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# The CIPP Model for Evaluation

DANIEL L. STUFFLEBEAM

*The Evaluation Center, Western Michigan University, MI, USA*

This chapter presents the CIPP Evaluation Model, a comprehensive framework for guiding evaluations of programs, projects, personnel, products, institutions, and evaluation systems. This model was developed in the late 1960s to help improve and achieve accountability for U.S. school programs, especially those keyed to improving teaching and learning in urban, inner city school districts. Over the years, the model has been further developed and applied to educational programs both inside and outside the U.S. Also, the model has been adapted and employed in philanthropy, social programs, health professions, business, construction, and the military. It has been employed internally by schools, school districts, universities, charitable foundations, businesses, government agencies, and other organizations; by contracted external evaluators; and by individual teachers, educational administrators, and other professionals desiring to assess and improve their services.<sup>1</sup> This chapter is designed to help educators around the world grasp the model's main concepts, appreciate its wide-ranging applicability, and particularly consider how they can apply it in schools and systems of schools. The model's underlying theme is that evaluation's most important purpose is not to prove, but to improve.

Corresponding to the letters in the acronym CIPP, this model's core concepts are context, input, process, and product evaluation. By employing the four types of evaluation, the evaluator serves several important functions. Context evaluations assess needs, problems, and opportunities within a defined environment; they aid evaluation users to define and assess goals and later reference assessed needs of targeted beneficiaries to judge a school program, course of instruction, counseling service, teacher evaluation system, or other enterprise. Input evaluations assess competing strategies and the work plans and budgets of approaches chosen for implementation; they aid evaluation users to design improvement efforts, develop defensible funding proposals, detail action plans, record the alternative plans that were considered, and record the basis for choosing one approach over the others. Process evaluations monitor, document, and assess activities; they help evaluation users carry out improvement efforts and maintain accountability records of their execution of action plans. Product evaluations

identify and assess short-term, long-term, intended, and unintended outcomes. They help evaluation users maintain their focus on meeting the needs of students or other beneficiaries; assess and record their level of success in reaching and meeting the beneficiaries' targeted needs; identify intended and unintended side effects; and make informed decisions to continue, stop, or improve the effort.

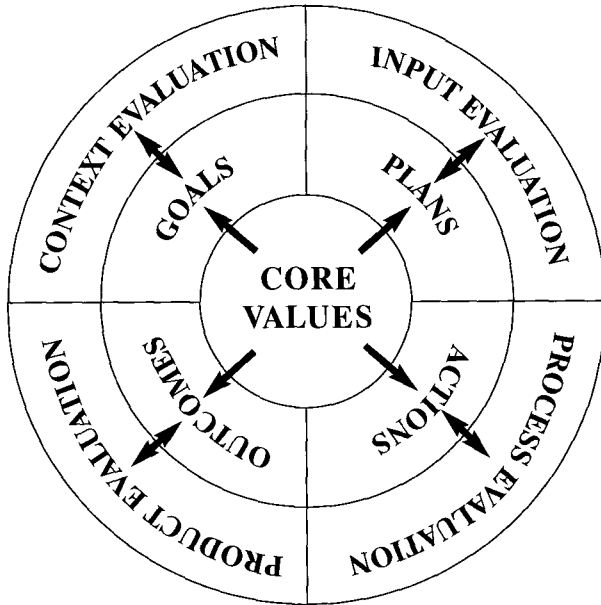
According to the CIPP Model, evaluations should serve administrators, policy boards, military officers, and other clients; teachers, physicians, counselors, clinicians, engineers, social workers, and other service providers; students, parents, patients, and other beneficiaries; and funding organizations, regulatory bodies, and society at large. Evaluators should present their audiences with evaluations that help develop high quality, needed services and products; help identify and assess alternative improvement options; help assure high quality and ongoing improvement of services; certify the effectiveness of services and products; expose deficient, unneeded, and/or unsafe services and products; and help clarify the factors that influenced an enterprise's success or failure. Thus, the CIPP Model is oriented to administration, development, effective service, prevention of harm, accountability, dissemination, and research.

This chapter introduces the CIPP Model by presenting a general scheme to show relationships among the model's key components. Next, evaluation is defined. The chapter subsequently delineates the CIPP Model's improvement/formative and accountability/summative roles. It follows with a brief discussion of self-evaluation applications of the model. Following discussion of the model's use for improvement purposes, general guidance and an example checklist are provided for using the model for accountability purposes. Context, input, process, and product evaluation are next explained in some detail as applied mainly to group efforts; these explanations include a few cogent examples and a range of relevant techniques. The chapter is concluded with guidelines for designing the four types of evaluation. The Evaluation Center's<sup>2</sup> experiences in applying the model are referenced throughout the chapter.

## A GENERAL SCHEMA

Figure 1 portrays the basic elements of the CIPP Model in three concentric circles. The inner circle represents the core values that provide the foundation for one's evaluations. The wheel surrounding the values is divided into four evaluative foci associated with any program or other endeavor: goals, plans, actions, and outcomes. The outer wheel denotes the type of evaluation that serves each of the four evaluative foci. These are context, input, process, and product evaluation.

Each double arrow denotes a two-way relationship between a particular evaluative focus and a type of evaluation. The task of setting goals raises questions for a context evaluation, which in turn provides information for validating or improving goals. Planning improvement efforts generates questions for an input evaluation, which correspondingly provides judgments of plans and



**Figure 1: Key Components of the CIPP Evaluation Model and Associated Relationships with Programs**

direction for strengthening plans. Improvement activities bring up questions for a process evaluation, which in turn provides judgments of actions and feedback for strengthening them. Accomplishments, lack of accomplishments, and side effects command the attention of product evaluations, which ultimately judge the outcomes and identify needs for achieving better results.

These reciprocal relationships are made functional by grounding evaluations in core values, as denoted by the scheme's inner circle. The root term in evaluation is *value*. This term refers to any of a range of ideals held by a society, group, or individual. Example values – applied in evaluations of U.S. public school programs – are students' meeting of state-defined academic standards, equality of opportunity, human rights, technical excellence, efficient use of resources, safety of products and procedures, and innovative progress. Essentially, evaluators assess the services of an institution, program, or person against a pertinent set of societal, institutional, program, and professional/technical values. The values provide the foundation for deriving the particular evaluative criteria. The criteria, along with questions of stakeholders, lead to clarification of information needs. These, in turn, provide the basis for selecting/constructing the evaluation instruments and procedures and interpreting standards. Evaluators and their clients must regularly employ values clarification as the foundation of their evaluation activities.

## A FORMAL DEFINITION OF EVALUATION

The formal definition of evaluation underlying the CIPP Model is as follows:

Evaluation is the process of delineating, obtaining, providing, and applying descriptive and judgmental information about the merit and worth of some object's goals, design, implementation, and outcomes to guide improvement decisions, provide accountability reports, inform institutionalization/ dissemination decisions, and improve understanding of the involved phenomena.

This definition summarizes the key ideas in the CIPP Model. The definition posits four purposes for evaluation: guiding decisions; providing records for accountability; informing decisions about installing and/or disseminating developed products, programs, and services; and promoting understanding of the dynamics of the examined phenomena. It says the process of evaluation includes four main tasks: delineating, obtaining, providing, and applying information. Hence, trainers should educate evaluators in such areas as systems thinking, group process, decision making, conflict resolution, consensus building, writing reports, communicating findings, and fostering utilization of evaluation results. To fully implement the evaluation process, evaluators also need technical training in collecting, processing, and analyzing information and in developing judgmental conclusions. The definition also notes that evaluators should collect both descriptive and judgmental information; this requires employment of both quantitative and qualitative methods. According to the definition, evaluations should assess goals, designs, implementation, and outcomes, giving rise to the needs, respectively, for context, input, process, and product evaluations. Also highlighted is the fundamental premise that evaluators should invoke the criteria of merit (the evaluand's quality) and worth (its costs and effectiveness in addressing the needs of students or other beneficiaries).

The CIPP Model also posits that evaluators should subject their evaluations and evaluation systems to evaluations and that such metaevaluations should invoke appropriate standards. The standards for judging evaluations that employ the CIPP Model go beyond the traditional standards of internal and external validity employed to judge research studies. The standards employed to judge CIPP evaluations of North American public school programs and personnel include utility, feasibility, propriety, and accuracy (Joint Committee, 1981; 1988; 1994). These standards are targeted to educational evaluations in the U.S. and Canada, but they provide examples that other countries can consider as they develop their own standards for educational evaluations.

## THE CIPP MODEL'S IMPROVEMENT/FORMATIVE AND ACCOUNTABILITY/SUMMATIVE ORIENTATIONS

The CIPP Model is designed to serve needs for both formative and summative evaluations. CIPP evaluations are formative when they proactively key the

collection and reporting of information to improvement. They are summative when they look back on completed project or program activities or performances of services, pull together and sum up the value meanings of relevant information, and focus on accountability.

The relationships of improvement/formative and accountability/summative roles of evaluation to context, input, process, and product evaluations are represented in Table 1. This table shows that evaluators may use context, input, process, and product evaluations both to guide development and improvement of programs, projects, or materials – the formative role – and to supply information for accountability – the summative role. Based on this scheme, the evaluator would design and conduct an evaluation to help the responsible teachers, principals, or other service providers plan and carry out a program, project, or service. They would also organize and store pertinent information from the formative evaluation for later use in compiling an accountability/summative evaluation report.

While improvement/formative-oriented information might not answer all the questions of accountability/summative evaluation, it would help answer many of them. In fact, external evaluators who arrive at a program’s end often cannot produce an informative accountability/summative evaluation if the project has no evaluative record from the developmental period. A full implementation of the CIPP approach includes documentation of the gathered formative evaluation evidence and how the service providers used it for improvement.

This record helps the external summative evaluator address the following questions:

1. What student or other beneficiary needs were targeted, how pervasive and important were they, how varied were they, how validly were they assessed,

**Table 1. The Relevance of Four Evaluation Types to Improvement and Accountability**

	<i>Context</i>	<i>Input</i>	<i>Process</i>	<i>Product</i>
<i>Improvement/ Formative orientation</i>	Guidance for choosing goals and assigning priorities	Guidance for choosing a program/ service strategy  Input for specifying the procedural design, schedule, and budget	Guidance for implementation	Guidance for termination, continuation, modification, or installation
<i>Accountability/ Summative orientation</i>	Record of goals and priorities and bases for their choice along with a record of assessed needs, opportunities, and problems	Record of chosen strategy and design and reasons for their choice over other alternatives	Record of the actual process and its costs	Record of achievements, assessments compared with needs and costs, and recycling decisions