Almohanna, Saudi Arabia</p> <p>Paper 7 (133) SOCIAL MEDIA AND ARABIC: CODE-SWITCHING AMONGST ALGERIAN STUDENTS LIVING IN THE UK Linda Merzougui</p>
24 October 17(T)	Session C
24 October 17 (T) 09.30 – 10.30	<p>Session C1</p> <p>Paper 1(48) GERMAN LEADERSHIP IN EU FOREIGN POLICY AFTER EUROZONE CRISIS? Merve Yavuz</p> <p>Paper 2 (7) CULTURAL AND ART EDUCATION: A MEANS FOR SOCIAL STABILITY IN NORTHERN GHANA Dr. Eric Appau Asante and MAVIS DONKOR</p> <p>Paper 3 (53) INNOVATIVE ACADEMY PROJECT -DISINFECTION OF EFFLUENTS WITH RENEWABLE ENERGY Hen Friman and Faina Nakonechny</p> <p>Paper 4 (61) EDUCATION, BUSINESS AND AGRICULTURE: AN INTEGRATION FOR ECONOMIC TRANSFORMATION IN DEVELOPING NATIONS- THE NIGERIAN EXPERIENCE Dr. Matthew Ojong Achigbe</p>
10.31 – 10.45	Morning Break
10.46 - 12.00	<p>Session C2</p> <p>Paper 1(57) EXPLORING THE EFFECT OF TECHNOLOGY SUPPORTED COLLABORATIVE LEARNING ON CREATIVE THINKING SKILLS OF PRE-SERVICE TEACHERS Erhan ÜNAL and Fatih ÖZDİNÇ</p> <p>Paper 2 (64) ASTIN THEORY AND SOCIAL NETWORKS Dr Elham Akbari and prof Hamid Abdollahian</p> <p>Paper 3 (50) EFFECT OF PAUL THE PERSIAN'S LOGICAL WORKS ON AL-MANTIQ BY IBN AL-MUQAFFA Seyedmohammadreza Azarkasb</p> <p>Paper 4 (136) THE NECESSITY OF REGIONAL ECONOMIC INTEGRATION: A LESSON FOR SOUTH ASIA? Md. Rajin Makhдум Khan and Faizah Imam</p> <p>Paper 5 (137) AN INVESTIGATION OF SENSORY LEARNING STYLES USED BY KURDISH EFL STUDENTS AT UNIVERSITY LEVEL Dr. Hoshang Farooq Jawad and Mr. Salahaddin Saeed Khidr</p>
24 October 17(T)	Session E

<p>24 October 17 (T) 09.30 – 10.30</p>	<p>Session E1 Paper 1(141) TOURISM STRATEGY IN THE SUN TRIANGLE ANALYSIS WITH THE THEORY BASED ON RESOURCES AND INSTITUTIONAL THEORY José G. Vargas-Hernández and Lic. Ana Yanetly Arias Orozco, Mexico Paper 2 (144) CONTRADICTIONS AMONG STUDENTS OF BEING MALES AND FEMALES IN LEARNING ENGLISH AS A FOREIGN LANGUAGE. Amina Babou, Algeria Paper 3 (145) THE RELATIONSHIP BETWEEN SYSTEM OF SUGGESTIONS AND THE PRODUCTIVITY OF HUMAN RESOURCES: A CASE STUDY OF TEHRAN PROVINCE GASCO Ali Aolatshah, Iran Paper 4 (120) BLEMISHES IN SYLLABUS DESIGNING OF ENGLISH AT PRIMARY LEVEL OF EDUCATION IN PAKISTAN: AN OBSTACLE IN ATTAINING LANGUAGE PROFICIENCY Zohaib Zahid and Dr Mamuna Ghani, Pakistan</p>
<p>10.31 – 10.45</p>	<p>Morning Break</p>
<p>10.46 - 12.00</p>	<p>Session E2 Paper 1 (158) TRAVELING THROUGH THE TOURISM PROMOTION TERMINOLOGY: CONSIDERATIONS UPON THE ADOPTION OF ENGLISH TERMS IN THE OFFICIAL WEBSITES OF ROME, MILAN, LUGANO AND BELLINZONA. Claudia Maria ASTORINO Paper 2(31) ADVANCING SUSTAINABLE AGRO-TOURISM IN THE WESTERN BALKANS: INSIGHTS FROM THE KATUN PROJECT Djurdjica Perovic and Sanja Pekovic andTatjana Stanovcic andJovana Vukcevic, Montenegro Paper 3 (163) SHARING ECONOMY: THE ESTABLISHMENT OF ORGANIZATIONAL IDENTITY OVERTIME, CONSIDERING IDENTIFY CLAIMS AND LEGITIMACY GRANTING João Miguel O. Cotrim and Prof. Francisco Nunes Paper 4 (143) REGENERATING PATRIARCHY: A STUDY ON GEORGE ORWELL'S VIEWS ON WOMEN AND FEMALE CHARATER Khaled Zouaoui Paper 5 (154) SATISFACTION OF INDIVIDUAL LEARNING NEEDS IN THE INTEGRATED TEACHING/LERNING MODEL IN PRIMARY SCHOOL Professor Anita Petere</p>
<p>12.01</p>	<p>Conference Close</p>
<p>23 -24 October 17</p>	<p>Participation and Discussion</p> <ol style="list-style-type: none"> 1. Dr. Mustafa Arslan., Georgia, 2. Dr. Dr Olufemi Aramide, Nigeria 3. Dr. Asif Iqbal, China 4. Professor Wang Zhuquan, China 5. Dr. Sumit Kumar dey, India
<p>25 October 2017</p>	<p>Free day for Participants</p>

UNIVERSAL DESIGN FOR WARD PATIENTS GOVERNMENT HOSPITAL

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ABSTRACT

The design of state hospital buildings is important to design the public space, in which the rooms are often not designed for disabled patient wheelchair or support device users. In this research, there are two important objectives: to study the utility behavior of patients in the patient room and to study the legal facilities in the hospital for the support of disabled patients in the movement, or use the device while healing to be able to use space effectively. Research Methodology consists of the patient interview, Nursing Department of Internal Medicine and to examine the condition of the patient's room by choosing a device level equivalent to mobility disability only. Survey results showed that the wheelchair patients or rehabilitators, where there were the problems in the area of showing and the toilet room, shower room, sink, door, sanitary model, which only supports the normal patient. The facility arrangement was found that there was a lack of other necessary assistance facilities. The physical appearance of the patient's room is in full compliance with the law. The improvement in this research is in the shower area. The design a support device supports the surrounding movement as required by law the lever handle, emergency signs must be installed in case of emergency. The wet and dry areas should have a gutter to prevent water from slipping including sanitary ware should be chosen as a specialized form for wheelchair access, and the last area to consider is the design of the ramp in the different floor levels of the room and the balcony to connect to make the wheelchair move easily. Let the patient relax not to be stuck in the room, but the way to improve facilities according to design standards for all people in the area. The hospital can be used as a model for similar areas.

Keywords— Universal design, Quality of life, Disability in motion, Ward for patients

INTRODUCTION

Universal Design is the design and composition of the environment so that everyone has access, understood, and utilized as fully as possible, regardless of age ability or disability, environment or building. It should be designed to meet the needs of everyone [1]. Currently, although the Act on the Promotion and Development of the Quality of Life of People with Disabilities (2550B.E.) and the Ministerial Regulations or equipping facilities or other services in buildings, places or public services to allow people with disabilities to access and use it in 2555B.E.. To control the design of state buildings such as hospitals, the building must be designed and environmentally friendly buildings for the disabled [2, 3]. Many other states created before and after the law. Abandonment of design work to achieve that standard may be with a budget or lack of awareness of the importance of equality of the disabled itself.

State hospital buildings, the pre-legislative construction controls, the space design is often geared towards public space. However, there is no room in the room for wheelchair patients or the need for physical therapy equipment such as bathroom design in the ward to enable rotation or wheelchair especially the total room. This is a crowded room with patients and relatives sharing both sleeping areas and toilets combined. So the researcher is aware that the research, said the owner of the building in the public sector, could be used as a basis or a guideline for improving the inpatient room or used as a requirement for the construction of new buildings to meet the criteria or standards can be used effectively in the most effective way to facilitate the use of wheelchair-accessible buildings or the need for better support devices. Do not feel discriminated or inferior to the normal person. Humanitarian

The concept of research adherence is the core concept of design standards for all people, where in the design of patient rooms in state hospitals, the researchers will study accessibility information for the mobility impaired by applying the theory of law, facilities to the disabled and professional practice guides,

architecture, design, environment and facilities for everyone, and related research to find ways to improve the area to legal.

OBJECTIVES

1. To study the utility behavior of patients in the patient room.
2. To study physical characteristics and equipment Legal facilities in the patient room included.

METHODOLOGY

In this research, the research method is divided into two main steps:

Step 1 is a consistent research process. The objectives of the research are (1) patient and nurse (department of Internal Medicine) interview to study functional habits, equipment, facilities, (2) to make a plan for study and improvement.

In addition, the researcher collected preliminary information by reviewing the literature research theories, theories, and research related to designing for all and facilities for the mobility impaired.

Step 2 Data Analysis is an analysis and evaluation of the facilities checklist that has been applied by the law [2,3] and the concept/design manual relating to the disabled [4,5] and from the pre- after renovation 3D modeling using computer program to present the image, improve the area, summarize the results and suggestions for improvement.

RESULTS

The research results are two parts.

1. Behavioral use of patient facilities in patient rooms from nurse caregiver interview and behavioral habits, equipment, patient facilities. It was found that patients and relatives used a shared room and shower space and Nurses and relatives help patients in the toilet, while the disabilities patients cannot help themselves, bring a wheelchair to the shower room and go out on the balcony itself.

2. Physical Characteristics and equipment legal facilities in the patient room include a survey of the area and a checklist of legal facilities found that the physical building in the patient room included, which is in accordance with the hospital design law in all respects. However, from the analysis of floor plan shows the living area as shown in Figure 1. The problem is in the area of shower area, washing and washing areas, the size of rooms, doors and sanitary ware overall, it only supports normal patients. The equipment only has support brackets in some positions cannot accommodate wheelchair patients or any rehabilitation facility that needs help.

Figure 1: Shows the living area, patient room (left), Patient shower room Plan (right)

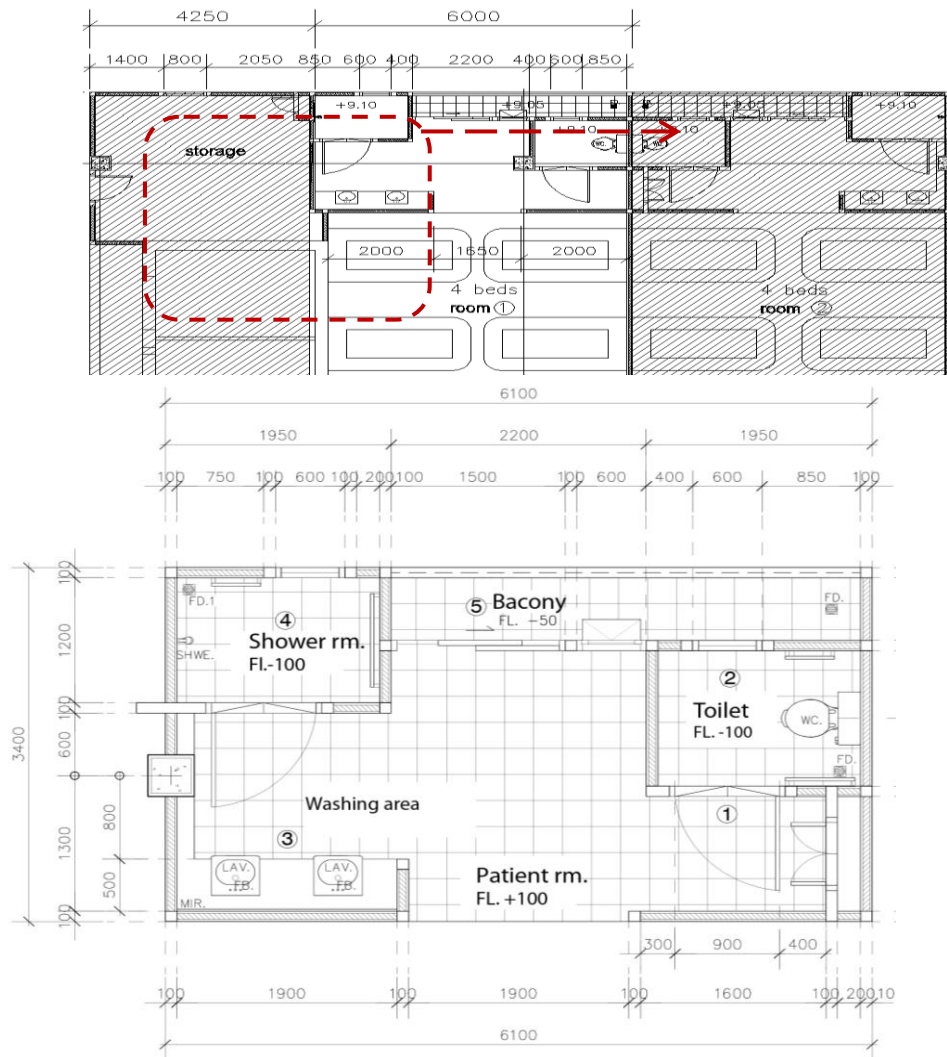
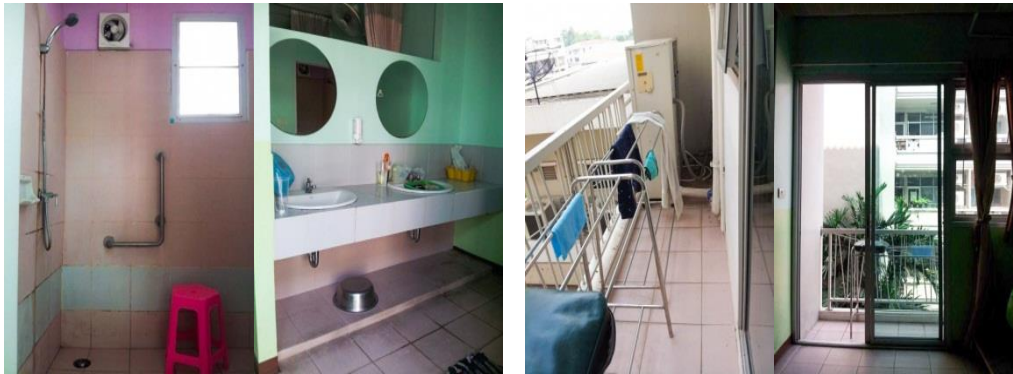


Figure 2: Image showing the area of the front of the toilet in 4 beds patient room



Figure 3: Shows the shower area and counter sink (left) showing the condition of the patio area patient room (right) patient room



MODIFICATION GUIDELINES

From the plan and illustrations shown in Figure 1- 3, we can analyze the problem and propose five modifications as follows:

No. 1: The entrance to the shower room is wide enough to allow the wheelchair of the patient to move in and out of the area easily and make a ramp between the floor outside the shower room and the floor in the shower room for the convenience of the wheel chair user.

No. 2: The original sanitary wares are too low height, not easy for the elderly. Should choose a sanitary toilet designed to be ergonomically designed. The height is close to a chair or wheelchair, so that the elderly will not have to shrink or tiptoe can sit easily because the elderly are not good knee problems. The height of the floor is not less than 45 centimeters but not more than 50 centimeters. The basin is mounted on both sides of the rail to support the support.

No. 3: The area for wheel chair users must be provided as a front facing access, where space is measured from the center of the sink on either side of the wall or obstruction. The distance is not less than 45 cm and there must be space for feet and knees. To set the height of the sink to a height of not less than 75 cm but not exceeding 80 cm measured from the floor to the top of the sink edge or counter surface. There should be no shelves above the sink and there should be an adjustable angle for wheelchair users. The faucet installation should be a lever type, a lever, a pressing lever or a shaft rotation.

No. 4: Wheelchair Access Wheelchairs, the shower area must be at least 75 cm long, not less than 150 cm long, and should have a seat in the wheelchair user area if folding seats are required. Adjacent to the side wall with shower control points, the seat must be at least 45 cm high but not more than 50 cm high. The shower must be at least 150 cm long and can be used with or without hand, where the shower head can be adjusted to the height.

No. 5: The balcony is basically different levels of difficulty for patients using wheel chairs. In addition, the balcony has insufficient space to rotate the wheel chair have a diameter of not less than 150 cm.

Figure 4: Shower & WC. plan comparison between before - after improvement

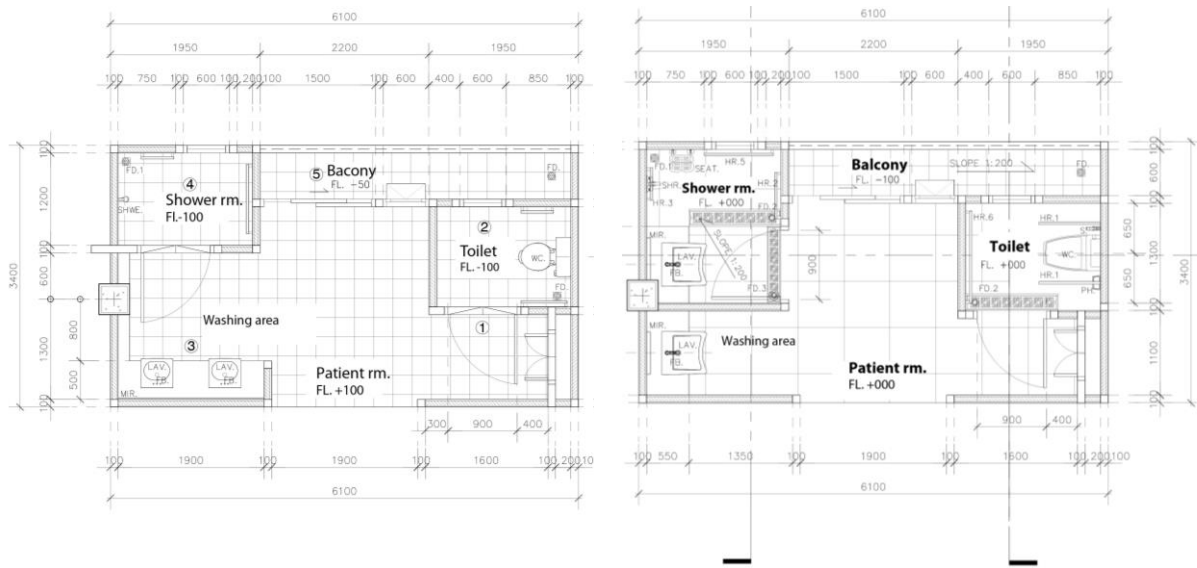


Figure 5: 3D image shows inside of shower area & WC. in patient room after renovation



Figure 6: 3D image showing the entrance to the shower room after renovation



SUMMARY

From the study of utility habits, patient facilities and legal facilities check It was found that patients and relatives had to share room and shower room space with nurses and relatives helping to support the patient in the shower room. But in the case of an inconvenient patient cannot help themselves bring a wheelchair to the shower room, the toilet and the balcony itself on the physical side. This building is designed and built in good design standards but also defects in the design of the entire shower room, which is not yet meet the criteria. It may be that the budget for designing public buildings is limited or it may be due to the neglect of the designer, regardless of the disabled and disabled patients using public buildings such as hospital buildings. Particularly in the study area, there are multiple patients with multiple defects. Affecting the usage behavior of buildings such as patients cannot use wheelchairs in the area easily. Both in the shower room and the toilet must have support devices to support the movement around the law. The lever handle. Signs must be installed in case of emergency. The wet and dry areas should have a gutter to prevent water from slipping including the sanitary form should be selected as a dedicated form for wheelchair access, and the last area to consider is the balcony, because this area should get the wind for relaxing but not inside the room. The connection of the space must design a ramp to allow the wheelchair to move easily.

This research can improve the quality of life for patients. Admittedly, the length of stay may be shorter - longer, depending on the case. In principle, we will try to provide patients. So, if there is a good facility to support themselves, where the disabled can help themselves. It is another force that helps patients feel valued have the courage to live as normal as possible. And the design is also used as a model for similar building designs.

CONCLUSION AND FUTURE WORKS

This research is a design example for all people in a case study room only, so that patients can access all areas of the hospital according to standard. The results should be extended to other public areas. To be able to support the use of patients most effectively, such as the creation of graphics, symbols, easy to understand the symbolic media, which also represent the public relations space access to various areas has created rapid awareness [6] such as the symbol of a wheelchair, a point of the telephone, a cash dispenser, etc. It is installed in areas such as an elevator hall, a waiting area for medical records. Including increasing the number of disabled parking spaces to increase the table space for disabled patients who are outpatients in the cafeteria, etc. in the government and local organizations themselves must supervise and support the design of the building is more legal Include a campaign to raise awareness and to recognize that all members of society must be equally treated.

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