

# Barriers to Behavior-based and Outcome-based Evaluations of Workplace Training

Presented by:

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# The Kirkpatrick Levels

## **Level 1: Reaction**

What is the learner's immediate response to the training?

**Typical methodology:** survey conducted before or shortly after training session ends

## **Level 2: Knowledge**

To what degree did the learner absorb the new information?

**Typical methodology:** quiz conducted at end of training session

## **Level 3: Behavior**

To what extent is the learner using the new information on the job?

**Typical methodology:** survey of learners 3-6 months after training completed

## **Level 4: Results (Outcomes)**

To what extent did the training achieve the organizational goals which prompted the implementation of training?

**Typical methodology:** collection of quantifiable performance measures pre- and post-training

***typical methodology ≠ effective methodology***

## Why Is Evaluation of Training Important?

Money spent by U.S. organizations spent on internal workforce training in 2011: **\$86.5 billion**

Average direct expenditure per employee in 2011: **\$1,182**

(ASTD, 2012)

“The creation of well-constructed evaluations can be useful in generating support for budget expenditures, continuing and modifying existing programs, and measuring the impact specific training programs have on the organization’s business goals.”

(Kirkpatrick and L’Allier, 2004)

## Significance of the Problem

“I know we should evaluate at Levels 3 and 4, but...”

### **2009 ASTD survey (ASTD, 2009)**

- 75% of organizations strongly valued Level 3 evaluations
- 55% conducted Level 3 evaluations to any extent
  
- 59% of organizations strongly valued Level 4 evaluations
- 37% conducted Level 4 evaluations to any extent

### **2006 eLearning Guild survey (Pulichino, 2007)**

- 97% of organizations perceived high value for Level 3 evaluations of training effectiveness
- 52% conducted Level 3 evaluations at least some of the time
  
- 97% of organizations perceived high value for Level 4 evaluations of training effectiveness
- 27% conducted Level 4 evaluations at least some of the time

# Survey: Evaluation Usage & Perceptions (Kennedy, Chyung, Winiecki, & Brinkerhoff, 2012)

- 68% of respondents earned a certificate or graduate degree related to training
- 81% of respondents completed at least one credit or non-credit course specifically on evaluation

Organizations evaluating training on a regular basis (40% or more of program evaluated)

Level 1: 88%

Level 2: 75%

**Level 3: 43%**

**Level 4: 18%**

How sufficient is each level for judging training effectiveness?

Level 1: 53%

Level 2: 60%

**Level 3: 62%**

**Level 4: 43%**

How important is it to conduct each level?

Level 1: 66%

Level 2: 96%

**Level 3: 99%**

**Level 4: 88%**

# Survey: Stakeholders & Reasons for Evaluation

**Top stakeholder for Level 3 and Level 4 evaluations:** the training department itself

## **Top reasons for Level 3 evaluations**

1. Relevance of content
2. Value of training's contributions to the organization
3. Factors impeding or helping transfer of training

## **Top reasons for not attempting Level 3 evaluations**

1. Lack of resources
2. Lack of support from organizational management
3. Lack of expertise in evaluation

## **Top reasons for Level 4 evaluations**

1. Value of training's contributions to the organization
2. Relevance of content
3. Success in executing changes leading to organizational goals

## **Top reasons for not attempting Level 4 evaluations**

1. Lack of resources
2. Lack of expertise in evaluation
3. Lack of access to post-training data

# Gilbert's Behavior Engineering Model (Gilbert, 2007)

	Information	Instrumentation	Motivation
Environmental	Data	Resources	Incentives
Individual	Knowledge	Capacity	Motives

# Logic Model: Ideal Evaluative Capacity

	Capabilities	Critical Actions	Key Results	Outcomes
Organizational Level	Data	<p>Organization clearly defines its expectations for the evaluation of training, and defines the role of training department in the evaluation process.</p> <p>Organization facilitates the collection of data required for evaluation, and encourages feedback to flow between the training department, stakeholders, and downstream impactees.</p>	<p>Organization receives evidence of the effectiveness of its training interventions for workforce improvement.</p>	<p>Organization improves organizational success by making use of evaluation results and transforms to a learning organization.</p>
	Resources	<p>Organization allocates sufficient personnel to the training department to allow adequate time for the evaluation process without negatively impacting other departmental priorities.</p> <p>Organization acquires or develops tools for collection and analysis of evaluation data.</p>		
	Incentives	<p>Organization makes visible how it values evaluation as an important component of workforce improvement.</p>		
Individual Level	Knowledge	<p>Training professional uses the terminology, concepts, and models applicable to training evaluation.</p> <p>Training professional communicates effectively with organization at all levels.</p>	<p>Training professional successfully conducts evaluation of training, generates evidence of contribution towards organizational goals involving workforce improvement, and then communicates results to the appropriate groups.</p>	<p>Training professional or training department functions as a strategic business partner and is actively involved in improving organizational success.</p>
	Capacity	<p>Training professional possess the cognitive capability to make data-based evaluative judgments.</p>		
	Motives	<p>Training professional wants to perform the required jobs and has motives aligned with the work and work environment.</p>		



## **Organizational Data**

- Regulatory/accreditation requirements
- Organizational policies
- Leadership support

## **Organizational Resources**

- Allocation of resources for evaluation
- Availability of tools

### **Organizational Data**

- Lack of leadership support for evaluation
- Lack of value placed on evaluative data

### **Organizational Resources**

- Lack of resources

### **Organizational Incentives**

- No visible support from leadership
- No consequences for non-cooperation

### **Individual Knowledge**

- Interpretation of Level 4 leading to no perceived need for Level 4 evaluations

## References

American Society for Training & Development. (2009). *The value of evaluation: Making training evaluations more effective*. Alexandria, VA: ASTD Research.

American Society for Training & Development. (2012). *2012 state of the industry report: ASTD's definitive review of workplace learning and development trends*. Alexandria, VA: ASTD Research.

Gilbert, T. F. (2007). *Human competence: Engineering worthy performance (Tribute ed.)*. San Francisco, CA: Pfeiffer.

Kennedy, P.E., Chyung, S.Y., Winiiecki, D.J., Brinkerhoff, R.O. (2012). Training professionals' usage and understanding of Kirkpatrick's level 3 and level 4 evaluations. *International Journal of Training and Development*, 18(1).

Kirkpatrick, D. L., & L'Allier, J. J. (2004). Evaluation as a strategic tool. *Chief Learning Officer*, 3(6), 30-33.

Pulichino, J. P. (2007). *Usage and value of Kirkpatrick's four levels of training evaluation*. (Unpublished doctoral dissertation). Pepperdine University, Malibu, CA.

## Presenter Information

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