Aims & Scope

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The Studying of Educational Strategic Planning, Implementation and Monitoring in Faculty of Nursing Administration and Related Factors: A Comparative Study of Faculty of Nursing Ubon Ratchathani Rajabhat University, Thailand and the University of Santo Tomas, Philippines

Thongchai Armartpundit[1*] and Napadol Srihaphun[2]
[1*,2]Faculty of Nursing, Ubon Ratchathani Rajabhat University, Thailand

Abstract

The Nursing and midwifery disciplines is a majority part of health workers in health care service in all parts of the world and the setting following international standard of Nursing and Midwifery sciences, the Faculty of Nursing, Ubon Ratchathani Rajabhat University is new nursing educational institution and would be improved and evolution into competition at national and international of Nursing professional laboring market and the comparing with former nursing faculty at international level the newly issues could stimuli to improving themselves. The exchange program with University of Santo Tomas Philippines could help to share these issues; the documentaries study and qualitative method were done for gathering data and comparing by content analysis. Findings showed more differences between faculties caused from difference context of Filipino society and Thai society. The vision of the UST's administration focused to enter nurses to European market and developed countries and they have more when the Asian Economic Council (AEC) come in. So the faculty of Nursing of UBRU could improve academic administration and research excellence into international Excellency and conduct these excellent into international Campus and cooperation international exchange. The nursing students and lecturers could adapt themselves into the international expertise following in English, nursing learning and practical skills at international level standard, international research collaboration and exchange international culture

Faculty of Nursing, Ubon Ratchathani Rajabhat University
2 Ratchathani Road, Mueang District, Ubon Ratchathani Province, 34000, Thailand
Tel. +66-45-352000 ext. 4337, E-mail: arbankerng@gmail.com

and adapt into practical field of nursing sciences for the dominant of faculty. Moreover, these of excellent could be matching to side businesses to enhance faculty income for improving quality of administration.

Keywords: Nursing Educational Strategies, Comparative Study

Introduction

Nursing and Midwifery sciences is a major part for enhancement and development quality of life in population and resolve to raise the health status of people throughout the world. There are counts on a key role in driving public health and health services system in all dimensions. The Nursing and midwifery professional enroll since the Health care Services and Public Health at Primary Care level throughout tertiary health care services in all countries around the world. Then, the performance driven health care system and wellness services at any level of public health and health care service is result of the studying of nurse and midwifery education (Fleming, 2006). So, all of nursing education has set the standard guidance for supporting standard nursing education and the same direction worldwide (ResolutionWHA59.23, 2006). The nursing and midwifery personnel could be alert and understand their role and take performance in patient managing for their missions. These skills have developed in nursing and midwifery's teaching in learning and practical process. The faculty of Nursing would be added all of nursing knowledge and practical skills by the standard features following Nursing council in all of countries and regions. Moreover, all of nursing lecturer would be qualified to teach a wide variety of modern and appropriate technologies for effective teaching and enhancing students' knowledge and experienced for nursing practical skills (White, Brannan & Wilson, 2010; Johnsrud & Rosser, 2003). The nursing lecturers should to do researching following their expertise field and conduct to revise their teaching knowledge for up to date (Fitzpatrick & Montgomery, 2006). The part of them would be serving for academic services in developing communities in the faculty's network, also supporting traditional and communities culture (Harrison, 2009). So in the role of the nursing lecturers must be having advance visions and effective plan for efficiently actions in covering these tasks accordingly to the standards of national or international nursing council, then the role of nursing lecturer would be power to driving missions of nursing faculty and key success on effectiveness for faculty development (Gorolamo & Roemer, 2011). Thus, all of personnel involved must have an aligned vision of the mission for the organization following the advancing in the field of nursing teaching, nursing research for community development, enhancement and conservation traditional culture, and educational services for community development. Moreover, nursing lecturers could maintain their leadership, conflict management, and reduction ambiguity in the nursing faculty administration and participation to enhancement organization into happy work place (Gormley, 2003).

Faculty of Nursing, Ubon Ratchathani Rajabhat University is a leading nursing educational institution in the northeastern part of Thailand and plays a key role in

the production of nursing profession to support the health care system in the region and private sectors of health care service throughout country. The progress of development must be set progressively into health care service at international level following international standard and competition in nursing professional workplace. Each year there are more than 1,400 high school graduates students who apply for the faculty. Nevertheless, less than 60 students could be get the seat of nursing student at the faculty. The nursing lecturers received research funding from external sources to remain low and not distributed all of them. The teaching and learning documents are not standardized enough, and the direction for academic services and conservative traditional culture unclear. Moreover, they have conflicts in the work place between staff and make unhappy of faculty member in their work. So in the opportunity of lecturers and students exchange program established by the University and it would set for faculty staff and students to studying vision, strategy and approach with contacts in management steps with the leading of Institute for production nurses profession in South East Asia region with University of Santo Tomas Philippines. This opportunity could help to share vision, mission and strategies for nursing faculty administration and their nursing academic administration, dimension of their work including workload and a pleasure to work and also exploring relates factors. The information would be used to comparing between faculties and conduct to sharing and set to developing Nursing faculty and administration at Ubon Ratchathani Rajabhat university. These would be conducted to progression and effectiveness also sustainability in nursing faculty administration.

Objectives

1. To study academic and institution administration including styles, resources, monitoring and comparing these issues between faculty of Nursing, Ubon Ratchani Rajabhat University with the Faculty of Nursing, University of Santo Tomas, Philippines

2. To identify the feasibility for the academic cooperation and enhancement nursing and academic administration, development, and recommendations for efficiency administration in the future.

Methods

1. Studying documents in faculty vision, strategy, mission and systems management plans, also studying system of administration, observation working atmosphere, visit library, laboratory room, classroom, lecturer's common room and working site at hospital for comparing between Faculty of Nursing. of Ubon Ratchathani Rajabhat University and University of Santo Tomas.

2. Interviewing faculty staff and nursing students on issues covering understanding and communication about vision, strategies of faculty, and understanding of systems management. To set interviewing l2-15 lecturers in each faculty about plans and action on research strategies, academic services for serving communities, Also plan and projects for cultural conservation and comparing between faculties.

3. Focus group discussion of faculty staff and nursing students 8-12 persons each group and each of faculties on issues covering understanding and communication about vision, strategic of faculty, and understanding in systems management, action following plans for research, academic services for serving communities, and cultural conservation comparing between faculties.

4. Data Analysis, the qualitative data analysis method performed by grouping, categorized and presented as number and percentage, the issues and causal related identified by conceptual content analysis.

Results

Contexts and vision of faculty's administration, the faculty of nursing of University of Santo Tomas offered a Bachelor of Nursing in 1946 as a private education and Catholic style. The country has rapidly economic growth and clearly political direction. These are supported steady development of the country. Then, nursing profession is also need in the both of at home and abroad in health care institutions, also in Europe, Australia and North America. Whenever the AEC come in, the nursing profession is one of eight disciplines has a memorandum to the same standards can across to work between countries. The advantage of their English expertise is set opportunities to accessory working than nurses from other countries in the region. Then, the vision of UST is aims to nursing excellence in internationally and has geared producing the main supporting for international labor market. In the faculty of Nursing of Ubon Ratchathani Rajabhat University started in 2012 under direction of the government university and set system following standards of Thailand Nursing council. However, the economic disruption due to political conflict and unclear direction in Thailand are causes for unstable in position of government health personnel. Then, the faculty of nursing of Ubon Ratchathani Rajabhat University has set the new vision for support nursing workforce in the both of public and private sectors but they have not yet to look the labor market in outside the countries. The advantage points of the nurse from UBRU is set style under the context of Buddhist style and the characters would be a cooling style, softly mind and did not seriously. However they have more disadvantages in English expertise, leadership, systematic thinking, and emotion quotient, also all of essential skills for 21st century skills. The

future development for UBRU could focus on participation faculty administration for enhancement in English expertise for contact outsmart with other countries. This should be a long-term cooperation following exchange of professors and nursing student between the UST and UBRU in continually.

Lecturers and nursing students in Philippines usually strictly and rigorously practice following Catholics belief also intensively in religion practices in the both of daily life and classroom activities. The philipino culture has dominated by Western culture for four hundred years ago, the Spanish life style and English language are general in Philippines. Then, the teaching and learning style of faculty of nursing in UST are more expertise in the skills for the 21st century. The teaching strategies usually emphasizing Simulation practical and Focusing on teaching block course learning through intensive self-help learning of nursing students. All of nursing student usually use original nursing textbooks as the main books in the learning. The university provides sufficiency textbooks for all of the students' requiring, and then they can discussion in learning tropics with the original contents and relevance to instructor's contents. Focus on the standard condition in hospital abroad. The hospital internship is a private university with modern tools and nursing students are expertise with the tools and more advantage from Thai's nursing students. For nursing instructors' administration, the UST set in the private section then the instructors has earned following their workload in the month   (on average 35,000 PSP / month by the fully workload, 35-45. Hours / Week)

For the UBRU nursing faculty, the nursing's lectures instruct following the majority in classroom instruction focused on the jobs and using Simulation less. The UBRU nursing students unclear in the 21st skills in expertise, the instructors emphasize the teaching narrative in class, lack of enthusiasm in active learning participation, lack of original textbooks in use for teaching.

The nursing practice, normally the nursing students of UBRU are training in the standard care unit of government hospitals and health services in the country. They have faced and expertise on the use of modern tools following government hospitals but fewer experiences with tools of the private hospitals. The instruction styles of the UBRU's nursing instructors usually use more classroom lecturing and fewer use of participatory active learning style. They rather rarely use of simulation and speeding in nursing skill. The using of original textbooks are low that following the gap of English language. Moreover, they were unclear in detection and development for the 21st century skills for instructors and students. However, the monthly payroll systems for instructors has set following the government system and do not focus on mission (Estimated average 40,000 baht / month per person).

The covering over 80% of Philippines nursing students purpose to work in

western countries, in Canada, Australia and in The United States of America. Then, the mainly mission of nursing from UST aims to produce for export into the private health sectors in these countries. Then, the faculty of nursing of UST has indicated to teaching accordance with international standards. They create networks cooperation with foreign countries to learn and develop and move into a competitive advantage in competition in the future, for example the preferably in the course of international Campus. There are differences from Thailand; The UBRU nursing education has focused on passing the quality of registered nursing standards of Thailand's nursing council. The Thai's nursing students usually less dream to be international nursing workforces. The UBRU's nursing faculty could develop into the international standard of nursing instruction in the both of students and instructors side for advantage of international competition For example, the international contact programs, international campus, changing students and instructors between international universities.

The research strategies of UST is focus on specific research funding supporting from the university. They have litter external supportive funds. The projects are likely welfare of catholic university to supporting communities and less impact to public policy. For the UBRU, they encouraged research network relevant to health sciences by regional research network and try to collaborate for developing international network for support international research grant in the future when Asian economic council come in. However the UST has the advantages and excellence in the community nursing by using participatory rural appraisal research before action in community based research but they lack internal and external research grants and international research collaboration.

The UBRU's faculty of nursing has more opportunity to create a National Research grants in regional development because they collaborate with the outside countries. The research networks have encouraged health sciences practitioners in the areas for cooperation in research projects based on local problems administration. There are difference and more advantage from UST, because the UST is a private and Catholic university. Then they set research project following community welfare. However, The UST is expertise in the community development and focus on community-based support, such as the religious center for housing the mentally disabled but disadvantage by lacking of social networks for supporting. The UBRU's faculty of nursing could focus on research academic campus for services to society and others countries collaboration in Asian Economic Council.

Conclusion

Based on the findings from the exchange program the administrations of faculties have more differences that caused from more different contexts of Filipino society and Thai society. The Filipinos society has followed western countries following colonized of developed counties for four decades. The intensive belief and Catholic culture has embedded process. Expertise English language and Western culture style is dominant in the Philippines. Then, vision of the UST's administration is to focus nursing graduates to enter the European market and developed countries such as Australia, Canada, and unites state of America when the Asian Economic Council (AEC) come in the nursing professional from the Philippines will have more advantage points in English communication than nurses from other countries. The opportunity to access employment will highly as following. So the faculty of Nursing of UBRU could adapt and acceleration into new setting vision and strategies, also improving academics and administration's plans and improving to new projects setting the nursing students to find opportunities in competition in nursing's market labor in health care service system. Then, for recommendations we could revise and encourage to setting new output orientation and nursing performance into international nursing standards, also direction to international competition. The revision of faculty administration standards including nursing's academic administration, research and community academic services could be set into the excellency into international standards, and benchmarking these excellent into international Campus and offer into international sharing and cooperation in exchange. The nursing students and lecturers could adapt and set themselves in to the international expertise following in English, nursing learning styles and international nursing practical skills, also international research collaboration and exchange international culture. The finally all of activities could be set into practical field of nursing sciences for the dominant of faculty. Moreover, these of excellent could be matching to side businesses for enhance faculty income for improving quality of the faculty administration in the future.

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The Effectiveness of Using Anonymous and Personal Identifiable Agents in Computer-Supported Collaborative Learning on Self-Regulated Learning and Team Projects Execution

Wudhijaya Philuek[1]*
[1]*Faculty of Education, Nakhon Sawan Rajabhat University, Thailand
Lance Chun Che Fung[2]
[2]School of Engineering and Information Technology, Murdoch University, Australia

Abstract

The aim of this study was to investigate the effectiveness of anonymous and personal identifiable agents of pre-service teacher students among students learning in terms of self-regulated learning which combined motivation scales and learning strategies scales, team collaboration, and team projects execution on Computer-Supported Collaborative Learning (CSCL). There were 451 students who participated in this study and 198 was successfully completed. The data were analyzed and interpreted by using various statistical techniques (t-test and ANOVA). The result showed the outcome of using anonymous and personal identifiable agents on CSCL affected self-regulated learning and team collaboration toward team project execution. There was an interaction in motivation (Extrinsic Goal Orientations: EGO), learning strategies (Critical Thinking: CT and Help Seeking: HS). However no interaction in team collaboration towards team projects execution when students used different agents for representatives on CSCL. This results to helped teachers or instructional designers in developing eLearning courseware which cooperated with project-based learning (PjBL) techniques.

Keywords: Anonymous and Personal Identifiable Agents, Computer-Supported Collaborative Learning (CSCL), Self-Regulated Learning, Team Projects

Faculty of Education, Nakhon Sawan Rajabhat University
398 Sawanwithi Road , Muang District, Nakhon Sawan Province, 60000, Thailand
Tel. +66-56-219100 ext. 2102 E-mail: woodiefamous@gmail.com

Introduction and Related Literatures

The use of Information and Communication Technology (ICT) in education has emphasized emotional and cognitive process in the acquisition and development of knowledge and specific competences (Dellit, 2001). In order to acquire and develop students' competence in a disciplinary area, student should have a solid base of verified knowledge, understanding of facts and ideas in the context of a conceptual construction, and the ability to organize their knowledge in a way which will facilitate retrieval and application. The metacognition is an aspect of students' learning strategies within the theory of Self-Regulated Learning (SRL). Metacognition could help students to define their goals and objectives, to monitor their learning process, and to evaluate their progress. Moreover, students need the opportunity to learn in depth and through comprehension of a topic in order to transform basic information into usable knowledge (Succi and Cerbo, 2005). Moreover, on the challenges in teaching and learning is how to effectively communicate course materials to students in the most appropriate way. It is desirable that the learning materials should be clear and concise. In addition, they should be informative as regard to all the activities and how they are related to the student's study. Ideally, from the students' perspective, the learning process and experience should be enjoyable so that it could lead to effective communication and learning (Kilic-Cakmak, 2010). An understanding of anonymous avatar in Computer-Supported Collaborative Learning (CSCL) in influencing students' motivation and learning strategies and creation of team learning in project development can assist the E-Learning developer, educator and researcher in using ICT in distance education or instructional technologist in business setting to design and develop the suitable environment and activities in Computer-Supported Collaborative Learning (CSCL) Environment. This study focuses on the psychological aspects such as behaviorism and constructivism theory, web technology as the development of Computer-Supported Collaborative Learning (CSCL), using anonymous and avatar in education, team learning, and the project-based learning will use as the teaching method to develop and plan for learning activities in each step of study because both control and experimental group have to study in the same environment on the web but different representative to produce project. The idea of anonymity on the internet means that the real author of a messenger is not shown (Palme and Berglund, 2007). Blau and Caspi (2008) found that in an online environment may enhance students' participation. In addition, visual anonymity and isolation from other students may decrease fear of criticism, which consequently both enhances participation and lead to a more risky behavior. It is related to the Social Identity model of Deindividuation Effects (SIDE) theory which claims that anonymity induces a shift in an individual's focus from their personal identity

toward their social identity as a member of a group. Also, visual anonymity combined with salient group identity increase the adherence to group norms and causes greater attraction o the groups' member (Blau and Caspi, 2008).

Methodology and Results

The objective of investigate the effectiveness of anonymous and personal identifiable agents used of pre-service teacher students among student learning in term of self-regulated learning which combined of motivation scales and learning strategies scales, and team projects execution on Computer-Supported Collaborative Learning (CSCL). This research combined with framework, stages, population and sample groups, and research procedures for collecting data, research materials such as CSCL, MSLQ, and learning management plans. It also address the data and statistics procedures in this research to analyses differentiate of students who take place in different identity and the execution of team projects. There are 451 pre-service teacher students will participate in this study as the sample group. They will divide into 2 groups by using Non-Randomized Control Group Design technique because of the limitation of random into both experimental and control groups are not totally matched. However, each group was expected to have similar academic performance and computer skills and the Independent Sample T-Test will be calculate for pre-test to check both group are not different by 0.05 level of significant. If there are any different has occur that factor or variable will be remove, or re-group. The 198 students totally completed all stages of this research and proceed to analyses by using Independent T-Test of pre/ post-test and One way ANOVA. The results of the effectiveness of anonymous and personal identifiable agents used of pre-service teachers undergraduate students among student learning in term of self-regulated learning which combined of motivation scales (6 subscales) and learning strategies scales (9 subscales). The data were analyzed and interpreted by using various statistical techniques such as using independent sample t-test to test the differentiated of two groups for pretest and there was not significantly different (p > .05) which can used to next step of analysis. There was an interaction effect between used of different agents and execution of team projects on motivation scales (EGO), learning strategies scales (CT and HS). Table 1 shows the summary of finding on number of students and groups of students in team projects execution.

Table 1 Summary of team project finding

Agents	Completed	Not Completed	TOTAL
AA	N = 57 (28.80%) 13 groups (28.26%)	N = 49 (24.75%) 11 groups (23.90%)	N = 108 (53.55%) 24 groups (52.16%)
PIA	N = 29 (14.65%) 7 groups (15.19%)	N = 63 (31.80%) 15 groups (32.65%)	N = 92 (46.45%) 22 groups (47.84%)
TOTAL	N = 84 (43.45%) 20 groups (43.45%)	N = 112 (56.55%) 26 groups (64.45%)	N = 198 (100%) 49 groups (100%)

There were results as follows: 1) using anonymous agents: there were a great number in completed projects (57 students, 28.80%) followed by not completed projects (49 students, 24.75%). This means that using AA could encourage students' team project completion; 2) using personal identifiable agents: there was a great number in not completed projects (63 students, 32.65%) followed by completed projects (29 students, 15.19%). This could imply that using PIA could not encourage students' team project completion; 3) the highest number of students after actual experiment was PIAF (63 students, 32.65%), AAS (57 students, 28.80%), AAF (49 students, 24.75%), and PIAF (29 students, 15.19%) respectively. This could imply that the PIA is not encouraging students' team project completion which contrasts to using AA that will encourage students' team project completion. However, the discussion in Chapter will explain more information and discuss the associated variables that conclusion this findings, and 4) the most population number of students in each group is 4 students (60.87%) followed by 5 students (28.27%), 3 students (6.52%), and 6 students (4.34%) respectively. Comparing the group member in completed team projects, there was 13 groups in 4 members (AA = 7 groups, PIA = 6 groups) and 6 groups in 5 members (AA = 4 groups, PIA = 1 group). This means that the suitable number is 4 students in each group when student assigned to work as a team and intend to complete the team projects in online learning environment.

Table 2 Summary of One Way ANOVA of Motivation and Learning Strategies

	Sum of Squares Between/ Within Groups	df Between / Within Groups	Mean Square Between/ Within Groups	F	Sig.
Motivation					
IGO	114.523/ 2983.457	3/194	38.174/ 15.379	2.482	.062
EGO	2540.043/ 4151.775	3/194	846.681/ 21.401	39.563	.000*
TV	693.158/ 5437.185	3/194	231.053/ 28.027	8.244	.000*
CLB	51.118/ 2796.362	3/194	17.039/ 14.414	1.182	.318
SE	1936.041/ 9185.272	3/194	645.347/ 47.347	13.630	.000*
TA	116.270/ 7923.103	3/194	38.757/ 40.841	.949	.418
Learning Strategies					
Reh	169.011/ 2518.545	3/194	56.337/ 56.337	4.340	.006*
Elab	705.492/ 4669.261	3/194	235.164/ 24.068	9.771	.000**
Org	269.337/ 2215.026	3/194	89.779/ 11.418	7.863	.000**
CT	375.456/ 3513.296	3/194	125.152/ 18.110	6.911	.000**
MC	1611.189/ 13447.457	3/194	537.063/ 69.317	7.748	.000**
TSE	527.940/ 5763.554	3/194	175.980/ 29.709	5.923	.001*
ER	74.567/ 1856.262	3/194	24.856/ 9.568	2.598	.054
PL	104.716/ 1357.445	3/194	34.905/ 6.997	4.989	.002*
HS	215.669/ 2428.008	3/194	71.890/ 12.516	5.744	.001*
*P<0.01/ **P<0.001					

The one way ANOVA was used to review the differentiated between four groups (AAS, AAF, PIAS, and PIAF). The results show (as in Table 2) the significant difference of motivation, learning strategies, and team collaboration when students used different agents in representative at P<0.01 and P<0.001 except Control of Learning Belief: CLB and Effort Regulation: ER.

On Motivation subscale

The ANOVA table revealed that there were no significant differences in gained scores on motivation subscale between AAS, AAF, PIAS, and PIAF Group on the IGO, $F(3, 194) = 2.482$, $p = .062$; CLB, $F(3, 194) = 1.182$, $p = .318$; and TA, $F(3, 194) = .949$, $p = .418$. However, there were significant difference on the gained scores of EGO, $F(3, 194) = 39.563$, $p < .001$; TV, $F(3, 194) = 8.244$, $p < .001$; SE, $F(3, 194) = 13.63$, $p < .001$; and overall, $F(3, 194) = 8.95$, $p < .001$.

Post hoc tests were carried out in order to investigate further where the differences occurred between each of the agents used on these six motivation subscales.

IGO (Intrinsic Goal Orientation): There were no significant differences across the used of different agents in term of Intrinsic Goal Orientation (p > .05), therefore, no post hoc tests were used.

EGO (Extrinsic Goal Orientation): Scheffe post-hoc comparisons of the four groups indicate that the PIAS (M = 30.24, SD = 4.73) gave significantly higher ratings for Extrinsic Goal Orientation than AAS (p = .000, M = 20.30, SD = 4.74), AAF (p = .000, M = 21.02, SD = 3.70), and PIAF (p = .000, M = 19.56, SD = 5.09). This means that students in PIAS group have higher level of Extrinsic Goal Orientation than students in AAS, AAF, and PIAF group.

TV (Task Value): Scheffe post-hoc comparisons of the four groups indicate that the AAS (M = 33.14, SD = 4.14) gave significantly higher ratings for Task Value than PIAF (p = .004, M = 29.54, SD = 6.44) and AAF (M = 33.82, SD = 5.15) gave significantly higher ratings for Task Value than PIAS (p = .043, M = 30.24, SD = 4.73) and PIAF (p = .001, M = 29.54, SD = 6.44). This means that students in AAF groups have higher level of Task Value than students in PIAS and PIAF group with statistically different and have no significant differences for students in AAS group.

CLB (Control of Learning Beliefs): There were no significant differences across the use of different agents in term of Control of Learning Beliefs (p > .05). Therefore, no post hoc tests were used.

SE (Self-Efficacy): Scheffe post-hoc comparisons of the four groups indicate that the AAS (M = 43.19, SD = 5.59) gave significantly higher ratings for Self-Efficacy than PIAS (p = .016, M = 38.10, SD = 7.06), PIAF (p = .000, M = 36.51, SD = 8.27), and AAF (M = 43.20, SD = 6.11) gave significantly higher ratings for Self-Efficacy than PIAS (p = .020, M = 38.10, SD = 7.06), PIAF (p = .000, M = 36.51, SD = 8.27). This means that students in AAF group have higher level of Self-Efficacy than students in PIAS and PIAF group with significant difference and without significant difference in AAS group.

TA (Test Anxiety): There were no significant differences across the use of different agents in terms of Test Anxiety (p > .05). Therefore, no post hoc tests were used

On Learning Strategies subscale

The ANOVA table revealed that there were significant differences in gained scores on learning strategies between AAS, AAF, PIAS, and PIAF Group on the overall, $F(3, 194) = 10.725$, $p < .001$; Reh, $F(3, 194) = 4.34$, $p < .001$; Elab, $F(3, 194) = 9.771$, $p < .001$; Org, $F(3, 194) = 7.863$, $p < .001$; CT, $F(3, 194) = 6.911$, $p <$

.001; MC, $F(3, 194) = 7.748$, $p < .001$; TSE, $F(3, 194) = 5.923$, $p = .001$; PL, $F(3, 194) = 4.989$, $p = .002$; and HS, $F(3, 194) = 5.744$, $p = .001$. However, there were no significant difference on the gained scores of ER, $F(3, 194) = 2.598$, $p = .054$.

Post hoc tests were carried out in order to investigate further where the differences occurred between each of the agents used on these nine Learning Strategies subscales.

Reh (Rehearsal Strategies): Scheffe post-hoc comparisons of the four groups indicate that the AAF (M = 18.29, SD = 3.53) gave significantly higher ratings for Rehearsal Strategies than PIAF (p = .01, M = 15.95, SD = 4.01), and have higher rating than AAS (M = 17.58, SD = 3.17), and PIAS (M = 16.72, SD = 3.57) without significant differences. This means that students in AAF group have higher level of Rehearsal Strategies than students in PIAF with significant difference and without significant difference in AAS and PIAF group.

Elab (Elaboration Strategies): Scheffe post-hoc comparisons of the four groups indicate that the AAS (M = 29.68, SD = 3.84) gave significantly higher ratings for Elaboration Strategies than PIAF (p = .000, M = 25.37, SD = 6.22). AAF (M = 29.47, SD = 4.37) gave significantly higher rating than PIAF (p = .000, M = 25.37, SD = 6.22). This means that students in AAF group have higher level of Elaboration Strategies than students in PIAF with significant difference and without significant difference in AAS and PIAS group.

Org (Organization Strategies): Scheffe post-hoc comparisons of the four groups indicate that the AAS (M = 18.79, SD = 2.97) gave significantly higher ratings for Organization Strategies than PIAF (p = .000, M = 16.13, SD = 3.45). AAF (M = 18.67, SD = 3.75) gave significantly higher rating than PIAF (p = .002, M = 16.13, SD = 3.45). This means that students in AAS group have higher level of Organization Strategies than students in PIAF with significant difference and without significant difference in AAS and PIAS group, and students in AAF group have higher level of Organization Strategies than students in PIAF with significant difference.

CT (Critical Thinking Strategies): Scheffe post-hoc comparisons of the four groups indicate that the AAF (M = 24.43, SD = 3.67) gave significantly higher ratings for Critical Thinking Strategies than PIAF (p = .001, M = 21.05, SD = 5.02). AAS (M = 23.79, SD = 3.67) gave significantly higher rating than PIAF (p = .007, M = 21.05, SD = 5.02). This means that students in AAF group have higher level of Critical Thinking Strategies than students in PIAF with significant difference and without significant difference in AAS and PIAS group, and students in AAS group have higher level of Critical Thinking Strategies than students in PIAF with significant difference.

MC (Metacognitive Strategies): Scheffe post-hoc comparisons of the four groups indicate that the AAS (M = 56.53, SD = 7.41) gave significantly higher ratings for Metacognitive Strategies than PIAF (p = .000, M = 49.75, SD = 6.01). AAF (M = 55.29, SD = 7.96) gave significantly higher rating than PIAF (p = .008, M = 49.75, SD = 6.01). This means that students in AAS group have higher level of Metacognitive Strategies than students in PIAF with significant difference and without significant difference in AAF and PIAS group, and students in AAF group have higher level of Metacognitive Strategies than students in PIAF with significant difference.

TSE (Time and Study Environment Strategies): Scheffe post-hoc comparisons of the four groups indicate that the AAS (M = 39.19, SD = 5.10) gave significantly higher ratings for Time and Study Environment Strategies than PIAF (p = .008, M = 35.70, SD = 6.56). AAF (M = 38.80, SD = 4.56) gave significantly higher rating than PIAF (p = .033, M = 35.70, SD = 6.56). This means that students in AAS group have higher level of Time and Study Environment Strategies than students in PIAF with significant difference and without significant difference in AAF and PIAS group, and students in AAF group have higher level of Time and Study Environment Strategies than students in PIAF with significant difference.

ER (Effort Regulation Strategies): there were no significant differences across the used of different agents in term of Effort Regulation Strategies (p > .05), therefore, no post hoc tests were used.

PL (Peer Learning Strategies): Scheffe post-hoc comparisons of the four groups indicate that the AAF (M = 14.88, SD = 2.44) gave significantly higher ratings for Peer Learning Strategies than PIAF (p = .016, M = 13.24, SD = 3.03). AAS (M = 14.84, SD = 2.27) gave significantly higher rating than PIAF (p = .013, M = 13.24, SD = 3.03). This means that students in AAF group have higher level of Peer Learning Strategies than students in PIAF with significant difference and without significant difference in AAS and PIAS group, and students in AAS group have higher level of Peer Learning Strategies than students in PIAF with significant difference.

HS (Help Seeking Strategies): Scheffe post-hoc comparisons of the four groups indicate that the AAF (M = 20.51, SD = 3.66) gave significantly higher ratings for Help Seeking Strategies than PIAF (p = .003, M = 17.94, SD = 3.87). AAS (M = 20.51, SD = 3.66) gave significantly higher rating than PIAF (p = .003, M = 17.94, SD = 3.87). This means that students in AAF group have higher level of Help Seeking Strategies than students in PIAF with significant difference and without significant difference in AAS and PIAS group, and students in AAS group have higher level of Help Seeking Strategies than students in PIAF with significant difference.

Discussion and Conclusion

From the ANOVA, there was extrinsic goal orientation, task value, and self-efficacy showed the statistically significant difference among groups. It may be because the motivation refers to goal orientation that encourage a person to complete a task or pursue a goal (Wolters and Rosenthal, 2000) which consists of intrinsic goal orientation and extrinsic goal orientation. From the results, the intrinsic goal orientation encouraged students to complete team projects especially students in anonymous agents and completed team projects group because students may feel that using anonymous agents were challenging goals, enjoyment and new thing to used. This was similar to study of Wolters and Rosenthal (2000) who found that students who believed that learning activities were important and useful were more likely to make an effort and encouragement to completing the learning activities. However, students who used PIA may feel that if they completed team projects they will get some rewards (Davis, Bagozzi, and Warshaw, 1992). So that, teachers should design activities that remind the students motivate and concentrate in their task and learning process then students will complete their study. The multiple regression analysis showed the negative effect on extrinsic goal orientation of students in PIAS group. It may discuss that extrinsic goal orientation plays important role than intrinsic goal orientation in using personal identifiable agents which is when teachers would like students to learning face to face, they should encourage extrinsic goal orientation to be good approach to persuade learners participate and learned by project based learning in CSCL. Students who used anonymous agents and completed team projects were more likely used of task value and self-efficacy than other three groups. This may be because the student percept about using anonymous agents and their learning tasks can effort their team project execution. Students believed that using anonymous agents was the important variable which can affect students to complete the learning tasks. According to Pajares (2002) who noted that the self-efficacy was the importance of factor in improving students' learning and academic success which is similarity to these results. It shows that students in anonymous agents and completed team projects group feel that they have ability to plan and execute actions in leading to complete team projects, and students in this group have improved score on self-efficacy, this refers to students in anonymous agents and completed team projects group feel that anonymous agents is useful to them. This is converse to the score on test anxiety which using anonymous agent could not affect this factor. This may conclude that, students in anonymous agents group feel that they did not feel stressful on the test because they hided themselves from others. However students in personal identifiable agents feel that it is very stress when they have to do because they show their identity on the CSCL.

There was 5 learning strategy subscales: critical thinking strategies, metacognitive self-regulation strategies, time and study environment strategies, effort regulation strategies, and peer learning strategies of AAS group gave high improvement among the others 3 groups (AAF, PIAS, and PIAF) while 4 learning strategies subscales: rehearsal strategies, elaboration strategies, organizational strategies, and help seeking strategies of PIAS group gave high improvement among the others 3 groups (AAS, AAF, and PIAF). The results show that students who used anonymous agents both of completed and not completed team projects have higher scores on all learning strategies scales those students using personal identifiable agents. This may discuss that the use of anonymity could encourage students' learning strategies because students may feel that they decrease social pressure, express themselves freely (Bornstein, 1993), and removes interpersonal cues (Walther, 1992) which increase group ideas and enhance participation (Nunamaker, Dennis, Valacich, and George., 1991). In some subscales of learning strategies which AAF group has higher scores on posttest than AAS group such as rehearsal strategies, critical thinking strategies, and effort regulation strategies because the scores on pretest of AAS group were lower than scores on pretest of AAF group. However, only four subscales on AAS group have statistical significant different. There were metacognitive strategies, time and study environment strategies, effort regulation strategies, and peer learning strategies. The study of Liaw (2004) showed that the eLearning provides users more opportunities to be active learners which students can control their learning time and complete their course. In this study, the use of CSCL allowed students to learn in anytime and anywhere, however the used of lesson plans might help students as a learning guidelines for students who completed team projects. The test of Two-way ANOVA showed that critical thinking and help seeking have interaction with the execution of team projects, and One-way ANOVA also showed the different among four groups (AAS, AAF, PIAS, and PIAF) with statistical significant. This may discuss that using anonymous could maintain students SRL which SRL is very important in learning outcomes because it predicts student academic achievement (Fredrick, Blumenfeld, and Paris, 2004) and students with limited SRL skills would not learn much from eLearning (Byers, 2000; Picciano, 2002).

This study explores the effectiveness of using anonymous and personal identifiable agents in Computer Supported Collaborative Learning (CSCL) to facilitate students' self-regulated learning. The main results concerned that using

anonymous agent could encourage motivation and learning strategies in team project execution. There were 13 groups taking part in anonymous agents completed team projects while 11 groups not completed. However, there were 7 groups taking part in personal identifiable agents completed team projects while 26 groups not completed. There was an interaction between using different agents and execution of team projects in extrinsic goal orientation, critical thinking strategies, and help seeking strategies. Focusing on differentiation, there were different between using agents and execution of team projects on extrinsic goal orientation, task value, self-efficacy, rehearsal strategies, elaboration strategies, organizational strategies, critical thinking strategies, metacognitive self-regulation strategies, time and study environment strategies, peer learning strategies, help seeking strategies.Focusing on differentiation, there were different between using agents and execution of team projects on extrinsic goal orientation, task value, self-efficacy, rehearsal strategies, elaboration strategies, organizational strategies, critical thinking strategies, metacognitive self-regulation strategies, time and study environment strategies, peer learning strategies, help seeking strategies. There were extrinsic goal orientation which is one motivation subscale encourage the success of projects in using personal identifiable agents, and effort regulation strategies which is one of learning strategies subscale encourage the success of projects in using anonymous agents.

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Numerical Simulation of Flow in a Solar Chimney Power Plant

Wichain Sommanawat

Faculty of Industrial Technology, Ubon Ratchathani Rajabhat University, Thailand

Abstract

In this study, a Finite Element Method (FEM) based program for steady-state viscous incompressible thermal flows is developed and utilized to simulate laminar flow in a Solar Chimney Power Plant (SCPP). The flow characteristics in the SCPP system is studied by comparing the distribution of velocity, temperature and pressure from three different types of connection between a solar collector and a chimney. It is found that the curved junction with a diffuser is the most suitable model for adopting the SCPP in practice.

Keywords: Solar Chimney, Finite Element Method, Viscous Incompressible Thermal Flows

Faculty of Industrial Technology, Ubon Ratchathani Rajabhat University
2 Ratchathani Road, Mueang District, Ubon Ratchathani Province, 34000, Thailand
Tel. +66-45-352000 ext.1703 E-mail: wsommanawat@gmail.com

Introduction

Recently, natural disasters become more severe, frequent, and destructive. For instance, it was found that a gap between the big tsunami waves at the western coast of Thailand and the great east Japan tsunami in Tohoku is only about years. Also, it can be investigated that the major floodings are often occurring in several countries even in Thailand. Or, the appearance of a large sinkholes worldwide or a killing of heat waves in Europe and Asia is regularly reported.

It is found that some of the aforementioned catastrophic events are caused due to the global warming effect. Increasing CO_2, one of the greenhouse gases, appears to dominate the effect of global warming. It was also revealed that most of the CO_2 from human activities comes from the consumption of fossil fuels (e.g. coal, petroleum and natural gas). This effect leads many countries to develop their own sustainable energy resources instead of using the fossil fuels.

Presently, renewable energy sources play an important rule for solving this challenging problem. One promising technology for rural areas, especially in the tropical countries where the solar radiation is highly available, is the Solar Chimney Power Plant (SCPP). The SCPP consists of three major components: the solar collector, the chimney and the power conversion unit (PCU) as depicted in Figure 1.

The SCPP generates electrical power by the buoyancy force of air which is heated under a transparent canopy by the greenhouse effect at the solar collector. Subsequently, hot air flows to a chimney's base located in the center of the collector and rises up along the height of the chimney to rotate a turbine for producing the power. A successful construction of the 50 kW Manzanares prototype in Spain has confirmed the possibility and reliability of this green technology.

The solar chimney technology was comprehensively reviewed by Zhou et al. (2010). Their paper provides the overall picture of research and development of SCPP technology over the past few decades, which consists of the evolution of experimental and theoretical studies, the details of construction process, cost analysis for competitiveness of power plant and physical phenomena of the system for the conventional SCPP as well as the information of an alternative types of SCPP.

After its first introduction (Cabanyes, 1903) and construction of the prototype in 1982, the researchers worldwide developed their theoretical and numerical models for studying the SCPP technology, e.g., Nizetic et al. (2008), Chergui et al. (2010), Hamdan et al. (2010), Larbi et al. (2010), Asnaghi et al. (2012). Most of the aforementioned literature utilized the fundamental of Computational Fluid Dynamics (CFD) to formulate governing equations of the flow in the SCPP. The commercial software (e.g., ANSYS and FLUENT) are generally used to analyze the problem numerically, and the results are compared with the data obtained from the

experimental results of the Manzanares pilot plant which are reported by Haaf et al.(1983) and Haaf (1983).

The purpose of this study is to develop a finite element program for steady-state viscous incompressible thermal flows (Dechaumpai & Kanjanakijkasem, 1999). The developed program is further used to find the most suitable model for constructing the SCPP based on three different types of connection between a solar collector and a chimney. It should be mentioned here that the effect of a turbine in PCU is not included in this study.

The paper will present briefly the fundamentals of CFD for steady-state viscous incompressible thermal flows. Then, the formulation by using the finite element method is introduced, followed by the numerical results of the SCPP. Lastly, the conclusions are addressed together with the recommendations for further research directions.

Governing Equations

In this study, the Computational Fluid Dynamics (CFD) for steady-state viscous incompressible thermal flows, in the context of Finite Element Method (FEM), is employed to study the flow characteristics in the solar chimney. In order to accomplish the analysis, a set of coupled nonlinear Navier-Stokes differential equations which consist of three fundamental laws, i.e., (1) conservation of mass or continuity, (2) conservation of momentums and (3) conservation of energy equations need to be solved. By taking care of the thermal effect on the buoyancy force, the Boussinesq approximation is introduced into the momentum equations. The aforementioned can be written as follows:

$$\frac{\partial u}{\partial x} + \frac{\partial v}{\partial y} = 0 \tag{1}$$

$$\rho\left(u\frac{\partial u}{\partial x} + v\frac{\partial u}{\partial y}\right) = \frac{\partial \bar{\sigma}_x}{\partial x} + \frac{\partial \tau_{xy}}{\partial y} + \\ \rho g_x\left(1 - \beta(T - T_0)\right) \tag{2}$$

$$\rho\left(u\frac{\partial v}{\partial x} + v\frac{\partial v}{\partial y}\right) = \frac{\partial \bar{\sigma}_y}{\partial y} + \frac{\partial \tau_{xy}}{\partial x} + \\ \rho g_y\left(1 - \beta(T - T_0)\right) \tag{3}$$

$$\rho c\left(u\frac{\partial T}{\partial x} + v\frac{\partial T}{\partial y}\right) = \frac{\partial}{\partial x}\left(k\frac{\partial T}{\partial x}\right) + \frac{\partial}{\partial y}\left(k\frac{\partial T}{\partial y}\right) \tag{4}$$
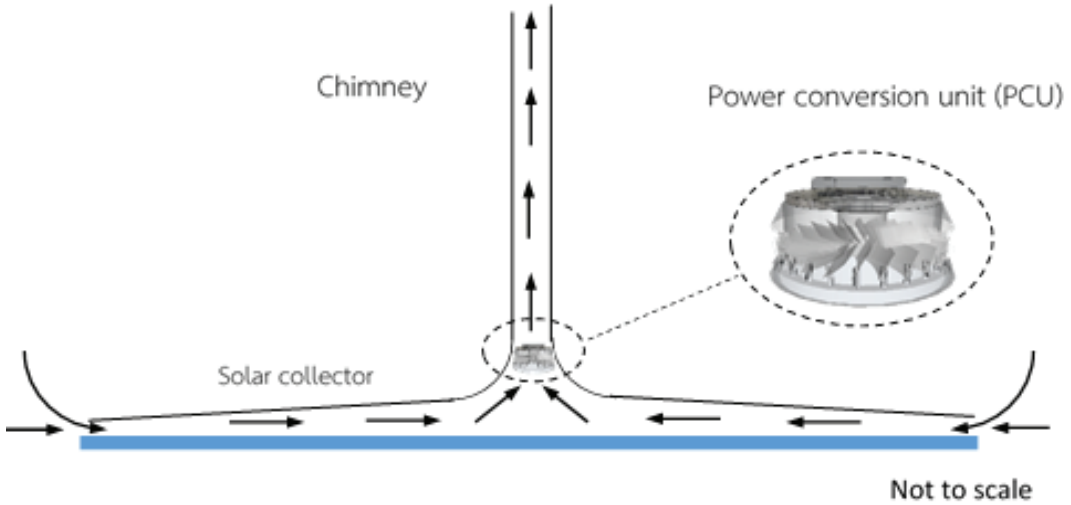
Figure 1 The graphical presentation of solar chimney power plant

where u and v are the velocity components in x- and y-direction, the reference and fluid temperatures are defined by T0 and T respectively, ρ stands for the fluid density, the terms c and k are the fluid specific heat and fluid thermal conductivity, g is the gravitation constant and β is the volumetric coefficient of thermal expansion.

Finite Element Formulation

Equations. (1-3) are composed of 4 unknown variables i.e. u, v, p and T which can be expressed by means of an approximation field as follows:

$$u(\mathbf{x}) = \sum_{a}^{n} N^a(\mathbf{x}) u(\mathbf{x}^a) \tag{5}$$

$$v(\mathbf{x}) = \sum_{a}^{n} N^a(\mathbf{x}) v(\mathbf{x}^a) \tag{6}$$

$$T(\mathbf{x}) = \sum_{a}^{n} N^a(\mathbf{x}) T(\mathbf{x}^a) \tag{7}$$

$$p(\mathbf{x}) = \sum_{b}^{n} H^b(\mathbf{x}) p(\mathbf{x}^b) \tag{8}$$

in which   a =1,2,…,6 is the quadratic shape function associated with velocity and temperature components,   b =1,2,3 is the linear shape function for the pressure interpolation. Consequently, the six-node triangular element is used to discretize the problem domain in this study as depicted in Figure 2. It can be investigated that the pressure variables are interpolated only at the corner nodes of the triangle.
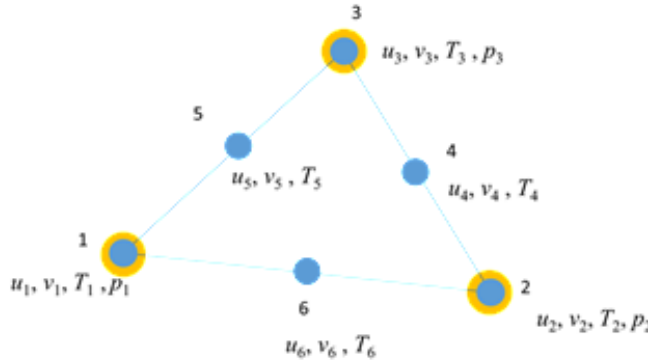

Figure 2 The six-node triangular element.

Equations. (1-4) are solved by using the Newton-Raphson iteration method. The global system of nonlinear equations can be expressed as follows:

$$[\mathbf{K(x)}]\{\mathbf{x}\} = \{\mathbf{R}\}$$

(9)

where [K(x)] is n×n matrix of nonlinear functions of x ; x is n×1 the vector of unknown variables and R is n×1 the vector of known quantities. The iteration technique starts by assuming the initial value of {x} and substitutes into Equation (9) leads to the unbalanced force vector as

$$\{\mathbf{F(x)}\} = [\mathbf{K(x)}]\{\mathbf{x}\} - \{\mathbf{R}\}$$

(10)

The final linearized system of equations with the incremental unknowns at the k th iteration is expressed as

$$
\begin{bmatrix}
K_u^{\beta} & K_u^{\beta} & K_{\bar{u}}^{\beta} & K_p^{\beta} \\
K_u^{\beta} & K_v^{\beta} & K_{\bar{v}}^{\beta} & K_p^{\beta} \\
K_{\bar{u}}^{\beta} & K_{\bar{v}}^{\beta} & K_T^{\beta} & 0 \\
K_p^{\beta u} & K_p^{\beta u} & 0 & 0
\end{bmatrix}
\begin{Bmatrix}
\Delta u^{\beta} \\
\Delta v^{\beta} \\
\Delta T^{\beta} \\
\Delta p^{\beta}
\end{Bmatrix}
= -
\begin{Bmatrix}
F_u^{\alpha} \\
F_v^{\alpha} \\
F_T^{\alpha} \\
F_p^{u}
\end{Bmatrix}
$$

(11)

The updated variables at the (k+1)th iteration can then be determined by

$$u_i^{k+1} = u_i^k + \Delta u_i^{k+1} \tag{12a}$$

$$v_i^{k+1} = v_i^k + \Delta v_i^{k+1} \tag{12b}$$

$$T_i^{k+1} = T_i^k + \Delta T_i^{k+1} \tag{12c}$$

$$p_i^{k+1} = p_i^k + \Delta p_i^{k+1} \tag{12d}$$

Equations (11-12) are repeated until the percentage of the overall error between the summations of incremental values and the present values is less than the tolerance value which is set to be 0.01% in this study.

Numerical Simulation

In the following section, the flow in the solar chimney power plant, with three different types of connection between a solar collector and a chimney, is performed in 2D. According to the symmetry of the chimney, only one-half of the solar chimney is discretized with the unstructured six-node triangular element as shown in Figure 3.

Owing to the limitation of memory storage and to maintain the laminar flow in the analysis, the main dimensions used in the simulation are not the real conditions of the prototype built in Spain. The magnitudes used in the simulation are given as follows: height of the chimney, 1 m; diameter of the chimney, 0.1 m; radius of collector, 1 m; height from the inlet to its center, 0.05-0.08 m.

In addition, the velocity of the air moving to the solar collector at the inlet is set to be 3.81 m/s and the difference of the temperature in the system is assigned to.
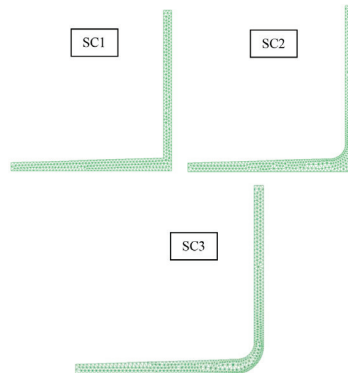

Figure 3 Solar Chimney models used in the analysis

Figures 4-6 show the numerical results of various solar chimney models obtained by FEM. Plotted in Figure 4 are the temperature contours along the energy collector and the chimney. As can be seen, a smooth continuity of temperature distribution can be observed in SC2 and SC3 models while the discontinuity of the result presents at the corner of straight junction as illustrated in Figure 4(a). Furthermore, this phenomenon can also be investigated in the case of velocity and pressure distributions.

Figure 5 displays the velocity vectors of the flow. In the case of SC1 and SC2, it can be noticed that the velocity decreases and vanishes at the transition area from the energy collector to the chimney's base. Consequently, this transition area is unnecessary in the system. Furthermore, the velocity results obtained from SC3 model exhibits a smooth and continuous flow. Also, the maximum value of velocity can be obtained at the chimney's base where the power generator will be installed.
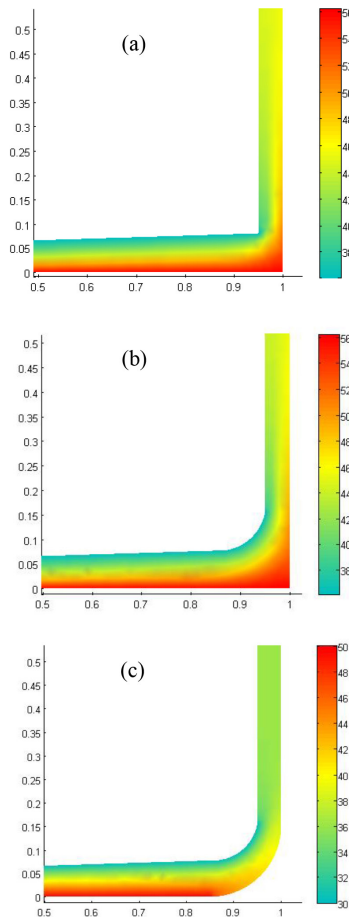

Figure 4 Temperature distributions obtained by the present method

The pressure contours are illustrated in Figure 6. For all models, the maximum pressure value can be found at the inlet of the air flow channel and decreases through the radius of the collector. Then, it begins to vanish at the top of chimney where the air flow exits. Additionally, at the position of the power generator, the average pressure obtained from SC3 is higher than the rest of models.
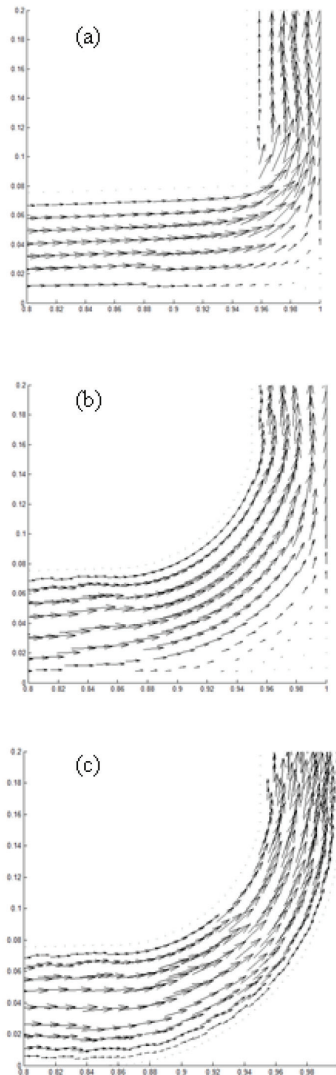

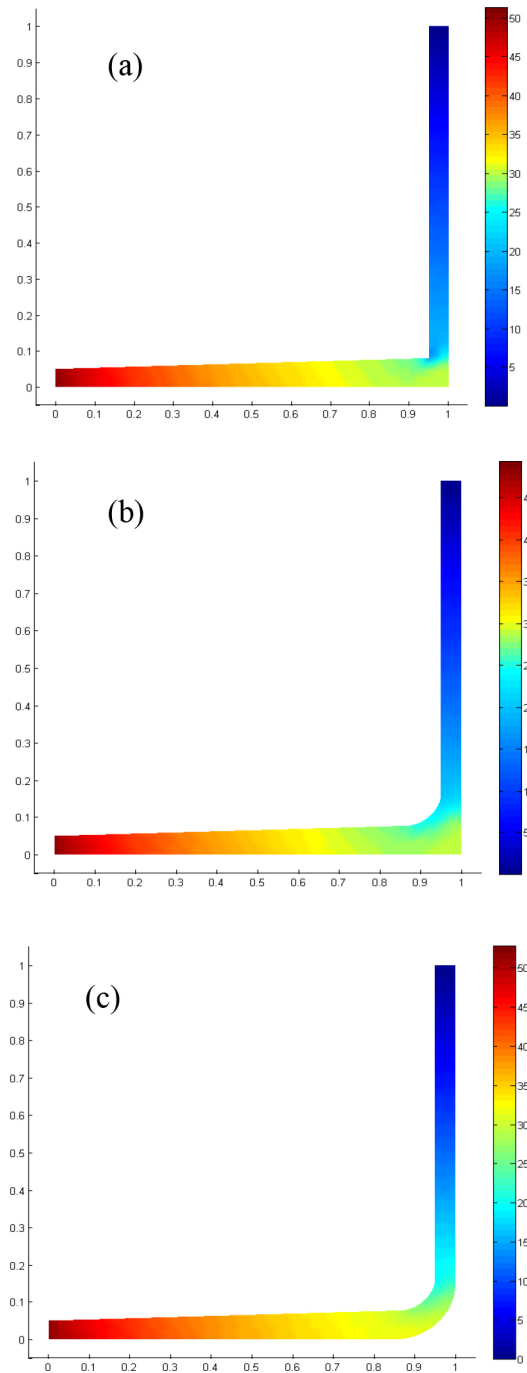**Figure 5** Velocity vectors obtained by the present method

Figure 6 Pressure distributions obtained by the present method

Conclusions

A finite element program for steady-state viscous incompressible thermal flows has been developed. The six-node triangular element is used to discretize the three different types of SCPP model. It was found that the proposed model can be applied successfully to study the localized characteristics of the flow. Also, it is discovered that the SC3 model provides the maximum of the average velocity and pressure at the power conversion unit. As a result, the SC3-junction type will be accepted in practice. However, more details are needed for analysis and design of the real SCPP system such as the effect of turbine installation or the shape of the chimney.

In addition, as the Asean Economic Community (AEC) is coming in the year 2015, this research can be considered as a starting point of CFD software development which can improve the international competitiveness in computational engineering research areas.

Acknowledgements

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The Factors Affecting a Decision to Continue a Study at the Champasack University

Marasri Naewchampa[1*]
[1*]Faculty of Sciences, Ubon Ratchathani Rajabhat University, Thailand
Bounchanh Vongthongkha[2] and Sitha Thammavongsa[3]
[2]Faculty of Sciences, Champasack University, LAO PDR

Abstract

The research aimed to 1) study the factors which affected the first-year students' decision to continue a study at the Champasack University, Lao People' Democratic Republic, and to investigate the problems and recommendations concerning the learning process of the students. Population in the study was 224 first-year students of the Champasack University in the academic year 2015. The research instrument was the questionnaire made by the researchers. The questionnaire consisted of two parts: part one was concerned with the general information of the students and part two dealt with six factors which affected the students' decision: work prospect, pride, motivation, personnel, site or location and teaching and learning. The present work was a survey research and conducted from May to June, 2015. Statistics used were percentage, means and standard deviation.

The research finding were as follows.

　　1. The six factors as found in the study had a moderate impact on students' decision to study at the Champasack University. As for individual aspects, it was found that the first three factors which most affected the students' decision to study at the Champasack University in the academic year 2015 were arranged in a descending order: personnel, pride and work. The three factors which least affected the students' decision were arranged from an ascending order: motivation, teaching and learning, location and site.

　　2. The recommendations given by the students were as follows: the sports complex should be created, expensive parking fees should be addressed, more restrooms should be provided, scholarships should be conferred to the students with

_____
Faculty of Sciences, Ubon Ratchathani Rajabhat University
2 Ratchathani Road, Mueang District, Ubon Ratchathani Province, 34000, Thailand
Tel. +66-45-352000 ext.1401 E-mail: 17dyopk2501@gmail.com

good performance, individual faculties should be encouraged to make products, there should be a special policy on the students' fees, the teacher's teaching quality should be improved, and more attention should be given to students, a learner-centered approach should be used and more hours should be added to the major subjects.

Keywords: Factors Affecting a Decision for Further Study, Champasack University.

Introduction

The Champasack University is divided into six faculties, each of which offers different courses. Students are admitted through both an entrance examination and a good learning performance. The study was aimed to explore the factors which influenced and affected students' decision to further their study in different faculties. A survey was conducted on the first-year students' opinions concerning the study continuance in different faculties. The result gained would lead to an improved guideline for the admission of the potential students. Furthermore, the results could be the guidelines for the students about to enter the tertiary level.

Objectives

1. To study the factors affecting the continuance of the study of the first-year students at the Champasack University.

2. To investigate the problems and recommendations concerning a learning process of the first-year students at the Champasack University.

Scope of Research

1. Population was 224 first-year students of the Champasack University in the academic year 2015.

2. The study was a survey research.

3. Duration of the study was between May 2015 and June 2015.

Definition of Key Terms

1.'Students' means the first-year students of the academic year 2015 of the Champasack University, Lao People's Democratic Republic.

2. 'The factors which affect a decision to further study' refers to what affects a behavior to make a decision to continue a further study at the Champasack University, which covers the following:

1) 'Work prospect' means job security, a post-graduation work, and a good job.

2) 'Pride' means a social recognition, a prestigious job, and reliability on the teacher's ability to impart knowledge.

3) 'Motivation' means a family support, a desired faculty, an aptitude, cheaper tuition fees, parents' affordability to pay the fees, and scholarships.

4) 'Personnel' means the teachers' knowledge and expertise, quality and constant care on the part of the teacher, and teachers' qualifications for the job.

5) 'Place/ site' means the site being close to residences or convenient to travel to and fro, sufficient parking space, location in downtown, favorable and

beautiful environment, library and computers available, and other facilities for example dormitory, sports complex and hospital.

6) 'Learning and teaching' means availability of the modern equipment, suitable and adequate learning media, and quality teaching.

Expected benefits

1. It was possible to know the students' opinions concerning the factors related to a decision to continue their study at the Champasack University.

2. The research results could be applied to develop a curricular administration in conformity with the learners' needs.

Research Methodology

Research instruments

The research instrument was a questionnaire developed by the researchers. It consisted of two parts. Part one was concerned with general information of the students and part two with the factors which affected students' decision to further their study. The questionnaire was divided into six aspects: job procurement, pride, motivation, personnel, site/ place and teaching and learning.

Data collection

A letter of request was sent to the university to grant permission to the researchers to collect data. Data were collected in July, 2015.

Data Analysis

Data were analyzed by using Microsoft Office Excel 2007. Statistics used in data analysis were percentage, mean, and standard deviation.

Results

It was found that there were the factors which affected the students' decision to continue their study at the Champasack University. The factors were shown in table 1.

Table 1 Factors affecting a decision to continue further study

Factors affecting a decision	Mean	Interpretation
1 work	3.44	Moderate
2 pride	3.49	Moderate
3 motivation	3.06	Moderate
4 personnel	3.66	Moderate
5 place/site	3.41	Moderate
6 learning and teaching	3.30	Moderate
Total	**3.23**	**Moderate**

From table 1, it was found that all factors which affected first-year students' decision to further their study at the Champasack University in the academic year 2015 were at a moderate level. Considering individual aspects, it was found that the first three factors affecting the first-year students' decision could be arranged in a descending order of significance: personnel, pride and work respectively.

Summary

1. General information

A majority of the students in the study were females, aged over 18. Their average income was lower than 1,000,000 gibs. Their families were self-employed. A majority of them lived in Champasack. They completed a high school diploma before entering the university. They got the admission through the entrance examination. The faculty which topped the list for the students was the Agriculture and Forestry, followed by Law, Political Science, and Natural Science. The majority of them got graduated from Pakxe Political Institute, followed by Champasack Institute and Phonetong Institute.

2. Factors affecting a decision to continue study at the Champasack University

It was found that the six factors found in the study had affected the first-year students' decision to study at the Champasack University at a moderate level in the academic year 2015. As regards the individual factors, it was found that the first three factors which most affected the first-year students' decision to study at the Champasack University were as follows: personnel, pride and work. The factors which least affected the students' decision to study at the Champasack University were arranged an ascending order as follows: motivation, learning and teaching and location or site.

3. Problems and recommendations

The following were recommendations or suggestions as given by the first-year students in the academic year 2015:

1. Sports complex should be created, parking charge should be addressed, and more restrooms should be provided.

2. Scholarships should be granted to the students with good performance.

3. Each faculty should be encourage to produce its own product.

4. There should be a special policy on the students' fees.

5. Teachers should be encouraged to improve their teaching methods and give more attention to students.

6. The learning and teaching process should be improved. A learner-centered approach should be introduced.

7. More hours should be added to the major subjects.

Recommendations

1. Recommendation for application

The study showed that the factors found had a moderate impact on the first-year students' decision to continue their study. The administrators and those concerned should consider or look for strategies to encourage more entrance of students.

2. The six factors which were studied had a moderate impact on students' entrance into the university. It is possible to explore for more other factors which can affect the university study. A study can be done as to what factors affect a tertiary study.

Acknowledgement

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Bach, S. (2012). *Managing human resources.* Hoboken, NJ: Wiley.

Gold, J., & Bratton, J. (2014). Towards critical human resource development education (CHRDE): Using the sociological imagination to make the HRD profession more critical in the post-crisis era. *Human Resource Development International, 17*(4), 400-415.

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