

**PID 09 Curriculum Evaluation of the Master of Arts in Aviation Management, B.C.2017 and the Developmental Approaches**

Krit Witthawassamrankul  
Kasem Bundit University, Thailand  
e-mail: krit.wit@kbu.ac.th

**Abstract** — This research aimed to evaluate the curriculum of Master of Arts in Aviation Management for the academic year of 2017 by using CIPP model. The CIPP model, which was developed by Daniel I. Stufflebeam, was used as the evaluation frame for analyzing the 4 aspects as 1) Context (C), 2) Input (I), 3) Process (P) and 4) Product (P) of the Master of Arts in Aviation Management. The research instruments were questionnaires, which were collected in April, 2018. The respondents were 12 current students and 8 graduated students. Descriptive statistics such as percentage, mean, and standard deviation were used to analyze the collected data. In addition, the researcher used an interview with 20 employers and peer review with 5 academicians. The content analysis was used for these qualitative methods. The results of the evaluation under the CIPP model (Context, Input, Process and Product) were rated at a high level (Mean is more than 3.50). The result of interview found that the employers were satisfied with the benefits of course content towards the use in aviation industry. The result of peer review showed that the instructors should encourage a variety of topics regarding graduate researches. In addition, the students in graduate school should be able to conduct and present the research either independent study or thesis by themselves. The students can combine their experience and develop practical researches which help their studies and careers. Peer review also suggested that the instructors should put diverse activities in the courses, such as research-based instruction, seminar, study tour, case studies, project-based learning (PBL), etc. and some courses should provide verification.

**Keywords:** Curriculum evaluation, CIPP model, Aviation management

**INTRODUCTION**

The curriculum evaluation is a major task and needed once the curriculum has been implemented in a Thai higher education for more than 5 year [1]. However, the curriculum should be evaluated every year since this implies quality assurance (QA) of the curriculum. A good curriculum should be evaluated based on various indicators, such as academic and research aspects, instruction quality and equipment, graduates' jobs. Therefore, the evaluation should include the stakeholders who involve with the curriculum such as the current students, graduated students, instructors and potential employers. The evaluation framework should consist of the necessary factors in the whole process of study.

A curriculum evaluation of Master of Arts in Aviation Management (Graduate Study), Aviation Personnel Development Institute, Kasem Bundit University has opened since 2011. Till the year 2016, the curriculum has admitted more than 65 students [2]. The curriculum aimed to provide knowledge and education on aviation management, which includes AM5101 Aviation Industry Management, AM5202 Human Resource Management, AM5103 Marketing in Aviation Industry, AM5104 Airline Strategic Management, etc.

Even though the curriculum evaluation in 2015 was satisfied by Commission of Higher Education (CHE) (Aviation Personnel Development Institute, 2016), the curriculum evaluation is still important since the curriculum has to be developed and modified due to the trends of aviation technology and labor market demands. Therefore, the researcher did the research to evaluate the curriculum of Master of Arts in Aviation

Management by using CIPP Evaluation Model to study the curriculum from the perspectives of stakeholders and find development approaches.

### RESEARCH OBJECTIVES

1. To evaluate the curriculum of Master of Arts in Aviation Management by using CIPP Model
2. To find the developmental approaches based on the curriculum evaluation.

### SCOPE OF THE RESEARCH OBJECTIVES

1. The researcher used CIPP model (Stufflebeam's) to evaluate the curriculum of the Master of Arts in Aviation Management for the academic year 2017.
2. Key informants and respondents of the curriculum evaluation are the stakeholders in the Master of Arts in Aviation Management, Aviation Personnel Development Institute

### SIGNIFICANCE OF THE STUDY

1. The result of the study can be used for developing the education quality.
2. The results of the study can be used for modifying the curriculum to meet the stakeholders' demands as the current students, graduated students, instructors and potential employers.

### THE CIPP EVALUATION MODEL BY STUFFLEBEAM AS AN EDUCATIONAL FRAME

There are numbers of curriculum evaluation such as Stake's Model, Tyler's Model, Kirkpatrick's Model and Roger's Model. Each model has different perspective and factors to consider. The model can focused on students' progress towards objectives such as Tyler's Model, some focused on level of education such as Kirkpatrick's Model (Reaction, Learning, Transfer, and Result). Some model focused on intend and actual and procedures of whole process such as CIPP evaluation model, which is a transformation process [3].

The CIPP evaluation model was developed by Daniel's Stufflebeam in 1960s [4]. CIPP consists of C-Context, I-Input, P-Process and P-Product. This model is a transformation process based for evaluating a higher education curriculum such as Bachelor or Master Degree curriculum. The CIPP model was created from analytic and rational basis for programmed decision-making [5]. It analyzes resource utilization and efficiency in the transformation process.

The examples of the CIPP evaluation model (Witthawassamrankul, 2018) are:

Context (C): Philosophy, Objectives, Structure, Content

Input (I): Instructor, Student, Classroom and Learning

Equipment

Process (P): Learning Management, Measurement and Evaluation

Product (P): Graduated Students, Benefits, Reputation

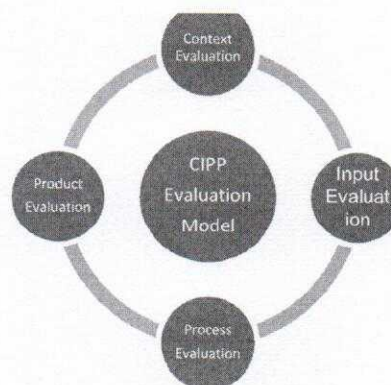


Fig.1. CIPP Evaluation Model (Stufflebeam's)

### RESEARCH METHODOLOGY

The researcher used mixed methods to evaluate the curriculum of Master of Arts in Aviation Management under the frame of CIPP evaluation model. The mixed method included the questionnaires, interview and peer review.

#### A. Questionnaire as a Quantitative Instrument

The questionnaire was a quantitative instrument used to analyzed descriptive statistics such as

frequency, percentage, mean and standard deviation. The questionnaires indicated 5 levels based on Likert's Scale ranging from highest (5) to lowest (1). The questionnaires, which consisted of 35 questions, were proven its content validity by 3 experts and its reliability analysis was more than 0.85 after a tryout of 30 sets of questionnaire to the similar program. The researcher distributed questionnaires to 20 respondents. There were 12 current students and 8 graduated students (sampled current and graduated students were more than 90% of population). The current students were asked to rate every question. The score ranges and meaning of questionnaire were as below:

4.21-5.00	Highest
3.41-4.20	High
2.61-3.40	Moderate
1.81-2.60	Low
1.00-1.80	Lowest

#### B. Interview as a Qualitative Method

Interview was done with employers of the graduated students. Interview questions asked the knowledge and abilities of the graduates and what the employers expected from the graduated students of this curriculum. Five types of employers or interviewees work in the aviation (20 key informants) as:

- Thai Airways International Company, Ltd.
- Thai Low Cost Airlines
- Airport of Thailand (AOT)
- National Airlines
- Non-Thai Low Cost Airlines

#### C. Peer Review as a Qualitative Method

Peer Review is a method which academicians, scholars and researchers use to find solution and developmental approaches. It gathers opinion and criticism of academicians, scholars and researchers from the meeting. In this study, there were 5 reviewers who hold doctoral degrees and academic titles from Aviation, Tourism, Service Industry and Business Management. They were 2 Associate Professors, 2 Assistant Professor and 1 Lecturers with Ph.D. in Business Management

## DATA COLLECTION AND ANALYSIS

The researcher distributed the questionnaires to the current students who completed the coursework and are currently doing independent studies or theses. In addition, he gave the questionnaires to the graduated students who work in the aviation organizations more than 1 year. He analyzed descriptive statistics as frequency, mean, percentage, standard deviation.

The researcher interviewed 20 key informants or employers of the graduates and then used content analysis to analyze the information. The researcher established the meeting for peer review.

The reviewers discussed the curriculum matters under the CIPP evaluation model. The researcher also asked the developmental approaches for the curriculum.

## RESEARCH RESULTS

The researcher divided the results into 3 parts based on the instrument and the methods used in CIPP Evaluation Model (Context, Input, Process and Product).

### A. The Questionnaire Results Based on CIPP Evaluation Model

#### 1. Context (C):

1.1 Philosophy: The overall scores was at a high level (mean = 4.60)

The philosophy clearly defines characteristics of the graduated students (mean = 4.73)

The philosophy covers the purposes of the curriculum (mean = 4.62),

The philosophy aims to develop aviation personnel (mean = 4.69),

1.2 Objectives: The overall scores was at a high level (mean = 4.59)

The long-term objectives for developing students' potential (mean = 4.47)

The objectives related with economic situation (mean = 4.33)

The objectives aligns with learning management (mean = 4.43)

1.3 Content: The overall scores was at a high level (mean = 4.63)

The content meets the demands of the students (mean = 4.55)

The content meets demand of aviation industry market (mean = 4.61)

The content helps the students to work in aviation industry (mean = 4.31)

## 2. Input (I):

2.1 Instructors: The overall score was at a high level (mean = 4.61)

Instructors give advices and are helpful (mean = 4.64)

Instructors are professional in aviation industry (mean = 4.61)

Instructors develop students' abilities in learning (mean = 4.66)

2.2 Students: The overall score was at a high level (mean = 4.62)

Students have good attitude towards aviation industry (mean = 4.44)

Students engage with class activities (mean = 4.12)

Students would like to participate in the class (mean = 4.45)

2.3 Learning Equipment: the overall score was at a high level (mean = 3.90)

Enough equipment for learning (mean = 3.86)

Fast internet and networking (mean = 3.71)

Technology and IT are used in classroom (mean = 3.68)

## 3. Process (P):

3.1 Learning Management: The overall score was at a high level (mean = 4.58)

The curriculum encourages practical experience such as internship (mean = 4.01)

The curriculum offers alternative ways of learning (mean = 4.45)

The curriculum increases students' skills for occupation (mean = 4.55)

3.2 Administration and Services: The overall score was at a high level (mean = 4.47)

Administration and Supporting service for education (mean = 4.66)

Introduction for registration and studying (mean = 4.50)

Fast system for admission and documentation (mean = 4.38)

3.3 Measurement and Evaluation: The overall score was at a high level

(mean = 4.23)

Measurement and evaluation are fair (mean = 4.10)

Measurement and evaluation meet the course objectives

(mean = 4.65)

Measurement and evaluation follow the determined structure (mean = 4.25)

## 4. Product (P):

4.1 Graduated Students: The overall score was at a high level (mean = 4.61)

The students can work in the aviation industry after graduating (mean = 4.80)

The students have enough knowledge in workplace after they graduate (mean = 4.42)

Students can tolerate to work and deal with difficulty (mean = 4.60)

### *B. The Interview Results from the Employers who used the Graduated Students*

The interview results of the employers who use the graduated students showed that they were very satisfied with the graduated students. The knowledge which the graduated students gain can be used in their organizations, particularly management. The graduated students know about marketing and management in aviation industry. The organizations like the curriculum which can develop people.

### *C. The Peer Review Results from the Academicians, Scholars and Researchers*

The peer review results showed the curriculum met the CIPP evaluation as:

1. Context (C) of the curriculum was useful and practical for people who work in aviation industry. The curriculum has been prepared for the students in both operational and management levels. The diverse contents which cover major area of marketing, management, accounting and finance, operation and research were important for the graduated students who would like to further themselves in aviation industry and the related field, such service industry.

2. Input (I) of the curriculum was good since the instructors were from the reputable aviation organizations from both airlines and airports. The instructors hold both academic degrees and experiences in aviation fields such as pilots, senior flight attendants, pursers, directors of aviation organizations and marketing managers. In addition, materials which used in the classes were relevant to the career in aviation organizations.

3. Process (P) of the curriculum was flexible for working persons, particular schedule and block courses. The main academic functions were properly followed such as preparing course syllabus, instruction management. Registration and payment is also simple for the students. In addition, it is easy to access information from IT and e-services in the program at any time.

4. Product (P) of the curriculum was good. The students can apply the knowledge they studied in the class in their real workplace. The students were satisfied with experience from the study. They keep contact with their alumni.

## CONCLUSION AND RECOMMENDATION

The research results found that context and input was rated at the highest level. The curriculum meets the philosophy and objectives, particularly to develop the knowledge and abilities in aviation management. Philosophy: The overall scores was at a high level (mean = 4.61) and input as the instructors who hold academic degree and experienced in aviation industry (mean = 4.60). Overall, based on the study, the students and stakeholders were satisfied with the curriculum. However, regarding peer review, the reviewers recommended the developmental approaches as:

1. The instructors should encourage the students to do and present the researches. The reviewers suggest that to study in graduate level, the students must have ability to study and to do researches. The topics of the researches can help the students' work and develop the students. In order to provide the diversities of research, the instructors and researchers should synthesize the independent studies

and theses of the students. Furthermore, the students should be able to publish in journals or present in national or international conferences.

2. The reviewers suggested that the instructors should put some activities into the courses, such as research-based instruction for AM5105 Research Methodology in Aviation, AM5201 Seminar in Aviation Industry, study tour for AM5206 Airport Management, case studies for AM5104 Airline Strategic Management, project-based learning (PBL) for AM5103 Marketing in Aviation and problem-solving AM5213 Law in Aviation Management etc. and at least 25% of the courses of the curriculum taught should provide verification such as a retest to ensure the quality assurance.

## REFERENCES

- [1] Commission of Higher Education. (2016) Manual of Thai Quality Assurance in Higher Education. Retrieved on 1 June, 2018, from [http://www.mua.go.th/users/bhes/QAMUA58/qa%20manual58/QA\\_MANUAL30032558.pdf](http://www.mua.go.th/users/bhes/QAMUA58/qa%20manual58/QA_MANUAL30032558.pdf)
- [2] Aviation Personnel Development Institute. Self-Assessment Report (SAR), 2016.
- [3] K. Witthawassamrankul. The Curriculum Evaluation of the Bachelor of Business Administration Program in Aviation Industry Management, B.C.2017 Aviation Personnel Development Institute. The Proceedings of 5th Social Sciences, Arts and Media International Conference 2018 (SSAMIC 2018), Srinakharinwirot University, Bangkok, Thailand, June 14-15, 2018.
- [4] D. Stufflebeam. The Relevance of the CIPP Evaluation Model for Educational Accountability, 1971. <https://eric.ed.gov/?id=ED062385>
- [5] G. Zhang et al. Using the Context, Input, Process, and Product Evaluation Model (CIPP) as a Comprehensive Framework to Guide the Planning, Implementation, and Assessment of Service-Learning Programs. *Journal of Higher Education Outreach and Engagement*, Vol.15. No.4., 2011