Conducting Impact Evaluation
for Judicial Branch Education

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Foreword by
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FOREWORD

One Judicial Branch Educator's Views on and Experiences with Impact Evaluation

Advocating for improved evaluation strategies in judicial branch education is not new. During the 1993 National Association of State Judicial Educators (NASJE) Annual Conference, Livingston Armytage and John Hudzik squarely addressed the need for measuring judicial branch education programs' impact. Again, in 1999, Maureen Conner and I revisited the issue of implementing impact evaluation protocols in judicial branch education. Yet, whether by benign neglect, limitations on judicial branch educators' resources, or general disinterest in the subject, judicial branch educators have generally resisted embracing or implementing impact evaluation strategies.

It is critical to note that public sector educators, especially judicial branch educators, labor under greater constraints than do our private sector counterparts when conducting impact evaluations. Generally, private sector educators can more easily measure the resulting impact or outcome of their corporate training efforts. After all, the ultimate goal of corporate training is to increase production, improve profits, decrease waste, or enhance consumer satisfaction with purchased products. It is, relatively speaking, easy to measure increased production of widgets resulting from delivering an "increasing production capacity" course. But judicial branch educators deal with a far different product than do corporate trainers. Judicial branch educators must evaluate the more elusively quantifiable value added to society resulting from educational activities. Measuring improved administration of justice, as opposed to increased production of widgets, can be a most challenging and frustrating quest.

I wish to state to my judicial branch education colleagues my case for implementing impact evaluation as part of our educational programming. Clearly, there are compelling reasons to engage in such evaluations, but discourse on this subject demands a level semantic playing field. There are many types and levels of evaluations, and many evaluation strategies.

Defining Evaluation Terms and Processes

There are two general types of evaluation methods. The first, and most commonly employed type of evaluation in judicial branch education, is termed *process* evaluation. Process evaluations assess the quality of the students' satisfaction with the training received. Examples of process evaluation often include students' written critiques of a recently completed class. These include open-ended surveys and Likert scale instruments to measure students' satisfaction with faculty, materials, content, and

learning settings. Process evaluation findings are often used to modify subsequent training or curriculum design.

This monograph only addresses *process* evaluation as the initial step in planning and implementing several levels of evaluation. It instead focuses on a second type of evaluation commonly referred to as *impact* or *outcome* evaluation. Impact evaluation assesses the value of, or impact caused by, the training delivered. Impact evaluation differs significantly from process evaluation. Unlike process evaluation, impact or outcome evaluation measures the change in students' subsequent behavior—the observable impact caused by the training event. Typically, impact evaluation includes measuring improved performance or productivity following specific training events.

In discussing impact evaluation, which this monograph covers in great detail and I summarize here, it is useful to borrow from Kirkpatrick's (1998) hierarchy of evaluation levels. Kirkpatrick's model sets forth four levels of evaluation. Kirkpatrick characterizes the first and lowest level, in terms of empirical sophistication, as *reaction* evaluation. Similar to the process evaluation methods often used by judicial branch educators, reaction evaluations measure participants' satisfaction with the learning event.

Kirkpatrick's second level of evaluation is termed *learning* evaluation. Learning evaluation takes the incrementally improved step of measuring the student's mastery of skills, knowledge, and abilities resulting from the learning event. Frequently, this evaluation method employs post-training testing of students to determine the learning event's efficacy.

Kirkpatrick's level three *behavior* evaluation methods go even further in evaluating the training event's impact. Rather than merely measuring improved knowledge or changed attitudes, behavioral evaluation actually measures whether the knowledge and skills learned are being applied in the workplace. As known from our collective experience, learning can occur and not be accompanied by changed behaviors or attitudes. Implicit in behavioral evaluation is the question, what good does learning accomplish if it does not result in improved on the job performance, behavior, or attitudes?

The pinnacle of evaluation methods, in Kirkpatrick's view, is what he terms level four *results* evaluation. This level of evaluation is truly *impact* evaluation. Results evaluation goes beyond determining whether training changes behaviors or attitudes. It seeks to answer the ultimate evaluation inquiry, has the training resulted in *organizational impact?* For example, can the learning delivered be tied to an increase in corporate profits? a waste reduction? increased customer satisfaction with overall service and product quality?

For judicial branch educators, the inquiry strives to measure impacts on the organization and society such as, has the learning delivered resulted in an improvement in

public confidence in the judicial system? more expeditious handling of cases? greater access for citizens with diverse cultural backgrounds or citizens who are physically challenged? Measuring education and training impacts is a truly worthwhile evaluation goal for judicial branch educators. Moreover, it may soon become mandatory.

One example of impact evaluation in judicial branch education could be measuring, before and after court clerks attend a case management class, the average elapsed time the clerks take to process actual case files. This example borrows from an actual impact evaluation we initiated in Virginia after providing *Calendar Management and Delay Reduction* training to juvenile judges and court clerks across Virginia.

The impact evaluation process involved several steps. In Virginia, we began by revisiting the missions and visions developed for our court system's two-year strategic plan. Prominent in that plan was the goal of realizing more efficient and timely resolution of juvenile court cases. Next, we refined our curriculum learning objectives. Simultaneously, we asked ourselves how we would ultimately measure the success and impact of the training. We concluded that a multi-phased, qualitative and quantitative impact evaluation strategy would be most appropriate.

Prior to initiating the delay reduction training, we sampled various types of juvenile cases to determine the average length of time to final case disposition. We also wanted to measure the training's impact on litigant satisfaction with the trial process and determine how long litigants waited in court for their case to be called. To determine the baseline wait, we conducted exit surveys and face-to-face interviews. We then delivered various training sessions.

At the conclusion of the training, similar post-training evaluations were conducted. We again measured the amount of time that transpired from case filing to final disposition, the amount of time litigants waited in court to have their case called, and litigants' overall satisfaction with the litigation process.

Coping with Scarcity Reality: Continuing Competition for Limited Public Funding

Judiciaries and judicial branch educators frequently have to compete for diminishing state resources. Simultaneously converging with this political reality is the growing public demand for judicial branch fiscal responsibility and decision-making accountability. Further compounding these pressures is palpable erosion of judicial branch independence. For example, an increasing number of state legislatures are mandating judicial training while insisting the judicial branch disclose and justify its training expenditures. This scrutiny will likely become more acute, compelling forward-looking judicial branch educators to develop evaluation techniques to measure the *value* judicial branch education adds to society. Stated more pragmatically, judicial branch educators must devise more sophisticated, yet affordable, means of justifying their training expenditures and strategies.

Most corporate trainers operate in internally competitive environments, which require continual justification of training budgets and expenditures. Intuitively, we know corporate training budgets are among the first casualties of economic downturns. Corporate trainers know well they must objectively demonstrate the corporate value added through employee training. Motorola, considered by many a premiere corporate training example, has taken that science to a new level. For example, during a Motorola presentation I attended, the Motorola spokesperson represented that its internal research quantitatively demonstrates that every dollar expended on employee training results in three dollars of cost savings or increased profits. Those conclusions are not necessarily transferable to other corporate trainers or judicial branch educators. However, those who follow computer chip stocks, or the currently depressed consumer market for computer microchips, can appreciate the intense fiscal scrutiny Motorola's training department must be undergoing. But corporate training departments that are positioned to quantify and objectively demonstrate the precise value added by training expenditures are also positioned to weather turbulent, volatile industry downturns.

Judicial branch educators cyclically experience similar competition for limited resources and encounter external scrutiny of their departments' budgets. In fact, Virginia's 1999 survey of judges and court officials revealed that the judicial system ranked *scarcity reality*, continuing competition among government agencies for limited public funding, as one of the most pressing concerns and significant trends affecting the judiciary. Moreover, all of us are aware of the increasingly popular political trend toward privatizing many traditional public-sector services. Judicial branch education is clearly not beyond that movement's reach. Coupling these trends with the changing dynamics of federal-state revenue-sharing arrangements should shatter any cozy conception that scarcity reality is irrelevant to state judicial branch educators. Despite the commonality of competing for limited resources, I perceive two key distinctions in the way corporate trainers compete for internally scarce resources and the prevailing strategy employed by many state judicial branch educators in securing public funds. Recognizing and considering these distinctions may help us rethink our approach to garnering financial support. This recognition should at least compel our interest in embracing impact evaluation strategies.

The first distinction involves the *proactive* versus *reactive* dichotomy. It is my general sense, having served in both private- and public-sector capacities, that corporate trainers subscribe to a proactive strategy when dealing with scarcity reality. Corporate trainers routinely anticipate the need to demonstrate and conduct value-added evaluative assessments of their training efforts. This evaluation strategy allows them to quickly mobilize arsenals of objective support to sustain training initiatives. They accomplish this through sophisticated use of evaluative methods and benefit-cost analyses. We, as state judicial branch educators (and I reticently include myself in this critical assessment), *viscerally* assess the value added by our training initiatives. I am equally reticent to add that, all too frequently, we deal with our respective scarcity realities in a fashion that would turn the most philosophically entrenched fatalist green with envy. In short, I

believe judicial branch educators and their courts' administrative offices often assume a more passive, reactive strategy than their corporate counterparts when sensing their educational budgets are vulnerable.

Granted, the very political milieu in which we operate, shaped by the doctrine of separation of powers and the unique constraints placed on the judicial branch, clearly distinguishes us from private-sector educators. However, those distinctions do not absolve judicial branch educators from thinking strategically and acting proactively. In light of the above-mentioned trends, I would argue we are *obliged* to borrow a more proactive approach from the Motorola or corporate model. This plea raises a pragmatic question. How do we do so? The answer to that question points to the second key distinction between the way corporate trainers and judicial branch educators compete for limited resources.

As previously discussed, many corporate trainers employ sophisticated evaluative techniques to measure objectively the value added by training programs. Virtually all corporations maintain statistics regarding improved safety records or error-free units produced per work hour, increased profits, or reduced waste. Exceptional corporate-training executives, however, also demonstrate a correlative relationship between these outcomes and specific training initiatives.

Temporarily ignore, if you will, the obvious distinction between producing widgets for a profit and what judicial branch educators aspire to produce—improved administration of justice. Imagine the persuasive force behind your next funding request if you could marshal evaluative results similar to those produced by your private-sector counterparts. During the 1999 NASJE Annual Conference, Maureen Conner and I discussed various evaluative opportunities available to judicial branch educators. For example, imagine being able to demonstrate (1) the nexus between courtroom demeanor training for judges and a reduced number of formal complaints filed against judges for discourteous behavior, (2) a causal relationship between conducting calendar management/case flow management workshops in a particular jurisdiction and a reduced average time to final case disposition in that same jurisdiction (accomplished perhaps by conducting pre-training and post-training sampling of case files in that jurisdiction), or (3) more tolerant attitudes and perceptions, and fair treatment of culturally atypical litigants following cultural diversity training for court officials (perhaps by conducting qualitative exit interviews of litigants—those accessing the system before the training is conducted, and those accessing it after).

These are but a few of the qualitative and quantitative evaluative methods that, if effectively applied, can be harnessed to garner judicial branch educators' share of scarce public resources. Perhaps more importantly, marrying evaluative methods with a proactive, "be prepared to demonstrate a value-added" strategy can close the gap between private-sector and traditional judicial branch education practices. In light of the trends pointing to increasing competition for diminishing public funds, privatization of public-

sector functions, and dynamic changes in revenue-sharing patterns, judicial branch educators must be prepared to close that gap, or it may be done for us.

How Do We Begin Evaluation Efforts? It's the Vision Thing

With Draconian fervor, Motorola insists that every training program substantially relate to at least one of its stated corporate visions, missions, or articulated strategic objectives. Accordingly, a compulsory initial step in evaluating or designing any training program is to ensure its relevance in that regard.

Likewise, judicial branch educators' first step in developing an evaluation strategy should be to ensure that their court system's curricula or training events relate to at least one of the court's vision, mission, or strategic objectives. Blind adherence to the corporate-training model will not necessarily promote better administration of justice in all instances. Nevertheless, virtually every state judiciary or court administrative office has deliberately developed an organizational mission or vision statement or has articulated various objectives to be accomplished within a finite period. Those states that have not done so certainly send clear policy statements providing general direction and tenor for judicial branch educators. Yet, because of competing time demands, many of us routinely develop training programs without first testing the proposed curriculum's relationship to any of the foregoing.

I suggest, the court's vision and mission statements and organizational objectives are polestars by which judicial branch educators can evaluate, measure, test, and justify curriculum proposals. Stated alternatively, if a proposed training program has no relationship to a vision, mission, objective, or directive, would you not be hard-pressed to justify public expenditures on that training effort? In an age of increased competition for public funds, judicial branch educators may be required to engage routinely in this Motorola-like exercise.

Secondly, it is imperative that judicial branch educators obtain policy makers' or court system leadership's commitment to use evaluation methods. This is paramount for several reasons. First, evaluation methods are often expensive at worst, and time consuming at best. Expending resources to evaluate training events is traditionally not a high priority item for most court systems. This can be overcome by demonstrating that evaluations can help achieve important organizational goals, improve the effectiveness of future training, and perhaps most convincing, respond to public and/or political external demands.

Thirdly, judiciously employ evaluation methodologies. Applying impact evaluation, for example, to every course is neither recommended nor desirable. The resources required for such an extensive effort will not be justified by the findings. Instead, select learning opportunities that are particularly important to the overall goals of your court or those anticipated to receive considerable resistance from learners.

Lastly, use the results to improve subsequent training events and your routine needs assessment efforts. When used this way, the evaluation event is really an important point in an organizational effort that resembles a circle. The circle begins by identifying the court system's relevant goals and objectives. Next, needs assessments are conducted to determine learners' preferences in achieving those goals. Training is then designed to advance one or more of those goals. Closing the circle, various evaluation methods can be employed, during and after the learning event, to measure learner satisfaction, determine if learning is taking place, confirm knowledge is improving or behaviors are changing, and finally, whether your organization or society is being impacted by the learning efforts.

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Supreme Court of Virginia

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How long the road is.
But, for all the time the journey has already taken,
How you have needed every second of it
In order to learn what the road passes by.

DAG HAMMARSKJOLD

From Dag Hammarskjold, *Markings.* Translated by Leif Sjoberg and W.H. Auden. (New York: Ballantine Books, 1983), 68.

INTRODUCTION

The purpose of this monograph is to provide judicial branch educators with the requisite information to implement an evaluation strategy for their education and training programs—a strategy that includes impact evaluation. The judicial branch *educator*, in addition to his or her usual roles, throughout this monograph, is treated as the person who plans and conducts the evaluation. Regardless of whether the educator actually does the evaluation, he or she must understand the process to participate effectively in it.

The evaluation models, steps, and forms offered here enable the judicial branch educator to lead the judicial branch forward in validating and valuing education and training efforts and expenditures in relationship to organizational outcomes and outputs. Allan D. Pepper wrote about this validating and valuing process.

> *Validation* is establishing that what you set out to do, you have actually done. Thus the validation that is concerned with training means that, when the training is finished, someone inspects the evidence available to see whether the right things have been taught, in the agreed upon manner and to agreed standards, and that the trainees have learnt to an expected level of proficiency.…
> *Evaluation* of training, or, indeed, of anything, consists simply of putting a value to it. The person who undertakes to validate is not immediately concerned with saying whether he likes the thing he is validating, or whether any benefit arises from it, or whether it was the right thing to have done. He is concerned simply with saying whether or not it happened. But to evaluate training means undertaking a search for the effect that it has had on the people and the situations which it influences, and then trying to measure or estimate whether this is advantageous or disadvantageous. (Pepper 1992, 70)

Judicial branch educators want to know they have accomplished what they set out to do with the prescribed level of excellence. They also want to know that the education and training program made a difference for the participants, the courts, and the public. Indeed, "making a difference" is what judicial branch educators value most about their work (Conner 1999). This combination of factors generates a professional interest in applying evaluation strategies to their education and training efforts.

Evaluating education and training becomes more complex when it involves measuring improved work performance and organizational output and outcomes. The ultimate success of education and training cannot be known by simple, end-of-program evaluation. In fact, a successful program as defined by Parry implies that many levels of evaluation are needed.

> A training program is most successful when the right participants (selection) receive the right knowledge, attitudes, and skills (KAS, or content) taught by means of the right methods, media, and instructor (process) at the right time

(need to know) and place (location) so as to meet or exceed the organization's expectations (learning objectives and performance outcomes). (Parry 1997, 1)

Judicial branch educators have been, and will continue to be, challenged to prove the success of their programming. The level of proof required increases with the level of money and political and public interest involved. This monograph suggests that the levels of evaluation correspond to the levels of investment and interest displayed by stakeholders both internal and external to the courts.

This monograph strives to give the judicial branch educator more information about impact evaluation than the clients who are requesting it. Educators should use this monograph when developing programs for which impact evaluation is intended; or for helping to select and assess outside consultants hired, or to be hired, to conduct impact evaluation; or, indeed, for educators themselves to conduct an impact evaluation when necessary.

Chapter One contains an overview of several evaluation models; all propose using several levels of evaluation. Judicial branch educators who are aware of the various models are better able to describe and promote the model they have chosen to employ.

Chapter Two gives a detailed account of the Kirkpatrick evaluation model (1998), the model that provides the foundation for this monograph. In this model, there are four levels of evaluation ranging from simply measuring reactions to a program, to determining whether the organization was changed by the program. By employing this wide-ranging model, judicial branch educators can gauge at what level the program stopped having an impact and why; or, the extent to which the program changed individual and organizational performance.

Chapter Three provides guidance on planning and implementing a four-level evaluation system, with an emphasis on impact evaluation. It addresses the issues of commitment, needs assessment, evaluation objectives, client identification, client use of the evaluation results, data collection methods, isolating effects, attributing monetary values to benefits and costs, communicating the results, and exploring possible problems when embarking on impact evaluation.

Chapter Four offers a step-by-step process for planning and implementing impact evaluation. It departs from the structure of earlier chapters and contains checklists and planning forms for all six steps.

The last chapter, Chapter Five, contains closing remarks about impact evaluation. It offers encouragement to judicial branch educators who undertake impact evaluation.

The Appendix contains sample evaluation forms to assist the judicial branch educator in developing his or her own impact evaluation forms—forms with factors and indices germane to their organization and to the specific education and training efforts being evaluated.

CHAPTER ONE

Overview of Evaluation Models

Several evaluation models have been developed to measure the effectiveness of education and training. They all have one thing in common; they attempt to measure results as defined by those involved in the evaluation process. A brief review of each model will provide the reader with a picture of the different components or levels of evaluation that could constitute an evaluation system.

Kirkpatrick's Four Levels of Evaluation: Reaction, Learning, Behavior, and Results

This model (Kirkpatrick 1998) describes what information to collect and when. The first level measures the participant's reaction to the program. Reaction evaluation typically examines responses to materials, instructors, subject matter, facilities, logistics, and teaching and learning methods used during the program. This type of evaluation has been referred to as smile sheets or happiness scales. While such an evaluation may not provide information about results, it does provide valuable information about the learning experience, which could result in continuing, discontinuing, or modifying a particular offering. The second level is learning evaluation. The intent of this level of evaluation is to verify that the participant learned something. Learning can be measured in a variety of ways. Learning evaluation establishes whether the participant acquired the skills or comprehended the information conveyed. Behavior is the third level in this model. At this level of evaluation, the educator seeks to determine whether the participant's behavior changed based on what was learned. The feedback for this level of evaluation is collected after the participant returns to the workplace. Its purpose is to discover whether the participant's attendance at a particular program improved workplace behavior. The fourth and final level is results. If a behavior change was detected, the educator wants to know, at this level of evaluation, whether the change in behavior positively affected the organization. Results evaluation monitors organizational improvements such as cost savings or reductions, improved output, a positive change in quality, and increased profits based on the participant's attendance in education or training.

Kaufman's Five Levels of Evaluation: Inputs and Reactions, Competencies, Application in Workplace, Organizational Outputs, and Societal Outcomes

Kaufman's approach (Phillips 1997a) is similar to Kirkpatrick's. Level one is divided into two parts: enabling and reaction. Enabling considers inputs related to human, financial, and physical resources. Reaction considers methods, means, and processes. Level two is acquisition of competencies. Level three is application of what was learned in the workplace. Organizational output is level four. It measures the output

or contributions of the organization. Level five measures societal outcomes by evaluating society and client responsiveness, consequences, and payoffs.

The CIRO Approach: Context, Input, Reaction, and Outcome

Warr, Bird, and Rackham developed this evaluation approach (Phillips 1997a). It has four categories of evaluation: context, input, reaction, and outcome. Context evaluation assesses workplace information to determine training needs and objectives. Input evaluation analyzes both internal and external resources to determine how they can be used to achieve desired objectives. Reaction evaluation involves collecting and using participants' feedback to improve programming. Outcome evaluation requires collecting data to discover what outcomes have resulted from the training.

The CIPP Model: Context, Input, Process, and Product

The CIPP model (DuBois 1993, Phillips 1997a) originates from the work of members of the Phi Delta Kappa National Study Committee on Evaluation in 1970. It evaluates context, input, process, and product. Context evaluation may be considered a needs assessment. It helps identify needs to fill, opportunities to explore, and problems to address. Input evaluation determines what resources can be employed to develop the program and achieve the goals. Process evaluation assesses the effects of implementing the program. Product evaluation identifies intended and unintended results and examines their impact.

Phillips's Five-Level Return on Investment (ROI) Framework

This framework (Phillips 1997a, Phillips 1997b) measures reaction and planned action (level one), learning (level two), job application (level three), business results (level four), and ROI (level five). Level one evaluation measures the participant's satisfaction and reviews his or her plans to use what was learned during the program. Level two evaluates, via in-class demonstrations and exercises, what the participant learned. Level three ascertains, through on-the-job assessment, whether the participant applies any of what was learned. Level four looks at results the participant achieves when applying what was learned. Items measured could be output, quality, costs, and customer satisfaction. Level five measures return on investment (ROI). At this level of evaluation, the monetary benefits and costs of the program are compared.

There is no right evaluation model to follow. Each educator must determine, in concert with the larger organization, what kind of feedback is needed. The educator can then fashion an evaluation system that meets the information needs of the organization, as well as the education department. Each level or step in every model reviewed here can provide valuable information to improve education and training, and measure the outcomes or impacts on the individual, organization, and ultimately the public or organization's customers.

According to Phillips, the most often used evaluation model is the four-level Kirkpatrick model (Phillips 1997a, 44). It will be used in this monograph with an emphasis on, and enhancements to, behavior (level three) and results (level four) evaluation measures. Increasingly, the courts are asking educators to demonstrate that the courts have been improved or the public has been better served as a result of the dollars spent on education and training for judges and court personnel. Other private and public organizations are also asking with greater frequency that the effort and dollars spent on education and training demonstrate a positive result in the workplace. Understanding what evaluations can and cannot measure is crucial knowledge for the educator to possess.

CHAPTER TWO

Four Levels of Evaluation

This chapter sets out the four levels of evaluation in the Kirkpatrick model. It focuses on level three, behavior evaluation, and level four, results evaluation, as the core factors in measuring impact. A complete treatment of the Kirkpatrick model can be found in *Evaluating Training Programs: The Four Levels*, Second Edition, by Donald L. Kirkpatrick (1998). For more information on levels one and two, readers are encouraged to read JERITT Monograph One, *Judicial Education Needs Assessment and Program Evaluation* (Hudzik 1991). This monograph provides detailed information, including sample forms, for designing evaluation processes and collecting data. The evaluation and data can be summative, only assessing the completed program, or formative, also providing information for shaping or improving future programs.

Level One: Reaction Evaluation

Each level of evaluation builds on the previous level and provides pertinent information that can be used to improve programming or to improve the organization as a whole. Reaction is the first level of evaluation in the Kirkpatrick model. It measures participants' reactions to the education and training program. Often educators, instructors, and policy makers disregard the importance of reaction evaluation. But, measuring reactions to a program is very important for four reasons. First, reaction evaluation provides valuable feedback about the program and usually provides useful information for future programming. Second, it tells program planners what participants think is important. Third, reaction evaluation provides information to others who are interested in the participants' education and training. Fourth, feedback collected as part of the program can establish benchmarks for future programs.

Common subjects for reaction evaluation are knowledge and skill of the instructor, usefulness of the topics, appropriateness of the learning environment, helpfulness of the learning activities, usefulness of audiovisual aids and written materials, and achievement of the program goals and objectives. Typically, in the last half-hour of the program, participants complete reaction evaluations. However, depending on the length or complexity of the program, evaluation feedback can be collected throughout the program. Usually, written evaluation forms are used, but other methods can be considered. These include focus groups following the program; debriefing sessions, during or following the program, in which participants respond to a set of open-ended questions; phone interviews following the program; and small group discussions among participants with feedback reported to the group as a whole.

Reaction evaluation is one method of measuring customer satisfaction. Since the credibility of the education and training organization often rests on what people think

about its programming and not necessarily the results the programming produces, it is important to accurately gauge and document participants' reactions. Otherwise, how participants feel about a program can only be discerned when their feelings are related, usually by word of mouth, to others. Formally gauging and documenting participants' reactions can have a downside however. When participants receive education or training they are not in favor of, or which makes them feel uncomfortable, reaction evaluation results will likely be lower. An example of this in judicial branch education is the repeated exposure to mandated social issue or social context education and training. Judges and others, forced to attend programs in subjects they already feel well informed about due to prior experience, training, or education, may express their dissatisfaction through lower evaluation scores. For this reason and for many others, educators cannot rely on reaction evaluation alone. They need to consider, at a minimum, the next level of evaluation—learning evaluation.

Level Two: Learning Evaluation

Evaluating learning is more complex than evaluating reaction. If no learning takes place, then it is unrealistic to expect that a change in behavior will occur. Organization sponsored education and training can increase knowledge and improve competencies, but expectations for improved workplace performance will not be realized unless learning objectives for the participants were established prior to the program and met by its conclusion. At the outset, evaluating knowledge and skill acquisition for improved competencies can be perplexing. To resolve that difficulty, we will look at individual elements used for measuring each.

Measuring Knowledge

Knowledge encompasses facts, concepts, principles, rules, procedures, policies, and theories (Parry 1997, 113). Measuring knowledge involves questioning whether participants received, understood, accepted, and can apply it (Parry 1997, 113).

Bramley (1996, 73) contends that knowledge about a certain job or the workplace is acquired at three levels, each building on the other. The three levels are

Declarative knowledge. This basic level is "what knowledge." It includes recalling simple lists, stating simple rules, and knowing a range of simple facts about a certain job, activity, or area of knowledge or information.

Procedural knowledge. Procedure knowledge is "how knowledge." This level uses declarative knowledge to develop procedures, plans, and action steps.

Strategic knowledge. This third level of knowledge involves developing strategies based on an analysis of the problem or situation and making a decision on the best way to proceed.

If we accept Parry's and Bramley's suppositions, we rightfully conclude that delivering knowledge-based programming and measuring it requires multiple steps and methods. Bramley further contends that the function of education and training is to (1) analyze what is required for satisfactory job performance at all three levels, (2) determine what the participants know at each level prior to the programming, and (3) close the gap between what is required and what exists (Bramley 1996, 73-74).

To determine whether the education and training program closed the gap requires a variety of evaluation methods. Testing is one of the traditional means of measuring this possible knowledge change.

Written tests for adults in continuing professional education and training are not very popular because they often measure only what one knows, not if one can apply that knowledge. Therefore, written tests—essay, multiple choice, true/false, or short answer tests—can be only one aspect of measuring the extent of knowledge change. A second aspect, follow-up after participants have returned to work, is the only way to determine if the appropriate level of knowledge was taught, learned, and successfully applied. This type of evaluation can be done through interviews, observations, or written questionnaires. If on-site evaluation is not possible, simulation of real-life situations can be used, such as an in-basket exercise which measures both knowledge acquisition and application.

Measuring Skill

Skills can be easier to measure than knowledge; of course, it becomes more difficult the more complex the skill. Again, Bramley (1996, 81) has set out a hierarchical level, this time for skills. He has established four skill levels.

Communication. At this level, the participants must be able to communicate what they can do.

Simple Procedures. This level considers the participant's ability to follow simple procedures with or without written instructions or notes.

Skilled Action. Skilled action refers to applying skills that have been practiced to a prescribed level of perfection.

Judging. This level of skill involves the participant judging whether a work product meets established quality standards.

There are many ways to measure skill application. To measure new skills at the education and training program, educators can use simulation, role-plays, case studies, in-baskets, tests, and other exercises that force demonstration of new skills. Evaluating participants on the job is another method of measuring the application of new skills. Such evaluation can be costly and time consuming. A decision to measure skills on the job must have the approval of the educator and the organization where the measuring will take place.

Although many educators may want to eliminate evaluation at both the reaction and learning levels and go directly to outcome or impact evaluation, which in the Kirkpatrick model is level three (behavior) and four (results) evaluation, this is a mistake. Without evaluating at all four levels, the educator cannot be certain in what way the program either succeeded or failed to bring about the desired change. Kirkpatrick (1998, 21) identified four conditions necessary for change to occur.

1. The person must have a desire to change.
2. The person must know what to do and how to do it.
3. The person must work in the right climate.
4. The person must be rewarded for changing.

Kirkpatrick (1998, 21) further explained that education and training programs can motivate people to want to change and give them the necessary knowledge and skills to do so, but if the workplace climate and the immediate supervisor do not support the change, the benefits of the program will not be realized. Kirkpatrick (1998, 21) identified five different kinds of climates that can affect the impact of the education and training program.

Preventing. The supervisor will not allow the participant to do what was taught at the seminar.

Discouraging. The supervisor makes it clear that behavior should not change by indicating his or her displeasure directly or by not modeling the behavior.

Neutral. The supervisor promotes business as usual. The participant can change if he or she wants to, but the change is neither supported nor discouraged. However, if negative results occur, the supervisor will likely exhibit preventing or discouraging behavior.

Encouraging. The supervisor encourages the application of new knowledge and skills on the job. Ideally, the supervisor would have been involved in getting the participant to the program.

Requiring. The supervisor knows what the participant should have learned and takes extra steps to ensure that the learning is transferred to the job. Sometimes there is a learning contract involved, which commits the participant to implementing in the workplace what was learned in the program.

The educator must know the kind of work climate to which the participant is returning. There is little to no chance that learning transfer will occur if the climate is preventing or discouraging. The level of change possible in the neutral, encouraging, or requiring climate will depend on both the intrinsic and extrinsic rewards for the participant. In the event no behavior changes occur, the educator must evaluate at the reaction and learning level to determine whether it was the program or the work climate that was at fault.

To influence the work climate, the educator should involve supervisors and relevant others in the development and delivery of the program. This makes them more likely to support what the educator is attempting to accomplish; and their support increases the likelihood that learning transfer will occur and impact can be experienced and measured.

Level Three: Behavior Evaluation

Assessing whether behavior changes have occurred as the result of participation in an education and training program is the focus of a level three evaluation. At this level, impact evaluation truly begins. Effecting workplace behavior changes through participation in a program is difficult because workplace and program environments are so different. In addition, conclusively assigning behavior changes to participation in a program can be problematic due to the number of potential influences.

Transfer of Learning

Transferring what was learned to the workplace is the key factor in impact evaluation; therefore, we will discuss the transfer of learning in some detail before continuing with behavior evaluation guidelines. Several factors can influence transfer of learning. First and most importantly, as discussed previously, the work climate will largely dictate whether behavior change will occur in the workplace. Second, an opportunity to apply what was learned must be present. Third, the participant's early experiences applying the new behavior must be good or the participant will not likely try again.

Transferring new behaviors to the workplace and arranging for their support can be aided in several ways. One of the most important is to have clear, concise, and measurable learning objectives that participants can use to develop plans for implementing their new knowledge and skills, i.e., behavior changes, when they return to

their jobs. Sharing the objectives with those who will be supervising or interacting with the participant can help with workplace support and make clear what new behaviors are to be measured. Participants can also log their behaviors—those taught in the program—and track their perceived improvements as they go through the program. These can be shared with supervisors or other relevant individuals to gauge post-program improvements (Bramley 1996).

Behavior change is more likely to occur if the participant is supported after leaving the education or training experience. Educators should determine how they could offer encouragement and assistance to participants once they return to the workplace. Such efforts should be part of the program plan. Participants can experience pride and satisfaction in their efforts to apply new skills or information. External rewards are also effective. Supervisors need to determine whether the change should be rewarded by offering acknowledgements of the change, more freedom, recognition, salary increase, and so on.

Guidelines for Evaluating Behavior Change

Evaluating behavior change is more difficult than evaluating reaction and learning, but like reaction and learning evaluations, it can be done during and/or at the close of the program, as well as after the program. Kirkpatrick (1998, 49-57) offers seven guidelines for evaluating behavior change.

Use of Control Groups. Control groups are extremely difficult to use outside a laboratory. The experimental group receives the education and training, while the control group does not. The obvious purpose for using control groups is to determine whether change occurred and whether that change can be associated with what was learned at the program. In order for control groups to be effective and accurate, the educator must make certain that the groups have the same characteristics. If the characteristics are not the same, the results are invalid. It is this reason that makes using control groups so difficult. Educators typically cannot control for all the variables that could effect the results.

Allow Time for Behavior Change to Take Place. The educator must become informed about how long it will take the participant to have an opportunity to exhibit behavior change. Some job tasks occur daily while others may not occur for six months to a year later. Thus, the timing of follow-up evaluation is critical to evaluating behavior change.

Evaluate Before and After the Program. The educator can determine what the participant's skills were before the program and then determine how they changed after the program. This type of evaluation can be done

by asking the participant to self-assess, asking others in the work environment to assess, or assigning observers to the work environment.

Survey and/or Interview Persons Who Know the Behavior. The educator should receive feedback not only from the participant, but also from others who have close and continual contact with the participant. Candidates could include supervisors, staff members, peers, and others who are knowledgeable about the participant's activities. The educator must determine the best person or persons from whom to get information. Such a decision takes into consideration who is the most qualified, available, reliable, and cost effective to reach. The decision to use written surveys or interviews is likely to be based on the time and resources available, and on what kind of data the educator wants to capture. Interviews take longer. However, they typically yield richer qualitative information. Written surveys will provide quantitative data and some qualitative data. The difficulty is getting them completed and returned.

Get 100 Percent Response or a Sampling. The best practice is to survey all the participants. If that is not possible, the educator should conduct random sampling of the participant group. If limited time and resources are an issue, the educator can randomly select a handful of receptive participants and a handful of resistant participants to determine whether any changes occurred. The educator can extrapolate from the results to the rest of the group. Obviously, the best choice is to solicit feedback from all the participants.

Repeat the Evaluation at Appropriate Times. For all the reasons previously mentioned about opportunity to demonstrate behavior change, evaluation feedback should be collected at multiple intervals. To determine the intervals, the educator will need to have a thorough understanding of organizational operations, the work climate, and the people involved.

Consider Benefits versus Cost. Evaluation at the behavior change level can be costly in both time and money. At the very least, educator staff time, as well as the time of the participant and those around him or her, will be involved in the evaluation process. If the project is large, outside evaluators may be needed. Either way, the costs are significantly higher than when only reaction and learning are being evaluated. While the costs of evaluating behavior change can be high, so can the benefits. If the program is only going to run once, there is no justification for investing in a costly evaluation process. However, if the program is going to be offered several times to large audiences, then a more complex evaluation

process may be warranted. In short, if great benefits are expected and
large sums of money have gone into the planning and delivery of the
program, then resources should be allocated to evaluate the effort
appropriately.

Evaluating behavior change is complicated and time consuming. It also involves
more than just the education department. Thus, it is important that other organization
members "buy into" the program and participate in the evaluation process. Once
behavior change is expected from education and training, the organization and its
members must be activated to be full partners in the process. One cautionary note,
behavior change may not provide positive benefits in the workplace. The new behavior
may not be accepted or the behavior may not bring forth the hoped for organizational
improvement. Such results demonstrate that behavior change alone cannot always
guarantee improved organizational output.

Level Four: Results Evaluation

With greater frequency, those who are funding education and training efforts are
demanding evidence that their investments are yielding results. Results evaluation is the
most difficult level of evaluation. It attempts to identify how education and training
changed the organization. The question usually asked is, did this training improve the
organization, and how? Educators hear results-oriented questions every day. Examples
of such questions are
  ▪ Have services delivered become more efficient, effective, appropriate,
    and helpful?
  ▪ Has the staff become more friendly?
  ▪ Has the quality of the product improved?
  ▪ Have costs to deliver products and services lowered?
  ▪ Has the work environment become more conducive to high productivity
    and morale?

Increasingly, the quality of court services and judicial decisions is being
scrutinized by the other branches of government and the public. Results-oriented
educators are aware of the need to develop ways to make court services and processes
more readily accessible, to improve public trust and confidence, and to address other state
and local initiatives. Internally, leaders and managers continually look for ways to
improve the quantity and quality of the courts' work products. In that effort, they try to
recruit and retain qualified people by building a work environment that rewards staff
members' efforts and invites collegiality.

Conducting results evaluation often involves benefit-cost analysis. Educators
doing benefit-cost analysis can be overwhelmed by the complexity of the organizational
procedures and budgets. Even if the educator has the information and is proficient at

doing benefit-cost analysis, it is difficult to make a direct correlation between the program and the results. A myriad of intervening variables could impact the results experienced by the organization. Nevertheless, educators should not be dissuaded. They may discover evidence that the education and training had some significant effects; or, if not, they may be able to identify why not. Both types of information are equally important.

Guidelines for Evaluating Results

Kirkpatrick (1998, 61-65) offers guidelines for evaluating results. Many are the same as those for evaluating behavior: use control groups, allow time for results to be achieved, measure before and after the program, and repeat measurement at the appropriate times. Two new guidelines added at the results evaluation level are (1) calculating benefits versus costs and considering return on investment (ROI), and (2) determining how much evidence is enough.

Calculating Benefits versus Costs and Considering ROI. Benefit-cost analysis was offered as an option at the level of behavior evaluation. However, as part of results evaluation, it is expected that benefits-cost analysis will be followed by ROI. The difficulty for the educator in identifying ROI, is determining which figures are meaningful and to what extent they are related to the program. In order to determine ROI, all other intervening variables have to be identified and their effects factored into the analysis. Since this is very difficult to do and sometimes inappropriate for what is being evaluated, another plausible evaluation goal is to look simply for evidence of results associated with the education and training program.

However, conducting results evaluation even without ROI can be very costly. To determine whether the cost is justified, the educator should consider the overall cost of the program, the potential results that can be accrued because of the program, and how often the program will be offered. If the program will be offered numerous times and the value of the expected results is very high for the organization, then a significant investment in evaluation should be made. Once the evaluation is complete, the program benefits versus costs can be weighed and appropriate decisions made.

Determine How Much Evidence is Enough. The educator cannot assume that the amount of evidence indicating results will satisfy organization leaders and other stakeholders. Educators need to query those requesting an evaluation to determine what evidence needs to be gathered and examined. Educating those involved in this decision-making

process is the first thing educators must do. They should solicit the desires
and objectives for results evaluation data, explain how results evaluation
can be conducted, and identify all the likely intervening variables that
could influence the evaluation results. Once agreement is reached, the
expectations for what information can be obtained and the amount of
evidence that can be linked to education and training should be more
realistic for all involved. Without going through this process, educators
run the risk of spending a great deal of time and money gathering data
which will not satisfy those involved and could be detrimental to their
education and training organization.

Evaluating results is important. But, a results evaluation effort must have the
support of the affected parties and the entire organization, as it will likely reveal things
about the organization that were either not known or not documented previously.
Resistance to future education and training efforts could result. The organization, as well
as the educator, must be prepared to accept what is found, and, if needed, develop
systems to take care of problems as well as acknowledge successes.

CHAPTER THREE

Planning and Implementing a Four-Level Evaluation System

Identifying how and what to evaluate must be determined at the beginning of the education and training process. Planning for evaluation is a front-end process and not something to be considered only after the program is developed. This way of thinking about evaluation will help the educator clearly identify what goals he or she is trying to accomplish. The goals later can be turned into learning objectives. For evaluation processes and outcomes to have meaning, they must be tied to organizational purposes, goals, missions, and strategies. Evaluation must have a client, in addition to the educator, and the educator must determine whom that client is. Sharing the evaluation results with the client and those who participated in the evaluation process makes soliciting participation in future evaluation efforts easier, gives information to those who need it, and increases the credibility of the education and training department.

This chapter explores many important aspects of planning and implementing a four-level evaluation system, including commitment, needs assessment, evaluation objectives, client identification, data collection methods, isolating the program effects, assigning monetary values to benefits and costs, communicating the results, and exploring possible problems with impact evaluation.

Commitment

A commitment to conducting and using evaluation results to improve education and training, thereby increasing the benefits to the participant and organization, is the foundation for implementing an evaluation system. When conducting evaluation at the reaction and learning levels, at minimum, the educator, faculty members, and participants must be committed to the process. When evaluating at levels three and four, people throughout the organization must support it. That means individuals in the workplace who either supervise or interact with the person who attends the program, as well as the larger organization, must be involved for behavior and results evaluation to be realized and accepted.

Needs Assessment

Regardless of how good a program is, if it does not meet an identifiable need, it is a wasted effort. Therefore, the educator must have conclusive needs assessment data that clearly defines the problems to be addressed by education and training. Such data is not always easy or inexpensive to obtain, especially when the educator is planning to use it to help measure impact. To plan for such a needs assessment the educator must find answers to the following questions.

1. How broad and deep should the needs assessment be?
2. What problems, issues, conditions, or combination of these will be the focus of the needs assessment?
3. Which judicial system personnel and which aspects of their job performance seem to connect most directly to these issues?
4. What is the tentative goal, objective, or standard to be pursued with the education and training program?
5. How many people need to be involved in providing data for the needs assessment—the sample size?
6. What are the constraints of time, money, and availability of people that must be considered (Hudzik 1991, 11-13)?

The educator must also identify from whom information can be collected. Groups and individuals usually considered are advisory bodies, consultants, faculty, court employees, court users, and members of the target audience. The data can come in many forms including literature, professional journals, research results, observations, focus groups and committees, written surveys, interviews, organizational reports, evaluation results from previous programs, and customer complaints.

For a more in depth treatment of planning and executing needs assessment for judicial branch education, readers should refer to JERITT Monograph One, *Judicial Education Needs Assessment and Program Evaluation* (Hudzik 1991).

Engaging in a comprehensive needs assessment process will yield objectives for the education and training program. Those same objectives will also guide the evaluation process.

Evaluation Objectives

Each level of evaluation will have different objectives. At level one—reaction—the objectives of evaluation will likely include determining the extent to which
- quality standards of the education and training organization were achieved
- faculty fulfilled contractual obligations
- vision or mission of the education and training organization was supported
- teaching and learning objectives were met
- meeting facility satisfied contractual obligations and expectations
- program met participants' expectations
- program content was helpful
- program design facilitated learning
- participants believe they will use the new knowledge and skills
- program contributed to the curriculum of the education and training organization

Reaction evaluation considers reactions collected from participants, faculty members, and education and training staff members. Reactions are a valuable part of any evaluation process as they are a snapshot in time of what people perceived happened and how they hope to use their experiences in the future.

At level two—learning—the objectives of evaluation encompass determining whether learning took place and can be applied in the workplace. Unlike reaction evaluation, at this level, those outside the education and training organization begin to take interest. Court executives, judicial officers, managers, policy makers, legislators, and financial officers often find level-two, -three, and -four evaluation results to be of greater interest. At the higher levels of evaluation, there is an expectation that the organization will benefit by whatever learning occurred. Objectives for level two learning evaluation may be to determine the extent to which

- theories, facts, rules, laws, and data were learned
- new knowledge was mastered and applied to policies, procedures, and plans
- problem analysis, thinking skills, and similar capabilities were learned and applied to developing strategies, simulations, and models
- program activities contributed to learning
- program content contributed to learning
- program design contributed to learning
- interaction with other participants contributed to learning
- participants believe that they will be able to transfer their new knowledge and skills to improved work performance
- learning contributed to changes in attitudes that can impact work performance
- learning contributed to changes in values that can impact work performance

Level two learning evaluation captures information about what knowledge was learned, new skills developed, and attitudes and values altered during the program. In addition, learning evaluation provides an opportunity to determine the participant's level of proficiency applying what was learned during the program. From this, estimates can be made about how successful the participant might be applying in the workplace what was learned in the program. Expectations of learning transfer to the workplace begin at this level. Those expectations lay the foundation for evaluation levels three and four, which comprise impact evaluation. In impact evaluation, more parties from outside the learning environment are involved. Those individuals who work or interact with the participant become integral to the evaluation process.

The objectives for level three evaluation—behavioral change—include the extent to which

- new knowledge, skills, attitudes, and values have been used when performing job tasks
- the work environment was prepared for using the new knowledge, skills, attitudes, and values

- supervisors, managers, peers, subordinates, and court users supported the new knowledge, skills, attitudes, and values
- new knowledge, skills, attitudes, and values contributed to improved work performance
- use of the new knowledge, skills, attitudes, and values resulted in rewards

Three additional objectives for evaluating behavior change are (1) identify, with as much specificity as warranted, those factors which contribute to or detract from improvements in work performance when the new knowledge, skills, attitudes, and values are applied; (2) identify which new knowledge, skills, attitudes, or values are applied and which are not; and (3) identify new needs that may have arisen as a result of the behavioral changes.

When determining objectives for evaluating at the behavioral change level, the educator must decide whether to evaluate individual participants or the group as a whole. The obvious value of evaluating each participant individually is that it provides specific information about what each person learned and how the workplace environment responded to what he or she did after returning to work. This information can be used to help the individual develop and is referred to as microevaluation (Robinson and Robinson 1989). Evaluating all participants in the program collectively to determine the benefits of the program to the organization is referred to as macroevaluation (Robinson and Robinson 1989). Microevaluation and macroevaluation are not mutually exclusive. Educators can strive to detect and promote individual improvements while simultaneously looking for information that points to organizational impacts resulting from the program. "When we measure behavioral change, we are focusing on whether the partnership of training and management worked, we are not interested in identifying which partner had the greater impact" (Robinson and Robinson 1989, 211).

Level four—results—evaluation tracks impact as return on investments. The investment costs are the training related expenses, and the investment benefits are the returns related to organizational improvements. Objectives for results evaluation include the extent to which
- the program impacted a specific organizational deliverable
- the program impacted parts of the organization not originally targeted
- new knowledge, skills, attitudes, and values provided during the program are having positive, negative, or neutral impacts on the organization

There are several keys to conducting a level four, results evaluation: (1) objectives must be clearly articulated and carefully aligned with what the program delivered; (2) people and processes outside the education and training program must be factored into the evaluation; and (3) determining ROI is a complicated matter and involves many steps, people, and variables.

A comprehensive evaluation process includes evaluation at all four levels. By conducting all levels of evaluation, from reaction to results, the educator can determine at what levels the learning transfer process from the education and training program succeeded or failed, and why either outcome may have occurred.

Evaluating at all four levels may seem attractive and necessary to many people both inside and outside the education and training organization. However, when they learn what is involved, and what kind of information can result—information about aspects of the entire organization, or information known but not previously documented—resistance can soon develop. To avoid this resistance, the educator must make sure that there is broad commitment to the full evaluation process. The educator also must be sure the education and training needs are verified, and the objectives are shared and supported by all affected parties. Anything short of this can have dire consequences for the educator. It is inevitable that someone will not like some part of the evaluation process or results; therefore, the educator needs to be rigorous throughout the evaluation process and document every step. He or she must also know who the evaluation client is and how the results will be used.

Identifying Clients and Uses for the Evaluation Results

Educators will quickly find out that there are multiple clients for the evaluation. Less obvious is what information those clients want. At levels one and two, the primary clients are usually the education and training organization, its faculty members, and the program participants. Typically, they want to know if the objectives of the program were met, and, if not, what can be done to meet the objectives in the future. To a lesser extent, managers who sent their employees to the program want to know that the program was of high quality, and that their employees learned valuable information or gained skills that can improve work performance.

Educators can gain a great deal of support for impact evaluation—levels three and four—if the clients for level one and level two evaluation were satisfied. These same clients will play a role in impact evaluation and may also be part of the client group for impact evaluation.

Identifying the clients of impact evaluation is critical because impact evaluation is time consuming, costly, and involves many people from different parts of the organization. Not all clients will want the same information. Many managers and directors will be interested only in improvements in their divisions or departments because their control and influence ends there. Although they hope the work of their divisions or departments can positively impact the entire organization, they know they have little control over many of the variables that affect the operation of the organization as a whole. Thus, this client group is likely to look for behavior changes, level three evaluation.

Division or department managers and directors have many expectations, assumptions, and opinions about what needs to change, how it should change, what new behaviors are required, what evidence is needed to determine if change has actually occurred, and how to collect the evidence. There are several reasons why the educator must know what the managers' and directors' expectations, opinions, and assumptions are before proceeding. First, without that information, a legitimate plan of action for the evaluation process cannot be established. Second, the managers and directors may not participate or may even sabotage the evaluation efforts. Third, if the results are not favorable, the evaluation may be viewed as invalid.

The educator must ask the following questions of the division or department managers and directors in an effort to make known their opinions and assumptions, so they can be factored into the evaluation plan or be neutralized.

1. Are you, as division or department managers and directors, the only clients of this evaluation process? Will others above, below, or across from you in the organization also want the evaluation results? If so, who are those people?
2. What do you and/or the other clients see as the need for the education and training program?
3. What behavior or skill outcomes do you and/or the other clients expect?
4. How will you and/or the other clients know whether these outcomes have occurred?
5. How much time must elapse before outcomes can be meaningfully measured?
6. Who, within the division or department, can collect the evaluation data?
7. What is your role in supporting the transfer of learning to the division or department?
8. What is your role in collecting evaluation data?
9. What evidence is needed to determine outcome?
10. What data collection methods would be acceptable?
11. How will valid results be recognized?
12. How will the results be reported and shared?
13. What are the likely uses for the evaluation results?

This set of questions will be posed preferably to all the clients identified for impact evaluation at the behavior change level—level three. The acceptability of the evaluation results depends on agreement between the educators and clients that the outcome indicators and collection methods are valid. By identifying and articulating the expectations, opinions, and assumptions at the outset, the evaluation process should be stronger, better, and have the confidence of all involved.

The clients for impact evaluation at level four—results—are often found in the upper strata of the organization hierarchy. Since level four impact evaluation deals with ROI, heads of the organization and stakeholders outside the organization will likely be part of the client group. In the case of judicial branch education, judges, court

executives, fiscal officers, state court administrators, state supreme court justices, and legislators may all have a vested interest in the evaluation process and results. Although it may be difficult to query these clients about their expectations, opinions, and assumptions, the educator needs to get as much information as possible from them before launching an ROI evaluation process. The educator must then ask the following questions.

1. Who are the internal and external clients for this evaluation?
2. What is the organizational need? Is the need present in one or more parts of the organization?
3. What is the desired organizational result?
4. What is the cause of the problem that education and training is to address?
5. What performance deficits and organizational practices are causally linked to the organizational result?
6. What needs to be taught to address the organizational need?
7. What will demonstrate that desired results were achieved?
8. What data collection methods would be acceptable?
9. How much time must elapse before outcomes can be meaningfully measured?
10. Who is likely to be involved in the data collection?
11. What is your role in collecting evaluation data?
12. How will valid results be recognized?
13. How will the results be reported and shared?
14. What are likely uses for the evaluation results?
15. What is the total cost of developing and implementing an education and training program to treat identified organizational needs or problems?
16. What is the total cost of developing, conducting, and reporting the ROI evaluation?
17. Is the cost of the education and training program and the ROI evaluation justified when weighed against the organizational needs?

ROI evaluation is rarely conducted. It takes time, money, and expertise to perform a comprehensive ROI evaluation. It is very difficult to isolate all the variables that can affect the organizational outcomes and even more difficult to relate them to specific outcomes. When stakeholders ask for ROI evaluation results, they want to know if the money being invested in education and training is worth it. Often they want to base their decision about the education and training program on dollars and cents, what they refer to as the bottom line. Is their request for such information legitimate? The answer is yes. Can such information be collected? It is less easy to collect ROI information in public institutions as they do not produce products that can be measured solely by a profit and loss statement, but varying forms of ROI results can be calculated. When should ROI evaluation be encouraged? Conducting ROI evaluation should only be done (1) when the amount of money invested in a program is very high, (2) the program will be presented several times to a large audience, or (3) the organizational need is so critical that investing in ROI evaluation sends the message that the organization's leaders and other stakeholders are backing the education and training effort and expect results.

Even though ROI information is desired by many clients and other stakeholders, it is important to emphasize that while every effort can be made to conduct ROI evaluation, some education and training programs are intended to improve individuals' skills and organizational functions not quantifiable in dollars and cents. Rather, the program's impact is measured through such intangibles as increased satisfaction with court services, improved image of the courts, or a more accurate understanding in the local community of the role of the court. These things are very important and although monetary values cannot be attached to them, they are nonetheless benefits and should be reported along with monetary benefits, costs, and ROI.

Data Collection Methods and Processes for Impact Evaluation

Background information is necessary to choose the best method for collecting and calculating impact evaluation data. The information can be developed by first determining the needs, establishing the evaluation objectives, and identifying the evaluation clients and their expectations, opinions, and assumptions. A brief description of the benefits and weaknesses of several data collection methods follows, as does a discussion of issues pertaining to impact evaluation methods and processes.

Behavioral Evaluation

The three most frequently used methods of collecting behavior evaluation data are observations, interviews, and surveys. The success of the evaluation method rests on the level of precision used in crafting program objectives and corresponding evaluation criteria.

To be effective, evaluation must measure discrete behaviors performed in the workplace that were addressed as part of the education and training program. Specificity is key. General statements of expected outcomes cannot be effectively measured. An example of a general statement is "the employee must exhibit excellent customer service." This behavioral objective cannot be measured effectively because what constitutes excellent customer service is not defined. Each behavior must be broken down into observable, measurable components. Examples related to excellent customer service are
- The employee must answer the telephone no later than the third ring.
- The telephone greeting must include the name of the court, the employee's name, and an offer of assistance, such as "How may I help you?"
- When employees are working the counter, they must always ask the person needing assistance, "How may I help you?"

Once observable, measurable components are developed, the client and educator must agree which behavioral outcomes are most important to evaluate. When deciding which behavior outcomes to measure, the educator and client should remember that the

larger the scope of the evaluation, the more money and time it will take to complete the evaluation.

Behavior evaluation focuses on activities that can be observed by others, such as the application of new knowledge and skills. Increasingly, educators are being asked to develop, deliver, and therefore evaluate programs that have as their purpose changing a participant's values, beliefs, and attitudes. There are many examples of this type of programming in judicial branch education—programs that deal with such issues as bias, diversity, domestic violence, sexual assault, the changing role of the court and the judge, cultural evidence, courts as learning organizations, and customer service for the courts. Robinson and Robinson (1989) referred to evaluating values, beliefs, and attitudes as collecting data on nonobservable behavior. A change in the participant's value, belief, or attitude is considered an intangible benefit when determining ROI.

Some of the same evaluation principles apply when evaluating nonobservable behavior, as when educators evaluate the application of the new knowledge or skill to determine that a behavior change occurred. First, as with other education and training content, the desired change must be linked to an articulated performance need so the participant is sufficiently motivated to apply what was learned during the program. Second, expectations must be stated specifically, so desired outcomes can be measured. Third, the client must accept the evaluation criteria.

Robinson and Robinson (1989) held that multiple sources of evaluation data can be used when measuring observable behavior; however, nonobservable behavior has but one source—the participant. Through interviews or written surveys, participants can be invited to reconstruct a certain mental process or action from which the educator can determine whether the participant used what was learned in the education and training program. When evaluating nonobservable behavior, the educator will need a baseline from which to start. Thus, pre- and post-tests and assessments are critical. Collecting nonobservable behavior evaluation data can be complicated and may need to be collected over time.

Results Evaluation

Results evaluation measures the return on the education and training investment by identifying and breaking down the costs and relating those costs to the result indicators. Calculating the program costs are easy compared to determining the benefits. Indicators for training costs are fairly constant, but those for benefits vary. Desired objectives and outcomes are different for each program, as are the indicators the educator must track to identify benefits.

In general, costs are reported as direct, indirect, development, overhead, or compensation for participants. In more precise terms, costs fall into several categories according to Parry (1997).
- development (course development [*time*] or purchase price of a package course [*price or license fees*])
- course materials
- equipment and hardware
- facilities
- travel, lodging, meals, breaks, and shipping materials
- salaries and consulting fees
- loss of productivity or cost of temporary replacements

Just as costs can come in many forms, so can benefits. Parry (1997) identified benefits as
- time savings
- better quality
- better quantity
- less absenteeism
- fewer medical claims
- reduced grievances
- fewer resignations
- fewer terminations

How does the educator know which of these or other factors are directly related to the program? The educator must go back to factors used to determine the needs for the program, set the objectives, determine the program content, and identify the clients. If possible, the educator should use indicators of performance for which the organization is already collecting data. However, if conclusive data are not available, the educator will need to collect raw data to identify trends and patterns; and, if none of the reports available provide sufficient information on performance indicators, request new reports that will (Robinson and Robinson 1989, Parry 1997, Kirkpatrick 1998).

The educator may have volumes of data, but they may not be conclusive. In real life, because so many variables can affect an organizational outcome, isolating the impact of education and training as the sole variable that contributed to the betterment or detriment of an organizational output is nearly impossible. Education and training may or may not be one of the variables. In the face of inconclusive data, evidence will be what the educator has to offer stakeholders. If the evaluation process is sound, with each step documented and each finding recorded, the educator will be able to explain why conclusive data are not available. More often than not, the evidence will be accepted.

Several data collection methods have withstood the test of time. Which methods the educator selects will depend on what kind of impact information is needed.

Surveys or questionnaires are most frequently used because they are inexpensive; easier to disseminate and collect; can accommodate large sample sizes, entire populations, or large geographic areas; can be statistically analyzed; render comparable data; and can maintain the anonymity of respondents.

Interviews can be used as a stand-alone evaluation method or in combination with other methods, usually surveys or questionnaires. Most often interviews are structured, but they provide opportunities for more probing and clarification than can be done through surveys or questionnaires. Interviews usually render rich and detailed information that cannot be gathered any other way. This is particularly true when the interview is structured as a guided conversation (Lofland and Lofland 1995). The guided conversation format elicits a great deal of contextual and descriptive information as well as opinions, values, beliefs, and attitudes about the matter under discussion. Interview results yield qualitative and quantitative data, depending on their design and administration.

Focus groups are similar to interviews, but instead of taking place with one individual at a time, many people are involved. Focus groups provide the same kind of data as individual interviews. However, in focus groups, the educator may get varying degrees of information quality, depending on whether the group is embracing or inhibiting of its members and the process. Thus, structuring the focus group and selecting its members are critical to its success.

Observation is a labor-intensive data collection method that requires the observer to go to the workplace and make observations there for an unspecified amount of time, as long as necessary to collect the data. The observer must know specifically what behavior he or she is looking for. Observations have an important benefit over interviews, focus groups, and questionnaires, in that the behavior is directly observed. In the other methods, only perceptions of what occurred are captured. The downside is that unless the observer is nonintrusive and present over an extended period of time, the person's behavior may change due to the observer's presence.

Control groups are difficult to use outside a laboratory. For control groups to be effective, the only variable among individuals in the

experimental and control groups can be the education and training
received by those in the experimental group.

Pre- and post-tests or assessments are a good way of establishing
baseline data from which comparisons can later be made. For such tests or
assessments to be valid, the specific behaviors, values, attitudes, and
beliefs measured must first have been carefully identified and thoroughly
explained. Establishing a baseline will allow the educator to decide
whether the education and training had any impact. Therefore, pre- and
post-tests or assessments need to be used with the other methods.

Assessing progress on action plans or individual development plans is
an excellent tool to measure change. As part of the education and training
program, participants can create plans with concrete action steps. In the
plan, the participant will identify other parties potentially affected by or
needed for the plan, establish timelines, and forecast obstacles or arenas of
support for their plans. After a plan is approved, the educator can use it at
appropriate intervals during the program and later in the workplace to
determine the participant's progress.

Manager meetings and briefings are data collection tools used to
determine whether changes of behavior have been noticed and if any
observed changes have affected the operations of the division or
department. Such meetings can and should take place with individuals
organizationally above, below, and across from the participant.

Organizational reports can be a helpful data collection method if the
data collected is directly related to the behavior or result being evaluated.
If not, they will not be of much assistance.

Benefit-cost analysis matches training expenses to the benefits later
gained. It can yield *ROI* data. In other words, this method deals with
quantifiable data from which organizational impact can be assessed. As
was previously discussed, identifying costs is relatively easy. Identifying
benefits directly related to education and training is difficult because of
the number of variables that affect organizational output.

Most impact evaluation plans will involve several data collection methods. It is
important to remember that the educator must wait to collect data until the participant has
had the opportunity to apply what was learned; thus, it may be three to six months after
the program before the earliest data can be collected. The educator can set a more precise
data collection schedule after considering the time it takes for outcomes to appear in
organizational results, factoring in seasonal and operational cycles, and identifying when

all currently established data collection activities occur. Timing of data collection is very important to obtain accurate results.

Isolating Effects and Attributing Monetary Value

Capturing results data for impact evaluation can often be a perplexing matter as can attributing monetary value to the benefits and the costs. The next two sections will provide guidance to educators on both these issues.

Isolating the Effects of the Education and Training Program

Trying to find out what happened as a result of an education and training program is what Phillips (1997a, 1997b) refers to as isolating effects. No matter how good the data collection method is, the effects have to be isolated in order to identify and measure change. Phillips (1997a, 70-71; 1997b, 29-31) offered ten ways to do just that.

Control groups, as previously discussed in this monograph, when carefully established and monitored, are the best way of isolating the effects of training.

Trend lines project the values of previously selected output variables without the effects of education and training. That projection is compared to the actual data collected after training. The difference represents the estimate of the program impact.

Forecasting projects mathematical relationships between input and output variables. Thus, it projects into the future what will happen if there is no education and training. Following the program, the actual performance of variables is measured and compared to the performance that was projected.

Participant estimates of the amount of improvement attributable to the education and training program can be captured using pre- and post-training assessments and later turned into numerical values that can be compared.

Supervisor estimates result from supervisors, given information about total organizational improvement, being asked to estimate what percentage of improvement is attributable to the education and training program.

Senior management is given the performance results and asked to project what they believe is attributable to education and training. It should be noted that this is not a particularly reliable method to gain impact evaluation data, but it does give the educator important information on the perceptions of senior management.

Experts, who are familiar with the variables being assessed and how they vary under certain conditions or treatments, provide an estimate on whether the change was caused by the education and training.

Subordinates of participants are asked to identify changes they have seen in the workplace since the education and training program was offered to their administrators, managers, and supervisors. They are also asked to indicate whether they believe those changes are attributable to the program or to other factors.

Other influencing factors are identified by the educator and/or client and their impact is estimated. What remains is the improvement attributable to the program.

Customers can provide information on whether they used a certain service or product due to its improved quality, which may be the result of education or training. For the courts, this may have limited utility except in the public court related education and outreach efforts.

Educators can use one or a combination of these methods to isolate the effects of the education and training program. Determining the method or methods should be premised on what information the educator is trying to capture, what measures will best provide the information, and what measures will render results that the client or clients will find valid and acceptable. Such decisions must fit into the overall evaluation plan.

Attributing Monetary Values to Benefits and Costs

Identifying costs of education and training is relatively easy and straightforward, though it may be time consuming. The monetary value involved is usually either known by the educator or easily attainable from the budget and finance department of the organization. It is attributing monetary values to benefits that is more difficult.

Whether the improvement is visible in easy-to-quantify data (e.g., output, quality, or time) or in difficult-to-quantify data (e.g., increased teamwork, better morale, or increased job satisfaction), monetary values must be assigned whenever possible and converted into unit costs that can be calculated for a benefit-cost analysis ratio and an ROI percentage. The costs assigned to the benefits must meet with the approval of the client or clients and be defensible, or they will have no credibility. Many of the benefits that clients and other stakeholders want measured have never been assigned monetary values. This is particularly true of public institutions like the courts as they have no profit motive and do not produce easily quantifiable products. Rather, the courts offer services; settle disputes; and assure rights under the United States Constitution, the constitutions of each state, and the Bill of Rights. For these reasons, ROI proof is very

difficult to obtain. Nonetheless, Phillips (1997a, 71-72; 1997b, 31-32) again offers strategies to assign monetary values to benefits.

> **Output increases** are assigned a monetary value based on their unit contribution to profit centers or cost savings areas.

> **Cost of quality** is calculated and improvements are converted to cost savings.

> **Employee time savings** are valued through wages and benefits.

> **Historical costs or organizational cost data** are used to establish the specific value of the improvement.

> **Internal and external experts** who are very credible can place a monetary value on an improvement based on their past experiences.

> **External databases** kept by other institutions that track the same kind of data can provide information for attributing monetary value to improvements.

> **Participant estimates** of the monetary value of the improvement are used when the participant can demonstrate the validity of such estimates.

> **Participants' supervisors** can provide estimates on the monetary value of the improvement. The participants and supervisors jointly make such assessments based on the information each has.

> **Senior management** can provide estimates of monetary value. This is an important indicator of how they value a certain improvement.

There are other departments in the organization responsible for calculating costs and benefits of certain organizational activities. Individuals from those departments should be invited to participate in this process. In particular, human resources, budget and finance, and the research and development departments should be called upon to provide information and assist in developing a strategy of isolating the effects of education and training and providing monetary values to the results. Education and training programs that aim to change the behavior of individuals within the organization or the organization itself typically need the support of many departments and leaders within the organization. As stated throughout this monograph, collaboration is key to developing and conducting impact evaluation.

Communicating and Using the Results

There is no better way to ensure that evaluation results will be used than by effectively communicating the results. The evaluation process explained in this monograph is heavily reliant on clear and consistent communication with everyone involved, from program participants to clients. Reporting the results is a special communication challenge. Not all clients will need the same information. Identifying who needs what by answering the "W" questions provides solid guidance for the educator in writing and delivering the report.

- Who wants to know?
- What do they want to know?
- Where, in what setting, do they want to be informed?
- When do they want to know?
- Why do they want to know?

In thinking about *who* wants to know, the educator should focus on the intended audiences for the report. The educator should develop an outline of the results for the major clients to review, and it should be adjusted based on their feedback. The educator will likely find that each client has different needs and consequently more than one report will be required.

What the clients want to know will influence how the educator organizes, formats, and writes the report. The educator will need to write a jargon-free report that uses terminology meaningful for the reader. Different clients value different things. The educator will need to format and display the results in a way that highlights items valued by that client.

Where, the location in which the client wants the report presented, can influence *how* the results are presented. The presentation, regardless of location or medium, needs to be attractive. The presentation should include visual aids or be multi-media especially if a large or diverse group is assembled. Written documents must be designed to be as attractive as other forms of presentation.

When the results are released, i.e., the timing of their release, is critical. It may significantly effect the extent of their use. The educator will need to consult with the client to determine when the release should occur. Periodic informal reports may be deemed more effective than one final report. The educator should have a one-on-one meeting with the client before any evaluation results are made public.

Each client will have different reasons—*why*—they want an impact evaluation done and different things they hope to gain through the results. Knowing their expectations and motivations will help the educator communicate the findings in a way that enables all stakeholders to use the results effectively.

Evaluation reports have a standard outline. The exact form will be dependent on the answers to the "W" questions. In general, an evaluation report includes the following sections.

- Executive Summary, a brief overview of the evaluation objectives and a description of the process and results.
- Background, an outline of the evaluation origins, purposes, goals, and objectives. It describes the clients, what was evaluated, cost of the evaluation, and salient literature or supporting documentation that further explains the need for the study or why it was done.
- Research Design, Methods, and Analysis, specific information on the design of the evaluation process, the methods used to conduct the evaluation, and the modes and units of analysis.
- Results, a section that contains the findings with explanations and discussions pertaining to their strengths and weaknesses.
- Recommendations, suggestions for actions that can be taken based on the evaluation results.

How the results are used, if ever, is a concern with all evaluation reports. Payne (1994) identified three problems with utilization—underutilization, overutilization, and nonutilization. Payne (1994) also suggests, to deal with the three utilization problems, that the person doing the evaluation become a change agent, continuing contact with the client and all those involved in the evaluation for the purpose of suggesting the best ways data can be used.

Problems with Impact Evaluation

At a minimum, impact evaluation involves several individuals, divisions, or departments beyond education and training. Depending on the scope of the program, the entire organization can be involved. Scrutiny of organizational activities, procedures, and outputs may not be universally welcomed. The scope of the evaluation itself can be problematic. Educators need to be aware of possible problems and prepare to address them. Even the best-planned and executed impact evaluation process can be affected by unforeseen events such as

Client Changes. Impact evaluation takes place over time with data collection scheduled at one or more intervals. Over that period of time, the client or clients may change. If this happens, the educator will need to meet immediately with the affected parties, to explain the process and who and what is involved. If the new client or clients want changes to the evaluation, the educator will need to determine whether the changes can be made without jeopardizing the study in progress. The educator must be able to explain his or her decision based on all the data used to develop the evaluation process.

Uncooperative Parties. Impact evaluation involves many people, some of whom may be resistant. Without cooperation, assessing impact is doomed. The educator can reduce the likelihood of this by following the processes suggested in this monograph. However, if resistance is encountered, the educator should provide the uncooperative parties with proof of the client's support for the project and the project's purpose. The educator should also explain the process, how the results will be used, and detail the benefits for the individual or organization.

Credibility of the Findings. Despite the best efforts of the educator, credibility of the results is often challenged. This happens for a variety of reasons: the client no longer favors the agreed upon measures; the measures rendered results unacceptable to the client; the client or others believe the results were due to the attention paid to the problem or the people involved, i.e., the Hawthorne effect;[1] those involved in the impact evaluation process are not respected or trusted by the client or others; the client simply does not believe the evidence that education and training either did or did not have an impact. The hope is that the credibility issues can be identified early and dealt with.

Challenges to the Measures. At each juncture, the client should approve the measures. Following each approval, the educator should pilot the measures by sampling the data. If the measures are deemed appropriate, the results still may not be to the liking of the client. The educator should then offer the client the use of other measures to look for different results, with the implications for each measure fully explained. The client will then be fully informed. If he or she wishes to choose other measures that would preclude certain results, the educator should be prepared to explain the strengths and weaknesses of that decision. If the client persists in going down a path that the educator believes will yield questionable results, the educator should continue with the evaluation and explain its weaknesses and strengths in the final report.

The Hawthorne Effect. The client may not accept the results believing that they occurred because people and their activities were receiving extra notice. Most impact evaluation methods are not sensitive to this factor. Only observations are likely be influenced by extra notice. And even for observations, the Hawthorne effect can be minimized or negated by having an individual customarily in the workplace make the observations.

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[1] The word *Hawthorne* refers to the factory in Cicero, Illinois, where the effect was first observed and described by Elton Mayo in *The Human Problems of an Industrial Civilization* (New York: MacMillan, 1933).

The Hawthorne effect, if present at all, is usually only a factor at the very beginning of a study. As newness diminishes, individuals get into a routine that continues over time.

Trust and Respect. Trust and respect are critical for an impact evaluation to succeed. Therefore, the educator must make certain that those doing the evaluation, whether internal or external to the organization, have the required expertise and be widely accepted by all parties involved. Clients fear that evaluation will shed an unfavorable light on individuals, divisions or departments, or the entire organization. They need to be confident that individuals doing the evaluation are sensitive to this issue and will act responsibly.

Disbelief of Findings. Finally, the client simply may not believe that education and training could have the demonstrated impact and calls the whole evaluation into question. If this happens, the educator should review step-by-step the documentation with the client, and hope the client will change his or her mind. The educator should also be prepared to bring in others who can reaffirm the documentation and reinforce the educator's position.

Noncomparable Data. Organizations are not static entities and the educator risks collecting noncomparable data. Processes tested before the education and training may change and no longer be available for testing after the program. If such changes are expected, the educator should request beforehand that a control group be established, so data can be compared.

Education and Training Effect Cannot Be Isolated. As previously stated, many factors contribute to improved or reduced work performance. Impact evaluation can only demonstrate how those factors come together to affect work performance. The educator must ensure that the client and others know this before the evaluation process begins.

Time and Money Commitment Is Too Great. Impact evaluation may require a large commitment of time and money, since tracking change usually occurs over time and involves many people. Depending on its complexity, impact evaluation can also require contracting for outside evaluation services. If time and money become an issue, the educator can offer alternatives such as using data already being collected by the organization rather than adding indices or collection mechanisms requiring different data; collecting data for a shorter period of time if the application of the new knowledge or skill can be assessed appropriately in that time

frame; reducing the number of results indicators; or simplifying the
process. If the decision is made to engage in a scaled back version of
impact evaluation, the educator must tell the client what he or she is giving
up in order to reduce the time and money investment. Failing to do so
may result in the client harboring unrealistic expectations. Explanations
of such decisions should also be in the final report.

There can be many problems related to conducting an impact evaluation, but
problems also can result if impact evaluation is not done. The educator, in concert with
all the others involved, must decide whether future problems will arise if impact
evaluation is not done. For most organizations, and the courts in particular, the problems
associated with not doing impact evaluation usually are political or monetary in nature.
If the court's funding agents, whether state or local, made a substantial investment in
education and training, they are going to want to know what the payoffs are. Doing
impact evaluation can buy a great deal of political good will and can lead to a stable
source of education and training funds.

The process described in this chapter is one of collaboration. Collaboration
occurs among the education and training staff; program participants; affected
organizational members; interested outside parties; and a myriad of stakeholders, some of
whom constitute the client group. To be successful, the educator must have the time,
money, commitment, staff resources, and communication skills to conduct impact
evaluation effectively. It is not an easy task. The educator must know his or her
personal, professional, and organizational limitations before beginning.

What will become increasingly apparent to the educator, if it is not apparent at the
outset, is that change in the workplace attributable to the education and training program,
is enhanced by a supportive work environment. If the education and training or its
support in the workplace is inadequate, the impact of the change will be diminished.
Conversely, if both are available and sufficient, both can positively affect the impact of
the change. Either way, educators should never accept all the blame, nor take all the
credit, for outcomes experienced by the individual, division and department, or
organization.

To assist the reader in using the information in this chapter, Chapter Four
provides a step-by-step process, complete with checklists and forms for planning and
implementing a four-level evaluation. Complementing Chapters Three and Four, the
Appendix provides sample impact evaluation forms from which educators can develop
their own to measure behavior change and results evaluation
.

CHAPTER FOUR

A Step-by-Step Process
for Planning and Implementing Impact Evaluation

The step-by-step process offered here is a set of six actions educators must take when engaging in impact evaluation. The information collected during the evaluation planning process will determine, to a great extent, the data collection methods. Therefore, the educator must closely review the needs assessment results; evaluation objectives; clients' expectations, opinions, and assumptions; and learning objectives from the education and training program before selecting data collection methods. Failure to match the correct method to the behavior or result being measured will lead to weak or invalid results.

In this chapter, data collection methods that can be used to measure impact will be presented. Specific considerations for behavior and results evaluation are also noted. Sample data collection forms are in the Appendix. The process follows the steps below.

- Preliminary Determination: Is Impact Evaluation Needed?
- Step 1: Identifying the Clients
- Step 2: Determining the Clients' Information Needs
  - ▫ Individual Client
  - ▫ Multi-Client Group
- Step 3: Agreeing on Program Objectives, Outcome Indicators, and Data Collection Methods for Impact Evaluation
- Step 4: Developing Programs for Impact Evaluation
- Step 5: Selecting the Data Collection Methods
- Step 6: Communicating the Results

For ease in navigating this chapter, headers on the right-hand pages include the number and title of the step covered.

Preliminary Determination: Is Impact Evaluation Needed?

To determine whether impact evaluation is needed or whether a less complex level of evaluation would satisfy the need for education and training follow-up assessment, responses to the following statements should be sought. If the response to one or more of the following statements is *yes,* developing an impact evaluation plan may be indicated.

It is important to note that often an individual or group requests impact evaluation when it is not appropriate or required. The following statements will help determine an actual need, rather than a perceived need, for impact evaluation. At any time, the need for a particular level of evaluation can change. The following statements form a starting point for the conversation about impact evaluation.

If the responses indicate preliminarily that impact evaluation is appropriate or required, the educator should also complete the first two steps of the impact evaluation process, *Step 1: Identifying the Clients* and *Step 2: Determining the Clients' Information Needs*, to determine if impact evaluation is truly warranted. Then, if impact evaluation is still indicated, all the remaining steps, *Steps 3-6*, should be followed.

Initial Assessment of Need for Impact Evaluation

Yes	No	Statement
_____	_____	The amount of money dedicated to the education and training effort is substantial.
_____	_____	The program will be offered many times to a large and/or diverse audience.
_____	_____	If the education and training objectives are achieved, the results of the program will make significant changes to the entire court organization or to multiple components of the organization.
_____	_____	The need the program is addressing is high profile, i.e., has captured the interest of individuals or groups both internal and external to the courts.
_____	_____	Funding sources want to know whether the money invested in education and training is producing positive results.

If any response above is *yes*, proceed with the following:

Yes	No	Statement
_____	_____	Money, time, personnel, and other resources will be committed to collect, analyze, and report the impact evaluation data.

If the response to this statement is *yes*, proceed with Step 1 and Step 2.

Step 1: Identifying the Clients

       The first step is to identify who wants to receive the evaluation results. A sample checklist of potential clients follows. Most programs have multiple evaluation clients. Typically, each client will have different needs for the evaluation information.

Identifying the Evaluation Clients Checklist

Date: _____   Name of program: _____

1. Education and Training Organization

   ___   Director/Deputy Director

   ___   Curriculum Developers/Program Developers/Program Managers

   ___   Meeting Planners/Logistics Managers

   ___   Program Researchers

   ___   Publications Managers

   ___   Program Attorneys

   ___   Program Assistants

   ___   Technology Specialists

   ___   Other _____

2. Education and Training Boards/Committees

   ___   Chairs/Vice Chairs

   ___   Members

   ___   Other _____

3. Education and Training Faculty and Facilitators

4. Education and Training Participants

5. State Supreme Court

   ___   Chief Justice

   ___   Associate Justice

   ___   Supervising Justice of Education and Training

   ___   Other _____

6. State Court Administrators Office

___ State Court Administrator/Deputy Administrator

___ Court Analyst

___ Legal/Court Services Attorneys

___ Technology Specialists

___ Information Specialists

___ Court Services Specialists

___ Public Information Officers

___ Other _____

7. Legislature

___ Majority and Minority Leaders of State House and Senate

___ Chairs/Vice Chairs of Court Oversight Committee

___ Members of Oversight Committee

___ Chairs/Vice Chairs of Finance Committee

___ Members of Finance Committee

___ Other _____

8. Courts Served by the Education and Training Programs

___ Chief/Presiding Judge

___ General/Limited/Special Jurisdiction Judges

___ Executives/Administrators/Managers/Supervisors

___ Other _____

9. Public Interest Groups

10. Court Users

11. Local/State Bar Associations

12. Other Interested Parties

Step 2: Determining the Clients' Information Needs

Not all evaluation clients will want or need the same information. Step 2 involves determining the needs various clients have for evaluation information, i.e., their objectives for obtaining evaluation information. This is a very important step, as it will tell the educator what level of evaluation results will satisfy the clients.

Often, clients will not have identified their true needs before asking for program evaluation results. The educator can help clients better understand their needs by asking a series of questions related to the levels of evaluation. This process accomplishes two things. First, clients become educated about what evaluation is, how it is done, and its benefits and limitations. Second, it requires clients to be precise about their information needs and perhaps how they will use the information. The educator can determine the level of evaluation desired by noticing at which level the bulk of needed information occurs.

Using a simple worksheet will help the educator work with individual clients. When a program has multiple evaluation clients, the educator should consider using a grid that allows the development of an evaluation strategy to deliver the desired results to the right clients.

Individual Client Evaluation Information Needs

Date: _____   Name of client: _____

Name of program: _____

	Information	Why it is needed
Reaction Evaluation	1. Thoroughness of pre-program promotional materials	
	2. Timeliness of pre-program promotional materials	
	3. Overall quality of program	
	4. Quality of program's logistical arrangements	
	5. Quality of staff assistance	
	6. Overall usefulness of the general subject matter	
	7. Overall usefulness of the selected topics	
	8. Overall quality of the instructor's presentations	
	9. Instructor's effective use of adult teaching/learning methodologies	
	10. Instructor's effective use of adult teaching technologies	
	11. Effectiveness of program delivery format and/or medium, e.g., CD Rom, self-instructional, broadcast, live program, etc.	
	12. Effectiveness of content organization and sequence of topics	
	13. Quality of written materials	
	14. Quality of visual aids	
	15. Extent to which objectives were met	
	16. Extent to which program supports overall curriculum	
	17. Extent to which program promotes vision of organization	
Learning Evaluation	18. Extent to which new information was learned	
	19. Extent to which new skills were learned	
	20. Extent to which knowledge was increased	
	21. Extent to which attitudes were changed	
	22. Extent to which behaviors were changed	
	23. Extent to which values were changed	
	24. Extent of missing pertinent information	

	Information	Why it is needed
Behavior Evaluation (continued on next page)	25. Extent to which new *knowledge* was used when performing job tasks	
	26. Extent to which new *skills* were used when performing job tasks	
	27. Extent to which new *attitudes* were used when performing job tasks	
	28. Extent to which new *values* were used when performing job tasks	
	29. Extent to which new *behaviors* were used when performing job tasks	
	30. Factors impeding the use of new *knowledge*	
	31. Factors impeding the use of new *skills*	
	32. Factors impeding the use of new *attitudes*	
	33. Factors impeding the use of new *values*	
	34. Factors impeding the use of new *behaviors*	
	35. Factors supporting the use of new *knowledge*	
	36. Factors supporting the use of new *skills*	
	37. Factors supporting the use of new *attitudes*	
	38. Factors supporting the use of new *values*	
	39. Factors supporting the use of new *behaviors*	
	40. Extent to which job performance was improved because of new *knowledge*	
	41. Extent to which job performance was improved because of new *skills*	
	42. Extent to which job performance was improved because of new *attitudes*	
	43. Extent to which job performance was improved because of new *values*	
	44. Extent to which job performance was improved because of new *behaviors*	
	45. Factors impeding improved job performance related to the new *knowledge*	
	46. Factors impeding improved job performance related to the new *skills*	
	47. Factors impeding improved job performance related to the new *attitudes*	
	48. Factors impeding improved job performance related to the new *values*	
	49. Factors impeding improved job performance related to the new *behaviors*	
	50. Factors supporting improved job performance related to the new *knowledge*	

		Information	Why it is needed
Behavior Evaluation (continued)		51. Factors supporting improved job performance related to the new *skills*	
		52. Factors supporting improved job performance related to the new *attitudes*	
		53. Factors supporting improved job performance related to the new *values*	
		54. Factors supporting improved job performance related to the new *behaviors*	
		55. New education and training needs resulting from the application of new knowledge, skills, attitudes, values, and behaviors	
		56. New knowledge, skills, attitudes, values, and behaviors that were not applied	
		57. Factors/reasons why new knowledge, skills, attitudes, values, and behaviors were not applied	
Results Evaluation		58. Extent to which the unit, department, or court improved in the identified performance area	
		59. Factors impeding unit, department, or court's improved performance in the identified area	
		60. Factors supporting unit, department, or court's improved performance in the identified area	
		61. Extent to which the state court system improved	
		62. Factors impeding improved state court system performance	
		63. Factors supporting improved state court system performance	
		64. Extent to which performance areas not targeted by the program were positively affected	
		65. Extent to which performance areas not targeted by the program were negatively affected	
		66. How much did the program cost?	
		67. Were the benefits worth the cost?	

Multi-Client Evaluation Information Needs

Date: _____   Name of program: _____

	Information	Education/Training Organization	Education/Training Boards/Committees	Education/Training Faculty and Facilitators	Education/Training Participants	State Supreme Court	State Court Administrative Office	Legislature	Courts Served by Educ./Training Program	Public Interest Groups	Court Users	Local/ State Bar Assoc.	Other Interested Parties
Reaction Evaluation	1. Thoroughness of pre-program promotional materials												
	2. Timeliness of pre-program promotional materials												
	3. Overall quality of program												
	4. Quality of program's logistical arrangements												
	5. Quality of staff assistance												
	6. Overall usefulness of the general subject matter												
	7. Overall usefulness of the selected topics												
	8. Overall quality of the instructor's presentations												
	9. Instructor's effective use of adult teaching/learning methodologies												
	10. Instructor's effective use of adult teaching technologies												
	11. Effectiveness of program delivery format and/or medium, e.g., CD Rom, self-instructional, broadcast, live program, etc.												
	12. Effectiveness of content, organization and sequence of topics												
	13. Quality of written materials												
	14. Quality of visual aids												
	15. Extent to which objectives were met												
	16. Extent to which program supports overall curriculum												
	17. Extent to which program promotes vision of organization												

	Information	Education/Training Organization	Education/Training Boards/Committees	Education/Training Faculty and Facilitators	Education/Training Participants	State Supreme Court	State Court Administrative Office	Legislature	Courts Served by Educ./Training Program	Public Interest Groups	Court Users	Local/ State Bar Assoc.	Other Interested Parties
Learning Evaluation	18. Extent to which new information was learned												
	19. Extent to which new skills were learned												
	20. Extent to which knowledge was increased												
	21. Extent to which attitudes were changed												
	22. Extent to which behaviors were changed												
	23. Extent to which values were changed												
	24. Extent of missing pertinent information												
Behavior Evaluation (continued on next page)	25. Extent to which new *knowledge* was used when performing job tasks												
	26. Extent to which new *skills* were used when performing job tasks												
	27. Extent to which new *attitudes* were used when performing job tasks												
	28. Extent to which new *values* were used when performing job tasks												
	29. Extent to which new *behaviors* were used when performing job tasks												
	30. Factors impeding the use of new *knowledge*												
	31. Factors impeding the use of new *skills*												
	32. Factors impeding the use of new *attitudes*												
	33. Factors impeding the use of new *values*												

	Information	Education/Training Organization	Education/Training Boards/Committees	Education/Training Faculty and Facilitators	Education/Training Participants	State Supreme Court	State Court Administrative Office	Legislature	Courts Served by Educ./Training Program	Public Interest Groups	Court Users	Local/ State Bar Assoc.	Other Interested Parties
Behavior Evaluation (continued on next page)	34. Factors impeding the use of new *behaviors*												
	35. Factors supporting the use of new *knowledge*												
	36. Factors supporting the use of new *skills*												
	37. Factors supporting the use of new *attitudes*												
	38. Factors supporting the use of new *values*												
	39. Factors supporting the use of new *behaviors*												
	40. Extent to which job performance was improved because of new *knowledge*												
	41. Extent to which job performance was improved because of new *skills*												
	42. Extent to which job performance was improved because of new *attitudes*												
	43. Extent to which job performance was improved because of new *values*												
	44. Extent to which job performance was improved because of new *behaviors*												
	45. Factors impeding improved job performance related to the new *knowledge*												
	46. Factors impeding improved job performance related to the new *skills*												
	47. Factors impeding improved job performance related to the new *attitudes*												
	48. Factors impeding improved job performance related to the new *values*												

	Information	Education/Training Organization	Education/Training Boards/Committees	Education/Training Faculty and Facilitators	Education/Training Participants	State Supreme Court	State Court Administrative Office	Legislature	Courts Served by Educ./Training Program	Public Interest Groups	Court Users	Local/ State Bar Assoc.	Other Interested Parties
Behavior Evaluation (continued)	49. Factors impeding improved job performance related to the new *behaviors*												
	50. Factors supporting improved job performance related to the new *knowledge*												
	51. Factors supporting improved job performance related to the new *skills*												
	52. Factors supporting improved job performance related to the new *attitudes*												
	53. Factors supporting improved job performance related to the new *values*												
	54. Factors supporting improved job performance related to the new *behaviors*												
	55. New education and training needs resulting from the application of new knowledge, skills, attitudes, values, and behaviors												
	56. New knowledge, skills, attitudes, values, and behaviors that were not applied												
	57. Factors/reasons why new knowledge, skills, attitudes, values, and behaviors were not applied												

	Information	Education/Training Organization	Education/Training Boards/Committees	Education/Training Faculty and Facilitators	Education/Training Participants	State Supreme Court	State Court Administrative Office	Legislature	Courts Served by Educ./Training Program	Public Interest Groups	Court Users	Local/ State Bar Assoc.	Other Interested Parties
Results Evaluation	58. Extent to which the unit, department, or court improved performance in the identified area												
	59. Factors impeding the unit's, department's, or court's improved performance in the identified area												
	60. Factors supporting the unit's, department's, or court's improved performance in the identified area												
	61. Extent to which the state court system improved												
	62. Factors impeding improved state court system performance												
	63. Factors supporting improved state court system performance												
	64. Extent to which performance areas not targeted by the program were positively affected												
	65. Extent to which performance areas not targeted by the program were negatively affected												
	66. How much did the program cost?												
	67. Were the benefits worth the cost?												

**Step 3: Agreeing on Parameters of the Impact Evaluation—Program Objectives, Outcome
         Indicators, and Data Collection Methods**

        After completing Step 2, if the educator determines a client's information needs can be
satisfied by reaction and learning evaluation results, end-of-program evaluation results with
limited follow-up will suffice. However, if more needs exist, the educator must collect impact
evaluation data. In this case, interaction with each client becomes essential for articulating the
assumptions about the education and training program, determining collection methods and
times, and agreeing upon what constitutes an outcome. The next form will help the educator and
client, or clients, set the parameters of the impact evaluation.

Impact Evaluation Planning Form

Date: _____   Name of program: _____

1. Problem statement, i.e., what is the problem and how do you believe education and training can help?

2. What behavior, skill, attitude, or value outcomes do you expect?

3. How will you know when/if these outcomes have occurred?

4. What performance or operational improvements are you expecting?

5. How will you know when/if the performance or operational improvements have occurred?

6. How much time must elapse before improvements can be measured? i.e., are the opportunities to apply what was learned available daily, monthly, yearly, or on a seasonal or business/operational cycle?

7. Who will be involved in the information collection within the division or department?

8. What is each client's role in supporting the transfer of learning within the division or department?

9. Who will prepare the workplace for the application of the new knowledge, skills, attitudes, values, or behaviors?

10. What methods will be used to collect data?

11. What indicators will be used to determine impact?

12. What results would indicate evidence?

13. What results would indicate proof?

14. How will the client, or clients, know if the impact measures are valid?

15. How will the results be reported?

16. How will they be shared?

17. How will they be used?

18. What is the total cost of developing and implementing an education and training program to treat this organizational need?

19. What is the cost associated with conducting behavior level impact evaluation?

20. What is the cost associated with conducting results level impact evaluation, i.e., ROI?

21. Is the cost of the education and training program and the impact evaluation justified when weighed against organizational need?

Step 4: Developing Programs for Impact Evaluation

         To treat an individual or organizational performance deficit with education and training that will be measured by impact evaluation methods, the program planning process must be conducted with precision. Anything less is likely to result in program objectives, content, and learning activities that are inappropriate to the goal. An ill-crafted program could readily produce the wrong impact, and poor evaluation results would follow.

         The program development process starts with the problem description and then describes the anticipated program impacts. A checklist for the program development process follows.

         For a full treatment of program and curriculum development, readers should consult JERITT Monograph Four, *Curriculum, Program, and Faculty Development: Managing People, Process, and Products* (Waldrop and Conner 1994) and JERITT Monograph Five, *Program Management: Managing Deadlines, Details, Activities, and People* (Conner and Waldrop 1994).

Program Development Checklist

Date: _____   Name of program: _____

  1. ____   Describe the individual, division or department, or organizational problem.

  2. ____   Explain how education and training can solve the problem.

  3. ____   Explain the desired change or impact.

  4. Assess needs.
  ___   Review literature, professional journals, research reports, and annual reports
          describing division or department, and organizational output.
  ___   Conduct on-site observations.
  ___   Conduct focus groups or committee meetings.
  ___   Distribute written surveys.
  ___   Conduct interviews.
  ___   Read evaluation results from previous education and training programs.
  ___   Read customer satisfaction data.
  ___   Read customer or court user complaints.
  ___   Read media reports.

  5. Develop goals.
  ___   Write realistic and achievable goals that will direct the efforts of the program
          planners, faculty, and participants.

  6. State objectives.
  ___   Write objectives so they state in specific, measurable, and clear terms what the
          participants should know or be able to do as a result of attending the program.
  ___   Identify types of objectives.
          ☐ Cognitive objectives are statements about what the participant can say or do to
            demonstrate mastery of knowledge and how to effectively use it.
          ☐ Affective objectives are statements about what the participant can say or do to exhibit
            learning that has resulted in a change in attitudes, values, or beliefs.
          ☐ Psychomotor objectives are statements about what the participant can do to
            demonstrate mastery of skills.

7. Establish content.

___   Content is relevant to objectives.

___   Content covers aspects of the subject matter that is pertinent to the workplace, offers enough theory to legitimize the subject matter, and explains its application in the workplace.

___   The content is arranged to assist the participant in grasping and applying the information.

8. Design presentation methods and activities.

___   Methods and activities are chosen after the objectives and content have been established.

___   Methods and activities are selected for their abilities to achieve the objectives and provide the best delivery of the content.

___   Possible methods

- ☐ lecture
- ☐ panel or debate
- ☐ small group activity
- ☐ demonstration
- ☐ experiential activity
- ☐ individual activity

9. Select audiovisual materials and room arrangements.

___   Audiovisual aids and materials assist in achieving objectives and display the content in a way that facilitates high participant learning and achievement.

___   Possible audiovisual aids

- ☐ flip charts and posters
- ☐ overhead transparencies
- ☐ slides
- ☐ videotapes
- ☐ audiotapes
- ☐ CD Rom
- ☐ DVD
- ☐ computer programs
- ☐ video conferencing, video teleconferencing, satellite broadcasts, closed-circuit television, etc.
- ☐ Web or internet based

   ___   Room arrangements provide physical and psychological comfort to aid in achieving objectives and best conveying content.

   ___   Possible room arrangements to consider

       ☐ classroom

       ☐ theater

       ☐ conference

       ☐ U-shape

       ☐ round

       ☐ herringbone

10. Present.

   ___   Presentation is founded on achieving the objectives, delivering the content, and utilizing adult education principles and practices.

   ___   The presentation cycle

       ☐ establishes the need to know

       ☐ provides new knowledge or information

       ☐ allows for validation and application of the knowledge and information

11. Evaluate.

   ___   Evaluation is designed to gauge the achievement objectives.

   ___   Levels of evaluation

       ☐ level one: reaction evaluation conducted throughout and at end of program

       ☐ level two: learning evaluation conducted throughout and at end of program, with brief follow-up after the participant has returned to workplace

       ☐ level three: behavior evaluation conducted several months after the participant returns to the workplace, likely to involve the participant and others that the participant reports to and interacts with

       ☐ level four: results evaluation measures training benefits and costs to calculate ROI

Step 5: Selecting the Data Collection Methods

Matching the data collection methods to the performance objectives is critical for obtaining usable and valid results. Volumes have been written about the pros and cons of the various evaluation methods. Educators are encouraged to become familiar with all evaluation methods, including data collection and analysis methods. What follows are characteristics of collection methods to be considered before final methods are selected.

Selecting the Data Collection Method Checklist

Date: _____   Name of program: _____

1. Surveys or Questionnaires

   Pros

   ___   Can be used with an entire population or a representative sample.

   ___   Can ask closed-ended questions, which makes the results easy to calculate.

   ___   Results can be analyzed and compared using various statistical methods.

   ___   Same instrument can be used before and after the program to identify impact of
           program.

   ___   Same instrument can be used to identify change over time.

   ___   Can ask open-ended questions to get more data.

   ___   Respondents are anonymous.

   ___   Are less expensive than some other more labor intensive methods.

   ___   Can easily analyze large quantity of data.

   ___   Data are believed to be objective, and therefore more credible.

   Cons

   ___   Instrument design and format is critical.

   ___   Question construction and sequence affects validity of results.

   ___   Must be pilot tested.

   ___   Knowledge and understanding of various methods of analysis are necessary to select
           and apply the correct method.

   ___   Provide no information beyond the questions asked.

   ___   Allow few narrative comments from participants.

   ___   Mailed surveys often have low response rates requiring multiple mailings to achieve a
           large enough sample size to be statistically significant.

2. Interviews

   Pros

   ___   Have a high response rate.

   ___   Interviewers can provide clarification of questions so the participant fully understands
           the questions.

   ___   Result in most questions being answered.

   ___   Generate rich and extensive data not usually obtained from written questionnaires
           with mostly closed-ended questions.

___ Can be structured as guided conversations to garner free ranging responses, or they can be structured to yield very precise answers to brief questions with limited response options.

___ Require person-to-person interactions.

Cons

___ Are time consuming, labor intensive, and expensive, which may result in fewer participants being contacted.

___ Participant responses are affected by the skill of interviewer.

___ Accuracy of data collected is contingent on interviewer's data collection skills related to hearing and recording data.

___ Data analysis relies on the interviewer's skill in coding, collapsing, recording, and reporting the data.

___ Data may not be comparable across participant groups or time.

___ Data is viewed as subjective and therefore less valid.

3. Focus Groups

Pros

___ Additional intellectual and emotional stimulation caused by people sharing their thoughts with the group may enrich and broaden the responses collected.

___ The same positive aspects of interviews apply to focus groups.

Cons

___ Controlling the process requires a highly skilled facilitator.

___ The same negative aspects of interviews apply to focus groups.

4. Observations

Pros

___ Behavior is directly observed.

Cons

___ Are labor intensive and can take a great deal of time and money.

___ Program objectives must be detailed, precise, and related to specific behaviors to be observed.

___ Are reliant upon the observer's skill in matching the program objectives with the behavior observed.

___ Behavior may be impacted by the Hawthorne effect unless the observer is non-intrusive and observes over enough time to see usual, customary behavior.

5. Pre- and Post-Tests

Pros

___   Pre-tests provide baseline data from which progress can be measured.
___   Information can be collected easily from all participants and other targeted individuals.
___   Are cheap to administer.
___   Results can be readily tabulated, analyzed, and compared.
___   Can easily accommodate large quantities of data for analysis.

Cons

___   Question construction is critical.
___   Questions must reflect the program objectives and precisely state the behavior to be tracked and the impact to be measured.
___   Results may not be anonymous depending on whether individual change or organizational impact is being measured.

6. Action Plans and Individual Development Plans

Pros

___   Participants develop own plans and commit to action steps complete with timelines.
___   All responsible and affected parties in the workplace must approve the plan and support its implementation.
___   All obstacles to and support for the improvements can be identified and dealt with.

Cons

___   Long-term monitoring may be required before impact can be measured.
___   May result in the discovery of additional individual and workplace needs.
___   Reporting is not anonymous.

7. Manager Meetings and Briefings

Pros

___   Participants and managers are active in the evaluation process.
___   Facilitate developing support for behavior change in the workplace.
___   Facilitate vertical and horizontal communications.

Cons

___ Depending on the size and scope of the evaluation, manager meetings and briefings can be labor intensive, time consuming, and costly.

___ Must focus on tracking changes or risk being ineffective for collecting data.

___ Data is anecdotal in nature.

8. Organizational Reports

Pros

___ No additional data collection is required.

Cons

___ Are valuable for tracking change only if they use data reflecting the program objectives.

9. Benefit-Cost Analysis

Pros

___ Reports training costs and attempts to measure benefits.

___ Measures organizational impact.

Cons

___ Because many factors affect how an organization operates, it is extremely difficult to isolate the effect of education and training.

___ Evidence, rather than proof, of change is typically what can be demonstrated.

___ It is extremely time consuming, and change can be very costly to track across the organization.

___ Organizational problems may be discovered that were previously unknown.

Step 6: Communicating the Results

Perhaps the most important and most overlooked step in any evaluation process is reporting the results. Often, results are given to the clients in a written report that is never read, or is read but never used. Impact evaluation is a collaborative process that relies heavily on client needs and cooperation in measuring the results. The impact evaluation process is not complete until the results are shared with each client via a written report and oral presentation.

In some cases, both client demands and the methods used require meetings throughout the process. For other clients, the evaluation parameters and processes are established and the client and educator do not meet again or share reports until the results are complete. The following checklist will guide the educator through determining what should be reported to whom, and when, where, and why.

Complete one checklist for each client.

Considerations for Communicating the Results Checklist

Date: _____ Name of program: _____

For each client determine:

1. Who is the evaluation client?

2. What does the client most want to know?
   ____ Write the report to meet the objectives.
   ____ Display results to highlight the objectives.

3. Where, in what setting, does the client want to receive the results?
   ____ One-on-one meeting
   ____ Small group meeting with other stakeholders
   ____ Large group meeting with stakeholders and other interested parties
   ____ Without personal contact, e.g., written report without any follow-up

4. When does the client want the results?
   ____ Periodically
   ____ When the evaluation is done
   ____ During the budget cycle
   ____ Before or after the budget cycle
   ____ To correspond with certain organizational, business, or political cycles
   ____ To avoid other large organizational reporting cycles or events

5. Why does the client want impact evaluation?
   ____ Improve division or departmental output
   ____ Improve organizational output
   ____ Supreme court request or mandate
   ____ Legislative request or mandate
   ____ State court administrator request or mandate
   ____ Public interest or education
   ____ Media interest or education

6. How should the report be formatted?

   ___   Title page

   ___   Executive summary or abstract

   ___   Acknowledgements

   ___   Table of contents

   ___   List of figures

   ___   List of tables

   ___   Chapter or section on the background of the evaluation, e.g., origins, purposes, goals, objectives, clients, description of what was evaluated, cost of evaluation, explanation of need for study and all relevant supporting documentation

   ___   Chapter or section which describes the research design, data collection methods, modes, and units of analysis

   ___   Chapter or section on the results which also includes a discussion of the strengths and weaknesses of the study

   ___   Discussions and recommendations

CHAPTER FIVE

Closing Remarks and Encouragement

Impact evaluation is neither easy nor cheap. It should never be undertaken as a post-program afterthought.

Impact evaluation has value beyond measuring individual or organizational performance improvements. It can make judicial branch education programs better because of the precision it brings to the development and execution of education and training. Impact evaluation can also demonstrate that judicial branch education is integral to court operations and should not be marginalized. When it is demonstrated that education and training can bring desired organizational change, judicial branch education will have a prominent role to play in the future of the courts.

With this prominence, however, comes a great deal of responsibility. Judicial branch education must receive, from the court organization, the authority and resources to respond appropriately to the challenge. Similarly, judicial branch educators must be ready and willing to accept this new role. This monograph offers judicial branch educators the knowledge, information, and tools to take a leadership role in implementing impact evaluation. It puts judicial branch educators in the center of the process, ready to engage in high-level discussions with all members of the organization and stakeholders outside the organization.

Impact evaluation is really about organizational change, and organizational change is not welcome to those with a stake in maintaining the status quo. To be successful with impact evaluation, judicial branch educators must exercise a great deal of professionalism and sensitivity to possible implications of the evaluation results. Often, impact evaluation will uncover organizational weaknesses that were not obvious before the evaluation. The judicial branch educator has the responsibility to make this likelihood known to clients prior to embarking on impact evaluation. Clients then will not be surprised if this happens and ways to handle possible discoveries can be determined before any such findings are brought to light.

Even though impact evaluation can be frightening for some, for others it will signify that the courts are serious about making improvements its employees will be proud of, its users will enjoy, and its funders will applaud.

APPENDIX

Data Collection Methods and Sample Forms
for Impact Evaluation

Surveys or Questionnaires

Use with
Level One, Reaction; Level Two, Learning; Level Three, Behavior; Level Four, Results

Tips for use
1. Use to collect pre- and post-assessment information.
2. Use when collecting quantitative data about attitudes, beliefs, values, behaviors, and measurable outcomes.
3. Use when population or sample size is large enough to render valid results.
4. For examples of survey questionnaires, see JERITT Monograph One, *Judicial Education Needs Assessment and Program Evaluation* (Hudzik 1991).

Steps to develop, disseminate, and analyze
1. Identify what is expected to change on the job as a result of the program.
2. Develop questions that will collect measurable data related to the expected change.
3. Identify appropriate and necessary questions about participant characteristics— questions such as age, sex, race/ethnicity, time on the job, and geographic location.
4. Develop for each question easily understood response options that can be statistically calculated and analyzed.
5. Sequence the questions from least threatening or invasive to most threatening or invasive.
6. Determine the data collection and analysis plan.
7. Pilot test the instrument.
8. Make changes based on results of the pilot test.
9. Prepare the final instrument for distribution.
10. Announce the upcoming survey questionnaire, explain its purpose, data collection methods and process, and how the results will be reported and used.
11. Send the instrument with a letter from an organizational leader or executive.
12. Send a reminder.
13. Collect, tabulate, and analyze responses.
14. Write the final report.
15. Distribute the final report to respondents and other stakeholders.

Sample Survey/Questionnaire

This survey is designed to identify how useful JERITT's Web site (http://jeritt.msu.edu) has been to you, and what JERITT can do to continue to serve your growing and changing needs. Please answer the following questions.

1. Have you ever visited JERITT's Web site?   Yes   No

    If yes, proceed to the remaining questions related to the Web site. If no, please indicate why you have not visited the Web site by checking below all reasons that apply.
    - ☐ Haven't had time
    - ☐ No need in my position
    - ☐ New to field
    - ☐ Didn't know it was available
    - ☐ Don't know how to access it
    - ☐ Don't have internet access

2. Did you find the JERITT Web site attractive? (Check one.)   — — — — —

    (Extremely   Very   Moderately   Somewhat   Not at all)

3. Did you find the JERITT Web site easy to navigate? (Check one.) — — — — —

4. Indicate the areas of the Web site you have visited by checking all that apply.
    - ☐ What's New
    - ☐ Databases
    - ☐ Publications
    - ☐ Communications
    - ☐ National Futures Symposium
    - ☐ Resources
    - ☐ JERITT Staff Information

5. Indicate the three areas you visit the most. List them in order of most used.
    a. (foremost)_____
    b. _____
    c. _____

    Comments on JERITT Web site:

6. Would you like other features included on JERITT's Web site?   Yes   No
    If yes, please describe?

Interviews

Use with
Level One, Reaction; Level Two, Learning; Level Three, Behavior

Tips for use
1. Use when information needed is difficult to obtain in written form.
2. Use when qualitative data on behaviors, skills, values, attitudes, and beliefs is needed.
3. Use when contextual or descriptive information is needed.
4. Can be used to collect pre- and post-test or assessment information.
5. If measuring organizational impact, use when population or sample size is large enough to provide valid results.
6. If measuring individual, department, or division change, population or sample size is not a factor.

Steps to develop, conduct, and analyze
1. Identify what is expected to change on the job as a result of the program.
2. Develop questions.
   a. Structured interview questions are brief with precise response options.
   b. Unstructured interview questions are open-ended and may be followed up with more direct and probing questions.
3. Pilot test the questions and interview process.
4. Train the interviewers to use active listening skills; appropriate verbal, nonverbal, and vocal communication skills; and effective techniques for asking questions and recording answers.
5. Determine the collection, coding, and reporting process.
6. Analyze and report the results.

Sample Interview Guide

The purpose of this interview is to discover what practitioners believe is the work of judicial branch educators. (Use this sheet when asking questions. Record respondent's answers on separate sheets.)

Demographic Data

  1. Date:

  2. Gender:

  3. Name:

  4. Title:

  5. Name of organization:

  6. Where organization is housed:

  7. Educational background:

  8. Length of service:

  9. How many personnel in your organization:

10. Size of your budget:

11. What audiences do you serve? What are their numbers?

Interview Questions

12. What are the responsibilities or functions of your job? Do you have a job description you could give me?

13. Describe the organizational structure within which you work and where in the organization judicial branch education is placed.

14. Do you have organizational peers? If yes, what is your role and relationship like with them?

15. Do you have an administrator? If yes, what is your role and relationship like with that person?

16. Using a scale from 1 to 5, with 1 being the lowest and 5 the highest, tell me the extent to which you enjoy your work.

17. Explain what about your work brings you joy.

18. Explain what about your work challenges or disappoints you.

Focus Groups

Use with
Level One, Reaction; Level Two, Learning; Level Three, Behavior

Tips for use
1. Use to collect qualitative information on attitudes, beliefs, values, and behaviors.
2. Establish open but focused communication environment.

Steps to develop, conduct, and analyze
1. Plan topics for discussion.
2. Develop questions and determine sequence in which they will be asked.
3. Determine how to record the answers.
4. Keep the group size small, between five and fifteen people.
5. Ensure that the participants are representative of the target population.
6. Select skilled facilitators.
7. Keep a list of the participants.
8. Determine coding of responses and analysis methods for calculating results.
9. Report the results.

Sample Focus Group Recording Form

Date: Name of program:

Name of facilitator:

Names of participants:

Question/Topic	Comments	Supporting Opinions	Opposing Opinions	Consensus

Observations

Use with
Level One, Reaction; Level Two, Learning; Level Three, Behavior

Tips for use
1. Use when secondary assessment is not sufficient to measure change.
2. Use when change can be directly observed.

Steps to develop, conduct, and analyze
1. Know precisely what is to be observed.
2. Pre-determine the exact change being sought, and identify degrees of change that are acceptable.
3. Train observers in desired techniques to conduct observations, record what they see, analyze and interpret what they see, and report their findings.
4. Determine ways to minimize the effort of the observer.
5. Prepare a schedule for observations in collaboration with all involved parties.
6. Select data recording options, which may include written notes, audio recording, video recording, or computer monitoring.
7. Can be used to collect pre- and post-test or assessment information.

Sample Observation Recording Form

Date: Name of program:

Name of observer:

Names of participant:

Expected specific behavior, attitude, value, or belief to be observed	Specific behavior, attitude, value, or belief being demonstrated	Differences between what is expected and what is observed

Pre- and Post-Tests

Use with
Level One, Reaction; Level Two, Learning; Level Three, Behavior; Level Four, Results

Tips for use
Many evaluation methods can be used as pre- and post-tests. In particular, see the following forms in this appendix.

Action Plans

Use with
Level Two, Learning; Level Three, Behavior

Tips for use
  1. Use to obtain commitment for change.
  2. Use when a written plan is necessary for the participants and others who will be involved in observing, supporting, or measuring the change.

Steps to develop, implement, and analyze
  1. Identify what needs to be improved.
  2. Determine if the participant received the necessary knowledge and skills.
  3. Identify who will be affected by, and involved in, the change process.
  4. Determine the obstacles and supports for the change.
  5. Assess the available resources and the time it will take to effect the change.
  6. Measure the results against the plan.
  7. Explain what happened and why.
  8. Report the results.

Sample Action Plan Form

Date: Name of program:

Name of participant:

---

1. What needs to be improved and why?

---

2. What outcomes or benefits to your division, department, or organization do you
   hope to achieve in measurable terms?

---

3. What are the success indicators?

---

4. List all obstacles and corresponding solutions.

Obstacles	Solutions

5. Identify the people whose cooperation and support you need.

Task/Action	Support Person

6. What resources do you need?

Task/Action	Resource

7. Set out a timeline.

Task/Action	Completion Date

8. At what intervals will your plan be reviewed?

Interval	Date	Comment

9. Obtain commitments (signatures) from affected parties.

Participant: _____ Date: _____

Supervisor/Manager/Director: _____ Date: _____

Co-Worker: _____ Date: _____

Individual Development Plans

Use with
Level Two, Learning; Level Three, Behavior

Tips for use
1. Use when individual performance improvement is required.

Steps to develop, implement, and analyze
1. The manager and participant agree on the performance to be improved; and together they select the education and training program and workplace supports to effect change.
2. Both the manager and the participant identify indicators that will demonstrate success. Indicators must be achievable.
3. Both the manager and the participant will determine what time and resources are necessary to effect the change.
4. Measure change by whether the plan was met.
5. Explain what happened and why.
6. Report results.

Sample Individual Development Plan Form

Date: Name of program:

Participant name: Manager name:

1. Select target performance area.

2. List current competencies.

3. List desired competencies.

4. Determine success indicators.

5. Indicate necessary resources or supports.

6. Record progress.

Required Competency	Date Acquired	Date Competency Applied	Level of Success	Comments

Organizational Reports

Use with
Level Three, Behavior; Level Four, Results

Tips for use
1. Use when data currently collected by the organization is an accurate and precise measure for assessing change.
2. Use when organizational variables will remain constant over the collection period.
3. Use in pre- and post-tests and assessments.

Steps to collect and analyze
1. Meet with those collecting and reporting the data to determine the level of systematic data collection methods and conditions.
2. Gain approval from organization's leaders to use the reports.
3. Assess results.
4. Report findings.

	Sample Organizational Report Log			
Date: Name of program: Factor/competency being measured:				
Name of Report	Indicator	Before	After	Comment

Manager Meetings and Briefings

Use with
Level Three, Behavior; Level Four, Results

Tips for use
1. Use when manager's cooperation, support, and assessment are critical for collecting data and supporting change.
2. Use in pre- and post-tests and assessments.

Steps to employ
1. Meetings should be focused on the objectives of the evaluation.
2. Meetings should be held at pre-scheduled intervals that correspond with data collection needs.
3. The factors to be discussed should be agreed upon in advance.
4. The data collected in the meetings or briefings should be recorded with the prior consent of the managers.
5. Record results.
6. Explain the results and why.
7. Report findings.

Sample Manager Meeting or Briefing Log						
Date: Name of program:						
Manager(s) name:						
Topic/Task/ Factor	Education/ Training Participant(s)	Competency Level Before | After		Hindrances	Supports	Discussion

Benefits, Costs, and ROI Analysis

Use with
Level Four, Results

Tips for use
1. Use when change to an organization output is the goal.
2. Use in pre- and post-assessment to measure program effect.

Steps to develop, implement, and calculate
1. Identify all the variables and their possible effects on change, including the education or training, when planning a benefit-cost analysis.
2. Determine how to measure the benefits and costs as they relate to the education and training program objectives.
3. Prepare to explain findings in a way that highlights the accomplishments and deficiencies of all operations involved in the desired change.
4. Prepare to report other organizational deficiencies that may become apparent through the evaluation process.
5. Associate a monetary value with each benefit and cost considered when possible.
6. Compare benefits and costs.
7. Calculate ROI.
8. Report results with explanation.

Worksheet A
One-Time Program Costs

Instructions: Complete this form once for each program. The program design and development is a one-time program cost, as is the program evaluation. These one-time program costs need to be divided by the number of times the program will be offered to calculate a cost per offering. The per-offering costs will be transferred to *Worksheet B: Program Costs Per Offering.* Note: The numbering system on this form coordinates with Worksheet B, the form to which the data will be transferred.

Name of program:		
Number of times program will be offered:		
1	**Program design and development (one-time cost)**	
1.1	needs assessment	$
1.2	program design	$
1.3	content development	$
1.4	price/fee packaged program	$
1.5	review and adjustment	$
1.6	salaries paid to individuals for time involved in design and development	$
1.7	benefits paid to individuals involved in design and development	$
1.8	indirect costs associated with salaries and benefits paid to individuals involved in design and development	$
1.9	education and training consultant fee associated design and development	$
	Total one-time program design and development cost	$
	Per-offering design and development cost Total design and development cost ÷ # of times program will be offered =	**$**

9	Evaluation	$
9.1	development of evaluation plan	$
9.2	data collection instrument	$
9.3	dissemination and collection	$
9.4	analysis	$
9.5	reporting	$
9.6	salaries paid to individuals for time involved in the evaluation	$
9.7	benefits paid to individuals involved in the evaluation	$
9.8	indirect costs associated with salaries and benefits paid to individuals involved in the evaluation	$
9.9	education and training consultant fees associated with the evaluation	$
	Total one-time program evaluation cost	$
	Per-offering evaluation cost Total design and development cost ÷ # of times program will be offered =	**$**

Worksheet B
Program Costs Per Offering

Instructions: Complete this form each time a program is offered. Per-offering line item totals will be accumulated (by item) and transferred to line items similarly named and numbered on *Worksheet D: Benefit-Cost Ratio and ROI*.   Note: Cost categories may change based on the program being evaluated. Add or change categories as needed.

	Name of program:	Number of staff: Number of instructor/consultants:	
	Date program is offered:	Number of participants:	
1	**Per-offering design and development cost** (from Worksheet A)		**$**
2	**Participant materials**		
2.1		notebooks	$
2.2		handouts	$
2.3		assessments	$
2.4		shipping	$
	Total participant materials cost per offering		**$**
3	**Instructor/consultant fees and costs**		
3.1		preparation	$
3.2		presentation	$
3.3		teaching aids	$
	Total instructor or consultant fees and costs per offering		**$**
4	**Equipment**		
4.1		projectors	$
4.2		VHSs/DVDs	$
4.3		screens	$
4.4		flipcharts	$
4.5		microphones	$
4.6		recordings	$
4.7		computers	$
4.8		phone lines	$
4.9		studio costs for video teleconferencing	$
4.10		uplinks	$
4.11		downlinks	$
4.12		cameras	$
4.13		bridging service	$
	Total equipment cost per offering		**$**

5	**Facilities**	
5.1	meeting rooms	$
5.2	food/beverage rooms	$
5.3	group meals	$
5.4	group breaks	$
	Total facilities cost per offering	**$**

6	**Travel, Lodging, and Per Diem Meals**	
6.1	travel for all participants, instructor/consultants, staff*	$
6.2	lodging for all participants, instructor/consultants, staff*	$
6.3	per diem meals for all participants, instructor/consultants, staff*	$
	Total travel, lodging, and per diem meals cost per offering	**$**

7	**Salary, benefits, and indirect costs paid for participants during this program offering**	
7.1	salaries paid for all participants	$
7.2	benefits paid for all participants	$
7.3	indirect costs for all participants	$
	Total salary, benefits, and indirect costs for all participants per offering	**$**

8	**Salaries, benefits, and indirect costs paid for staff* during this program offering**	
8.1	salaries paid for staff *	$
8.2	benefits paid for staff*	$
8.3	indirect costs paid for staff*	$
	Total salary, benefits, and indirect costs for all staff* per offering	**$**

9	**Per-offering evaluation cost** (from Worksheet A)	**$**
	Total of all costs per offering	**$**

* Staff refers to the education and training department staff members

Optional Cost Calculations

1. *Per Participant Cost Per Offering*
   Total (sum) of all costs per offering ÷ # of participants = per participant cost of offering

2. *Cost Averages*
   (Note: Averages can be calculated only after totals from all offerings are available.)
   a. Total cost of all offerings ÷ total number of offerings = average offering cost
   b. Total cost of all offerings ÷ total number of participants = average participant cost

Worksheet C
Program Benefits

Instructions

1. Complete this form for each participant in the education and training program being evaluated. Line item totals will be accumulated by item and transferred to line items similarly named and numbered on *Worksheet D: Benefit-Cost Ratio and ROI.* Note: If a large number of participants and other employees and managers are involved, consider using an average rate for salaries, benefits, and indirect costs. Use the averages, multiplied by the number of people involved, in the calculations that follow.

2. Determine the unit of measurement, e.g., hourly, daily, weekly; for salaries, benefits, and indirect costs. This sample form uses hourly rates.

3. Some calculations require the use of unit costs that are pre-calculated by the organization.

4. Identify the length of time data will be collected. The length of the evaluation period is used to calculate the value of the benefit. The collection period must be determined on the business or operational cycle required to capture all relevant impact data associated with the education and training program.

5. Accumulated totals from all program benefits worksheets will be calculated and recorded on this worksheet, *Worksheet D: Benefit-Cost Ratio and ROI.* Note: Not all benefit categories will be appropriate for the item or activity being evaluated. Chose only those categories, or add others, that most accurately represent what is being evaluated.

6. Many of the values required to complete this worksheet will need to be obtained from the organization's human resources department, finance and budget department, or comptroller.

Worksheet C
Program Benefits

Name of program:	Date program is offered:	
Unit of measurement to be used for salaries, etc., e.g., hourly, daily, weekly		
Length of evaluation period:		
Employee name or ID:		
1	**Monetary value of time savings**	
1.1	Value of reduced time for participant to perform tasks associated with program during the evaluation period # of hours saved x hourly rate for participant's salary + benefits + indirect costs x number of hours in evaluation period	$
1.2	Value of reduced time for completion of entire operation involving the tasks associated with program during the evaluation period # of hours saved x hourly rate for all other involved employees' salary + benefits + indirect costs x number of hours in evaluation period	$
1.3	Value of reduced supervision/management time involving the tasks associated with program during the evaluation period # of hours saved x hourly rate for involved managers'/supervisors' salary + benefits + indirect costs x number of hours in evaluation period	$
	Total monetary value of time savings	**$**

2	**Monetary value of increased productivity**	
2.1	Value of participant's reduced downtime associated with program during the evaluation period # of hours saved x hourly rate for participant's salary + benefits + indirect costs x number of hours in evaluation period	$
2.2	Value of entire operation's reduced downtime associated with program during the evaluation period # of hours saved x hourly rate for all other involved employees' salary + benefits + indirect costs x number of hours in evaluation period	$
2.3	Value of supervisor/manager's reduced downtime associated with program during the evaluation period # of hours saved x hourly rate for involved managers'/supervisors' salary + benefits + indirect costs x number of hours in evaluation period	$
	Total monetary value of increased productivity	**$**
3	**Monetary value of improved quality**	
3.1	Fewer returns or corrective actions needed because of dissatisfaction or incomplete service on matters associated with program during the evaluation period # of hours saved x hourly unit cost per task	$
	Total monetary value of improved quality	**$**

4		**Monetary value of improved personnel performance**	
	4.1	Value of reduced absenteeism associated with program during the evaluation period $\#$ of hours saved x hourly rate for employee's absentee costs x number of hours in evaluation period	$
	4.2	Value of reduced health care claims associated with program during the evaluation period $\#$ of claims fewer x unit health care cost per claim	$
	4.3	Value of reduced grievances associated with program during the evaluation period $\#$ of grievances fewer x unit cost per grievance	$
		Total monetary value of improved personnel performance	$
5		**Monetary value of improved workplace environment**	
	5.1	Value of reduced employee assistance program claims associated with program during the evaluation period $\#$ of claims fewer x unit cost per claim	$
	5.2	Value of reduced management intervention time associated with program during the evaluation period $\#$ of hours saved x hourly rate for involved managers'/supervisors' salary + benefits + indirect costs x number of hours in evaluation period	$
		Total monetary value of improved workplace environment	$
		Total value of all benefits	$

Worksheet D
Program Benefit-Cost Ratio and ROI

Instructions: Complete this form once for each program. Using all *Worksheet B: Program Costs Per Offering* sheets for the evaluation period, and all *Worksheet C: Program Benefits* for those involved with the program, accumulate line item totals by item and transfer totals to line items similarly named and numbered here. Calculate benefit-cost ratio and ROI.

Name of program:		
Date program is offered:		
Benefit-Cost Ratio and ROI Worksheet		
	Monetary value of program benefit item	**Total Benefit**
1.	Monetary value of time savings	$
2.	Monetary value of increased productivity	$
3.	Monetary value of improved quality	$
4.	Monetary value of improved personnel performance	$
5.	Monetary value of improved workplace environment	$
	Total monetary value of program benefits	**$**
	Program cost item	**Total Cost**
1.	Program design/development cost	$
2.	Participant materials cost	$
3.	Instructor cost	$
4.	Equipment cost	$
5.	Facilities cost	$
6.	Travel, lodging, and meals cost	$
7.	Participant salary and benefits cost	$
8.	Educator/trainer and staff salary and benefits cost	$
9.	Evaluation cost	$
	Total program costs	$

The following example of calculating and expressing the benefit-cost ratio (BCR) demonstrates that for each dollar spent on education and training, $4.23 is returned in benefits. BCR is typically expressed as a ratio, in this case it would be 4.23:1.

BCR = $75,000 (Benefits) ÷ $17,740 (Costs) = $4.23

Note: There is no established minimum for an acceptable benefit-cost ratio. Each organization will need to determine its own standards.

Calculating Benefit-Cost Ratio (BCR) Total monetary value of program benefits ÷ Total program costs =	
BCR	_____ :1

In the following example, ROI, expressed as a percentage, is 323%. This means that for every dollar invested in education and training, the organization received $3.23 in returns after program costs were recovered.

ROI = 75,000 (Benefits) - 17,740 (Costs) ÷ 17,740 (Costs) x 100.0 = 322.7 or 323%

Calculating Return on Investment (ROI) Total net benefit, i.e., Total monetary value of program benefits – Total program costs ÷ Total program costs x 100.0 =	
ROI	_____%

Intangible Benefits

Often, programs such as those dedicated to improving customer satisfaction, providing new conflict resolution techniques, developing teamwork, eliminating bias, improving morale or motivation, or advancing court public outreach, for example, generate benefits that can be identified but not expressed directly as a monetary gain.

These intangible benefits should be reported along with the benefit-cost and ROI figures. The educator will need to explain why these benefits cannot be assigned a monetary value; then indicate how the organization is nonetheless improved by the benefits.

Using the data collection methods explained in this monograph, educators can collect, analyze, and report both tangible and intangible benefits from education and training that might otherwise go unreported and unrecognized.

REFERENCES

Bramley, Peter. 1996. *Evaluating Training Effectiveness: Benchmarking Your Training Effectiveness after Best Practice*. 2nd ed. London: McGraw-Hill.

Conner, Maureen E., and Karen Waldrop. 1994. *Program Management: Managing Deadlines, Details, Activities, and People*. JERITT Monograph Five. East Lansing, MI: Judicial Education Reference, and Technical Transfer (JERITT) Project.

Conner, Maureen E. 1999. *Claiming Status in an Emerging Occupation: A Study of State Judicial Education in America*. JERITT Monograph Nine. East Lansing, MI: Judicial Education Reference, and Technical Transfer (JERITT) Project.

Dubois, David D. 1993. *Competency-Based Performance Improvement: A Strategy for Organizational Change*. Amherst, MA: HRD Press.

Hudzik, John K. 1991. *Judicial Education Needs Assessment and Program Evaluation*. JERITT Monograph One. East Lansing, MI: Judicial Education Reference, and Technical Transfer (JERITT) Project.

Kirkpatrick, Donald L. 1998. *Evaluating Training Programs: The Four Levels*. 2nd ed. San Francisco: Barrett-Koehler.

Lofland, John, and Lyn H. Lofland. 1995. *Analyzing Social Settings: A Guide to Qualitative Observation and Analysis*. 3rd ed. Belmont, CA: Wadsworth Publishing Co.

Parry, Scott B. 1997. *Evaluating the Impact of Training: A Collection of Tools and Techniques*. Alexandria, VA: American Society for Training and Development.

Payne, David A. 1994. *Designing Educational Project and Program Evaluations: A Practical Overview Based on Research and Experience*. Norwell, MA: Kluwer Academic Publishers.

Pepper, Allan D. 1992. *Managing the Training and Development Function*. 2nd ed. Brookfield, VT: Gower Publishing Co.

Phillips, Jack J. 1997a. *Handbook of Training Evaluation and Measurement Methods*. 3rd ed. Houston: Gulf Publishing Co.

———. 1997b. *Return on Investment in Training and Performance Improvement Programs*. Houston: Gulf Publishing Co.

Robinson, Dana Gaines, and James C. Robinson. 1989. *Training for Impact: How to Link Training to Business Needs and Measure the Results*. San Francisco: Jossey-Bass.

Waldrop, Karen, and Maureen E. Conner. 1994. *Curriculum, Program, and Faculty Development: Managing People, Process, and Product*. JERITT Monograph Four. East Lansing, MI: Judicial Education Reference, and Technical Transfer (JERITT) Project.