

# The Quality of Bachelor of Science Program in Industrial Management of Suan Sunandha Rajabhat University

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## ABSTRACT

This research aims to evaluate the quality of Bachelor of Science Program in Industrial Management, to study the cause of dropout of students, and to assess opportunity of the students of Bachelor of Science Program in Industrial Management of Suan Sunandha Rajabhat University. There were three groups of population herein; the last year students in academic year of 2015 consist of 48 persons, dropout students from academic year of 2013 to 2015 consists of 48 persons, and the Industrial Management course of the Rajabhat University in five regions of the seven University. The results showed that; all six aspects; Course, lecturers, environmental learning, learning process, learning evaluation, and lifelong learning; under the CIPP model obtained a very good level. The overall result of the cause of dropout of students in five aspects; students themselves, student's family, lecturer, relationships with classmates, and university; gained the moderate level. The Industrial Management curriculum of Suan Sunandha Rajabhat University in the area of lecturer and students were much higher compared to other universities. However, the opportunity to competition in area of curriculum was slightly lower compared than the other universities.

**Keywords:** quality of curriculum, CIPP model, cause of dropout, opportunity to competition

## INTRODUCTION

The course or curriculum is essential for learning and teaching for all levels of education. Curriculum contributes a significant role in the success of an education. The course is planned to achieve the education to its efficiency and high standard, it helps define the purpose, scope, and content, ideas for learning and teaching activities. So it can be said that the course is an indicator of the quality of human development. Human development requires a quality program with a clear, appropriate, and consistent context of adoption.

The acquisition of quality courses by evaluating courses, because the assessment is the process of gathering information related to the program or to check the quality of the course. The objective is to develop and improve the specific area of learning to be more effective (Thongthai, 2008). On the other hand, it is necessary to get the update in order to comply with the requirements of academic theory in today's timely change society, graduate with desirable characteristics and being competitive in today's stiff competition among the professionals (National Education Act, 1999). Standards of higher education courses in Thailand determined curriculum must be developed to modernize and improve the quality at least every five years, together with an assessment of the ongoing development program (Bureau of Higher Education Standard and Quality, 2010).

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The advancement of technology in the curriculum development required to develop aggressive potential. Can be adjusted according to the evolution of technology advancing all the time and capacity to compete both domestically and abroad.

From the advancement of technology today, Curriculum development is required to develop an aggressive potential. Course can be adjusted according to the evolution of technology advancing all the time, and supports competition in both domestic and international. In particular, human for industrial need to be ready to work immediately, high potential for development to both academic and professional manner. They must conduct themselves in a professional, moral, ethical, according to the Motto of University: Wisdom Faith and Social Leadership.

Bachelor of Science Program in Industrial Management of Suan Sunandha Rajabhat University opened more than 17 years since 1999, graduates for more than 40 people per year. For the other reason, the university aims to be Smart Archetype University of the Social in the year of 2017, and to be Nich Guru University in the year of 2022, for 2030 will be International Nich Guru University. The university's quality standards into the global competition requires quality of all courses. From such reason, the researcher was interested to study. The quality of Bachelor of Science Program in Industrial Management of Suan Sunandha Rajabhat University for all process of curriculum management, input, process, and output and the problem from dropout of students, lead to assess opportunity to competition. The results of the research can be used to improve the curriculum, improve the learning process, and planned the operations. The course will be a well-timed, higher quality, conform to academic standards, and be accepted by society.

## OBJECTIVES

1. To evaluate the quality of Bachelor of Science Program in Industrial Management of Suan Sunandha Rajabhat University.
2. To study the cause of dropout of students from Bachelor of Science Program in Industrial Management of Suan Sunandha Rajabhat University.
3. To assess opportunity to competition of Bachelor of Science Program in Industrial Management of Suan Sunandha Rajabhat University.

## SCOPE OF RESEARCH

1. Research variables were to:
  - 1.1. To evaluate the quality of Bachelor of Science Program in Industrial Management of Suan Sunandha Rajabhat University by CIPP model (Stufflebeam, 1971) as to context evaluation (course assessment), input evaluation (lecturers and environmental learning assessment), process evaluation (learning process assessment), and product evaluation (learning evaluation and lifelong learning program has developed a feature of student)
  - 1.2. To study the cause of dropout of students in 5 aspects as to themselves, their family, lecturer, social, and university.
  - 1.3. To assess opportunity to competition in 3 areas: curriculum, lecturer, and student.
2. Populations used in this research were to:
  - 2.1. Last year students or senior of Bachelor of Science Program in Industrial Management of Suan Sunandha Rajabhat University.
  - 2.2. Dropout students from Bachelor of Science Program in Industrial Management of Suan Sunandha Rajabhat University.
  - 2.3. Bachelor Program in Industrial Management of 14 Rajabhat University.

## DEFINITIONS

**Quality of Bachelor of Science Program in Industrial Management** mean to a high level of value or excellence of course management system covers the inputs, process, and outputs must be competitive. This research was evaluated the curriculum by CIPP model, to study the cause of dropout of students, and assessed opportunity to competition.

**CIPP model** mean to the program evaluation which requires the evaluation of context, input, process, and product in judging a program's quality. The evaluation by CIPP model of this research by questionnaire upon the Likert 5 rating scales.

**Context evaluation** mean to course assessment, for the curriculum in the philosophy and objectives of the course, the education curriculum, in accordance with the requirements of the labor market, the appropriate number of hours in each subject, is necessary and beneficial to the operation of work of each subject in the course.

**Input evaluation** mean to lecturers and environmental learning assessment, were a great consideration of the course instructors qualification, experienced teaching methods, student advising. Including environmental learning, equipment for learning, information systems, and learning atmosphere.

**Process evaluation** mean to learning process assessment, should be considered in the field of teaching and is consistent with the characteristics of subjects, learning objectives, teaching materials and media, and teaching methods.

**Product evaluation** mean to learning evaluation and lifelong learning program has developed a feature of student, is one of the factor in the course of the evaluation, as to evaluation methods in line with objectives, teaching activities according to predefined rules and regulations, system of evaluation is transparent. Including the lifelong learning program has developed a feature of all the students in moral, knowledge, and intellectual skills, the relationship, the responsibility, and numerical analysis, communications and information technology.

**Cause of dropout** mean to the reasons of the students to leave from the course before graduation in the duration of the course in five areas; reasons form students themselves (own), from their family, from lecturer, from relationships with classmate (social), and from the university. The cause of dropout measured by questionnaire upon the Likert 5 rating scales.

**Opportunity to competition** mean to the situation favorable to the possibility that the curriculum is better than other courses in 3 areas: curriculum, lecturer, and student. It is measured by comparison to the common data from quality assurance information of course.

## RESEARCH METHODOLOGY

To evaluate the quality Bachelor of Science Program in Industrial Management of Suan Sunandha Rajabhat University the use of the questionnaire to collect data from the last year students or senior of Bachelor of Science Program in Industrial Management of Suan Sunandha Rajabhat University in academic year of 2015 consists of 48 persons.

The questionnaire has two parts: The first part is to ask the information about the respondents by checklist, and the second is to assess the respondents of Bachelor of Science Program in Industrial Management. The question consists of six aspects in a total of 25 questions, including course assessment of 4 items, lecturers assessment of 5 items, environmental learning assessment of 3 items, learning process assessment of 5 items, learning evaluation of 3 items, and lifelong learning program has developed a feature of student of 5 items. This opinion was measured by the five characteristics on the likert's 5 rating scales and use a scale of excellence (5), good (4), fair (3), poor (2), and very poor (1).

The statistics used for data analysis were frequency, percentage, average, and standard deviation. According to Best (1978), the meaning of each range of average is as follows: 1.00–1.50 means no quality, 1.51–2.50 means low quality, 2.51–3.50 means medium quality, 3.51–4.50 means quality or good, and average 4.51–5.00 means high quality or very good.

To study the cause of dropout of students from Bachelor of Science Program in Industrial Management of Suan Sunandha Rajabhat University the questionnaire has been used to collect data from dropout students from Bachelor of Science Program in Industrial Management of Suan Sunandha Rajabhat University from academic year of 2013 to 2015 for 48 persons.

The questionnaire has two parts: The first part with 12 items questions regarding the characteristic of respondents by checklist, and the second the reasons of the students leaving from the course before graduation in the duration of the course in five areas, 50 questions were asked including reasons form students themselves (own), from their family, from lecturer, from relationships with classmate (social), and from the university.

The questionnaire upon the Likert 5 rating scale and use a scale of extreme (5), very (4), moderate (3), slightly (2), and not at all (1).

The statistics used for data analysis were frequency, percentage, average, and standard deviation. The meaning of each range of average is as follows: 1.00–1.50 the least, 1.51–2.50 less, 2.51–3.50 moderate, 3.51–4.50 more, and 4.51–5.00 the most.

To assess opportunity to competition of Bachelor of Science Program in Industrial Management of Suan Sunandha Rajabhat University compared with the Industrial Management course of the Rajabhat University in various regions of five, of the seven University. Questionnaire was used to collect data in 3 areas: curriculum, lecturer, and student.

## DISCUSSION

### Discussion on the Evaluation of the Bachelor of Science Program in Industrial Management of Suan Sunandha Rajabhat University

Research found that the quality of the Bachelor of Science Program in Industrial Management in the six aspects were in a very good level. The product evaluation in area of lifelong learning program has developed a feature of student for the questions about numerical analysis skills, communication and information technology has the lowest average (mean = 4.06). This result was consistent with the findings of Suwan (2014) found that establishments that were hiring graduates of the course was to assess communication skills in English was low, and suggest to develop by adding into the learning process an extra-curricular activities.

However, in the area of lifelong learning as well, It found out that graduates of the program were featured in a good moral and ethical by the highest average (mean = 4.34) followed by the relationship and responsibility (mean = 4.23). These was compliance with the identity of the university: Professional practitioners, academic excellence, intelligent communications, and strategic thinkers with public awareness.

### Discussion on the Cause of Dropout of Students from Bachelor of Science Program in Industrial Management of Suan Sunandha Rajabhat University

The results showed that the overall outcome of all five aspects obtain the moderate level. The student's family aspect has an average low compared to other aspects. The problems of the families of the students were debt, poverty, uncertainties occupation, including family rift. The problems from students themselves garnered the second, these found that the students frequent absences, family responsibilities, not well in basic knowledge, and uninterested to learn.

That precipitate the decrease in rates of dropout before graduation to resolve by family and students first. The university should take this issue seriously and should find a way to solve this complication. Because dropout is the educational wasteland and it's the major problem that demonstrate competency in the management of university that do not achieve the stated goal (Rojbuntong, 2016).

### Discussion on the Assessment of the Opportunity to Competition of Bachelor of Science Program in Industrial Management of Suan Sunandha Rajabhat University

The results showed that Suan Sunandha Rajabhat University has course cost higher than other universities. Possibly due to the university is in the capital city and we are first ranked of Thailand Rajabhat Universities. Additionally, the university is having the facilities for students such as the Internet connection, area for activity, library, gym, etc. Meanwhile courses can carry out extra-curricular activities for students such as training, a factory tour, observe project, and so on.

## CONCLUSION

1. The results of the evaluation of Bachelor of Science Program in Industrial Management of Suan Sunandha Rajabhat University, it was found that overall of the result was in the level of good or quality with average of 4.12 and for all six aspects under the CIPP model was gained the good level or quality shown as **Table 1**.

**Table 1.** Mean, Standard Deviation, and level of evaluation of The Bachelor of Science Program in Industrial Management of Suan Sunandha Rajabhat University by CIPP model

CIPP model		Mean	S.D.	Level
Context evaluation	Course	4.08	0.52	Good
Input evaluation	Lecturers	4.21	0.44	Good
	Environmental learning	3.91	0.60	Good
Process evaluation	Learning process	4.12	0.47	Good
Product evaluation	Learning evaluation	4.19	0.56	Good
	Lifelong learning program has developed a feature of student	4.18	0.54	Good
	Total	4.12	0.40	Good

**Table 2.** Mean, Standard Deviation, and level of cause of dropout of students from Bachelor of Science Program in Industrial Management of Suan Sunandha Rajabhat University

Aspects	Mean	S.D.	Level
Students themselves (own)	3.04	0.34	Moderate
Student's family	3.08	0.45	Moderate
Lecturer	2.66	0.20	Moderate
Relationships with classmate (social)	2.74	0.44	Moderate
University	2.73	0.27	Moderate
Total	2.85	0.20	Moderate

From **Table 1**, it was found that the last year students or senior of Bachelor of Science Program in Industrial Management of Suan Sunandha Rajabhat University in academic year of 2015 for 48 persons evaluate the curriculum in 4 areas of 6 aspects with the level of good with the mean between 3.91 to 4.21.

2. The results of the cause of dropout of students from Bachelor of Science Program in Industrial Management of Suan Sunandha Rajabhat University, it was found that overall of the result was in the level of moderate with the mean of 2.85 and for all five aspects were gained the moderate level shown as **Table 2**.

From **Table 2**, it was found that dropout students from Bachelor of Science Program in Industrial Management of Suan Sunandha Rajabhat University from academic year of 2013 to 2015 for 48 persons were dropout by themselves cause in highest with the mean of 3.04, and also had the moderate level of all cause to dropout and overall.

3. The results of the assessment the opportunity to competition of Bachelor of Science Program in Industrial Management of Suan Sunandha Rajabhat University in 3 areas: curriculum, lecturer, and student. This research found that:

3.1. The opportunity to competition in area of curriculum found that: Total of credit in courses has the opportunity to competition higher than the University of the North but lower than the University of the South. For all course fees has the opportunity to competition lower than all University, and score of admission was only 1 University of central region has the opportunity to competition higher than Suan Sunandha Rajabhat University.

3.2. The competition in area of lecturer found that: The educational level of lecturers has the greater significant compared to other universities. The academic position of lecturers are prominent than the lecturers in central and southern regions universities.

3.3. The advantage of students was slightly higher than other universities considering the number and type of students.

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## Disclosure statement

No potential conflict of interest was reported by the authors.

## Notes on contributors

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