

EVALUATION MODEL OF EDUCATION PROGRAMS

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1. INTRODUCTION

Educational program evaluation is a series of activities carried out on purpose to see the level of success of educational programs. Evaluating educational programs is an activity that is intended to find out how much success the planned action is. In conducting the evaluation, a model is needed to measure and assess the educational program that will be evaluated.

This section will discuss educational program evaluation models that can be used by education observers in conducting monitoring. Among the models to be addressed are Goal-oriented Evaluation Model, Goal-free Evaluation Model, Formative-summative Evaluation Model by Scriven, Countenance Evaluation Model, Responsive Evaluation Model (Model Responsive Evaluation), CIPP Evaluation Model CIPP Evaluation Model (), CSE-UCLA Evaluation Model (Center for the Study of Evaluation, the University of California at Los Angeles), and Discrepancy Evaluation Model (DEM).

2. DEFINITION OF PROGRAM EVALUATION

The evaluation states that "a program evaluation theory is a coherent set of conceptual, hypothetical, pragmatic, and ethical principles forming a general framework to guide the study and practice of program evaluation" [1].

Described from the above understanding that program evaluation theory has 6 (six) characteristics, namely: comprehensive linkages, core concepts, tested hypotheses about how evaluation procedures produce the expected output, systems that can be applied, requirements ethics, and a general framework for guiding program evaluation practice and conducting research into evaluation program.

Meanwhile, other opinions state that program evaluation is:

Program evaluation is a set of mostly quantitative procedures used to understand the full costs of a program and to determine and judge what investments returned in objectives achieved and broader social benefits. The aim is to determine costs associated with program inputs, determine the monetary value of the program outcomes, compute benefit-cost ratios, compare the calculated rates to those of similar programs, and ultimately judge a program's productivity in economic terms. The benefit-cost analysis approach to program evaluation may be broken down, into three levels of procedure: (1) cost analysis of program inputs, (2) cost-effectiveness analysis, and (3) benefit-cost analysis [2].

Program evaluation is a quantitative procedure used to understand program financing and what it allocates to it to achieve program objectives. Program evaluation helps to determine budget allocation for inputs, impacts and outcomes of the program. There are 3 (three) procedures for the assessment of budget programs, namely input cost analysis, effectiveness analysis and benefit analysis.

Another opinion states that program evaluation is:

The use of social research procedures to systematically investigate the effectiveness of a social intervention that is adapted to their political and organizational environment and designed to inform social action in a way that improves social conditions [3].

Program evaluation uses standard research procedures to determine the effectiveness of program interventions that are implemented both politically and in an environment organizational.

A similar opinion states that program evaluation is

Program Evaluation is about understanding the program though a regular, systematic, delegate gathering of information to uncover and identify what contributes to the "success" of the program and what actions need to be taken to address the findings of the evaluation process [4].

The objective of program evaluation is "evaluation can be done to improve the plans for service or their delivery, to raise outcomes of programs, or to increase the efficiency of services" [5].

It is said that the purpose of program evaluation is a mechanism to monitor, systematize and increase the efficiency of activities to provide results or impacts in the form of better service from a program in the implementation of the work being carried out.

Program evaluation is critical, but not all parties can be involved. There are nine criteria for parties engaged in program evaluation, namely:

The process involves participants in learning skills; participants own the evaluation. They are active in the process; participants focus the assessment of what they consider essential, participants work together as a group, the whole evaluation process is understandable and meaningful to the participants, accountability to oneself and others is valued and supported, the perspective and expertise of all personnel are recognized and valued, the evaluator facilitates the process and is a collaborator and a resource for the team, the status of the evaluator relative to the team is minimized (to allow equitable participation) [6].

The program evaluation has different functions according to the background of the review, namely as follows:

The most common reasons for doing evaluation are to identify needed improvements to the evaluand (formative assessment); to support decisions about the program (summative evaluation), and to enlarge or refine our body of evaluative knowledge (ascriptive evaluation as in 'best practices' and lesson learned' studies and almost all assessments by historians) [7].

The description above explains that evaluation consists of three functions, namely a formative role, namely evaluation that is used for improvement and development of a program, service, summative namely assessment is used for accountability, information, selection or making decisions related to programs and diagnostic functions, namely to diagnose a program.

The definition of program evaluation in education has a slight meaning, different namely:

Educational program evaluation is the "systematic collection and analysis of information related to the design, implementation, and outcomes of a program, for monitoring and improving the quality and effectiveness of the program " [4].

Explicit evaluation refers to the achievement of goals, while implicitly evaluation must compare what has been achieved from the program with what should be made based on the standards set. In the context of implementation program, the criteria in question are the criteria for the success of the implementation, and the things that are assessed are the results of the process itself in the framework of decision making. Evaluation can be used to check the level of program success about the environment program with a "judgment" whether the program is continued, postponed, improved, developed, accepted or rejected.

The definition that emphasizes the role of evaluation in educational programs is expressed that:

That a formal evaluation has a vital role in education includes providing information used as the basis for: (1) make policies and decisions, (2) assess the results achieved by the students, (3) assess the curriculum, (4) gives credence to school, (5) to monitor the funds that have been granted, (6) repair materials and educational programs [8].

Based on these various definitions, it can be synthesized that program evaluation is a systematic and continuous process of collecting, describing, interpreting and presenting information to be used as a basis for making decisions, formulating policies and developing subsequent programs.

3. PROGRAM EVALUATION MODEL

a. Goal-oriented Evaluation Model The

Earliest evaluation model, developed starting in 1961, focuses on achieving educational goals, namely the extent to which predetermined learning objectives can be achieved. In the evaluation of educational programs, measurements are made of variables education (indicators). The measurement results are compared with the goals that have been determined before the application is implemented or with standard criteria. The results of these comparisons can illustrate the success or failure of educational programs.

This model uses program objectives as the criteria for determining success. The evaluator tries to measure the extent to which the goals have been achieved. Evaluation of this model will be carried out on an ongoing basis to continuously evaluate how far the objectives have been made in the program implementation process.

Evaluation model Goal-oriented evaluation Model (oriented Evaluation Model of Interest) is the oldest evaluation model developed Scriven. Goal-oriented Evaluation Model as "...any type of evaluation is based on the knowledge of - and referenced to ... the goals and objectives of the

program, person, or product," [7]. According to Scriven, the goal-based evaluation model goal is any type of evaluation based on knowledge and is referenced to program, person or product objectives.

Goal-based evaluation models generally measure whether the objectives set by policy, program or project can be achieved or not. This evaluation model focuses on gathering information that aims to measure the achievement of system, program objectives and plan for accountability and decision making. If a program has a purpose or has no valuable meaning, then it is a wrong program. The objectives are the goals to be achieved, the effect or the end of what the program will succeed.

b. Goal-Free Evaluation Model (Model Non-Interest Evaluation)

Evaluation that is not based on the objectives and program of activities. Goal-free evaluation is oriented towards external parties, consumers, stakeholders, the education council, the community. Michael Scriven developed this model. This model assessment assumes that for consumers, stakeholders, or the city "the goals of a program are not important". What is important for consumers is good behaviour that can be displayed by every person who participates in the activity program or every item produced. In the context of educational evaluation, goal-free does not mean that evaluators are blind or do not want to know about program objectives. However, evaluators limit themselves to not being too focused on the goal to be avoided and biased.

Another opinion states that:

But if one has some kind of needs assessment in hand, then one can use it to evaluate all effects, whether intended or not. Indeed, it is precisely the appropriate device for doing so. Consequently, one can completely by-pass the reference to goals. Programs, like products, should be evaluated by matching their effects against the needs of those whom they affect. The evaluator engages an investigator to find whatever effects an intervention products [7].

Evaluation of the goal free model focuses on changes in behaviour that occur as an impact, and the program is implemented, looking at side effects, both expected and unexpected, and comparing with before the program was implemented.

c. Formative-summative Evaluation Model by Scriven This

Evaluation model was developed by Michael, Scriven, differentiating evaluations into two types: formative assessment and summative assessment.

"... formative evaluation was defined as the process of judging an entity, or its components, that could be revised in form for the expressed purpose of providing feedback to persons directly involved in the formation of the entity" [6].

Formative evaluation, internal in nature, functions to improve institutional performance, develop programs/personnel, aims to determine the progress of program the ongoing(in-progress). Monitoring and supervision, included in the category of formative evaluation, is carried out while program activities are continuing, and will answer various questions.

Summative evaluation, carried out at the end of the program, aims to determine the success of the program that has been implemented, provide accountability for its duties, provide recommendations to continue or stop the program in the following year. The evaluation will be able to answer questions, the extent to which program objectives have been achieved, what changes have occurred after the program is completed, whether the application has been able to solve problems, what changes in behaviour can be displayed, seen and felt during program implementation.

d. Countenance Evaluation Model (Model Evaluation)

The evaluation focused on educational programs, to identify the stages of the education process and the factors that influence it. This model was introduced by Stake.

According to Stake, there are three stages of the program, namely the Antecedent phase, Transaction phase, and Outcomes phase. At each stage, it will reveal (describe) two things: What was wanted (intended) and What happened (observed). In detail, it is described as follows:

a) Antecedent phase, the phase before the program is implemented. The evaluation will look at the condition of the initial application, the factors that are expected to affect the success/failure, the readiness of students, teachers, administrative staff, and facilities before the program is implemented. b) Transaction phase, when the application is deployed. The evaluation focused on seeing the program goes according to plan or not, how people's participation, openness, independence principals. c) Outcomes phase, at the end of the program, to see the changes that occur as a result of a program that has been done. Are the implementers demonstrated good behaviour, high performance? Are clients (consumers) are

satisfied with the programs implemented and what behaviour changes that can be observed after the application is completed) [9].

The Stake Model can provide an in-depth overview of program implementation and detailed. Suppose an assessment of a program has been carried out. In that case, it is continued by making relatively similar comparisons between applications, or absolute comparisons, namely comparing a plan with a certain standard. There is a possibility that the description, on the one hand, differs from the judgment on the other. In this model, the input, process and outcome data are compared not only to determine whether there is a difference between the objectives and the actual situation, but also against an absolute standard for assessing the benefits of the program. .

e. Responsive Evaluation Model

After several years of performing and develop CountenanceModel, Stake led to the idea of Responsive EvaluationModel. This evaluation is developed in line with the development of personnel management and behaviour change. This evaluation model is suitable for social programs, arts, humanities, and problems that need to be addressed with the humanities aspect.

The evaluation focuses on the reactions of various parties to the implemented program and observes the impact and results of program implementation. In other words, it uses approach client-centred studies and transaction observation. This model is suitable for evaluating programs that cause conflict in the community. Evaluation decisions are oriented towards the client or program user. One opinion states that "responsive evaluation is an alternative, an alternative hold, based on what people do naturally to evaluate things, they observe and react ' [6]. In this model, the reactions of the program users are used as the basis for observations.

According to evaluation, it is called responsive if it meets three criteria:

- (1) More directly oriented towards program activities than program objectives, (2) Responding to the information needs of the audience, and (3) The perspective of the different values of the people served is reported in the success and failure of the program [10].

Educational evaluators must work for and have the support of educators who provide educational services. Evaluators serve a wide variety of clients, including teachers, school administrators, curriculum developers, taxpayers, legislators, financial sponsors and the general public who often have different needs. The evaluators must interact continuously to respond to the needs of their clients.

f. CIPP Evaluation Model

Stufflebeam introduced this model, the acronym CIPP and Context, Input, Process, Product, is an evaluation model that is oriented towards decision making. Stufflebeam argues that:

Corresponding to the letters in acronym CIPP, the model's core concept are context, input, process, and product evaluation. Context evaluation assesses needs, problems and opportunities as based for defining goals and priorities and judging the significance of outcomes. Input evaluation assesses alternative approaches to meeting requirements as a mean of plans to guide activities and later to help explain results. Product evaluation identifies intended and unintended issues to help keep the process on track and determine effectiveness [1].

Stufflebeam classifies evaluations into four types to be reviewed, and alternative decisions are taken and program stages that are evaluated. Of the four stages of assessment, each evaluation stage provides information on decision-making.

Evaluation, Contextcarried out at the stage of assessment, provides information for planning decisions(planning decision). Context evaluation will look at the contextual conditions, what are the expectations of the community, what is the vision and mission of the institution to be evaluated.

Evaluation Input, conducted in the early stages produce information for decision determination program implementation strategy(structuring decision). Input evaluation will see how the input conditions (input) both raw input and instrumental input. Raw data is the input that is processed into output, for educational institutions are students, learners; Instrumental contributions such as teachers, facilities, curriculum, management, are supporting data in program implementation.

Evaluation Process, carried out while the program is running, produces information about program implementation; Process evaluation will look at how program activities are running, participant participation, resource persons or teachers, teacher/instructor performances at PBM in class, how funds are used, how a teacher and student interactions in class. What percentage of success has been achieved, and estimate the victory at the end of the program. The type of decision was an implementing decision.

Evaluation Product, carried out at the end of the program, is to determine the success of the

program. The extent to which the objectives have been achieved, the obstacles encountered and the solutions, how the program's success rate includes: effectiveness, efficiency, relevance, productivity, and so on. Product evaluation produces information for program continuation decisions (recycling decision). Product evaluation is also the leader's accountability for the program, which is the responsibility of the stakeholder.

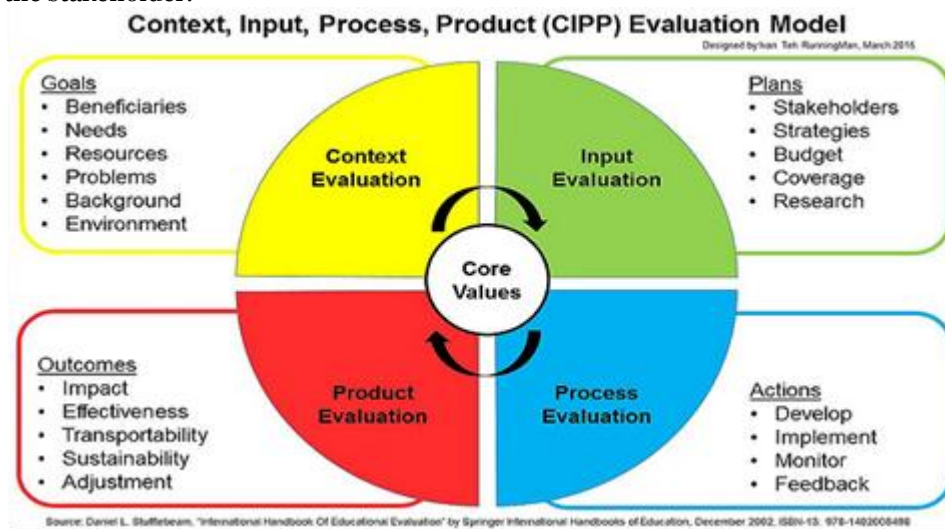


Figure 1. CIPP Evaluation Model Process

The CIPP model is a model that has relatively complete components, but the current condition of the CIPP model has been developed. One of the dominant developments is in product components. As quoted by Stufflebeam, "a product evaluation should assess intensive and unintended outcomes and positive and negative outcomes. Product evaluation should gather and analyze stakeholder's judgment of the enterprise"[1]. To determine the quality of the products produced from a program, it is necessary to measure the positive and negative impacts felt by related parties, including participants. Based on this, the CIPP model was developed by adding the Outcomes component so that the model became CIPPO. Outcomes have role important in evaluating because a program apart from being analyzed until it produces outputs or products, will be more comprehensive if it is continued until it gets an illustration of its impact (outcomes) so that it can provide a reference for the program to be extended or possibly stopped.

g. CSE-UCLA Evaluation Model (Center for the Study of Evaluation, the University of California at Los Angeles) The

Evaluation of the CSE-UCLA model is almost the same as the CIPP model, including category a comprehensive review. The CSE-UCLA evaluation involves five evaluation areas, are "these five areas these five areas represent attempts to provide evaluative information to satisfy unique decision categories: system assessment, program planning, program implementation, program improvement, program certification" [11].

The first stage of evaluation begins with the Needs Assessment, where the assessment identifies problems by looking for differences between the status program or actual and expected conditions. What issues are faced and what irregularities exist in the institution. The second stage of planning and development (program planning and development), looks at whether the planned program is appropriate to meet needs or achieve goals, and the decision to be taken is the selection of strategies to achieve program objectives. The third stage of implementation (program implementation), the evaluation focuses on program implementation. The review will answer the questions: did the program go according to plan, how did the teachers and students look, what were the impressions and attitudes of parents and the community, what was the teaching and learning process, what needed to be changed, fixed so that the program would run successfully at the end of the program. The fourth stage of results (improvement program), evaluation is carried out on the results achieved. The extent to which the application has been able to meet the planned objectives, whether the results were made as a result and the treatment given. The fifth stage of impact (program certification), the evaluation is focused on assessing the benefits and the program. Questions revolve around how the exists program, how the program benefits individuals and institutions, the type of recommendation at this stage is that the application needs to be developed, extended, modified, reduced or even stopped.

h. Discrepancy Evaluation Model (DEM)

The word discrepancy is an English term, which is translated into Indonesian into gaps. The model developed by Malcolm Provus is a model that emphasizes the view of deficiencies in program implementation. The program evaluation carried out by the evaluator measures the size of the difference in each component. Malcolm M. Provus first introduced the Discrepancy Evaluation Model (DEM) in 1971 in his book entitled Discrepancy Evaluation Model [1].

The evaluation of the DEM model discusses five stages of evaluation, namely: (1) design, (2) installation, (3) process, (4) product, and (5) cost. At each stage, a comparison is made between reality and standards. Before making a comparison, it is necessary to make a standard first. The standard for stages 2, 3 and 4 is the design of a program created in step 1. Rules that are different from the reality of the model compared to stage 1. The procedure used in phase 1 to get the existence of design is by meeting all staff levels to determine the plan. Before holding a meeting on the map, the evaluator of a program prepares several questions designed to get specific information about a program. After knowing the program design, it is then making a comparison in stage 1.

In stage 2, the evaluator compares the program implementation or reality with the program design. Meanwhile, in step 3, an analysis of the carried out design and fact of the program is to obtain an interim product. Furthermore, in stage 4, comparing the level at which the final product has been achieved (reality) is by the specifications of the products that have been determined in the design program (standard). Thus, stages 3 and 4 are measuring the final result (product), with specifications in stage 3 measuring internal goals, and step 4 measuring the ultimate goal.

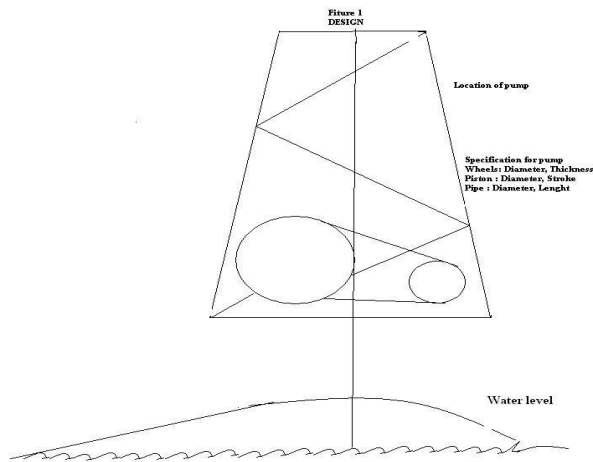
Stage 5 evaluates the cost of a program (reality) and compares it to the costs of other programs that have the same product and goals. This comparison allows the evaluator to make a policy to continue or stop a program.

The stages of the DEM model are in Provus' opinion, which states that:

The discrepancy evaluation model posits the five stages of evaluation: (1) design, 2) installation, (3) process, (4) product, (5) cost. At each of these stages, a comparison is made between reality and some standard or standards. The analogy often shows differences between standard and existence; this difference is called discrepancy. Based on the comparisons made at each stage, discrepancy information is provided to the program staff, giving them a rational basis on which to make adjustments in their program. Before a comparison can be made, a standard must be set. The standard for stage 2, 3 and 4 is the design of the program established in stage 1. The rule against which the reality of the model is compared in phase 1 is a set of design criteria. The procedure used in step 1 to obtain the existence of the design is the program design meets... At stage 2, we compare the program operation (reality) with the input and process sections of the program design (standard. At step 3, we investigate the relationship between process and interim products. The rule is the hypothesized relationship specified in the program design, and the reality is the degree to which perishable products have been achieved. Stage 3 work will be discussed in greater detail later. Once we have established that the stage 3 relationships specified do exist, we can move to stage 4 comparison. At step 4, we compare the degree to which final products have been achieved (reality) with the specification of these products in the program design (standard). Thus, we see that both stage 3 and 4 are concerned with measuring product; at step 3, interim goals and at stage 4, terminal goals [12].

Constance Mackenna emphasizes the same thing in his article "Making Evaluation Manageable" which explains that in the Provus model, an evaluator identifies problem areas through comparisons of program performance - what can be achieved in Extension - with standard program designs that have been carried out. The result is that it is not always the same as what was desired in the initial planning, here the discrepancy may occur. Provus furthermore strongly considers gap as an essential guide in the evaluation program. Therefore, he recommends that when there is a difference in the implementation of the program that is no longer in accordance with the initial should be designed, the program design standard changed.

The picture of the five stages based on the design and operation of the program in the field is as follows:



FigureDesign Model [12]

Meanwhile, the picture of program implementation is as stated 2.DEMby Provus as follows:

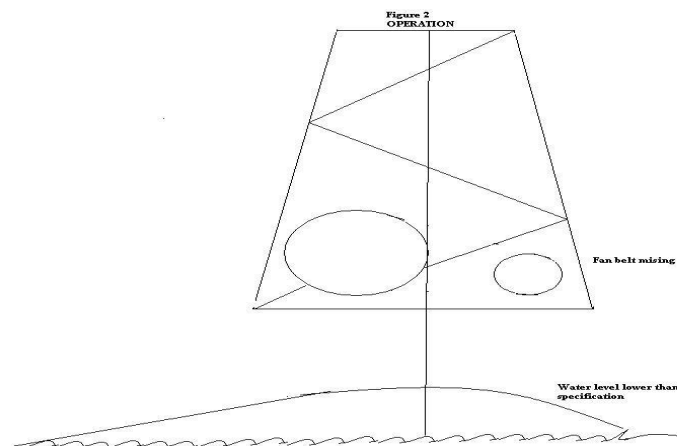


Figure 3. DEM Operation Model [12]

The evaluation model is an evaluation design developed by experts, with the intent or purpose it forms, where each model there are differences, especially in the evaluation review, the type of activity and the evaluation stages and the results it wants to achieve.

Provus believes that evaluation is an art (arts) to describe the imbalance between performance standards and performance that occurs. The concept of evaluating inequality is the same as the concept of Goal-Based Evaluation Model proposed by Ralph Tyler. According to the inequality evaluation model, evaluation requires six steps to carry it out, namely:

- Developing a design and standards that specify the characteristics of the ideal implementation of the evaluation (object of assessment) such as policies, programs or projects
- Planning evaluations using the discrepancy evaluation model. Determine the information needed to compare the actual implementation with the standards that define the performance of the evaluation object
- Capturing the performance of the evaluation object which includes implementation program, results in quantitative and qualitative
- Identifydiscrepanciesbetween the standards and the actual results of the evaluation object and

- determine the inequality ratio.
 e) Determine the cause of the imbalance between the rules and the performance of the evaluation object. f) Eliminate inequality by making changes to the implementation of the evaluation object [13].

The image of the process of the inequality evaluation model is as follows:

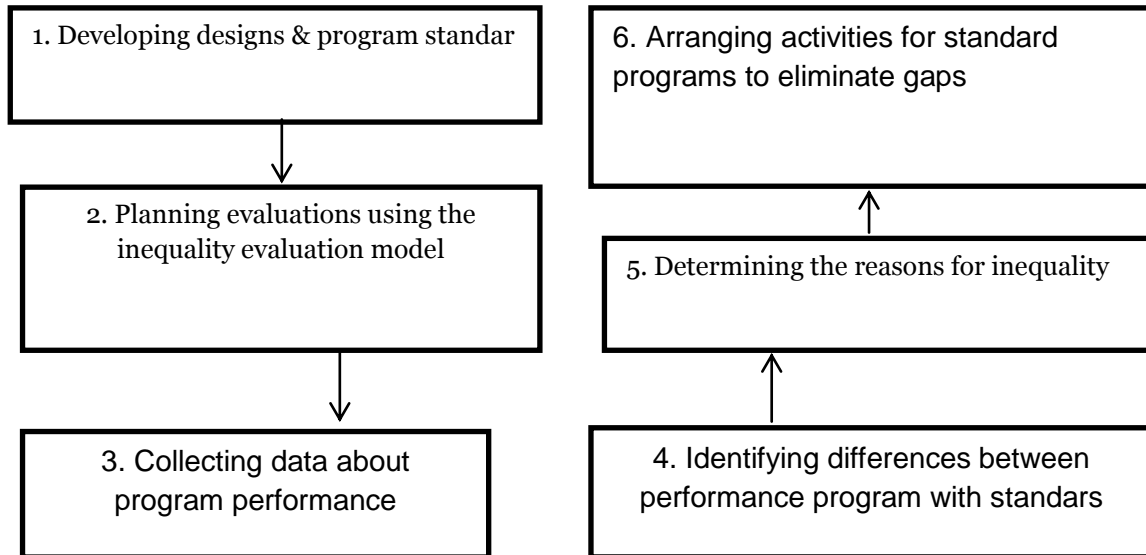


Figure 4. Inequality Evaluation Model Process (Arikunto, 2009)

Inequality is determined by studying three aspects of the program, namely: input, process and output at the levels of program development:

- a) Program definition that focuses on the design and the nature of the project, including objectives, students, staff, activities and so on.
- b) Program implementation
- c) Program process, focused on the developmental level where objectives are being achieved
- d) Program products or final matches outcome with standards or goals (Arikunto, 2009).

The evaluation of the DEM model uses the results of the review as a way to determine/take policies about programs that have been implemented: to be improved, to be continued, or discontinued. Patton, "the purpose of evaluation research, is to provide relevant and useful information to decision-makers, the criteria for use and relevance being negotiated with the decision-maker and information user during the conceptual phase of evaluation" [6].

The evaluation of the DEM model is a model that describes the circumstances between what is expected in the plan and that which is generated in program implementation. evaluation is Gapintended to determine the level of conformity between the standards set in the program and the actual appearance of the application by using:

- a. Standards are criteria that have been developed and established with effective results.
- b. Appearances, namely the resources, procedures, management and tangible results that appear when the program is implemented.

Suhasini Arikunto stated that the DEM or gap evaluation model has unique characteristics compared to other evaluation models. The gap model is flexible because it can and should be used in all types of programs (Arikunto, 2009). Thus, to complete the program assistance Bidikmisi scholarship at Djuanda University, Bogor to comply with the standards and regulations that have been made by the government through the guidelines that are rolled out every academic year, researchers are interested and feel it is essential to use the DEM model as a tool to determine the suitability between the designs used. Already exists with the actual reality at Djuanda University, Bogor.

Evaluation of the DEM model program is a process for (1) defining standards program, (2) seeing whether or not inequalities occur between several aspects of performance program and the standards of the program, and (3) using the gaps information to change performance or replace standards.

Provus defines evaluation as a tool to make a judgment on the advantages and disadvantages of an object based on the standards and performance. This model is also considered to use a developmental approach and is oriented towards systems analysis. Rules can be measured by answering the question of how the program works. At the same time, the achievement is more about what happened. According to Provus, evaluation is to be constructive and affirmative, not to judge. The DEM evaluation model is a program evaluation model that emphasizes the importance of understanding the system before evaluation. This model is a procedure problem-solving for identifying weaknesses (including in official selection) and for taking corrective action. The stages of the DEM evaluation model are as follows:

- a. The design stage, which contains a) a description of the goal, process, or activity and then b) describes the required resources. These expectations or standards are the basis on which ongoing evaluation depends.
- b. Installation stage, which is the implementation of the program design/definition stage into a standard to be compared with the initial operation of the program. The idea is to determine the same and congruence, whether or not the application has been implemented as designed.
- c. Process stage, which is to carry out the evaluation stage marked by data collection to maintain program implementation. The idea is to pay attention to progress and then determine the initial impact, effect, or effect.
- d. Product stage, namely data collection and analysis that helps to determine the level of target achievement of the outcome. In step 4 the question is "Have the program objectives been achieved?" The hope is to plan a follow-up long-term with an understanding of the impacts.
- e. The cost stage, which is the stage showing the opportunity to compare the results with those achieved by other similar approaches. In each of the four steps of comparison the standard with program performance to determine if there is conflict.

Another approach heavily influenced by Tyler's thinking was developed proves by based on evaluation assignments at a public school in Pittsburgh, Pennsylvania. Provus (1973) views assessment as a process of sustainable information management designed to provide services as the watchdog of program management and the assistant of administration in the management of program development through sound decision making.

Evaluation is carried out by measuring performance at each stage of the program and comparing it with predetermined standards. So that by comparing the standard with the performance it will be known discrepancy that occurs. Each step of the program will be interpreted to assess the success of the program as a result of the evaluation. Several evaluation questions are expressed in the DEM evaluation model: Is the program well-identified and apparent, well structured, well implemented, enabling objectives can be achieved, and whether the final goals of the program have been met. In evaluating a particular object, the researcher must have a standard by which to compare it with the object under study. What is meant by standard (S) is a list, descriptive or representation of the qualities that should be possessed or achieved. By understanding an object based on these standards, you can measure the performance (P) of that object. The image of the DEM evaluation model is as follows:

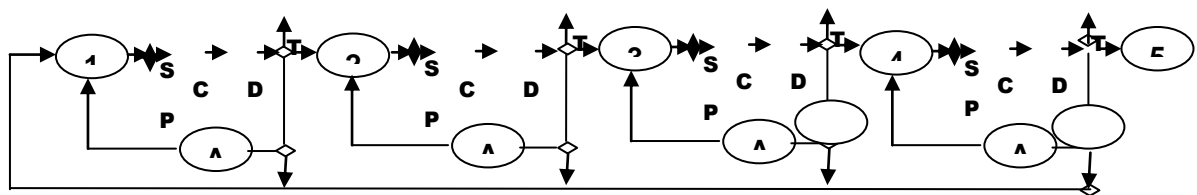


Figure 5. DEM Evaluation Model [12]

S is the program standard, P is the program performance, C is the comparison, D is the difference information, A is the change in program performance or measure, and T is program termination. Stage 5 represents the cost and benefit evaluation options that can be used by the evaluator. Utilization of gaps or differences in information always leads to a decision whether to 1) proceed to the next stage, 2) return to that stage after a change in program or operation standards, 3) return to the stage initiator 4) discontinue the program.

This is in Malcolm Provus' opinion, which states that:

Here S is standard, P is program performance, C is compared, D is discrepancy information,

A is changed in program performance or standards, and T is terminate. Stage 5 represents the cost-benefit option available to the evaluator only after the first four stages have been negotiated. Notice that the use of discrepancy information always leads to a decision to either (1) go on to the next step, (2) recycle the stage after there has been a change in the program's standards or operations, (3) recover to the first stage, or (4) terminate the project [12].

In stage 1, an explanation of the program design is obtained as performance information. This performance is compared to the so-called standard design criteria. In step 2, the standard for assessing performance is the standard determined in stage 1. Meanwhile, information is a program obtained from field observations from the program installation. Policyholders can provide information on gaps, program managers or implementers to redefine the program or replace it. In stage 3, performance information is obtained or collected through the internal product of the program. Standards used are part of program design that describes the relationship between a program's process and results. Gap information is used to redefine the process and process relationships interim product or to improve control of the process carried out in the field. Stage 4, namely the standard, is part of the program design aimed at the goal final. Program performance information consists of the criterion measures used to estimate the effects of these objectives. At this stage, if the decision-maker has several projects with similar results, they may choose to do a cost and benefit analysis to see and measure the efficiency of the program.

This explanation is in Provus' opinion, which states that:

"At stage 1, a description of the program's design is obtained as" performance "information. This performance is compared with the design criteria postulated as a standard. The discrepancy between achievement and standard is reported to those responsible for the management of the program. At stage 2, the standard for judging performance is the program design arrived at in step 1. The program performance information consists of field observations of the program's installation. Discrepancy information may be used by the program manager to redefine the program or change installation procedures. At stage 3, performance information is collected on a program's interim products. The standard used is the part of the program design that describes the relationship between program processes and perishable products. Discrepancy information is used either to redefine the process and involvement of operation to the perishable product or to improve control of the process being used in the field. As stage 4, the standard is the part of the program design that refers to terminal objectives. The performance information program consists of criterion measures used to estimate the terminal effects of the project. At this point, if decision-makers have more than one plan with similar outcomes available to them for analysis, they may elect to do a cost-benefit analysis to determine program efficiency [12].

The same thing is clearly stated that the evaluation process is:

- a) Agreeing on standards
- b) Determining whether a discrepancy exists between the performance of some aspects of a program and standards set for performance
- c) Using information about the difference to decide whether to improve, maintain or terminate the program or some point of it [9].

Based on the evaluation model, there are advantages and disadvantages of each evaluation model. From the data that the researchers obtained during the grand tour initial, this study uses the DEM evaluation model. The DEM evaluation model offers approach practical and systematic evaluation needs in many aspects. DEM can be used to gather information that is essential in the decision-making process. The advantage main of DEM is its emphasis on self-evaluation and systematic program development.

Whatever gaps are found through evaluation, Provus recommends that problem solving be carried out cooperatively between evaluators and program management staff. The cooperation process that is carried out includes talking about: 1) why there are gaps, 2) what improvement efforts might be made, 3) which efforts are best prepared to solve the problems at hand.

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