

## **UNDERGRADUATE STUDENT'S SATISFACTION TOWARD THE NEW EDUCATION SYSTEM IN THAILAND**

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### **Abstract**

Since 1997, Thai government had announced the new policy to reduce the funding in education system by changing the main structures from public university to autonomous university. In 2007, there are 14 public universities had implemented the new education systems. Consequently of funding decrease, universities need to open more programs to compete each other in order to survive and match up to the business or student need. Nevertheless, new education system can affect spread out to many private universities. This lead to be question marked on the quality of education system. Therefore, this research is focus on the perception of undergraduate students toward the quality of university in Thailand. In this research, will be used the quota sampling to collect the data from autonomous universities in Thailand. The Structural Equation Modeling is the recommend statistical techniques for this research.

**Keyword:** *Education system, Student satisfaction, SEM, Autonomous University*

**JEL Classification:** Z

### **1. INTRODUCTION**

Higher Education (HEI) in Thailand was started in nineteenth century. From the 1960s to 1990s, many public universities were formed by amalgamation of colleges or upgrades of college to universities by the Ministry of Education. Many private universities were also set up during this period in Bangkok and provincial areas. Currently there are 69 private universities and 78 public universities in Thailand ([www.contactcenter.mua.go.th](http://www.contactcenter.mua.go.th)).

The Higher Education system in Thailand was set the policies for new education system as autonomous university in 1997. Thai government was transformed Thai public universities from the bureaucratic system to autonomous public

universities. Autonomous public universities were different to government public universities as allowed to set their own regulation related to academic affair independently, personal administrations, and managed the budget and asset independently (Kirtikara, 2004; Makmee *et al.*, 2007; Kantabutra and Tang, 2010). According to Commission of Higher Education (CHE), there are 14 public universities transformed the education system to autonomous public universities.

## **2. LITERATURE REVIEW**

### **2.1 Teacher competency**

Teacher competence is the set of knowledge and ability that a teacher process (Lunenberg and Ornstein, 2004), whereas Mondy and Noe (2005); Noe *et al.* (2006) described the competency of teacher as the knowledge, skill and ability. Moreover Oliva *et al.*, (2009) described that competence are not only knowledge, skill and ability but it includes mobilization and complex mental operations, while Cheng (1995) believed that knowledge and ability have direct effect to the performance of teacher.

Furthermore Jumani *et al.*, (2010) said that the teacher competencies are the knowledge and skill required of a teacher and include the value, sensitivities, capabilities and the ability to put all of them in the practical as the appropriate way.

### **2.2 Knowledge**

The knowledge is the science that is the most practical subject for the survival in the society (Lunenberg and Ornstein, 2004). Furthermore Awayiga *et al.* (2010) described the knowledge as the understanding of history and sciences, understanding of mathematics and economics, cultural awareness and lifelong learning. According to Noe *et al.* (2006) stated that knowledge is the fact or procedure of information that necessary for successful in any task.

Finally, Stiver *et al.*, (2010) pointed that knowledge is a foundation for all areas. McClune and Jarman (2010) can classified to three types of knowledge as knowledge of science, knowledge about writing and language profile while Awayiga *et al.* (2010) also classified the knowledge as three types of knowledge are general knowledge, organizational and business knowledge, and accounting and auditing knowledge. However Algazo and Hilawani (2010) classified the teacher knowledge in classroom are knowledge about language and knowledge in teaching situation.

### **2.3 Skill**

Skill is an expertise or accomplishment in any field and it is the critical to access these skills in education and economics (Allen, 2000). Furthermore Lyon (2003) stated that skill is the necessary in variety of tasks as education, business and so on.

Many researchers classified many types of skill as communication skill, intellectual skill, interpersonal skill, technical and functional skill, personal skill, organizational and business management skill and IT skill (Awayiga *et al.*, 2010). According to Stivers *et al.* (2010) pointed the types of skill as communication skill, creativity skill, leadership skill and problem solving skill. Finally, Allen (2000) concluded that skill which necessary for education are problem solving skill, communication skill, interpersonal skill, foundation skill (listening, reading and writing skill) and negotiation skill.

### **2.4 Curriculum**

Curriculum can be defined as the action plan or written document which includes strategies for achieving desired goals (Lunenburg and Ornstein, 2004). Furthermore Kliebard (2002) and Sears and Marshall (2000) explained that curriculum is a system with own definitions, operational constructs, assumptions, generalizations, law and specialists to interpret the knowledge.

Kliebard (2002) suggested that the curriculum can be applied to all subjects and constitutes a frame of reference while Lunenburg and Ornstein (2004) pointed that the curriculum needs a proper range of required knowledge, skill, concept and learning experiences that consider the interests, abilities and background of students.

### **2.5 Tuition fee**

Tuition and fee are the prices that posted by institutions of higher education because the tuition fees are not include the other cost such as textbooks and other required item for students to attend the class in school (Nova Science Publishers, 2009). Moreover Liu *et al.* (2009) summarized the expenditures requirement of students and their families are tuition fee, textbooks, dorm, food, transportation, tutoring and miscellaneous fee. Many researchers pointed that the universities tuition fees can be the most barrier of students to enter the university (Liu *et al.*, 2009; Challender, 2003 cited in Moore *et al.*, 2011).

## **2.6 Student satisfaction**

Many researchers referred that student satisfaction is the attraction or positive feeling between student toward institution or programs (Sum *et al.*, 2010; Qi *et al.*, 2010). Furthermore Lo (2010) explained that the student satisfaction is the perception of students toward learning environmental support and it is also likely to concern the role of the instructors and the role of students.

Moreover Qi *et al.*, (2010) concluded that student satisfaction is the perception and evaluation of every service in school based on their expectation while, student satisfaction is the student feedback on a particular program (Gibson, 2010). Sum *et al.*, (2010) also described that student's positive feeling and satisfaction is contingent to the students' academic and social experiences obtained at the particular institution. On the other hand, Letcher and Neves (2010) summarized that student satisfaction is the attitude from the student's education experiences.

Qi et al. (2010) also commented on the teacher competencies, workplace attitude and curriculum have direct positive relation to student satisfaction while Palmer and Holt (2008) suggested that the interaction between teacher and student has positive relation to student satisfaction. Moreover the teacher's methods which serving to trigger student's think and learning, have strongly effect to student satisfaction (Lo, 2010).

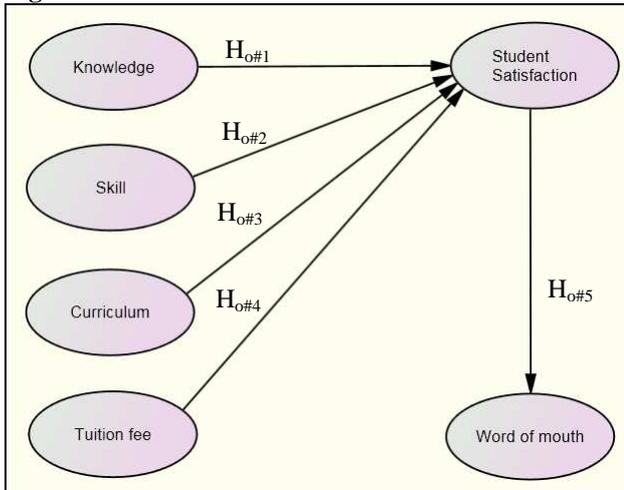
## **2.7 Word of mouth**

Word of mouth defined as the customer who informs friends, relatives and colleagues about the event that has created a certain level of satisfaction (Söderlund, 1998). Furthermore Walsh and Mitchell (2010) also defined the word of mouth as a general concept of marketplace and the degree of product related information which a consumer communication to other consumer. On the other hand, Ng *et al.*, (2011) commented that word of mouth is the significant tangibles or experiences for service providers.

Gremler *et al.*, (2001) concluded that word of mouth has impact to the relation of customer and employee, and the perception of service quality. While Söderlund (1998) pointed the association between word of mouth and customer satisfaction is related to the level of satisfaction, in case of high level satisfaction produce the positive association.

### 3. RESEARCH MODEL

Figure 1: Research model



Source: Developed for this study

#### 3.1 Hypotheses

This study investigates the teacher competencies as knowledge and skill of teacher, curriculum and tuition fee have direct effect to student satisfaction. Moreover, teacher competencies, curriculum and tuition fee have indirect effect toward word of mouth by using student satisfaction. Finally the student satisfaction also has direct effect to word of mouth. Then there are five hypotheses were tested:

*Hypothesis 1: knowledge of teacher has effect to student satisfaction*

*Hypothesis 2: skill of teacher has effect to student satisfaction*

*Hypothesis 3: Curriculum has effect to student satisfaction*

*Hypothesis 4: Tuition fee has effect to student satisfaction*

*Hypothesis 5: Student satisfaction has effect to word of mouth*

All of these hypotheses will be tested by structural equation modeling.

### **3.2 Methodology – Research design**

To examine our hypotheses, this research applied *ex-post facto* research design for surveying. The judgmental sampling survey is the suitable method for collection the questionnaires because the sampling units of this research are bachelor students who study at autonomous public universities in Bangkok area.

The questionnaires were structured into three sections. Screening question is the first section to check that the respondents are bachelor students from autonomous public universities. The second section is the questions which are included from six parts of questions as knowledge, skill, curriculum, tuition fee, student satisfaction and word of mouth. The demographic information (gender, income and level of education) is the last section of the questionnaires.

The reliability for all scales was assessed by Cronbach's alpha method. In the study, use both of the *Cronbach's Alpha if item deleted* and *Corrected item-total correlation* methods. All of these methods were reduced to a set of highly reliable items. All reliabilities were attained the minimum level of 0.70 for acceptable (Zikmund, 2003; Hair *et al.*, 2010). A pilot study use to evaluate the reliability of the questionnaires was carries out with 10 bachelor students from autonomous public universities. The result of reliability at the pilot test is 0.960.

The sample for the main study consists of 400 bachelor students from four different autonomous universities in Bangkok area are Chulalongkorn University, Mahidol University, King Mongkut Institute Technology of Ladkrabang and King Mongkut Institute Technology of Thonburi.

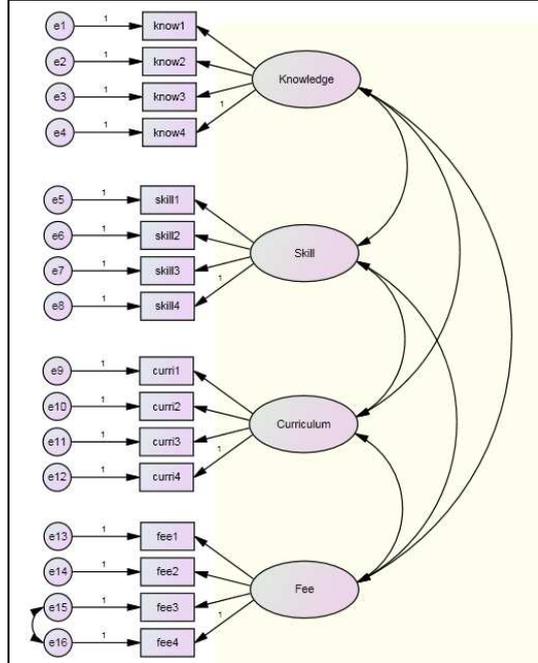
The pre-analytical found that the data was non-normality. The assumption of structural equation modeling is the data must normality, then there are 16 cases will be removed from the original data because of the data is the outlier. Then there are only 384 cases that suitable for analyzing. The reliability of post-test is 0.891, which is reliable for analyzing.

The sample size is quite enough sample size requirements for analyzing. The structural equation modeling (SEM) is particularly effective when testing models that are path analysis with mediating variables and latent variables that are being measured with multiple indicators. Then our model contains several latent variables and mediating variables, SEM is considered appropriate technique.

### 3.3 Analysis and results

The 16 items comprising the four constructs were subjected to a confirmatory factor analysis (CFA) with the actual data input. A CFA allows for a simultaneous assessment of overall and specific elements of measurement validity. The CFA in this study will be shown in the following figure.

Figure 2: Confirmatory Factor Analysis (CFA)



Source: Developed for this study

It was analyzed the Confirmatory Factor Analysis (CFA) by AMOS version 18. The results of the overall fit statistics are: CMIN/DF = 1.989, GFI = 0.940, TLI = 0.963, CFI = 0.970, RMR = 0.029, RMSEA = 0.051. It means that the model was fit the data well and all the indices were within the recommend ranges (i.e. RMR < 0.08, RMSEA < 0.08, GFI > 0.9, TLI > 0.9, CFI > 0.9 and CMIN/DF < 3; Hair *et.al.*, 2010).

### 3.4 Hypotheses testing

After the confirmatory factor analysis, it was analyzed the structural regression modeling. The estimates result will be shown as the following table:

**Table 2: Table of estimates**

	Estimate	S.E.	C.R.	P
Student Satisfaction <--- Knowledge	.482	.076	6.339	***
Student Satisfaction <--- Skill	.032	.122	0.265	.791
Student Satisfaction <--- Curriculum	.631	.089	7.113	***
Student Satisfaction <--- Fee	-.092	.053	-1.747	.081
Word of Mouth <--- Student Satisfaction	1.311	.149	8.823	***
Word of Mouth <--- Skill	-.540	.157	-3.435	***

Source: Developed for this study

*Hypothesis 1 (H<sub>0#1</sub>): knowledge of teacher has no effect to student satisfaction*

After the model was analyzed by AMOS version 18, the program shown the knowledge of teacher has significance value lower than 0.05 or 5%. Then the first hypothesis is rejected.

*Hypothesis 2 (H<sub>0#2</sub>): skill of teacher has no effect to student satisfaction*

Refer to the table 2, the significance value of skill of teacher to student satisfaction is higher than 0.05 (0.791 < 0.05). Then this hypothesis is not rejected. It means that skill of teacher has no effect to student satisfaction.

*Hypothesis 3 (H<sub>0#3</sub>): Curriculum has no effect to student satisfaction*

Refer to the analysis from the program, it shown that the estimate is significance (0.000 > 0.05). It means that curriculum has effect to student satisfaction.

*Hypothesis 4 (H<sub>0#4</sub>): Tuition fee has no effect to student satisfaction*

From this hypothesis is not significance because the significance value at table 2, are higher than 5% (0.081 > 0.05). Then the tuition fee has no effect to student satisfaction.

*Hypothesis 5 (H<sub>0#5</sub>): Student satisfaction has no effect to word of mouth*

According to table 2, the significance value of student satisfaction to word of mouth is lower than 5% (0.000 < 0.05). It means that this hypothesis will be rejected or student satisfaction has effect to word of mouth.

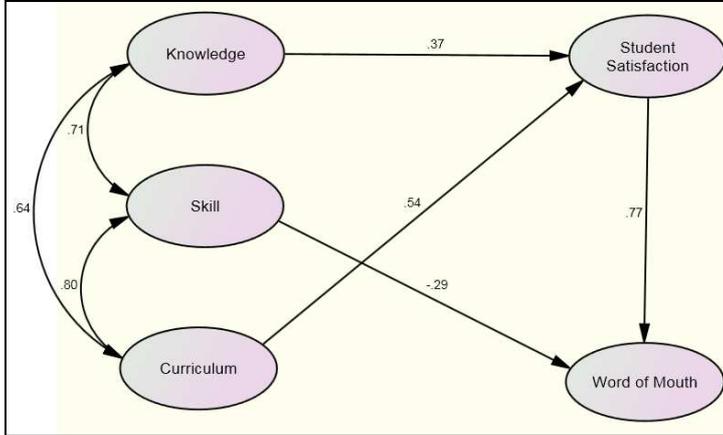
*Hypothesis 6 (H<sub>0#6</sub>): skill of teacher has no effect to word of mouth*

After it was analyzed by the structural equation modeling (SEM), the result was shown the new path from skill of teacher to word of mouth which the significance

value of this path is less than 5%. Then it means that skill of teacher has effect to word of mouth.

### 3.5 Structure model

**Figure 3: Structural model results**



Source: Developed for this study

According to figure 3, the structural theoretical model shows the standardized parameter values for the various linkages. The exogenous latent variables were allowed to correlate freely. The model fit the data quite well. The measurement indices are CMIN/DF = 2.382, GFI = 0.912, TLI = 0.948, CFI = 0.956 RMR = 0.044 and RMSEA = 0.060. Additionally, some of the path estimates were significant and in the expected direction. The all possible of standardized total effect from knowledge and curriculum to student satisfaction while knowledge, skill, curriculum and student satisfaction have total effect to word of mouth will be shown in the table 3.

**Table 3: Standardized total effect**

	Curriculum	Skill	Knowledge	Student Satisfaction
Student Satisfaction	.537	.000	.372	.000
Word of Mouth	.415	-.286	.287	.773

Source: Developed for this study

From the table 3, a direct path was specified from knowledge (0.537) and curriculum (0.372) to student satisfaction. Although skill and tuition fee no have direct effect to student satisfaction because all of these paths did not significance

in the model, but skill (-0.286) has direct effect to word of mouth in negative direction. Finally student satisfaction (0.773) has direct effect to word of mouth.

#### **4. CONCLUSION**

The results of this study supported that knowledge and curriculum have causal relationship to student satisfaction in the positive way. Although, knowledge and curriculum have no directly effect on word of mouth, those factors still shown the positively indirect effect via student satisfaction to word of mouth at 0.287 and 0.415. This could be said that if the knowledge of teacher and curriculum increased, it could cause the student satisfaction increased as both factors go positively on each other, and it's still be lead to increase on word of mouth as the positive effect from indirect effect of knowledge and curriculum and positive direct effect of student satisfaction.

In this study, has one limitation on the tuition fee. In Thailand, nearly 100% of the bachelor students have their parents to take care for their tuition fee. Therefore this sampling unit (bachelor students) may not have an impact on the variable. Nevertheless, there is further research need to be considered such as a comparison between the group of master student who are studying in the autonomous universities and the group of master students who are studying the government universities.

#### **BIBLIOGRAPHY**

Allen L. (2000), "Competencies that count: strategies for assessing high-performance skill", LAB Working paper No. 2, Northeast and Island Regional and Educational Laboratory, Providence, RI.

Billy Mcclune and Ruth Jarman (2010), "Critical readings of science-based news reports: Establishing a knowledge, skills and attitudes framework", *International of Science Education*, Vol. 32, No. 6, pp. 727 – 752.

Bonnie P. Stivers, Raj Veliyath, Teresa Joyce and Janet S. Adams (2010), "Knowledge, skills, and abilities for the market economy: An investigation of student perceptions before and after China's WTO entry", *Journal of Teaching in International Business*, Vol. 21, pp. 27 – 52.

Cheng Y. C. (1995), "Function and effectiveness of education", *Wide Angel Press*, Hong Kong

Don Hellriegel and John W. Slocum, Jr. (2004), "Organization Behavior", 10<sup>th</sup> edition, Thomson Learning

Emad M. Alghazo and Yasser A. Al-Hilawani (2010), “Knowledge, skills and practices concerning phonological awareness among early childhood education teachers”, *Journal of research in childhood education*, Vol. 24, pp. 172 – 185.

George J. M. and Jones G. R. (2005), “Understanding and Managing Organization Behavior”, 4<sup>th</sup> edition, Pearson Prentice Hall

Gibson Allen (2010), Measuring business student satisfaction: a review and summary of the major predictors”, *Journal of Higher Education Policy and Management*, Vol. 32, No. 3, pp. 251 – 259.

Hair J. F. Jr., Anderson R. E., Tatham R. L. and Black W. C. (2010), “Multivariate Data Analysis”, 7<sup>th</sup> edition, Prentice Hall

Joseph Y. Awayiga, Joseph M. Onumah and Mathew Tsamenyi (2010), “Knowledge and skills development of accounting graduates: The perception of graduates and employees in Ghana”, *Accounting Education*, Vol. 19, No. 1–2, pp. 139 – 158.

Juanus De Oliva, Fernandez Lozano, Martin Del Pozo, Gonzales Ballesteros, Pesquero Franco and Sanchez Martin (2009), “Comparative study of evaluation of professional competencies by experienced and trainee Spanish primary teachers”, *European Journal of Teacher Education*, Vol. 32, No. 4, pp. 437 – 454.

Kantabutra Saranya and Tang C.S. John (2010), “Efficiency Analysis of Public Universities in Thailand”, *Tertiary Education and Management*, Vol. 16, No. 1, pp. 15 – 33.

Kirtikara Krissanapong (2004), “Transition from a university under the bureaucratic system to an autonomous university: reflections on concepts and experience of King Mongkut’s University of Technology Thonburi”, Office of the Education Council, Ministry of Education, Thailand.

Kliebard H. M. (2002), “The Struggle of the American Curriculum”, *Teacher College Press*, Columbia University

Letcher W. David and Neves S. Joao (2010), “Determinants of undergraduate business student satisfaction”, *Research in Higher Education*.

Lloyd E. Alison and Luk T.K. Sherriff (2011), “Interaction behaviors leading to comfort in the service encounter”, *Journal of Service Marketing*, Vol. 25, No. 3, pp. 176 – 189.

Liu Chengfang, Zhang Linxiu, Luo Renfu, Rozelle Scott, Sharbono Brian and Shi Yaojiang (2009), "Development challenges, tuition barriers, and high school education in China", *Asia Pacific Journal of Education*, Vol. 29, No. 4, pp. 503 – 520.

Lo C. Celia (2010), "How student satisfaction factors affect perceived learning", *Journal of Scholarship of Teaching and Learning*, Vol. 10, No. 1, pp. 47 – 54.

Lunenburg F. C., and Ornstein A. C. (2004), "Education Administration Concepts and Practices", 4<sup>th</sup> edition, Thomson Learning

Lyon P. (2003), "Influencing performance improvement using skill charting", *Journal of European Industrial Training*, Vol. 27, No. 8, pp. 398-404

Makmee Pattrawadee, Sujiva Siridej and Kanjanawasee Sirichai (2007), "Development of a model of organizational effectiveness evaluation for faculties of education", *Higher Education Journal*.

Mondy R. W. and Noe R. A. (2005), "Human Resource Management", 9<sup>th</sup> edition, Pearson Prentice Hall

Nabi Bux Jumani, Muhammad Akhlaq, Samina Malik, Saeed-ul-Hassan Chishti and Tahir Hussain Butt (2010), "A comparison of the professional competencies of mathematic teachers trained through conventional and distance system of education in Pakistan", *International Journal of Academic Research*, Vol. 2, No. 5, pp. 365 – 378.

Ng Sandy, David E. Meredith and Dagger S. Tracey (2011), "Generating positive word-of-mouth in the service experience", *Managing Service Quality*, Vol. 21, No. 2, pp. 133 – 151.

Noe R. A., Hollenbeck J. R., Gerhart B. and Wright P. M. (2006), "Human Resource Management", 5<sup>th</sup> edition, McGraw Hill International edition

Nova Science Publishers, Inc., (2009), "Higher Education: Tuition continues to risk, but pattern vary by institution type, enrollment, and education expenditures", *Journal of Education Research*, Vol. 2, Issue 4, pp. 421 – 434.

Palmer R. S. and Holt M. D. (2009), "Examining student satisfaction with wholly online learning", *Journal of Computer Assisted Learning*, Vol. 25, pp. 101 – 113.

Qi Guosheng, Chen Meifeng, Liu Xiao and Ding Bangyou (2010), "An empirical study of student satisfaction and its influencing factors – School of Continuing

Education of Guangzhou University”, *International Journal of Continuing Education and Lifelong Learning*, Vol. 2, No.2, pp. 29 – 40.

Sear J. T. and Marshall D. (2000), “General Influences on Contemporary Curriculum”, *Journal of Curriculum Studies*, Vol. 32, pp. 199-214

Shaukat Ali Raza, Zain Majid and Abid Zia (2010), “Perceptions of Pakistani university students about role of academic engaged in imparting development skills: Implications for faculty development”, *Bulletin of Education and Research*, Vol. 32, No. 2, pp. 75 – 91.

Söderlund Magnus (1998), “Customer satisfaction and its consequences on customer behavior revisited”, *International Journal of Service Industry Management*, Vol. 9, No. 2, pp. 19 – 188.

Sum Vichet, McCaskey J. Stephen and Kyeyune Catherine (2010), “A survey research of satisfaction levels of graduate students enrolled in a nationally ranked top-10 program at a mid-western university”, *Research in Higher Education*.

Walsh Gainfranco and Mitchell Vincent-Wayne (2010), “The effect of consumer confusion proneness on word of mouth, trust, and customer satisfaction”, *European Journal of Marketing*, Vol. 44, No. 6, pp. 838 – 859.

Zikmund G. W. (2003), “Business Research Methods”, 7<sup>th</sup> edition, Thomson Learning

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