

Results-Based Training Evaluation 0
RESULTS-BASED TRAINING EVALUATION FOR CAMPUS LAW
ENFORCEMENT

Results-Based Training Evaluation for Campus Law Enforcement

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INTRODUCTION

Over the last several years a sizeable number of campus law enforcement administrators have had the misfortune of observing a steady decrease in the amount of funding available for organizational training initiatives. The reasons for this decrease in available funds earmarked for training has often resulted for a myriad of reasons, such as the loss of valuable state funding for public educational establishments in general by state legislative representatives , the desire of campus administration to steer available funding to other perceived critical organizational needs, and from the outcries of both parents and students as they are asked to increasingly shoulder a larger burden for their own, or their children's, educational pursuits. Regarding these sources of funding for educational establishments and initiatives, a recent article in "The Houston Chronicle" reported a planned tuition increases at The University of Texas -Austin of 26 percent, beginning in the fall 2003 to fall 2004 school year, and that Texas A&M University has proposed a 21 percent increase for their fall 2004 semester. These increases are primarily the result of the recent Texas legislature's decision to deregulate educational funding and allow for adjustments to be made by the individual institutions, but realistically transpired from a decrease in the amount of monies available for state services and initiatives, which included public institutions.

While no administrator desires to have their training budget decreased, it is an unfortunate reality that in both public, as well as private organizations, one of the first casualties of a reduced budget is often training. In many instances this could not come at a worse time for the campus administrators, the majority of whom are expected to provide, at a very minimum, state mandated training for their law enforcement officers to

keep certifications current. This reality, coupled with the escalating expectations of the community for law enforcement agency to provide the same, or perhaps even an increased level of policing services on their respective campuses with highly trained officers, appears to be nonsensical. It can be stated that expectations and reality often meet, but unfortunately the expectations, no matter how unrealistic, often carry the day when it relates to expected police actions by the general public. While maintaining the organizational training budget in these lean budget times may not be entirely plausible, there still remains a useful process that may be utilized to protect current available training funds, and that in the long run may even enable an increase in the funds available for essential future training initiatives. This process, often overlooked in the planning and organization of law enforcement training initiatives, has often been referred to as results-based training evaluation.

The Results Based Evaluation

Phillips (1997) in his recent text “Handbook of Training Evaluation and Measurement Methods”, defines evaluation as “a systematic process to determine the worth, value, or meaning of an activity or process” (p. 36). While generally speaking program and training evaluation is not a new subject for most experienced law enforcement trainers and administrators, what is distinctive regarding the Phillip’s text is the depth to which the evaluation process is taken. Phillips notes that the majority of established evaluation models, such as the Kirkpatrick Four Level Approach and the more recent CIPP Model, stop short of providing a complete picture of the training process. Phillip’s recommends that many training evaluations warrant a more intensive, what he refers to as a “Level Five”, effort of evaluation. In the Phillip’s level five evaluation, which he also termed a

“Return on Investment” evaluation, “the measurement focuses on the actual results program participants achieve as they successfully apply the program material” (p. 43). Notably, it also includes information regarding the monetary value and costs of the overall program.

The Phillip’s five levels of evaluation can be described as:

1. Reaction and Planned Reaction- measures participant’s reaction to the program and outlines specific plans for implementation.
2. Learning- measures skills, knowledge, or attitude changes.
3. Job Applications- measures change in behavior on the job and specific application of the training material.
4. Business Results- measures business impact of the program.
5. Return on Investment- measures the monetary value of the results and costs for the program, usually expressed as a percentage.

Phillips results-based model actually consists of 18 steps, which he suggests should be followed to achieve a comprehensive training evaluation. These methods will be listed and discussed briefly in order to enhance the discussion of the results-based model of evaluation.

1. Conduct a Needs Assessment and Develop Tentative Objectives- the first step in any training program should be a needs assessment. The purpose of the needs assessment is to evaluate current deficiencies in knowledge, skills or attitudes of the trainees, and may be completed through the use of a survey or questionnaire.
2. Identify Purposes of Evaluation- this step is simply determines why the evaluation should be completed in the first place. If the training is for informational

- purposes only, for example, a comprehensive evaluation may not be needed, a simple questionnaire at the end of the program may be sufficient.
3. Establish Baseline Data- is of prime importance, and answers the question of what to evaluate. The data may be collected both before and after the training session.
 4. Select Evaluation Method/Design- the types of evaluation methods include pre and post-course examinations, participant feedback, participant follow-up, action planning, and performance contracts.
 5. Determine Evaluation Strategy- this steps answers the questions of who, where, and when relative to the overall evaluation process.
 6. Finalize Program Objectives- this step is made after all the questions regarding the evaluation plans have been answered. Each objective should be related to baseline data that have been collected.
 7. Estimate Program Costs/Benefits- this step involves estimating the approximate costs of developing and actually conducting the program.
 8. Prepare and Present Proposal- a formal proposal may be needed to supply management with the pertinent information regarding the training program. This step should be comprehensive, and prepared to grab the administrator's attention.
 9. Design Evaluation Instruments- the instruments that one might use for this stage of the evaluation may include record keeping systems, questionnaires, examinations, attitude surveys, interviews, focus groups, observations, or job simulations.
 10. Determine and Develop Program Content- may be determined by a subject matter expert or other knowledgeable individual.

11. Design or Select Delivery Methods- includes all of the traditional methods of program delivery, such as presentation-discussion, conference, case study, role play, workshop, computer based instruction, simulations and games, etc. The selection of the appropriate method depends on many factors, such as budgets, available resources, time frame, and program objectives.
12. Test Program and Make Revisions- often overlooked, pilot testing of the training program gives the developer an opportunity to test some of the evaluation methods and to make adjustments as needed.
13. Implement or Conduct Program- self explanatory, this step is an integral part of the evaluation process. Additionally, all training participants should be made aware of the expected results of the training program.
14. Collect Data at Proper Stages- a system to collect the data should be implemented at the appropriate time and the data collected for later review.
15. Analyze and Interpret Data- although some statistical analysis is needed the analysis does not have to involve the assistance of a statistician, and may be completed by current staff in a majority of situations. Measures of central tendency (the mean, median and mode generally) indicated the impact on the participants as a group. Measures of dispersion (standards deviations and analysis of variance) are used to calculate how widely the performance of the participants varies when compared with each other and over time. Measures of association use correlation to show a quantitative relationship between different elements of the HRD program and performance.

16. Make Program Adjustments- the program may need changes based on the analysis of the information that is collected.
17. Calculate Return on Investment- the basic formula for return on investment is:

$$\text{ROI}(\%) = \frac{\text{Net Program Benefits}}{\text{Program Costs}} \times 100$$

A return on investment is called for if an economic justification is planned. If so, then the ROI provides a sound basis for calculating the efficient use of financial resources allocated to training activities.

18. Communicate Program Results- four people usually need this type of information. One is the training staff and director of training for the purposes of making program improvements. Management is another important group, as they are the individuals who control the training purse strings and often have a desire to know the outcomes of the monies that are spent toward training efforts. The third group is the participants who need feedback on how well they have done in the training program. The fourth group is the participant's immediate managers, who must make adjustments and schedule classes accordingly (Phillips, 1997).

Example ROI Training Evaluation

An example of a training evaluation using the Phillip's ROI strategy is provided as an example of the format and usefulness of the ROI evaluation process. It should be noted that the data used for this evaluation is not authentic, and was developed solely for discussion of how ROI may be used within a campus law enforcement organization.

Fleet Safety Initiative for the HISD Police Department

Rationale

The Houston Independent School District Police Department approached this training group for the purpose of designing and implementing a program designed to reduce the excessive number of at-fault traffic accidents within their 40 man police department. The department believed that both the number and severity of traffic accidents involving its officers could be reduced, saving the organization money (vehicle repair costs), time as a result of lost labor (injuries), and the court appearances which are often necessitated to defend the organization from outside lawsuits generated as a result of motor vehicle accidents. There have been no organized efforts to date taken by the police department, other than negative disciplinary efforts taken against patrol officers found at fault in a motor vehicle accident, and the department had the desire to move in the direction of a more positive outcome, with an officer fleet safety training initiative.

Initial Meeting

An initial meeting was held on February 13, 2004 at HISD Police Department headquarters. In attendance were the Paradigm Consulting Group, the Chief of Police, the Assistant Chief of Police, and the HISD Police Department's Fleet Coordinator. During this meeting the group reviewed the historical fleet accident data to ascertain whether past police vehicle accidents were considered fault or non-fault, actual costs for repairs, costs for litigation (if any), and the approximate costs for time lost by injured police officers. After a brief discussion the group concluded that a full needs assessment should be completed by the training group and a curriculum be developed

to decrease the number of police vehicle accidents by patrol officers. It was decided to meet again after the needs assessment to work out a costs and a timetable for the training sessions.

Needs Assessment Results

Hard data available for review:

1. Number of vehicle accidents in 2003: 10
2. Number of at fault accidents: 7
3. Cost of vehicle repairs: \$60,000 Yr.
4. Lost officer time from injuries: \$45,000 Yr.
5. Litigation costs to department: \$45,000 Yr.

Soft data available for review-added benefits of the program:

1. Attitude changes from knowledge gained from training sessions.
2. Increased individual confidence levels.
3. Reduction of injuries sustained from accidents

This training group had already completed a job analysis within the police department within the last year for the job position of police officer. The results indicated in regards to vehicle safety and operations that officers felt their competence levels for pursuit driving were low, and felt that advanced pursuit drivers training would be helpful. Officers also were of the opinion that the resultant legal issues regarding liability for accidents was of prime importance to them, and rated litigation concerns above injuries sustained in order of importance.

Subject matter expert panel:

A subject matter expert (SME) panel consisting of 4 officers and 2 sergeants from the HISD patrol division was convened to verify the information that was received from the original job analysis regarding police vehicle operation. A questionnaire was developed by the training group to further the discussion, and by using nominal group technique it was established that training in the issues of officer civil liability and personal injury would be of value. These specific issues are to be instructed via classroom lecture format by the training group. Officer should also receive training in evaluating and identifying possible road hazards and other terrain situations, as several of the accidents involving the patrol vehicles were noted to have originated from hazards on campus property (pot holes, low pipes or objects sticking out of the ground, etc.).

Additionally, there was unanimous agreement that the course should consider having at least five full days of defensive /pursuit driving to be instructed by the Houston Police Academy's Driving Range personnel. Perceived pursuit driving confidence levels were identified to be low among the officers, and it was felt that increasing pursuit driving confidence could be a factor to reduce police pursuit driving accidents and the resultant injuries sustained to both officers and civilian groups noticeably reduced .

After this data was gathered another meeting was held with the consulting group and the same initial group of commanding officers, and it was decided that HISD would like the training program to be designed and implemented as soon as was practical. It was decided to have 15 officers and five sergeants attend the first training session, and the other 15 officers and sergeants would follow within a four-week period.

Pertinent statistics: What do fleet accidents costs a law enforcement agency?

Law enforcement agencies face three major cost items as a result of fleet motor vehicle crashes- workers compensation benefits, civil lawsuits, and vehicle repair and replacement expenses.

The average worker's compensation benefit paid each year per state law enforcement agency is \$161,003, and for other law enforcement agencies, the average is \$117,190.

In this study, 93% of the state law enforcement agencies and 51% of the other law enforcement agencies reported that they have had civil suits filed against them as a result of a motor vehicle collision. These percentages are representative only of the agencies who responded to the survey, and may not reflect all of the police agencies in the IACP membership.

State agencies spent an average of \$214,000 per year per agency on repairs or replacements to departmental vehicles because of motor vehicle accidents, and other law enforcement agencies spent an average of \$125,400 (source: IACP Law Enforcement Fleet Crash Study, 09-95).

Evaluation Model Used

It was decided that a return on investment model would be used for the evaluation of this training program, since the department desired to be shown the actual estimated value of the training program. The program would use a Level 5 evaluation, which would provide HISD with the estimated return on investment of the training initiative. There was historical data available regarding the patrol vehicle accidents, such as the actual number of accidents (fault and non-fault), injuries sustained by the officers resulting in missed

time from work, and costs for vehicle repairs, which were available for analysis at the end of the program.

Title of Program

Fleet Safety Initiative for the HISD Police Department

Goals and Terminal Performance ObjectivesGoals:

The program goal is a 30% reduction in the number of traffic accidents resulting in damages to patrol units, a similar reduction in the amount of injuries to police officers, and a reduction of litigation expenses. The training session would also additionally show other enhanced performance results of a soft nature, such as a boost in confidence levels by the patrol officers, and other positive attitudinal results which comes from the satisfaction of completing a rigorous training course.

Terminal Performance Objectives:

The evaluation instrument that will be utilized are: HISD historical accident records, a 6-month post training session evaluation of accident to date, pre-tests of the patrol officers at the beginning of the program to assess attitudes and prior knowledge, a post-test at the end of the 80 hour intensive course consisting of a written exam (80% required as a passing score), and lastly a pursuit driving exam scored by a member of the drivers training section of the training team (90% overall score needed to pass). Expectations were set high for the group, and it was decided that as an incentive for successfully completing the course the officers would receive a specially designed fleet safety pin to wear on their uniforms if desired. As an additional incentive, it was decided that officers who went for a one year period without an accident would receive an additional day off

from work with pay that could be utilized during the upcoming benefit year. All officers who did not receive a passing score would be given an additional opportunity within a six week period to retry the section of the specific portion of the test that was failed. Those not scoring the minimum percentage would be taken off of motorized patrol duties and placed on a campus at one of the districts schools or buildings where a police presence is necessitated, where driving is not an ordinary function of that position.

Distal Evaluation:

It was decided that an evaluation of the programs success would be completed in approximately 6 months from the date of the last class. This evaluation would be of the historical data gathered to that date regarding the number and types of vehicle accidents. It was anticipated that at least half of the original 30% reduction desired would be realized regarding the number of accidents, injuries sustained, repairs, and litigation costs in this first six month period. The group also wanted to re-evaluate the patrol officers who completed the program to determine any behavioral changes that may have occurred as a result of attending the training sessions. The original pre-test and post-test would be used and compared to the new questionnaire as another measure of the success of the program.

Figuring the ROI

Simply, the return on investment can be described as the costs incurred by the training program minus its expected benefits. I have calculated the expected return on investment for this example fleet safety initiative program and will now list expected results below.

Costs of the program:

1. Program materials	\$1000
2. Instructor costs	\$4000
3. Facilities costs	\$1000
4. Design and development	\$4000
<u>Total Costs</u>	\$10,000

Program Benefits: (estimated to be 30%)

1. Reduction of vehicle repairs	\$18,000
2. Reduction of officer injuries	\$14,000
3. Reduction of litigation costs	<u>\$14,000</u>
<u>Total benefits</u>	\$46,000

<u>Cost benefit ratio:</u>	Program benefits	<u>\$46,000</u>
	Program costs	\$10,000

ROI = \$36,000 (24,000 x 100)

ROI%= 36% (estimated)

CONCLUSIONS

Many campus law enforcement agencies have witnessed a sizable reduction of available monies available for the training of their classified police personnel. This has often resulted from circumstances beyond the immediate control of the police department, such as a reduction of state and other funding initiatives for the organization as a whole, significant outside pressures that are placed on school administrators by parents and students burdened with burgeoning tuition increases,

and other organizational cutbacks made by administrators trying to squeeze more returns from each available dollar.

While additional training funds may not be on the immediate horizon for many of the campus law enforcement organizations, they should still remain ever vigilant in their search for additional training dollars to train their police personnel. Often this may necessitate seeking outside training resources via grants, or the combining of training monies and resources with other similarly situated police departments (ex., regional training initiatives), in an effort to increase training opportunities. One often overlooked source to assist in the salvaging of training dollars, however, is the utilization of the evaluation process to support current and developing training initiatives. By using the return on investment in the training evaluation process, it may be possible for the campus policing organization to increase support from campus administration (as well as current departmental officers and staff) for training programs by providing evidence of a results oriented, cost/benefit conscious, training program.

Note: For more information about evaluation and the return on investment process please see the “Handbook of Training Evaluation and Measurement Methods” by Jack J. Phillips, 1997 (3rd Edition), Butterworth-Heinemann publishing, Woburn, MA.

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