

# RCGR<sup>5th</sup> 2020

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## PROCEEDINGS OF THE 5<sup>th</sup> REGIONAL CONFERENCE ON GRADUATE RESEARCH

THEME “SUSTAINABLE BUSINESS GROWTH, CHALLENGES,  
MEASURES AND SOLUTIONS IN GLOBAL SCENARIO”

18 January 2020

Sripatum University, Khon Kaen Campus, Khon Kaen, Thailand



**Editors:**

Vichit U-on

George C. Hadjinicola



**มหาวิทยาลัยศรีปทุม**  
SRIPATUM UNIVERSITY

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วิทยาลัยบัณฑิตศึกษาด้านการจัดการ



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Proceedings of  
The 5<sup>th</sup> Regional Conference on Graduate Research

**RCGR<sup>5<sup>th</sup></sup>**  
**2020**

Theme “Sustainable Business Growth, Challenges,  
Measures and Solutions in Global Scenario”

18 January 2020

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## Welcome Address from Conference Honorary Chairs

It is a great pleasure and honor for us, on behalf of *The 5<sup>th</sup> Regional Conference on Graduate Research*, to welcome you all to the world famous festival. First of all, we would like to thank the co-organizers, namely Graduate College of Management, Sripatum University, (Thailand); University of Cyprus (Cyprus); and University of Wollongong in Dubai (United Arab Emirates) for organizing this conference, which is a major multidisciplinary regional platform and important event in the Asean region.

To support the Asean destination for international visitors, the organizers selected Khon Kaen as a conference venue due to it is one of the four major cities of Isan, Thailand, also known as the “big four of Isan”, the others being Udon Thani, Nakhon Ratchasima, and Ubon Ratchathani. Thailand’s 2014 EU Film Festival also included Khon Kaen, together with Chiang Mai and Bangkok, as host locations.

To conclude my address, we would like to thank Sripatum University, University of Cyprus, and University of Wollongong in Dubai that have assisted in the organization to this conference to promote a tourist destination in Khon Kaen to our delegates and guests.

We wish good results in your deliberations.



Dr. Rutchaneeporn Pookayaporn Phukkamarn  
President, Sripatum University, Thailand  
RCGR 2020’s Honorary Chair



Asst. Prof. Dr. Janya Pookayaporn  
Assistant to the President, Sripatum University, Thailand  
RCGR 2020’s Honorary Chair

## Welcome Address from Conference General Chairs

On behalf of Sripatum University, Khon Kaen Campus (Thailand); Graduate College of Management, Sripatum University (Thailand); University of Cyprus (Cyprus); and University of Wollongong in Dubai (United Arab Emirates), we would like to welcome you to participate in *The 5<sup>th</sup> Regional Conference on Graduate Research* which will take place at Sripatum University on 18 January, 2020 in Khon Kaen, Thailand.

The conference will be an exciting event bringing international and interdisciplinary expertise in a rapidly developing field together for one day. It will provide an opportunity for experts in business, management, marketing, accounting, communication arts, social sciences, humanities, science, and engineering from worldwide to exchange and discuss ideas and information.

In a present and future issue, we will cover more on the following topic as “Sustainable Business Growth, Challenges, Measures and Solutions in Global Scenario”. This Conference delivers the most up-to-date issues, and also provides opportunity for CIOs, CEOs, industry leaders, managers, academics, and government officials to exchange ideas on future business co-operation trends and best practices. This one day conference is an excellent opportunity for you to meet with other professional members from all over the world, share the view of graduate research internationally.

We would also like to take this opportunity to express our sincere thanks to all the presenters, delegates, reviewers, advisory committee members, local organization committee members, and guest speakers for their interesting and valued contributions. On behalf of the organizers, we would like to personally apologize for any difficulties you might have encountered while attending this conference and wish all of you a very successful and fruitful deliberations.



Assoc. Prof. Dr. Vichit U-on  
Sripatum University, Thailand  
RCGR 2020's General Chair



Prof. Dr. George C. Hadjinicola  
Lecturer, University of Cyprus, Cyprus  
RCGR 2020's General Chair



Assoc. Prof. Dr. Ioannis Manikas  
University of Wollongong in Dubai, United Arab Emirates  
RCGR 2020's General Chair

## Welcome Address from Conference Program Chairs

Welcome to *The 5<sup>th</sup> Regional Conference on Graduate Research* in Khon Kaen, Thailand. This professional meeting is thought to provide an excellent opportunity for faculty, scholars, Ph.D. students, administrators, and practitioners to meet well-known experts from all over the world and to discuss innovative ideas, results of research, and best practices on various topics of Business, Management, Marketing, Accounting, Communication Arts, Social Sciences, Humanities, Science, and Engineering, and many other related issues.

The RCGR conference continues to be highly competitive and very well perceived by the international community, attracting excellent contributions and active participation. This year, researchers from more than 5 countries have submitted their papers to the 5<sup>th</sup> RCGR 2020 international conference. After a careful review process by members of the international program committee, 113 quality papers have been accepted for presentation at the conference. We thank all authors who dedicated a particular effort to contribute to the conference.

We wish you a pleasant stay in Khon Kaen, and a successful conference.



Asst. Prof. Dr. Ungul Laptaned  
Thai Researchers' Consortium of Value Chain Management and Logistics, Thailand  
RCGR 2020's Program Chair



Prof. Dr. Andreas C. Soteriou  
Lecturer, University of Cyprus, Cyprus  
RCGR 2020's Program Co-Chair

## Speaker Background



### **Dr. Maarten Pieter Roderik Tau**

Dr. Maarten graduated Bachelor of Arts (B.A.) from University of Amsterdam (2001). He is currently Teacher of English for Business Communication Department, Sripatum University Khonkaen. Prior to his appointment as Teacher of EBC department, he had served as a lecturer of English at various schools and colleges for several years in Thailand. He also had worked for over 10 years as a Financial Consultant at leading banks e.g. ABN AMRO, ING and Rabobank in the Netherlands. He had trained many young financial professionals during his career in the banking sector in The Netherlands. He had also worked as a Financial Advisor at Welten Consultancy and at Slegt Financial Services in The Netherlands.

## Speaker Background



### **Tomas Lars Planberg**

Tomas graduated B.Sc. Social Work, specialized in the Intercultural and International Social Work in 2003 from the Mid University in Östersund, Sweden. He is currently working as an English teacher in English for Business Communication Department, Sripatum University Khonkaen since February 2019. Before that he has been working as an English teacher for different English institutes in Thailand. In his work as a social worker, he has a widespread experience working with teenagers and families from different countries who have moved to Sweden. Moreover, he has been living in U.S.A, Ecuador, Israel, Sri Lanka and worked as a supervisor and coordinator for youth group in culture study. With his interests in culture, education, business and political issues, his main focus is to work with young people by education.

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## Session Schedule

**RCGR<sup>5<sup>th</sup></sup>  
2020**

**The 5<sup>th</sup> Regional Conference on Graduate Research  
Sripatum University, Khon Kaen Campus, Khon Kaen, Thailand  
Theme: Sustainable Business Growth, Challenges, Measures and Solutions in Global Scenario**

Saturday (S) 18 January 20	Room	Floor 3, Room 206 – Pookayaporn Auditorium										
		Floor 2, Room 301	Floor 2, Room 302	Floor 2, Room 303	Floor 2, Room 304	Floor 2, Room 305	Floor 2, Room 306	Floor 2, Room 307				
	08:00 – 09:00	REGISTRATION										
	09:00 – 09:15	<p>OPENING ADDRESS: Asst. Prof. Dr. Janya Pookayaporn, Honorary Chair Sripatum University, Thailand</p>										
	09:15 – 09:30	<p>WELCOME ADDRESS: Assoc. Prof. Dr. Vichit U-on, General Chair Sripatum University, Thailand</p>										
	09:30 – 10:45	<p>KEYNOTE ADDRESS: “Sustainable Business Growth Towards Global Economy” Dr. Tau Maarten Pieter Roderik, The Netherlands Tomas Lars Planberg, Sweden</p>										
	10:45 – 11:00	SATURDAY AM BREAK										
	11:00 – 12:20	SA1 Educational Administration and Planning 1	SB1 Educational Administration and Planning 2	SC1 Educational Administration and Planning 3	SD1 Business and Marketing Management 1	SE1 Accounting, Finance, and Banking 1	SF1 Operation and Supply Chain Management	SG1 Laws and Public Administration 1				
	12:20 – 13:20	SATURDAY LUNCH BREAK										
	13:20 – 15:00	SA2 Educational Administration and Planning 4	SB2 Educational Administration and Planning 5	SC2 Educational Administration and Planning 6	SD2 Business and Marketing Management 2	SE2 Accounting, Finance, and Banking 2	SF2 Communication Arts	SG2 Laws and Public Administration 2				
15:00 – 15:20	SATURDAY PM BREAK											
15:20 – 18:20	SA3 Educational Administration and Planning 7	SB3 Educational Administration and Planning 8	SC3 Educational Administration and Planning 9	SD3 Business and Marketing Management 3	SE3 Accounting, Finance, and Banking 3	SF3 Accounting, Finance, and Banking	SG3 Organization and Human Resource Management					
19:00 – 21:00	<p>WELCOME DINNERS: Authentic Chinese Food, Kosa Hotel, Khon Kaen, Thailand</p>											
21:00 – 21:15	<p>CLOSING ADDRESS: Asst. Prof. Dr. Ungul Leptaned, Program Chair Thai Researchers' Consortium of Value Chain Management and Logistics, Thailand</p>											

### Saturday, 18 January 2020

Code	Session	Chair	Room	Start	Finish
SRE	Registration Saturday	Yongyut Homthong	Floor 3, Room 206	08:00	09:00

Code	Session	Chair	Room	Start	Finish
SOA	Opening Addresses	Asst. Prof. Dr. Ungul Laptaned	Floor 3, Room 206	09:15	09:30
	09:00	09:15	<b>Opening Address:</b> Asst. Prof. Dr. Janya Pookayaporn, Honorary Chair Sripatum University, Thailand		
	09:15	09:30	<b>Welcome Address:</b> Assoc. Prof. Dr. Vichit U-on, General Chair Sripatum University, Thailand		

Code	Session	Master of Ceremonies	Room	Start	Finish
SKA	Keynote Addresses	Assoc. Prof. Dr. Vichit U-on	Floor 3, Room 206	09:30	10:45
	09:30	10:45	<b>Sustainable Business Growth Towards Global Economy</b>		

Code	Session	Room	Start	Finish
SAB	Saturday AM Break	Hall	10.45	11:00

Code	Session	Chair	Room	Start	Finish
SA1	Educational Administration and Planning 1	Dr.Cherdsak Srisangchai	Floor 2, Room 301	11:00	12:20
0001	11:00	11:20	Information System Development for Education Loan in Rajamangala University of Technology Isan, Nakhonratchasima (e-RMUTI Education Loan) <i>Apiradee Muankhamla and Yaowaret Jantakat</i>		
0020	11:20	11:40	The Development of Thai Vocabulary Reading Skill by Using the Thai Reading Supplementary Exercises for Grade 2 Students' of Banphukambao School Khonkaen Primary Educational Service Area Office 4 <i>Penprapa Anuntapum, Chakkaphan Chancharoen, and Supachai Janpum</i>		
0022	11:40	12:00	A Feasibility Study of the Bachelor of Arts Curriculum Development Tourism Department, 2020 <i>Saowanee Thapphet</i>		
0025	12:00	12:20	Development of Problem Solving Skills on Multiplication by Using Multimedia for Grade 2 Students from Intornwittaya School <i>Nantawan Kumbua, Suphat Punpattanakul, and Pannapa Songsangkaew</i>		

Code	Session	Chair	Room	Start	Finish
SB1	Educational Administration and Planning 2	Dr.Chakkaphan Chancharoen	Floor 2, Room 302	11:00	12:20
0050	11:00	11:20	The Effects of Learning Using Graphic Organizers in the Topic of Personal and Family Laws on Learning Achievement and Critical Thinking Ability of Mathayom Suksa II Students at Chaiya Wittaya School in Surat Thani Province <i>Naiyane Krainara</i>		

0054	11:20	11:40	The Development of Spelling Skill Achievement Using TGT Cooperative Learning Technique for Grade 4 Students BanNaAngkam School Loei Primary Educational Service Area Office 2 <i>Prapassara Junpae, Supachai Janpum, and Pimpilai Saengtup</i>
0056	11:40	12:00	Cooperative Learning Technique Learning Together With Social Media. to Promote Teamwork in Physics Subject Mechanical Balance. for Grade 10 Students <i>Natcha Bubbamalo, Paisarn Worakham, and Natchanok Jansawang</i>
0057	12:00	12:20	Subtitling Swear Words in Netflix Series from English into Thai: A Case Study of "The End of the F***ing World" <i>Tareerat Hirunnukroa and Boonlert Wongprom</i>

Code	Session	Chair	Room	Start	Finish
SC1	Educational Administration and Planning 3	Dr.Sanae Komsommai	Floor 2, Room 303	11:00	12:20
0089	11:00	11:20	The Development of E-Book Instructional Media Fundamental Knowledge about Computer for M.1 of Khaokaewittayasan School, the Secondary Educational Service Area Office 19 <i>Dolnapha Polpan, Jirayu Srisangachai, and Jiraporn Loonprom</i>		
0090	11:20	11:40	Developing Reading Skills of Early Childhood by Using Multimedia of Inthornsuksa's Students in Office of the Private Education Commission <i>Jaruwan Kumbua, Pitak Polkacha, and Weeradet Xata</i>		
0092	11:40	12:00	The Development of Division Skill through Activity Packages for Grade 3 Students at Ban Kokklang School, Khonkaen Primary Educational Service Area Office 4 <i>Krittaya Phetnak, Chakkaphan Chancharoen, and Virat Chareonchua</i>		
0093	12:00	12:20	STEM Education Enhances Problem Solving Abilities and Learning Achievement on Motion and Force of Grade 8 Students <i>Jinthanath Makchit, Paisan Worakham, and Nukool Kudthalang</i>		

Code	Session	Chair	Room	Start	Finish
SD1	Business and Marketing Management 1	Assoc. Prof. Dr.Vichit U-on	Floor 2, Room 304	11:00	12:20
0007	11:00	11:20	Risk Management for Reducing Electric Energy Costs with Balanced Scorecard <i>Pichai Triasom and Marut Khotphan</i>		
0027	11:20	11:40	Factors Affecting The Decision To Join The OCS / PCS Company in Bangkok Metropolitan Region <i>Nutawoot Thoanon</i>		
0037	11:40	12:00	The Relation Between Marketing Mix and Acceptance of Using MYMO Application by GSB in Kamalasai District, Kalasin <i>Chinapa Issaradeth and Nontipan Prayurhong</i>		
0045	12:00	12:20	Modern Management Approach of Restaurant Business in Khon Kaen Province <i>Nisarawan Piboonpompong</i>		

Code	Session	Chair	Room	Start	Finish
SE1	Accounting, Finance, and Banking 1	Dr.Sumana Chantharat	Floor 2, Room 305	11:00	12:20
0018	11:00	11:20	A Study of the Problems in Using Accounting Software Packages for Small and Medium Business in Khon Kaen Province <i>Goraphan Duangjaidee, Kittitat Kiattikhunawong, Ratcharat Satittayasat, Kanchana Inphaen, Saowanee Lapitakchai, and Palakorn Wiangtai</i>		
0019	11:20	11:40	Readiness of SMEs Accountants in Accession to the ASEAN Economic Community in the Upper Northeastern Region <i>Duenchai Sonklang</i>		
0035	11:40	12:00	A Study of Demand of Knowledge on Accounting and Laws with a Good Life of Old People in Nong Daeng Chomphu District, Khon Kaen Province <i>Kanjana Promsoda, Kamontip Kumpaiwongpitug, Aphichaya Boonsri, Butsaba Kummanechan, Jiraporn Pralubruksa, and Palakorn Wiangtai</i>		

0036	12:00	12:20	The Effects of Economic News On Stock Returns in Thailand <i>Phattharawadee Saelee, Wanvilai Chulaphan, Jorge Fidel Barahona Caceres, and Tanchanok Bejrananda</i>
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Code	Session		Chair	Room	Start	Finish
SF1	Operation and Supply Chain Management		Dr.Virat Chareonchua	Floor 2, Room 306	11:00	12:20
0003	11:00	11:20	A Material Handling System Design in Rice Milling Process: A Case Study of Maekaew Rice Milling <i>Seksan Winyangkul, Nuttawat Taerin, Nakorn Chaiwongsakda, Prawet Anan-uea, Chayakorn Putakammerd, Kwanruen Sinnarong, Watchara Watanarawee, and Wipobh Jaikhang</i>			
0004	11:20	11:40	Transportation Routing: A Case Study of Thanapiriya Public Company Limited <i>Seksan Winyangkul, Puoyanud Kornkaew, Nakorn Chaiwongsakda, Prawet Anan-uea, Chayakorn Putakammerd, Kwanruen Sinnarong, Watchara Watanarawee, and Wipobh Jaikhang</i>			
0010	11:40	12:00	Analysis of the Supply Chain Management of Fresh-Cut Vegetable Packing House for Export to the United Kingdom <i>Kunrarat Worathakittikun and Parthana Parthanadee</i>			
0068	12:00	12:20	Waste Reduction in Trailer Maintenance Process: A Case Study of Deuan Sawanh (thailand) Co., Ltd. <i>Jirachai Kulliab, Khunnapat Assawapritipong, and Sittichai Waengnern</i>			

Code	Session		Chair	Room	Start	Finish
SG1	Laws and Public Administration 1		Ms.Nisarawan Piboonpornpong	Floor 2, Room 307	11:00	12:20
0011	11:00	11:20	The Role of Lawyers and the Postmortem Examination <i>Santiphong Kumansing and Lert Thueaksaeng</i>			
0012	11:20	11:40	Professional Compulsory Liability Insurance Medical <i>Santiphong Kumansing and Porntap Aonrat</i>			
0013	11:40	12:00	The People Opinions of the Practices Good Governances Principle of the Government Offices of Loei Province and Nongbualamphu Province <i>Kalaya Yotcamlue</i>			
0014	12:00	12:20	The Security of the State above the Right to Privacy of Citizens: A Case Study of Chinese Facial Detection Technology <i>Najaree Chayaboot</i>			

Code	Session		Room	Start	Finish
SLB	Saturday Lunch Break		Food Court	12:20	13:20

Code	Session		Chair	Room	Start	Finish
SA2	Educational Administration and Planning 4		Dr.Chersak Srisangchai	Floor 2, Room 301	13:20	15:00
0026	13:20	13:40	The Development of Achievement in Solving Multiplication Problems by Using the Skill Practice Prathom 4 School under Loei Primary Education Service Area Office 1 <i>Santipron Puttathongsri, Jirayu Srisangachai, and Ngamprom Onbuakhao</i>			
0028	13:40	14:00	The Development of English Word Reading Ability by Using Phonics Method of grade 1 students at Banphailomnonsombut School Under Udon Thani Primary Education Service Area Office 3 <i>Chollada Suksamran, Chakkaphan Chancharoen, and Thanu Vongjinda</i>			

0031	14:00	14:20	The Development of Learning Activities Based on Geo-Literacy on Human-Environmental Interactions for Mattayomsuksa 1 at Nongbuadaeng Wittaya School the Secondary Educational Service Area Office 30 <i>Chakkrit Tophan, Chakkaphan Chancharoen, and Sanae Komsommai</i>
0032	14:20	14:40	The Development of Practice Skills about Human and Environment by Using CIPPA Model For Student In Prathomsuksa 3 at Banphonhong School under Loei Primary Education Service Area Office 1 <i>Jeeraphan Kanpakse Chotwattananusorn, Chakkaphan Chancharoen, and Virat Chareonchua</i>
0034	14:40	15:00	Student Team Achievement Division Together with Education Applications <i>Attapon Jaiwong, Paisarn Worakham, and Panwilai Dokmai</i>

Code	Session	Chair	Room	Start	Finish
SB2	Educational Administration and Planning 5	Dr.Chakkaphan Chancharoen	Floor 2, Room 302	13:20	15:00
0062	13:20	13:40	Development Quality of Education to be Effective and Sustainable Focus on Classroom-Based by Using PLC Process: Lessons Learned from Study Visit to Japan <i>Theerapong Sangsit and Oratai Santimataneedol</i>		
0063	13:40	14:00	The Development of Skill Practice Packages on Mathematic Problem Solving for Prathom Suksa 4 at Ban Nongyaplong School <i>Natnichanan Sriphum, Rakkiet Srisunthorn, and Adul Pimthong</i>		
0066	14:40	15:00	Development of Digital Media Innovation of Science Learning on Nutrients in Food for Prathomsuksa 6 at Nongyaplong School Khon Kaen Primary Educational Service Area Office 2 <i>Sayumporn Khacharoen, Chakkaphan Chancharoen, and Adul Pimthong</i>		
0070	14:00	14:20	Learning Management by Online Lessons for Subject of Website Creation by HTML, Mathayom Sueksa 1 <i>Pirada Malam</i>		
0075	14:20	14:40	The Development of Analytical Thinking Abilities of the Fifth Grade Students by Using the Six Thinking Hats Technique <i>Maneerat Kamseekaeo, Cherdasak Srisangachai, and Chakkaphan Chancharoen</i>		
0078	14:40	15:00	The Administrative Standard of the Upright School Project in Educational Institutions under the Sisaket Primary Education Service Area Office 3 <i>Thitimar Taosiri and Surasak Srikrachang</i>		

Code	Session	Chair	Room	Start	Finish
SC2	Educational Administration and Planning 6	Dr.Sanae Komsommai	Floor 2, Room 303	13:20	15:00
0094	13:20	13:40	Organized Active Learning with Multimedia Technology to Promote Teamwork Skills in Biology on Plant Photosynthesis for Grade 11 Students <i>Pirada Thanatka, Somsanguan Passago, and Paisarn Worakham</i>		
0097	13:40	14:00	The Development of English Vocabulary Reading Skill by Using the English Song Activities for grade 1 students' of Bandonklet School Nong Bua Lamphu Primary Educational Service Area Office 1 <i>Nalinrat Kompai, Virat Chareonchua, and Pannapa Songsangkaew</i>		
0099	14:00	14:20	The Development of Mental Calculation by Using Calculator Skills of 6st Year Kindergarten Students At Anubanchuenchom School in Mahasarakham Primary Educational Service Area Office 3 <i>Phumin Duayseedum and Chakkaphan Chancharoen</i>		
0101	14:20	14:40	The Development of Speaking Skill of Early Childhood by Story Telling at Bannachumchang School in Nong Khai Primary Educational Service Area Office 2 <i>Thanvarath Khamsing, Chakkaphan Chancharoen, and Pitak Polkacha</i>		
0103	14:40	15:00	Discovery Learning Process and Use of Simulation Scenarios to Develop Learning Achievement Long-Term Memory In the Safety and chemistry laboratory Skill for Grade 10 Students <i>Woranut Koengsanthia, Natchanok Jansawang, and Thanawat Somtua</i>		

Code	Session		Chair	Room	Start	Finish
SD2	Business and Marketing Management 2		Assoc. Prof. Dr.Vichit U-on	Floor 2, Room 304	13:20	15:00
0049	13:20	13:40	The Relationship between Marketing Mix and Financial Investment Behaviors of Senior Citizens in Nong-Rua, Chumpae, and Sichomphu District, Khon Kaen Province <i>Natda Chaichawakooop and Nontipan Prayurhong</i>			
0055	13:40	14:00	The Relationship between Marketing Mix and Purchase Decision of Fresh Coffee at the Gas Station in Nong Ruea and Chum Phae Districts in Khon Kaen Province <i>Tuntigon siritepsongklod and Nontipan Prayurhong</i>			
0059	14:00	14:20	Relation between the Marketing Mix and Quality of Thai traditional Therapeutic Massage Service for the Elder in Mueang District, Khon Kaen Province <i>Patrawadi Sripolleh and Nontipan Prayurhong</i>			
0060	14:20	14:40	Factors Influencing Foods Purchase through Applications Grab Food and Food Panda in the Mueang District, Khon Kaen Province <i>Juthatip prachachai, Waraporn Seetha, Panadda Sannupap, Niphaphon Waithaisong, Supatra Pimson, Montatip Singasasang, Panchita Chainasup, and Palakorn Wiangtai</i>			
0064	14:40	15:00	A Correlation between Change of Economic Condition and Competency in Adaptation of Silk Community Enterprise in Ban Phai Sub District, Khaen Nuea District, Khon Kaen Province <i>Galayarat Warnjid and Nontipan Prayurhong</i>			

Code	Session		Chair	Room	Start	Finish
SE2	Accounting, Finance, and Banking 2		Dr.Sumana Chantharat	Floor 2, Room 305	13:20	15:00
0047	13:20	13:40	Guidelines for the Internal Control of the Financial and Accounting of Veterinary Clinics in Muang Khonkaen <i>Siriprapa Jampee, Kanyarat Jungpantaw, Sudduangkamon Buatik, Supakan Siriod, Pancheewa Chomphuphuen, and Palakorn Wiangtai</i>			
0058	13:40	14:00	Factors That Influence The Performance of Accountancy Strategic Management of SME Business in The Province Khon Kaen <i>Amornrat Sanpanna, Thidarat Kengthon, Tanaporn Prapun, Muttika Onapai, Pormpimon Moonrat, and Palakorn Wiangtai</i>			
0061	14:00	14:20	The Causal Relationship between Financial Development, Energy Consumption and Economic Growth in South East Asia <i>Noppadol Senken, Jorge Fidel Barahona Caceres, Wanvilai Chulaphan, and Tanchanok Bejrananda</i>			
0065	14:20	14:40	A Study of the Accounting Problem of Small and Medium Business in Khon Kaen Province <i>Tutsanee Hadkhunthod, Chirawan Singkong, Ruttikal Saisopa, Apinya Jomtong, Pawarisa Buanong, and Palakorn Wiangtai</i>			
0069	14:40	15:00	A Study of Factor Analysis of Accounting Major at Sripatum University, Khon Kaen Campus <i>Charinthip Khammaphan, Nisachon Keawpanya, Pattamalak Leakarchok, Varisara Asawapattanakun, Wilasinee Singkornkaew, and Palakorn Wiangtai</i>			

Code	Session		Chair	Room	Start	Finish
SF2	Communication Arts		Dr.Virat Chareonchua	Floor 2, Room 306	13:20	15:00
0072	13:20	13:40	Ethics in Presenting Entertainment News in the Digital Age <i>Athit Kamultra and Tirath Pluempitichaiikul</i>			
0073	13:40	14:00	A Study of Thai Film Marketing Communication Strategy at Sahamongkol Film International Co., Ltd. and M Pictures Entertainment Public Co., Ltd. <i>Chonticha Kingkwai and Ongart Singhalumpornng</i>			
0077	14:00	14:20	The Impacts of Social Media Marketing Activities on Brand Awareness of Hair Care Brands <i>Patnarin Manokum, Wanvilai Chulaphan, Jorge Fidel Barahona Caceres, and Tanchanok Bejrananda</i>			
0080	14:20	14:40	Ethics on Online Media Creation <i>Monchaya Sabuar and Karatploy Thamkaew Sillapaurai</i>			

0109	14:40	15:00	Practical Use of Designing Cover Pages for Publishing on Websites, Digital Image, and Video Exchange Services <i>Thapanapong Sararat, Jiranai Yoddee, and Wassana Yuttachum</i>
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Code	Session		Chair	Room	Start	Finish
SG2	Laws and Public Administration 2		Ms.Nisarawan Piboonpompong	Floor 2, Room 307	13:20	15:00
0015	13:20	13:40	Legal Issues Protecting the Safety by Injecting Body Fillers <i>Noppornsiri Lueangam</i>			
0016	13:40	14:00	The Role of Lawyers and Natural Resources and the Environment <i>Kusol Sangkananta and Santiphong Kumansing</i>			
0017	14:00	14:20	Environmental Governance and Design Principles in Decentralized Common Pool Resource Management: The Preliminary Study on Thailand's Local Government Initiatives <i>Pawinee Chuayprakong</i>			
0030	14:20	14:40	Legal Issues of Peer to Peer Lending <i>Kanyanat Supin</i>			
0098	14:20	14:40	The Relationship between Good Governance Management of Administrators and Job Satisfaction of Teachers under Office of the Vocational Education Commission in Udonthani <i>Pronphaka Pokhao, Yuenyong Thajjaidee, and Prayad Ruechakul</i>			
0106	14:40	15:00	Administrative Strategies School Based Management for Local Development of School Under the Sisaket Provincial Administrative Organization <i>Rattanaporn Setkhumbong and Surasak Srikrachang</i>			

Code	Session		Room	Start	Finish
SPB	Saturday PM Break		Hall	15:00	15:20

Code	Session		Chair	Room	Start	Finish
SA3	Educational Administration and Planning 7		Dr.Cherdsak Srisangchai	Floor 2, Room 301	15:20	17:20
0038	15:20	15:40	Development of Drawing and Applying Light and Shadow Skills by using skill Exercise of Secondary Student 1/1, Srisangwan Khon Kaen School, Office of Special Education Administration <i>Kritsana Seechat, Chakkaphan Chancharoen, and Sanae Komsommai</i>			
0040	15:40	16:00	Knowledge Management of Internal Education Quality Assurance in Sisaket Provincial Administration Organization <i>Surasak Yuanchit and Surasak Srikrachang</i>			
0041	16:00	16:20	The Development and Management of Learning in Resources and Local Wisdom of English Major Level 3's Students for Enhance the Competencies in the 21st century, Learning and Innovation Skills by Research Based Learning <i>Khobfa Chancharoen and Pitak Polkacha</i>			
0043	16:20	16:40	A Study of Critical Thinking on Cell and Cell functions of Grade 10 Students Learned by Mental Model Building <i>Chainarong Rahothan, Somsanguan Passago, and Panwilai Dokmai</i>			
0044	16:40	17:00	Scientific Concepts Study Education in Studying Chemistry on Acid-Base for Grade 11 Students by Organizing Activities using Submicroscopic Diagrams <i>Araya Klinsrisuk, Phanwilai Dokmai, and Thanawat Somtua</i>			
0046	17:00	17:20	Factors Affecting Admission to the Faculty of Accountancy, Sripratum University, Khon Kaen Campus <i>Sirwat Khailammao, Sunisa Sasirath, Oraya Chaken, Matawee Preesit, Sawitri Khamthanee, Sudarat chapa, Lalintip kulanam, Kanokwan khoksathan, and Palakorn Wiangtia</i>			

Code	Session		Chair	Room	Start	Finish
SB3	Educational Administration and Planning 8		Dr.Chakkaphan Chancharoen	Floor 2, Room 302	15:20	17:20
0079	15:20	15:40	The Development of Keyboard Skills by Using Computer Games of Prathomsuksa 6 Students at Bannonsamransansanook School in Nongbualamphu Primary Educational Service Area Office 1 <i>Eakkalak Thongkot, Navarat Saekhow, and Pitak Polkacha</i>			
0081	15:40	16:00	The Development of Grade 8 Students' Learning Achievement in The Science Subject of Mineral Resources Muang Phayalae Wittaya School <i>Teemapom Mobkhunthod, Chakkaphan Chanchareon, and Jiraporn Loonprom</i>			
0084	16:00	16:20	Reading Diphthongs by Using the Exercise of Reading Diphthong Words with Images with Prathom Suksa 2 Students for Ban Phong Nhib School Under the Office of Loei District 2 <i>Prab Haewchan, Chakraphan Chancharoen, and Pannapa Songsangkaew</i>			
0085	16:20	16:40	The Development of English Reading Skill by Using the English Fable for Grade 4 Students' of Thairatwittaya 105 (Chueakmuay Wittaya) School Nongkhai Primary Educational Service Area Office 1 <i>Dararat Ketkaew, Cherdasak Srisangachai, and Chakkaphan Chancharoen</i>			
0087	16:40	17:00	The Development of Reading Thai Words Spelling Skill Based on the Final Consonant Sound by Using Color Theory for Prathomsuksa 1 Ban E-Lers School Loei Primary Educational Service Area Office 2 <i>Apisit Simmalee, Chakkaphan Chancharoen, and Thanu Vongjinda</i>			
0088	17:00	17:20	A Development of Instructional Materials by Using Augmented Reality about Hydrocarbon Compounds for Grade 12 Students of Kongsarnwithayakom School under Secondary Educational Service Area Office 30 (SESAO) <i>Phuricha Phonthaphim, Navarat Saekhow, and Jiraporn Loonprom</i>			

Code	Session		Chair	Room	Start	Finish
SC3	Educational Administration and Planning 9		Dr.Sanae Komsommai	Floor 2, Room 303	15:20	16:40
0110	15:20	15:40	A Development of a Model of Teaching and Learning Activities by Using Basic Coding Knowledge Games of Grade 5 Student Computational Science of Anubankhonkaen School under Khon Kaen Primary Educational Service Area Office 1 <i>Chanchai Pommalong, Chakkaphan Chancharoen, and Thanu Vongjinda</i>			
0111	15:40	16:00	The Development of Computer Skills using Computer Assisted Instruction of Ban Nong Hai Wang Khon Yom School under Khon Kaen Primary Educational Service Area 5 <i>Ariyaphap Diloklap, Chakkaphan Chancharoen, and Cherdasak Srisangachai</i>			
0112	16:00	16:20	English Vocabulary Writing Ability Development by Using Games For Mathayom Sueksa 2 Students, Anukoolnaree School, Muang District, Kalasin Province <i>Nattaporn Phutong</i>			
0113	16:20	16:40	The Development of Student's Chinese Speaking Skill Using Collaborative Activities in Satriwithaya High School <i>Ouyang Tianting and Kanyarat Sriwisathiyakun</i>			

Code	Session		Chair	Room	Start	Finish
SD3	Business and Marketing Management 3		Assoc. Prof. Dr.Vichit U-on	Floor 2, Room 304	15:20	17:20
0067	15:20	15:40	The Relationship between Marketing Mix and Its Effects on Dietary Supplement Products Buying Decision of the Elderly in Chum Phae Sub District, Nong Rue Districts, Khon Kaen Province <i>Sasirapa Khunprathum and Nontipan Prayurhong</i>			
0071	15:40	16:00	Factors Affecting the Decision Making on Purchasing Products from the Online Application in Mueang District, Khon Kaen Province <i>Jiraporn Samranwong, Duangkamon Phanwong, Suparat Dipaen, Boonyanoot Thepwoong, Sajjai Mueangson, and Palakorn Wiangtai</i>			

0076	16:00	16:20	The Factors Influencing to Decision Making in Selecting the Elderly Nursing Home Care in Khon Kaen Province <i>Pimyada Punbang and Nontipan Prayurhong</i>
0082	16:20	16:40	The Influence of Perceived Brand Equity on Decision to Buy Maternity and Baby Products VIA Online Catalogue of Consumer in Bangkok Metropolitan Region <i>Pinyada Tampol and Prerapha Taweasuk</i>
0096	16:40	17:00	The Effect of the Customer's Satisfaction on Loyalty Towards Using Karaoke in Muang District, Khon Kaen Province <i>Nattapat Hongsapin and Nontipan Prayurhong</i>
0107	17:00	17:20	Characteristics of Highly Successful Members of the Multi-Level Marketing Company, Kangzen-Kenko International Co., Ltd. <i>Taradol Akkarapattananon and Nontipan Prayurhong</i>

Code	Session		Chair	Room	Start	Finish
SE3	Accounting, Finance, and Banking 3		Dr.Sumana Chantharat	Floor 2, Room 305	15:20	18:00
0074	15:20	15:40	Relationship between Book Value, Basic Earnings Per Share, and Diluted Earnings Per Share with the Stock Price of Listed Companies in the Stock Exchange of Thailand: The Case of Complex Structure Companies in SET50 Index <i>Yodsawinkan Kobkanjanapued, Molsikarn Tripattanasit, and Phatnatcha Chotkunakitti</i>			
0086	15:40	16:00	Research of Mudmee Thai Silk Production Group: the Cost and Return of Mudmee Silk Production Podaeng Sub District, Chonnabot District, Khon Kaen Province <i>Patimakorn Khurnmetta, Sirawit SrangNa, Apinya Pimsamran, Narin Tanasri, Raksina Pobwandeetragoon, and Palakorn Wiangtai</i>			
0091	16:00	16:20	The Comparison of the Cost and the Return of Organic Vegetable Planting in Ban Sumrong, Ban Kham Sub District, Nam Phong District, Khon Kaen Province <i>Salisa Thuphom, Thanannapat Budda, Intraporn Sudtasorn, Sudarat Bunput, Jutatip Tanwisai, and Palakorn Wiangtai</i>			
0095	16:20	16:40	The Effect of the Customer's Satisfaction on Loyalty Towards Using Karaoke in Muang District, Khon Kaen Province <i>Nattapat Hongsapin and Nontipan Prayurhong</i>			
0102	16:40	17:00	Factors for Consideration of Accounting Office Operations in Khon Kaen Province <i>Wanchai Roengchaiyaphum, Siriwimon Saetia, Philaiwan Sonwa, Panida Sammalee, Sudarat Wisetthum, and Palakorn Wiangtai</i>			
0104	17:00	17:20	Success Factors of Accounting Information System in the Department of Local Administration, Khon Kaen Province <i>Amaralak Sirithongsook</i>			
0105	17:20	17:40	A Study of the Cost and Return from Rice Cultivation for Farmers, Mueang District, Khonkaen Province <i>Krittaya Songkarak, Theeraporn Srijanthao, Thippa chaipromkhieo, Pornnapha Kaewkhamkong, Netnapha Kanpuksee, and Palakorn Wiangtai</i>			
0108	17:40	18:00	The Relationship between Financial Management and Lifestyle Planning for Retirement By Court of Justice Officials in Khon Kaen Province <i>Orawan Kanpudsa and Nontipan Prayurhong</i>			

Code	Session		Chair	Room	Start	Finish
SF3	Applied Science and Computer Technology		Dr.Virat Chareonchua	Floor 2, Room 306	15:20	18:00
0002	15:20	15:40	The Study of Plant Community Structure Discovered Melientha Suavis Pierre in Chiang Muan District Phayao Province <i>Anuwat Anawat and Sitthisak Pinmongkolgul</i>			
0005	15:40	16:00	Design and Construction of Disassembling Tools for Shaft, Pickup And Multipurpose Vehicles <i>Amnuay Kaminruae, Virote Singmanee, Anucha Srithamma, Pongsak Yoisertsut, and Choosak Ranongthai</i>			

0006	16:00	16:20	Application of Geographic Information System for Monitoring Land Use Changes in Nakhonratchasima City Municipality <i>Yaowaret Jantakat and Pongpun Juntakut</i>
0008	16:20	16:40	Biological Activities and Anthocyanin Determination of Eleutherine Americana Extract <i>Pahol Sansomchai and Onuma Chansatein</i>
0009	16:40	17:00	Effect of N <sub>2</sub> Gas Flow Rate on Structure of Zirconium Nitride Thin Films Deposited by DC Magnetron Sputtering <i>Jindawan Thammapreecha and Aram Chanachot</i>
0023	17:00	17:20	The Development of GSP Application for Computer-Assisted Instruction of Mathematics Teaching in Quadrilateral area unit of Prathom Suksa 6 at Ban Thatum Donrua School, under Maha Sarakham Primary Educational Service Area Office 1 <i>Aemorn Aupata, Chakkaphan Chancharoen, and Navarat Saekhow</i>
0024	17:20	17:40	The Development of Applied High Speed Multiplication Techniques (Vedic Mathematics) for Computer-Assisted Instruction of Mathematics Teaching for Prathom Suksa 4 at Ban Mabo School under Maha Sarakham Primary Educational Service Area Office 2 <i>Phansak Uppate, Suphat Punpattanakul, and Ngamprom Onbuakhao</i>
0053	17:40	18:00	Impact of Nutritional Information on Consumer Healthy Food Choices <i>Sukanya Damkrut, Wanvilai Chulaphan, Jorge Fidel Barahona Caceres, and Tanchanok Bejananda</i>

Code	Session	Chair	Room	Start	Finish
SG3	Organization and Human Resource Management	Ms.Nisarawan Piboonpormpong	Floor 2, Room 307	15:20	18:20
0021	15:20	15:40	A Study of the Relationship between Work Factors and Performance of Employees at DokKhun Industrial Group in KhonKaen and NongBuaLamphu Province <i>Kritchada Duangtaecha and Nontipan Prayurhong</i>		
0029	15:40	16:00	Correlation between Personnel Development and Competency in Operation of Government Officers and Personnel under the Court of Justice Office, Khon Kaen Province <i>Jirapant Raknui and Nontipan Prayurhong</i>		
0033	16:00	16:20	A Study of Factors Effecting to The Organizational Commitment of Vocational Teachers in Udonthani Province <i>Juthamat Saikew and Vorapon Klongcherngsorn</i>		
0039	16:20	16:40	Motivation Factors and Transformational Leadership Affecting Organizational Commitment of the Construction Business in Bangkok <i>Jirapach Pongsunont and Natsapun Paopun</i>		
0042	16:40	17:00	A Study of the Relationship between Work Motivation and Work Efficiency of the Court Officials in the KhonKaen District <i>Chanaporn Khadun and Nontipan Prayurhong</i>		
0048	17:00	17:20	The Cost and Compensation of Broiler Raising Nong Bua Subdistrict, Ban Fang District, Khon Kaen <i>Ploynaphat Nonting, Nilubon Wongwan, Areeya Sasim, Thidarat Sirima, Jirapa Sadraksa, and Phatsarawan Duangthipjan</i>		
0052	17:20	17:40	A Study of the Relationship between the Transformational Leadership of School Administrators and School Effectiveness under Secondary Educational Service Area Office 20 <i>Yuenyong Thajjaidee, Vitorn Vipahot, Vorapol Klongchengsol, and Prayad Ruechakul</i>		
0083	17:40	18:00	The Evaluation of Occupational Support Community Enterprise, Koh Kok Community, Rayong Province <i>Phatnatcha Chotkunakitti, Yodsawinkan Kobkanjanapued, Molsikarn Tripattanasit, and Ittidej Seangpuang</i>		
0100	18:00	18:20	A Study of the Relationship between Stress, Quality of Life and Work Efficiency of Personnel Roi-Et Area Revenue Office <i>Punthararat Nachaichot and Nontipan Prayurhong</i>		

Code	Session		Chair	Room	Start	Finish
SWD	Welcome Dinners		Asst. Prof. Dr. Ungul Laptaned	Kosa Hotel	19:00	21:00
	19:00	21:00	<b>Welcome Dinners:</b> Authentic Chinese Food, Kosa Hotel, Khon Kaen, Thailand			

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0113

**The Development of Student's Chinese Speaking Skill  
Using Collaborative Activities in Satriwithaya High School**



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by

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## **Abstract**

Collaborative learning is a new teaching method, which is student-centered. It is also a new teaching model to apply it in teaching Chinese as a foreign language class. This research will be conducted in the Chinese class of Satriwithaya high school. The purpose of this study is twofold: to study the collaborative activities in Chinese speaking class, and to evaluate students' Chinese speaking skill after using collaborative activities in the Chinese speaking class. In teaching experiments, this teaching experiment is based on a review of the literature. This paper selected three collaborative activities for teaching experiments, namely outdoor practice (Chinese interview), business talk (role play) and Chinese tongue twister. Using the results of teaching experiments and classroom observation methods, students' vocabulary learning, grammar learning, and oral expression are used to evaluate whether collaborative activities can help students improve their oral skills in the Chinese as a foreign language. In the discussion section, the paper will also analyze the results of the experiment and the results of classroom observations, and put forward corresponding suggestions for the application of collaborative activities in the classroom of Chinese as a foreign language.

**Keywords:** Chinese Speaks Skill, Chinese Teach as a Foreign Language, Collaboration Activity

## 1. Introduction

Since the beginning of the 21st century, with the strong support and promotion of the state, the world has set off a frenzy of "Chinese fever". As of July 2018, data showed that more than 1 million people in Thailand are learning Chinese, and more than 300 schools have opened Chinese courses. At the same time, Thailand's tourism industry is developing better and better. Every year, more than one million Chinese tourists come to Thailand, creating a favorable language training environment for Thai people to learn Chinese.

The language environment is very important for foreign language teaching. How to create a better language environment for students under limited conditions and how to improve students' speaking ability is a problem worth studying. This thesis explores the role of collaborative activities in the Chinese classroom and applies three main collaborative activities: outdoor practice (Chinese interview), (role play), and Chinese tongue twister competition to the Chinese as a foreign language classroom.

According to last year's tourism data from Internet, more than 10 million Chinese tourists visit Thailand every year, which is a favorable environment for Thai students to learn Chinese. In my Chinese class, I not only encourage students to go out of the class and communicate with these Chinese tourists, but also encourage students to apply what they have learned into practical communication. Therefore, I combine collaborative activities with traditional classes to make my class plan. After conducting the research, I found that this idea is very similar to the "flip classroom" proposed by the Bangladeshi American Salman Khan, but the difference is that the flip classroom is a typical classroom explanation time by experiment and in-class discussion. The activities are replaced by other activities, and the classroom explanations are completed by students in extra-curricular activities in the form of video and other media. In this study, the main purpose is to use collaborative activities to help students to practice, discuss and obtain information, and keep the typical classroom explanations.

Satriwithaya School is located near the famous scenic spots of Khao San Road and Grand Palace in Bangkok, Thailand. There are many Chinese tourists and it is a very good Chinese learning environment. Satriwithaya High School Year 2 students have a good ability to read and write Chinese, but there is a lack of systematic training on listening and speaking Chinese, which causes them to write Chinese but can't speak or listen Chinese. They are very interested in Chinese, like Chinese stars, and like teamwork. In my listening course of Chinese Proficiency Test (HSK) 3, I know that they have a lot of vocabulary, but in the listening part they need to a lot of times to fine out those words they had learned already because they lack language Environment, there is no frequent training in Chinese listening also. The vocabulary that appears in the listening part of the Chinese Proficiency Test is mostly everyday communication. I began to think about how to create a Chinese environment to exercise their oral skills in a limited environment.

However, this class has a relatively obvious flaw that is the students' Chinese level is quite different, and the students with high level can already carry out simple Chinese communication, but the students with low level can't understand even the simplest Chinese vocabulary. This makes it very difficult for teachers to design a teaching plan.

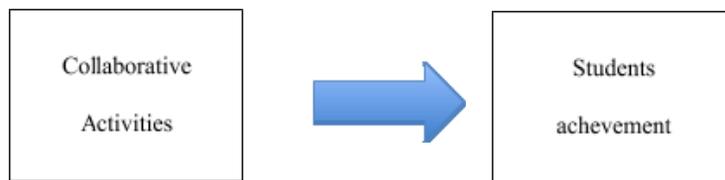
## 2. Research Objective

Here have two objectives:

1. To study the collaborative activities in Chinese speaking class.
2. To evaluate students 'speaking skills after using collaborative activities in Chinese speaking class.

## 3. Conceptual Framework

Collaborative activities are the independent variable, Students achievement is the dependent one. The relationship of the two is that, if the Collaborative activities are not effective or does not produce effective-ness, it may affect the students' performances inside the classroom and make the students learn nothing or they will not gain enough and more knowledge.



**Figures 1** Conceptual Framework

## 4. Definition of Terms

Collaborative activities are classroom activities designed on the basis of the concept of collaborative learning. Activities that engage students in self-learning and self-improvement through peer learning and group discussions. Collaborative learning refers to a strategy of organizing students to learn through groups or teams. Collaborative work among group members is an integral part of achieving class learning goals. Individuals (students) in group assistance activities can share the information and learning materials they explored and discovered during the learning process with other group members, and even with other groups or classmates.

There are seven basic models of collaborative learning: competition, debate, cooperation, problem solving, partnership, design, and role playing.

Vocabulary teaching mainly refers to the teaching of pronunciation, meaning, writing, and grammar in language teaching. Students must master a certain amount of vocabulary to perform listening, speaking, reading, writing, and translation in language. The vocabulary teaching in spoken Chinese teaching is to promote the generation of students' Chinese communicative competence as the fundamental purpose. Vocabulary teaching in spoken language teaching is not conducted in isolation, but is related to the teaching of phonetics, grammar, and pragmatics.

Grammar teaching is to teach students how to sort vocabulary so that they become a sentence or phrase that can clearly express meaning. Therefore, grammar teaching and vocabulary teaching will be conducted simultaneously in the spoken Chinese class.

Pronunciation in English language teaching, English teachers often emphasize that it is not necessary to have a personal accent when the pronunciation is accurate or not, as long as the other

party can understand the meaning you express. However, in Chinese teaching, based on the characteristics of Chinese tones, once the pronunciation is inaccurate, it can easily cause misunderstanding. Therefore, pronunciation practice is necessary in spoken Chinese teaching. Your Chinese can have a personal accent, but the pronunciation must be accurate.

Oral skills .Most papers use the term “communicative competence” to describe students’ Oral and written skills in language learning. In this study, “oral skills” means the skills required to use spoken Chinese effectively and appropriately in social situations. This project focuses on students’ oral competency mainly on three aspects: students’ oral test scores, oral production and quality of spoken Chinese

## **5. Research Design**

This part has three activities; one is outdoor learning: interview Chinese tourists, two indoor learning: business conversation (B) and tongue twister competition.

### **5.1 The experiment purpose**

The group task is determined by five groups. Summarize the teaching advantages of collaborative activities in the Chinese classroom, and analyze the teaching methods which have obvious promotion effects on students' learning Chinese, namely vocabulary, Chinese pronunciation and Chinese expression ability. At the same time, it is necessary to analyze the shortcomings of the teaching method, and propose corresponding solutions and opinions to provide effective learning programs for Thai middle school students' Chinese character learning, which makes this teaching method, play a better role in teaching Chinese as a foreign language. From a certain level, it also promotes the development of teaching Chinese as a foreign language to a certain extent.

### **5.2 Overview of teaching research objects**

In the experiment, we will conduct traditional classroom teaching and test. In this test, we can get a list of high-level and low-level students. A total of 40 students are divided into 8 groups, so the composition of the group is based on the scores of this test to select 4 high-score and 4 low-score students.

### **5.3 Teaching experiment content (course design)**

**Table 1** Outdoor Learning's Class Plan

1	Teaching purpose	Let students review relevant vocabulary and master some oral skills.
2	Teaching Preparation	Students prepare tasks (saving class time and increasing the time for class discussion sessions)
3	Teaching content	<p>1. Fruit vocabulary:                      莲(durian)、山竹 (mangos teen)、莲雾(lotus)、红毛丹(rambutan)、蛇皮果(snake fruit)、龙功果(Long Kong)、芒果(mango)、小菠萝(small pineapple).</p> <p>2. Locations vocabulary:                      皇宫(Grand Palace)、考山路(Khao San Road)、暹罗广场(Siam Square)、金山寺(Jinshan Temple)、四面佛(Buddha)、湄南河(Chao Phraya River)、唐人街(Chinatown)、玉佛寺(Jade Buddha Temple)、火车夜市(Train Night Market).</p> <p>3. City vocabulary:                      迈(Chiang Mai)、普吉 (Phuket)、大城(Ayutthaya)、华欣(Hua Hin)、芭提雅(Pattaya)、甲米(Krabi)、苏梅岛 (Koh Samui)、皮皮岛(Phi Phi Island).</p> <p>4. Food vocabulary:                      瓜沙拉(Papaya salad)、芒果糯米饭(mango glutinous rice)、炒河粉(fried rice noodles)、猪肉串(pork skewers)、海鲜自助(seafood buffet)、水果自助(fruit buffet).</p> <p>5. Adjective:                      吃(delicious), 美味/好吃(delicious), 有趣(interesting).</p> <p>6. Grammar: 公斤(kg) 卖(sell) 买(buy) 搭配(collocation)</p>
4	Teaching key difficult points	Large vocabulary and some vocabulary are more difficult to the low level students.
5	Teaching process	<p>1. Introduction:                      I don't know if you have noticed that there are many Chinese tourists in Bangkok. Chinese tourists like visiting Thailand very much. Some of them like the island scenery of Thailand some like the food and fruits of Thailand, and some like the local customs of Thailand. As a student of Chinese, have you ever communicated with these Chinese tourists?                      The teacher will ask you to do an outdoor interview, so that we can get in touch with real Chinese people and see how Chinese people speak Chinese.</p> <p>2. Learning vocabulary: ask students to speak the words they know by asking questions                      Question1. What kinds of fruits are there in Thailand?</p>

		<p>Learn Fruit vocabulary: 榴蓮、山竹、蓮霧、紅毛丹、蛇皮果、龍宮果、芒果、小菠萝</p> <p>Question2. What are the famous attractions in Bangkok?</p> <p>Learn Locations: 大皇宮、考山路、暹羅廣場、金山寺、四面佛、湄南河、唐人街、玉佛寺、火车夜市。</p> <p>Question3. What are the famous tourist cities in Thailand?</p> <p>Learn City vocabulary: 清迈、普吉、大城、华欣、芭提雅、甲米、苏梅岛、皮皮岛。</p> <p>Question4. What are the famous foods in Thailand?</p> <p>Learn Food name: 木瓜沙拉、芒果糯米饭、炒河粉、猪肉串、海鲜自助、水果自助</p> <p>3. Learning grammar</p> <p>a. 比如(such as) eg: 泰国有很多城市, 比如曼谷、普吉和清迈。(There are many cities in Thailand, such as Bangkok, Phuket and Chiang Mai.)</p> <p>b. 最(most) eg: 小明是我们班最高的人。(Yunnan is the most beautiful province in southern China)</p> <p>c. 喜欢(like) eg: 我喜欢你。(I like you)</p> <p>d. 些(some) eg: 这里有一些苹果。(there are some apples)</p> <p>e. 个(universal measure word) eg: 一个人。(a person)</p>
6	students record new words	<p>Student writ down new word and Remember those word</p> <p>1. Self-introduction</p> <p>不好意思, 我叫....., 我们是来自..... 学校汉语专业的学生, 请问我们可以采访一下你(们)吗? 是一些关于泰国旅游的问题。</p> <p>(Excuse me, my name is..., we are from... Could we interview you some questions about tourism in Thailand?)</p> <p>2. Reference questions</p> <p>A. 你去过曼谷的哪些景点呢? 最喜欢哪个景点呢?</p> <p>What tourist attractions have you visited in Bangkok? Which scenic spot do you like best?</p> <p>B. 你觉得泰国的食物怎么样? 比如.....</p> <p>What do you think of Thai food? Such as...</p>
7	interview skills	

			<p>C. 你觉得泰国人怎么样? 比如.....          What do you think of Thai people? Such as...</p> <p>D. 你还去过曼谷的哪些地方? 比如.....          Where else have you been in Bangkok? Such as...</p> <p>E. 你最喜欢泰国的什么水果? 比如.....          What's your favorite fruit in Thailand? Such as...</p>
8	Students group themselves and make requirements		<p>Requirements:</p> <ol style="list-style-type: none"> <li>Each student must ask more than one question</li> <li>Each group must interview more than two Chinese tourists</li> <li>Group activities, not individual action, everyone must pay attention to safety.</li> <li>Shoot the interview as video and send it to the teacher.</li> </ol>

**Table 2** Business Conversation's Class Plan

1	Teaching purpose	Let students review the related vocabulary and master the spoken skills of selling.
2	Teaching Preparation	Students prepare tasks (saving class time and increasing the time for class discussion sessions)
3	Teaching content	<p>1. Fruit vocabulary:          榴莲(durian)山竹(mangosteen)莲雾(lotus mist)红毛丹(rambutan)蛇皮果(snake fruit)龙功果(Long Kong)芒果(mango)小菠萝 (small pineapple)苹果(apple)龙眼(longan)香蕉(banana)火龙果(pitaya)荔枝(litchi)葡萄(grape).</p> <p>1. People noun:          老板(boss)顾客(customer)先生(Sir)小姐(miss)朋友(friend)美女 (beauty)帅哥 (handsome boy).</p> <p>2. Other words:          买卖(trading), 斤(jin), 两(liang), 公斤(kg), 新鲜(fresh), 甜(sweet), 酸(sour), 熟(ripe), 生(raw), 搭配(match), 铢(baht), 十(ten), 百(hundred), 千(thousand).</p> <p>Phrase: 怎么卖? (how much?) 多少钱? (How much is it?) 可以便宜一点吗? (Can you come down a little?)</p> <p>3. Grammar:          比如(such as) 最(most)喜欢(like) 哪些(which) 哪个(which)</p>
4	Teaching key	Expression of price.

	and difficult points	
5	Teaching tools	Fruit cards and money cards. 1. Teachers shall write fruit words and people's names on the blackboard, and only write Chinese characters. Students must find the pinyin and Thai meanings of the words themselves Teachers teach students to read one by one, and help students check the translation of new words 2 Other new words focus on how to use them. 3. Learning grammar a. 公斤 quantifier eg. 这里有一公斤水果。(Here is a kilo of apples.) b. 卖sell 买buy eg. 苹果怎么卖? (How Apple sells) eg. 妈妈去买苹果 (mom go to buy apples) c. 生 have two means (1) Objective: raw eg. 这个苹果是生的(This apple is raw) (2) Verb: born eg. 她生了一个女孩(She gave birth to a girl) d. 搭配 nonu: collocation eg. 苹果搭配梨一起卖。(apple sold with pear) 3. Classroom collaborative activities The group is the owner of the fruit stall. The teacher is the customer. Teachers will have cards in their hands to use as cash. Students must find a way to get teachers to buy their fruit. The team with the highest value on the card wins the prize.
6	Teaching process	

**Table 3** Tongue Twister Competition’s Class Plan

1	Teaching objectives	Correct students' pronunciation and check students' pronunciation.
2	Teaching Preparation	Students prepare tasks (saving class time and increasing the time for class discussion sessions)
3	Teaching content	<p>Two tongue twisters were selected based on the pronunciation of the students</p> <ol style="list-style-type: none"> <li>1. 石狮寺前有四个石狮子 寺前树上结了四个涩柿子 四个石狮子不吃四个涩柿子 四个涩柿子倒吃四个石狮子</li> <li>2. 老罗拉了一车梨 老李拉了一车栗 老罗人称大力罗 老李人称李大力 老罗拉梨做梨酒 老李拉栗去换梨</li> </ol>
4	Teaching process	<ol style="list-style-type: none"> <li>1. The teacher writes pinyin on the blackboard and demonstrates pronunciation</li> <li>2. Teaching vocabulary 石狮(Stone lion) 寺(temple) 狮子(lion) 柿子(persimmon) 涩(scorpion) 老(old) 车(car) 梨(pear) 拉(pull) 栗(chestnut) 称(weigh) 大力(vigorously) 换(change).</li> <li>3. Teaching grammar ”车”have two means (1) Noun: car eg:我爸爸买了一辆新车。(my father bought a new car) (2) Quantifier: Describe the capacity of a car eg:这里有一车苹果。(There is a car apple here.) “称”verb: Weighing eg:请给我称一斤苹果。(Please weigh a pound of apple)</li> <li>4. Students imitate pronunciation</li> <li>5. Practice in groups</li> <li>6. Activity begins</li> </ol>

## 6. Research Instrument

**Table 4** Grading

	Questions	points
Vocabulary:	5	10
Grammar	5	10

**Table 5** Pronunciation

Standard	Points
Accurate pronunciation, accurate tone, no accent	10
Accurate pronunciation, accurate tone, slight accent	9-7
Accurate pronunciation, inaccurate tone, severe accent	6-4
Inaccurate pronunciation, inaccurate tone, severe accent	1-3

**Table 6** Oral Expression

Standard	Points
Rich in emotion, fluent in expression	10-8
No emotion, fluent	7-5
No emotion, no fluent	1-4

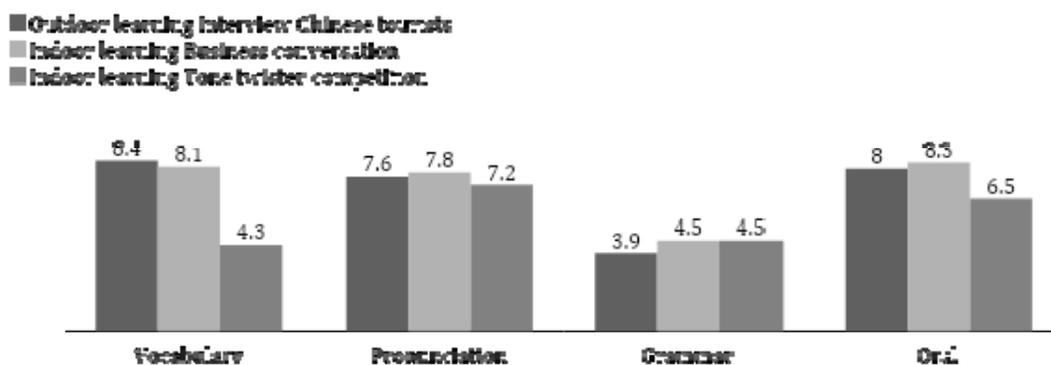
## 7. Data Analysis

There are two main test methods: traditional paper test and oral test.

**Table 7** To study the collaboration activities in Chinese speaking class, so here are the score on the post-test.

	Outdoor learning	Indoor learning	
	Interview Chinese tourists	Business conversation	Tone twister competition
Vocabulary	8.4	8.1	4.3
Pronunciation	7.6	7.8	7.2
Grammar	3.9	4.5	4.5
Oral	8.0	8.3	6.5x

### post-test score



**Figures 2** To evaluate students 'Chinese speaking skill after using collaborative activities

From this figures we know it can improve students 'Chinese speaking skill.

Here are the details:

**Table 8** Outdoor Learning

	Pre - test scheme	Post - test scheme
Vocabulary	5.8	8.4
Pronunciation	4.5	7.6
Grammar	4.5	3.9
Oral skill	3.5	8.0

**Table 9** Business Conversation

	Pre - test scheme	Post - test scheme
Vocabulary	4.9	8.1
Pronunciation	5.0	7.8
Grammar	5.5	4.5
Oral skill	4.6	8.3

**Table 10** Tongue Twisters

	Pre - test scheme	Post - test scheme
Vocabulary	3.6	4.3
Pronunciation	4.3	7.2
Grammar	4.5	4.5
Oral skill	5.3	6.5

From these tables, we can see that in the three collaborative activities, students' vocabulary, speaking skills and pronunciation have improved to some extent, but grammar has not.

## 8. Conclusion

Based on those data, we know that students can improve their Chinese speaking skill by using collaboration activities.

Under the impact of modern technology, the traditional methods of education are constantly changing, and new teaching principles are constantly emerging. However, it is undeniable that the current technology has not reached the point that traditional education can be completely excluded. The traditional teaching method still has certain advantages. How to integrate the innovative teaching method into the traditional classroom becomes the direction of future teaching exploration (Wenshen Yu 2001).

Traditional classroom teaching is a kind of knowledge-based teaching, that is, traditional classroom teaching only focuses on the transfer of knowledge. In the classroom, students become containers of knowledge instead of specific individuals--the subject of life. This is the fundamental defect of traditional classroom teaching (Wenshen Yu 2001). In recent years, many scholars believe that online teaching will impact the development of traditional classrooms, and maybe one day traditional classrooms will be abandoned by educators. But I don't think traditional classrooms will be replaced but they will be changed. In the second language classroom, the integration of collaborative activities is also a new thinking. According to my teaching experiments, I know that this model is good for students to learn and practice speaking, but it has certain flaws.

1. Class discussions help increase students friendship, the unity or feelings of the class students are beneficial to their learning, but this kind of communication will also make it easy for students to discuss other things when communicating.

2. This mode is stricter in controlling the classroom time, because the collaborative activities require more time, but the class time is limited, so the teacher should fully consider the use and arrangement of classroom time in the classroom plan.

3. In the classroom mood of the students, it is necessary for the teacher to control and guide. Some students who are more isolated are in conflict with the communication process in this collaborative activity. This requires teachers to guide these students to accept this mode slowly.

4. In the classroom mood of the students, it is necessary for the teacher to control and guide. Some students who are more isolated are in conflict with the communication process in this collaborative activity. This requires teachers to guide these students to accept this mode slowly.

## **9. Recommendation**

### **9.1 For the teacher:**

Speak hard and practice more, because the class time is limited. In this limited time, try to let the students speak Chinese. The teacher should focus on the key points of teaching and let the students practice more.

Teachers must have independent personality charm and teaching style. The teaching ideas must be clear, so it is easier for students to participate in the classroom activities with the teacher's classroom rhythm.

Assisting in learning is a student-centered learning method, so don't give students too much learning pressure during the teaching process. Especially the introverted students do not like to communicate with their classmates or to resist such group activities. Their performance may not be as good as other people, teachers should lower the expectations of these students, because not every student is suitable for the same teaching method. The teacher must learn to adjust his mentality.

### **9.2 For students:**

To change students' perceptions of not paying attention to spoken English.

Pay attention to the classroom experience of the students and adjust the classroom plan according to the needs of the students.

To observe the emotional communication between students, when the students have an unregulated communication problem, the teacher should intervene in time.

### **9.3 Spoken Chinese as a Foreign Language**

In the oral Chinese speaking class, students only need to exercise Chinese speaking skills. In this process, they should also pay attention to infiltrating some Chinese culture into students. In Jiehui Ren(2014)'s research, we can know that language and culture should be combined in teaching Chinese as a foreign language. For example, when students learn how to introduce themselves in Chinese, they should tell us why the Chinese surname should be placed in front and explain to them the Chinese clan culture.

There are many elements to be considered in the arrangement of collaborative activities. Diversified collaborative activities can be used in the classroom for teaching Chinese as a foreign language. This requires Chinese teachers to consider how to innovate collaborative activities and make full use of students' autonomy to teach. For example, according to the teaching content of the teacher, you can use some Chinese film or mythology to let the students perform the lectures, or let the students learn to sing Chinese songs. The form can be diversified.

The development and integration of new mobile devices and applications have changed our daily lives and learning styles. It would be helpful for instructors to be aware of both the benefits and challenges of adapting mobile assisted language learning in their classrooms (Chuang, Hui-Ya, 2016), so in the Chinese class we can use the mobile phone to help students to learn.

The flipped class: an opportunity to engage millennial students through active learning strategies (Amy roehl, Shweta linga redd, Gayla jett shannon, 2013). The goal of the Chinese as a Foreign Language Class is to enable non-Chinese characters to use Chinese to communicate in social activities. It can be said that communicativeness is a major feature of language. However, most of the Chinese language teaching in Thailand at this stage ignores this concept. Chinese teaching is used as a regular teaching subject and is only used to cope with examinations. How to make students use Chinese literature is an important classroom. Do not cause embarrassing situations that students can read, read, listen to, and cannot express.

#### **9.4 Choice of classroom**

According to the research results of Yan Yonghong and other scholars, the intermediate color temperature fluorescent lamp can produce appropriate amount of benign stimulation to students in the appropriate length of time, which can play a role of “waking up” or “relaxing” to improve the learning efficiency and ease the vision. The effect of brain fatigue, while the effect of high and low color temperature fluorescent lamps is reversed.

First, the classroom needs to be kept clean and tidy. A good environment can make people feel happy. A bad environment will affect the students' mood. The teacher should instill in the students that even if the classroom is used temporarily, it is necessary to keep the classroom clean and convenient, and it is convenient for others to be convenient.

Second, the classroom needs to ensure that there is sufficient light, a suitable color temperature, and a suitable light illuminance. Design classroom lighting according to the orientation or characteristics of the classroom. When the light is too good, it will affect the students to see the blackboard or affect the students' mood. The too bright light will make the students become impatient. When the light is dim, the students will be allowed. It has become a downturn, so lighting in the classroom is also an extremely important part.

#### **9.5 In terms of teaching concepts**

The concept of modern teaching is many. According to modern technology and advanced concepts, people began to explore how to transform the passive learning of traditional mode into active learning, so the idea of flipping the classroom appeared.

Combined with the process and results of teaching experiments, collaborative activity learning can slowly transform the traditional teaching mode into a flipping classroom in the course teaching, from passive input to active input. And in Jiaobo's (2010) master thesis paper was a study on the effects of collaborative learning with mobile devices proved that students can also learn collaboratively through mobile phones, which is in line with educational trends of the times (Heng Ngee MOK 2014).

Because these collaborative activities require students to prepare adequately outside the classroom, discuss and explain each other in the classroom to achieve the effect of gaining knowledge in the discussion. Therefore, the role of the teacher in the classroom can be changed from the speaker to the discussor, and the distance between the teacher and the student is narrowed.

We should be bolder in the concept of event design, such as adding Chinese film and television in role-playing (Yuexin Wang, 2017).

## References

Amy roehl, Shweta linga reddy, Gayla jett shannon, J(2013), The Flipped Classroom: An Opportunity To Engage Millennial Students Through Active Learning Strategies, Journal of Family and Consumer Sciences, VOL. 105 -NO. 2 -2013.

Huijie Ren, J(2014). 语言与文化：对外汉语教学应该教什么(Language and Culture: What should be taught in teaching Chinese as a foreign language). Chongqing University of Arts and Sciences, Yongchuan, Chongqing, 402160.

Heng Ngee MOK, J (2014). Teaching tip: The flipped classroom. Journal of Information Systems Education, 25 (1), 7-11.

Jiaobo Cui, D(2010). A study on the Effects of collaborative learning with Mobile Devices (master of Information Sciences in Information Technology), Massey University.

Wenshen Yu, J(2001), 试析传统课堂教学的特征及弊端(Analysis of the Characteristics and Disadvantages of Traditional Classroom Teaching), Educational Research, No. 5, 2001.

Yan Yong-hong, Guang Yan, Liu Xiang-de, Liu Wei, A(2010). Journal of Civil, Architectural & Environmental Engineering. Vol 32 No. 4, Aug 2010.

Yuexin Wang, J(2017) 中文影视资源及在对外汉语教学中的应用 (Chinese Film and Television Resources and Their Application in Teaching Chinese as a Foreign Language), Journal of Hebei University (Philosophy and Social Science), Vol 42, No 3, May 2017.

## **Sripatum University, Thailand**

Sripatum University is one of the oldest and most prestigious private universities in Bangkok, Thailand. Dr. Sook Pookayaporn established the university in 1970 under the name of "Thai Suriya College" in order to create opportunities for Thai youths to develop their potential. In 1987, the college was promoted to university status by the Ministry of University Affairs, and has since been known as Sripatum University. "Sripatum" means the "Source of Knowledge Blooming Like a Lotus" and was graciously conferred on the college by Her Royal Highness, the late Princess Mother Srinagarindra (Somdet Phra Srinagarindra Baromarajajanan). She presided over the official opening ceremony of SPU and awarded vocational certificates to the first three graduating classes. Sripatum University is therefore one of the first five private universities of Thailand. The university's main goal is to create well-rounded students who can develop themselves to their chosen fields of study and to instill students with correct attitudes towards education so that they are enthusiastic in their pursuit of knowledge and self-development. This will provide students with a firm foundation for the future after graduation. The university's philosophy is "Education develops human resources who enrich the nation" which focuses on characteristics of Wisdom, Skills, Cheerfulness and Morality.

## **University of Cyprus, Cyprus**

The University of Cyprus was established in 1989 and admitted its first students in 1992. It was founded in response to the growing intellectual needs of the Cypriot people, and is well placed to fulfill several aspirations of the country. The University is a vigorous community of scholars engaged in the generation and diffusion of knowledge. Despite its brief history, the University of Cyprus has earned the appreciation of Cypriot society. Admission for the majority of undergraduate students is by entrance examinations organized by the Ministry of Education and Culture of the Republic of Cyprus.

## **University of Wollongong in Dubai, United Arab Emirates**

The University of Wollongong in Dubai, abbreviated as UOWD, is a private university located in Dubai, United Arab Emirates. The University is one of the UAE's oldest universities, having been founded in 1993. The Campus has over 3,500 students from more than 108 countries. UOWD is one of the UAE's oldest and most prestigious universities. Established in 1993 by the University of Wollongong in Australia - currently ranked in the top 2% of universities in the world (QS World University Rankings 2018) – UOW in Dubai represents a pioneering Australian initiative in the Gulf region.

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