

## Program Evaluation in Higher Education

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### Abstract

*Every programmes implemented by each institution and organization should be evaluated after the execution of a cohort. The Purpose of Programme Evaluation, According to Doll (1992) is to recognize sizes and continuities in evaluating its effectiveness, Stufflebeam (1971) believes that the purpose is to highlight the objective achievement for the next alternative in decision making, while from the humanist point of view concerns on individual achievement in a planned situation (Stake and Denny, 1969). According to Talmage (1985), the content of programme evaluation comprising intrinsic value, instrumental value, comparative value, idealization value and decision value. The types of programme evaluation according to Scriven (1997) divided into formative and summative. Formative evaluation was made during an ongoing programme, while summative evaluation was made at the end of a programme. Therefore Provus (1971) evaluated the effectiveness of the programme in terms of performance, standards and products. According to Borg and Gall (1989), evaluation towards the effectiveness of the programme is usually made to determine the success of educational programme or focused on the level of success, the merit of respondent, syllabus design, and content of the programme, implementation and objectives achievement of the programme itself (Longstreet and Suane, 1993). The model Context, Input, Product, and Process (CIPP) was adapted from the theoretical model designed by Stufflebeam and Shinkfield (1984), which focuses on improvement oriented evaluation. Measurement of programme evaluation should be evaluated quantitatively through the impact value to see its effectiveness. Impact means double level of effectiveness. The first is in terms of mean, and the second is impact value. Measurement of impact level in its scale (five likert scales) is measure by three quartiles system according to mean range score ( $5 \div 3 = 1.66$ ) and impact range score ( $25 \div 3 = 8.33$ ). The value of 25/100 is the impact wattage for each four dimension variable: context, input, process and product (CIPP). Two interval scores are used to prove the impact level of each dimension: context, input, process and product (CIPP).*

Keywords: Program Evaluation

### Introduction

In terms of effectiveness, Ornstein and Hunkins (1993) stated that the effectiveness means; response (impact) subject that leads to a change resulting from an achievement of an objective to make decision, appropriate research design is by using survey. According to White, Mayne and Evarton (1990), effectiveness means; reference to the quality, a prolonged effort of mind to change and reshape experience. Cheng (1996) deems effectiveness as something that has criteria that can be measured or assessed from the aspects of qualities and achievement. David Pratt (1980) also describe 'effectiveness' as, to what extent students were able to achieve the objectives of the programme viewed from exam's grade and production that meets planning. From the effectiveness aspects in education and teaching programme, Kah Boh Boon (1987: 5) explained: The term effectiveness is

concerned with how far a course or activity has brought about the intended result pertaining to the acquisition of professional knowledge and skills expected of a teacher. Butterfield (1995:145) added it as standards that the curriculum seeks to establish.

Hussein Hj. Ahmad (1991:145) stated that to evaluate effectiveness or its opposite, is usually begin with terms such as, 'to what extent something is...' so that the effectiveness leads to the implication of assessment. Stake (1967) then explained ways to improve and create the detection is through measurement of objectives and its goal through data collection, processing and interpretation related to a programme. Evaluation of a programme is also a process to determine the pattern and how it will happen, the next as submitted by Rowntree (1997) also agree with Tyler (1990) emphasize more process to determine the achievement of an objective set of programmes.

In Malaysia Language Teaching Centre, Ministry of Education views evaluation and the effectiveness of a training programme or a course as an effort which aimed to assess the achievement of the objectives and implementation of a programme. Specifically, what is known through the effectiveness research of a programme or course is to detect the level of knowledge achievement, skills, and attitudes of participants, problems and changes obtained after the training programmes. Dessler (1997) highlighted four things of the effectiveness of a programme that need to be measured which includes:

- i. Participant's reaction towards the course
- ii. Learning
- iii. Behaviour
- iv. Result

Joyce Van TASSEL (199) evaluated the effectiveness of a programme from the aspects: the content of course's component, content focus and experience gained from the programme. While Ubben and Hughes (1996) viewed the effectiveness of a programme is the aspect of mastery in skills or abilities.

From the aspects of effectiveness evaluation process, until now, evaluation and detection of teaching programmes are made during and at the end of the course. Evaluation is made to identify performance of participants and effectiveness implementation of the programme itself. Common effectiveness evaluation tools used for this purpose are tests and examinations, questionnaires, observation, interviews and discussion. Asariah Shah Mior (1991), stated that what to emphasized in future is the formalization and strengthening of assessment programme and by detecting and evaluating the effectiveness or results from the attended course.

Programme Evaluation from the perspective of education means an assessment of a teaching training programme whether it is effective or vice versa. Tuckman (1985) suggested that the assessment is done by achieving the goal of input and outcome aspects. While Worthen and Sanders (1987) suggested that teaching evaluation programme is made through the determination of the standards for quality's budgeting, determine whether standards are relative or absolute, and to collect relevant information.

### **Purpose of Programme Evaluation**

According to Doll (1992) the purpose of programme evaluation is to recognize sizes and continuities in evaluating its effectiveness, views and right processes for it to reach its goals. Stufflebeam (1971) believes that the purpose is to highlight the objective achievement for the next alternative in decision making. It may also a process to see, hear, observe, and document what is seen, heard, observed and completed by taking action (Noor Azmi, 1990). In a programme's context, many aspects of evaluation was created that intended to measure the effect and impact. As described by Asariah Mior Shaharuddin (1991), detection programme is a systematic framework for collecting and analyzing data on all events related to the implementation of the programme with the purpose to improve its management.

Evaluation in a context of a programme contains the curriculum that often involves the effectiveness. The aim is to collect a combination of data between the content of the curriculum and goal achievement. Evaluation of curriculum from the perspectives of philosophic focuses on the achievement of individual behaviours, while from the humanist point of view concerns on individual achievement in a planned situation (Stake and Denny, 1969).

### **Content of Programme Evaluation**

Cronbach (1963), stated that evaluation towards the effectiveness of the programme is focusing on results and execute one of the following results; first, a decision to improve the course, second, decision towards students and teachers, and third, decision regarding the administration and regulations. However, Talmage (1985), evaluated several aspects in the form of:

- i. Intrinsic value: Benefit and accuracy of the curriculum content.
- ii. Instrumental value: Determine the goals and targets of the curriculum.
- iii. Comperative value: Comparison between the curriculum in several aspects such as; courses or programmes, content, implementation and its objective.
- iv. Idealization value: The idea on how to make the programme in the best performance towards the achievement of respondents in every aspect.

- v. Decision Value: Determination on the result of curriculum whether to continue, suspended, modified or terminated.

### **Types of Programme Evaluation**

Scriven (1997) divided the programme evaluation into formative and summative. Formative evaluation was made during an ongoing programme, while summative evaluation was made at the end of a programme that aimed to collect information as a mean whether to continue or terminate a programme or after a programme ended to see overall effectiveness of the programme. Provus (1971) evaluated the effectiveness of the programme in terms of performance, standards and products.

According to Borg and Gall (1989), evaluation towards the effectiveness of the programme is usually made to determine the success of educational programme or focused on the level of success, the merit of respondent, syllabus design, content of the programme, implementation and objectives achievement of the programme itself (Longstreet and Suane, 1993).

### **Contex, Input, Product, and Process (CIPP) Model**

The model was adapted from the theoretical model designed by Stufflebeam and Shinkfield (1984), which focuses on improvement oriented evaluation. The aim is to make a decision towards one's course or an educational programme.

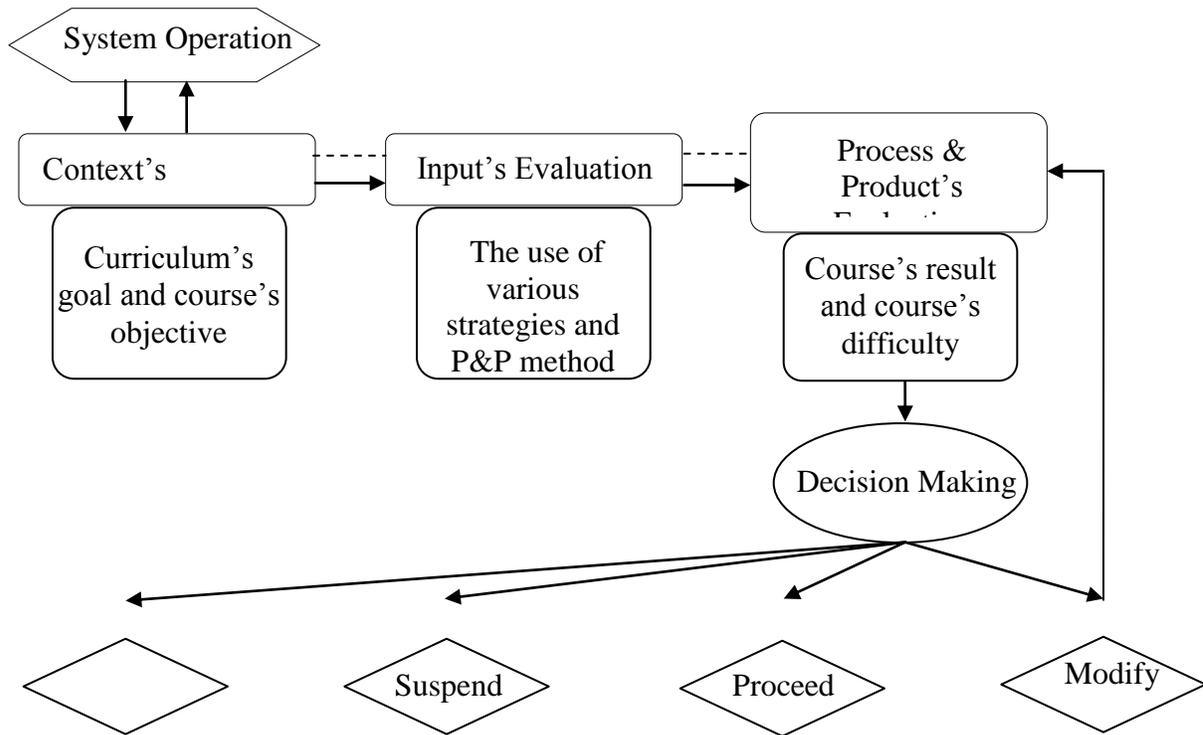
Briefly, through the CIPP model theory, evaluation of effectiveness of one course begins with an agency that operates the control system (course or programme) then followed by evaluation in the first dimension that is evaluation of context by setting the curriculum's goals to achieve. Next is the second dimension, evaluation of input focuses on using various strategies and methods of teaching and learning as the content of the courses. The third dimension is the evaluation of process that focused on the assessment of a process implementation and existing problems that can circumvent components of the programme in the form of context and input. Finally the fourth dimension is evaluation of product that focused on outcomes achievement of one's course or programme.

Stufflebeam (1981) stated that, the evaluation process can also be placed after assessment of a product because the process is significant to existing problems which could hinder the entire course including dimensions of context, input and product. In other words, the more problems exist, the harder to achieve the success of a course.

The decision must be made in product and process dimensions whether to terminate, suspend, proceed or modify the course. If modification is needed

for the course, the assessors are required to examine any weak dimension to fix until the first terminal that is operation system. CIPP model theory from the framework concept is as follows:

CIPP Theory Model



Source: Daniel L. Stufflebeam and Anthony J. Shinkfield (1984), *Systematic Evaluation: A Self-Instructional Guide to Theory and Practice*. Boston: Kluwer-Nijhoff Publishing, p. 167.

The CIPP model theory was designed by Feinch (1984) and developed by Cates. While Robert Stake (1968) had included responsive approach elements, as Michael Scriven (1966) added two evaluation elements that are formative and summative, while Patton (1978) and Cronbach (1980) included characteristics of evaluation and measurement in the CIPP model theory. With that, CIPP model theory was built with a combination of several leading icons in the field of effectiveness evaluation of educational programmes in USA.

CIPP model theory is used as theoretical framework in this research and has been studied by researchers starting from classic's theories until the implementation of CIPP model developed by modern researchers. Resources was referred from Scriven (1966) that include formative and summative

evaluation to the CIPP model theory to qualify any programmes to be included inside the regulation of course or the effectiveness of evaluation of the programme. Stake (1967) had placed the input and outcome inside the product to see the effectiveness of achievement of goals and its objective. Even Daniel L Stufflebeam (1968) is considered the founder and pioneer of CIPP model theory, James Longest (1975), Potton (1978) and Cronbach (1982) are the icons whose responsible for inserting the characteristics and measurement characteristics into the CIPP model theory.

While Cates (1985), Ayers, Gephart, and Clark (1989) and Abu Bakar Ibrahim (1990), had placed the characteristics of formative and summative evaluation into the CIPP model theory. Worthen and Sanders (1973) focused on decision making into the CIPP model theory.

In terms of its implementation, CIPP model theory had been used in various studies such as Muhammad Hj. Ihsan (1997) which use the CIPP theory model in evaluating the effectiveness of Diploma in Education programme at the Faculty of Education, University of Malaya through qualitative research.

Tan Hui Leng (1998) had used CIPP model theory, four dimension that are context, input, process and product (model theory 1973 - oriented implementation and decision-making of the programme) in evaluating the effectiveness of the course, Science's subject in the Teacher Training Programme (KPLI) with a combination of quantitative (descriptive statistic – percentage, mean and intervention statistics - correlation) and qualitative method.

Azizi Yahaya (1999) had applied theory CIPP model, four dimension that are context, input, process and product (CIPP model theory 1971 – product assessment orientation) in evaluating the effectiveness of subject Living Skill in secondary schools in Negeri Sembilan by using descriptive statistic survey (percentage and the difference of mean).

While Rosnani Hashim and Mohd Sahari Nordin (1998) in the action research had focused on product's dimension only from the CIPP model theory (model theory 1971 - oriented implementation's evaluation) in evaluating the effectiveness of Halaqah Ta'aruf Programme (Orientation Week for new students in the Faculty of Education, International Islamic University of Malaysia after ten years after of implementing descriptive statistics (Likert 3 Scale).

As a conclusion, CIPP model theory can be used as a basis to measure the effectiveness of DPLI programme. Theoretical framework of this research also will be the mould and basis towards method and measurement of research so that every design studies will be more easily understood and avoid it from sidetracked.

## Conclusion

David Pratt (1980) which stated a programme or course is considered effective and successful when the following criteria are met such as 90% of program participants excelled successfully (passing grade), 50% passed with distinction (honours), at least 8 out of 10 participants that were randomly selected had achieved the objectives of the program through test, the sequence of objectives had been achieved, there were no negative outcomes, throughout the 12 months following from the end of the programme, there is no proof showed that students failed to perform well that requires immediate treatment.

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