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### Evaluation Principles and Implentation for Performance Improvement

Younghee Jessie Kong

Franklin University, [jessie.kong@franklin.edu](mailto:jessie.kong@franklin.edu)

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# Evaluation Principles and Implementation for Performance Improvement

Younghee Jessie Kong Ph.D. International Institute for Innovative Instruction, 08/11/2016

## Abstract

Many organizations spend a lot of money to provide training courses or programs to improve their performance in today's competitive environment. Therefore, evaluation plays a critical role in making judgments about the value or worth of a course or a program that provides solutions for improving the performance of programs and organizations. However, most organizations do not actually conduct effective evaluations of their training programs due to lack of professional knowledge and skills in training evaluation as well as lack of evaluation resources and instructions. This poster is to introduce fundamental theories and models for summative evaluation and provide practical guidelines for conducting an evaluation in an appropriate way. More specifically, this poster 1) explores major evaluation models and theories emerged in organizations, 2) identify major evaluation tasks and activities required in each major phase of an evaluation process, and 3) describes appropriate techniques and tools that are derived from evaluation theories and models to complete each evaluation task and activity. This poster is designed to inform college faculty who teach an introductory level evaluation course or performance professionals who want a solid conceptual grounding in evaluation and a guide for applying such concepts in their own work.

## Why Evaluate?

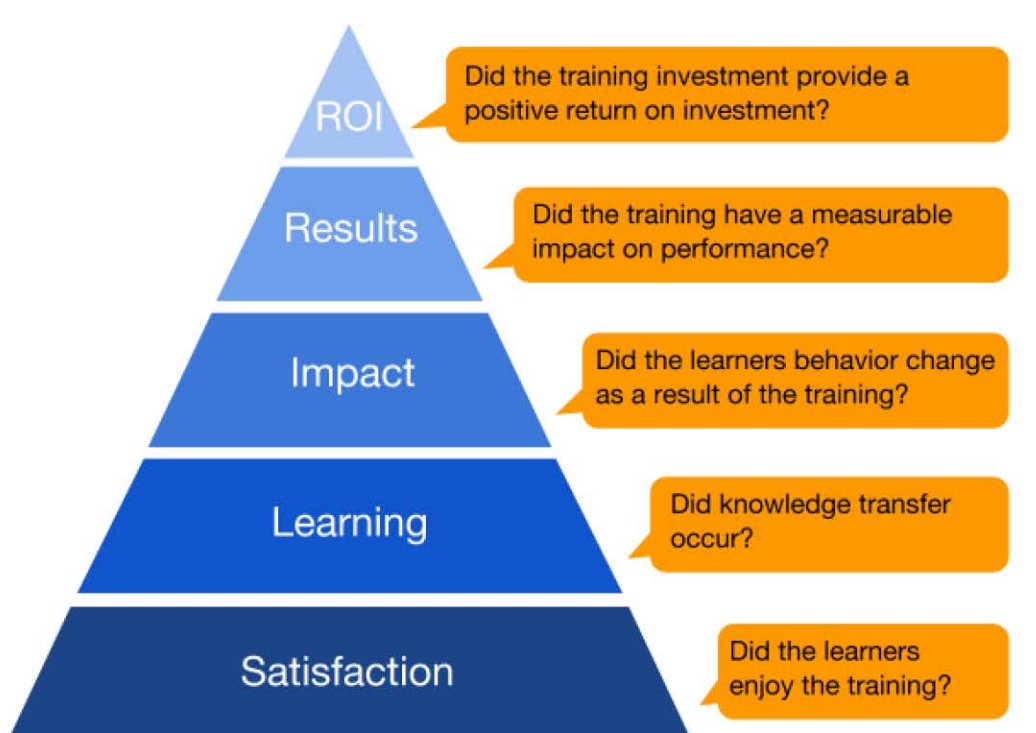
- **Decision Making:** training effectiveness, drivers and barriers for performance improvement, program/course revision, personnel decisions, etc.
- **Feedback:** feedback to course designers, trainers, or trainees
- **Marketing** for the training programs (Kraiger, 2002)

## Evaluation Models

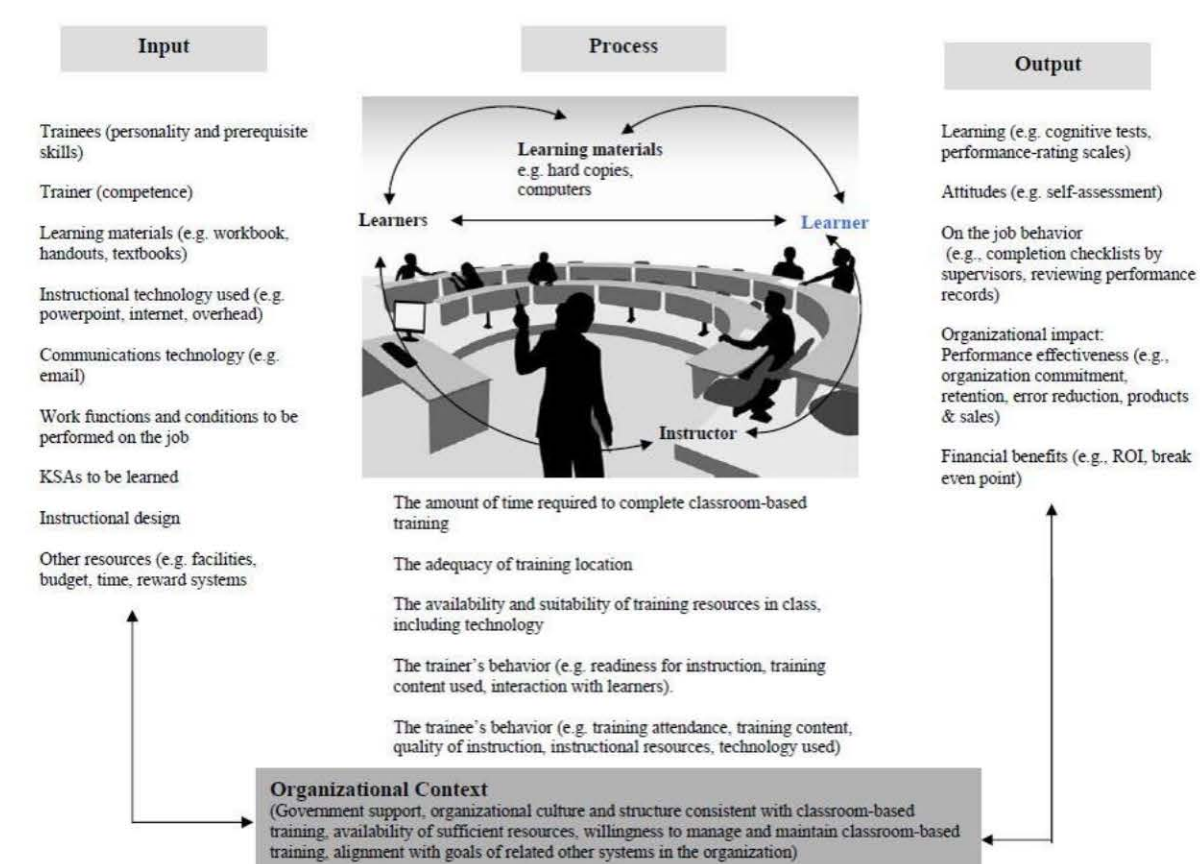
### Kirkpatrick's Four-Level of Evaluation



### Philips' Five-Level of Evaluation & ROI



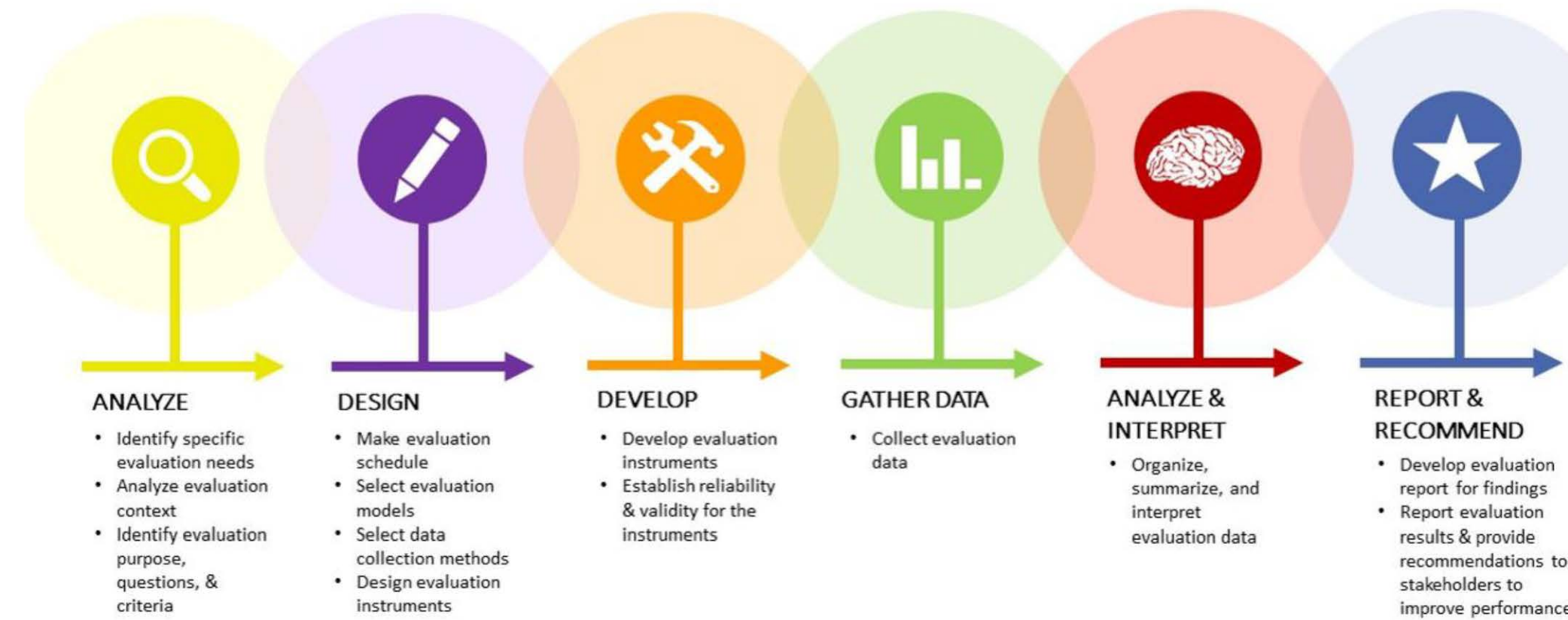
### System-based Model (CIPP Model)



### Fitzpatrick, Sanders, & Worthen's Evaluation Approach

1. Clarifying the evaluation request and responsibilities
2. Setting boundaries and analyzing the evaluation context
3. Identifying and selecting the evaluation questions and criteria
4. Planning how to conduct the evaluation
5. Collecting evaluation information
6. Analyzing and interpreting evaluation information
7. Reporting and recommending the results of evaluation

## Generic Evaluation Process

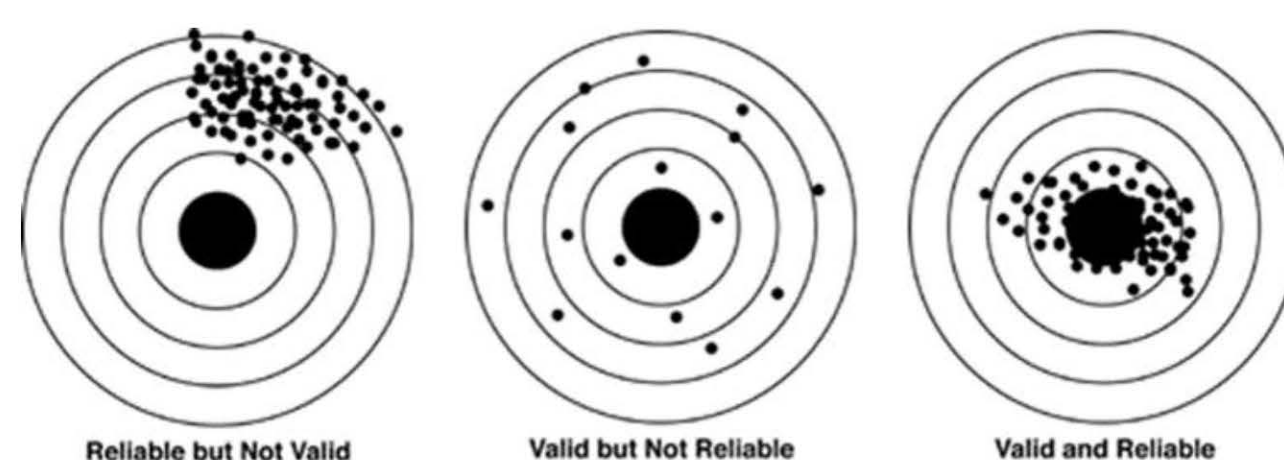


### Phase 1: Needs Analysis

- Identify specific evaluation needs.
- Identify the organizational goals.
- Identify the organizational needs and/or gaps.
- Identify stakeholders and their expectations for evaluation.
- Analyze resources and capability that can be committed to the evaluation E.g., employees needed, hour estimates, types of tools and technologies).
- Analyze the evaluation context.
- Identify evaluation purpose, questions, and criteria.

### Phase 2: Design

- Select/modify appropriate evaluation models for your evaluation tasks.
- Make an evaluation schedule including:
  - Evaluation timeline from beginning to end.
  - Development of instruments
  - Data collection, data analysis, and evaluation report
- Select appropriate data collection methods
- Design your evaluation instruments Answer
  - evaluation questions.
  - Measure learning objectives.
- Set up validity and reliability for your instrument.
  - **Validity:** It is valid, if the test measures what it is supposed to measure.
  - **Reliability:** It is reliable, if the test consistently yields the same results for a given individual.
  - what is the relationship between validity and reliability?



Data Collection Methods	Quantitative	Advantages	Disadvantages
Observation Methods	Participant Observation		
	Focus Group		
	Message Group Technique		
	DMGT/Technique		
	Simulation		
	Classroom Experiments/Techniques		
Interviews/Content Methods	Questionnaire		
	Classroom Assessment Tests		
	Work Behavior Check		
Document Content Methods	Direct Data Review		
	Questionnaires		
	Articles & Web Includes		

Data Collection Methods (Guerra-Lopez, 2008)

Learning Objectives	Weight	Learning Level	Test Component						Reference Material
			Pretest	Formative	Summative	Final	Posttest	Retention	
Prepare for a classroom presentation	3	Application	3	3	3	3	3	3	Hale, (2011), pp. 34, 35; Hargrave, (2009), p. 10
Prepare for a classroom presentation	3	Application	3	3	3	3	3	3	Hale, (2011), pp. 34, 35; Hargrave, (2009), p. 10

Test Instrument Design (Hale, 2011)

Validity	Reliability
Face Validity	Test-Retest
Content Validity	Equivalent of alternate forms
Concurrent-Criterion Validity	Split-Half
Predictive Validity	Kuder-Richardson
Construct Validity	Cronbach's alpha coefficient

Types of Validity & Reliability Guerra-Lopez, 2008)

### Phase 3: Development

- Develop evaluation instruments for gathering data based on your analysis and design. The following are the examples of developing test items.

**Using Structured Interviewing to Select and Hire Desirable Job Candidates**

**POST-TEST**

**Test Instructions**

The purpose of this test is to determine what you understand and remember from this course. This test has 25 questions of various types. You will be given 60 minutes to take the Post-Test. If you complete the test early, you can take a break and return when the time is up (TIME REMAINS ON CLOCK). We will then review the answers together as a group.

You are encouraged to select the best possible answer for each question. We will provide feedback during the test review period. If you run out of time on the questions, you will need to take the test online at a later date. You will be encouraged to take the course again or review the materials on your own prior to retaking the test.

Scores for this test will be reported to Human Resources. Failing this course does not negatively affect your performance review.

**Test Instructions**

**Test Items**

**Feedback**

### Phase 4: Data Analysis

#### Quantitative Data Analysis

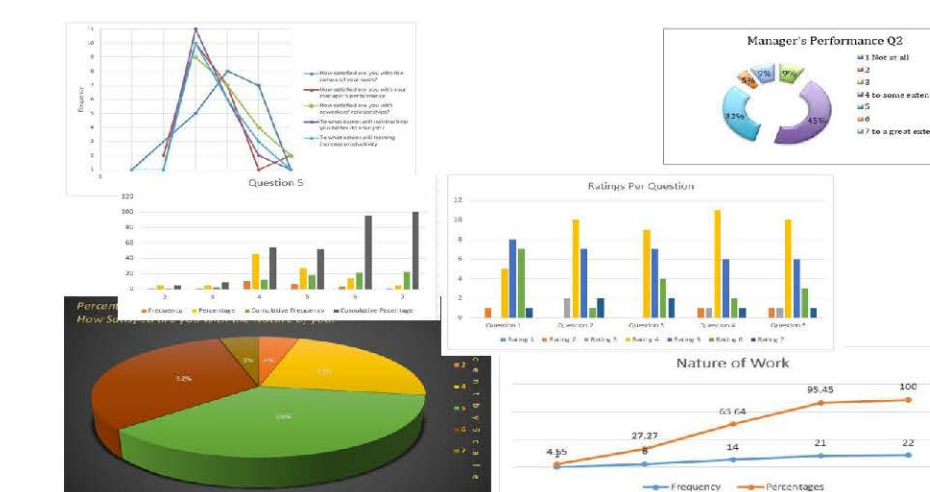
Descriptive statistics: to summarize or describe data. The most commonly used descriptive statistics are measures of central tendency, measures of variability, visual representations, and measures of relationships.

#### Describe numbers:

- Measures of Central Tendency: Mode, Median, & Mean
- Measures of Dispersion (Variability): Range, Semi-Interquartile Range, & Standard Deviation

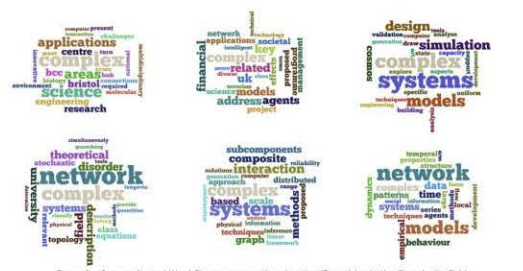
**Graphical Representations of Data:** Bar graph, line chart, pie chart, etc.

#### Interpreting and drawing conclusions.



#### Qualitative Data Analysis

1. Review the interviewees' transcripts and your notes during the interview or observation.
2. Recognize recurrent themes and code them accordingly. To generate codes, you highlight words or phrases that described important themes or meaning using different colors, and labeled each code with a term in the margins of the transcripts.
3. Using these codes, create categories and subcategories for each statement/term. To design a category system, categories of the same "order" should have approximately the same level of abstraction. Based on the level of abstraction, create subcategories, if necessary.
4. Repeatedly read each statement and endeavored to clearly define categories as well as kept codes semantically close to the terms they represented.
5. After categorizing, compare all categories to find similarities, differences, and patterns among categories
6. Draw conclusions (Maxwell, 2005).



### Phase 5: Report & Recommendations

#### How do you communicate your findings with stakeholders?

- Ongoing communication with the evaluation stakeholders in each step of an evaluation process.

Stakeholder	Key Information	Key Messages	Key Actions
Senior Management	Overall findings, ROI, strategic implications	Key findings, recommendations, next steps	Approve budget, allocate resources
Trainers	Feedback on training effectiveness, areas for improvement	Training effectiveness, areas for improvement	Improve training content, methods
Learners	Feedback on training experience, learning outcomes	Learning outcomes, training experience	Provide feedback, improve training
Human Resources	Findings on employee performance, training needs	Employee performance, training needs	Develop training programs, monitor performance

(Preskill & Russ-Eft, 2005)

#### What are important considerations for developing a useful and effective evaluation report?

- Based on your stakeholders' needs and preferences, summarize:
  - Needs Analysis
  - Data Collection
  - Data Analysis & Interpretation
  - Conclusion & Recommendation

### References

1. Fitzpatrick, J., Sanders, J., & Worthen, B. (2004). *Program evaluation*. MA: Pearson.
2. Guerra-Lopez, I. (2008). *Performance evaluation*. CA: Jossey-Bass.
3. Hale, J.A. (2011). *Test development workbook*. Downers Grove, IL: Hale Associates.
4. Kong, Y. (2009). *A comparison of the practices used by human resource development professionals to evaluate web-based and classroom-based training programs within seven Korean companies* (Doctoral dissertation). Retrieved from OhioLINK.
5. Kraiger, K. (2002). Decision-based Evaluation. Chapter in K. Kraiger (Ed.) *Creating, implementing, and managing effective training and development systems in organizations: State-of-the-art lessons for practice* (pp. 331 - 375). SF: Jossey-Bass.
6. Maxwell, J. (2005). *Qualitative research design: An interactive approach* (2nd ed.). Thousand Oaks, CA: Sage Publications.
7. Preskill, H. & Russ-Eft, D. (2005). *Building evaluation capacity*, (pp. 325-326). Thousand Oaks, CA: Sage.