

# Train-the-Trainer Certificate Program

## Module 5 Evaluation



Connecticut Training & Development Network and Department of Administrative Services

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## Your Module 5 Facilitators



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## Introduction

- Introduce yourself
- Your agency
- Your experience with evaluations

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## Agenda –



- | Welcome/Overview
- | Why Do Evaluation?
- | Types of Evaluation
- | 4 Levels of Kirkpatrick Model
- | Summary
- | Evaluation

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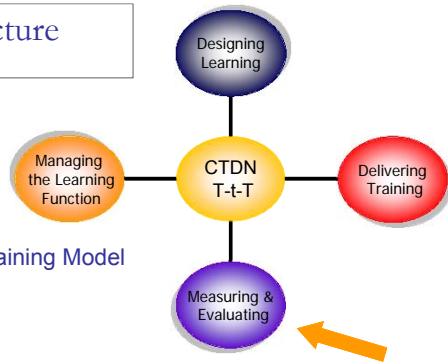
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## Big Picture

CTDN Training Model



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## Objectives



- | At the end of this module you will be able to:
  - Identify the key components of a formative evaluation
  - Describe all levels of Kirkpatrick's evaluation module used to assess training effectiveness
  - Design a level 1 evaluation according to Kirkpatrick's guidelines

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# Objectives



- At the end of this module you will be able to:
  - Given learning objectives, design level 2 criterion test items
  - Given learning objectives, design a level 3 evaluation
  - Given a case study, describe how to evaluate learning using Kirkpatrick's level 4 criteria

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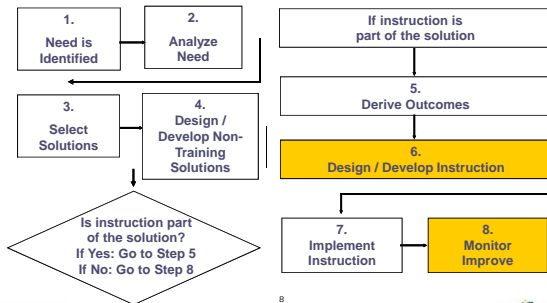
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# Mager's Strategy of Instructional Development



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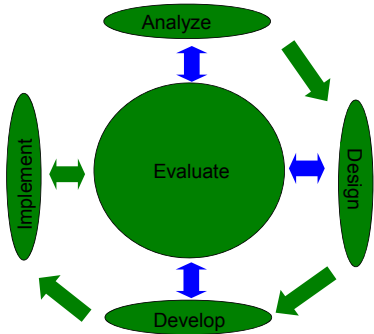
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## Exercise 1

- 2 Groups
- Group 1 discuss – Why should we do evaluations?
- Group 2 discuss – Why don't we do evaluations?

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**Report-Outs**

Each Group

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## Practical Tip #1

**Only evaluate what you are going to act upon!**

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## 2 Types of Evaluations



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### Formative

- Determine if curriculum meets learning objectives
- Provide data to revise curriculum
- Build support for program

"Evaluation designed to keep you from embarrassing yourself" – [McGarry](#)

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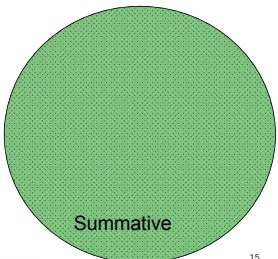
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"Evaluation designed to keep you employed" - [McGarry](#)



"Evaluation designed... to present conclusions about the worth of the program..." *Dick & Carey*

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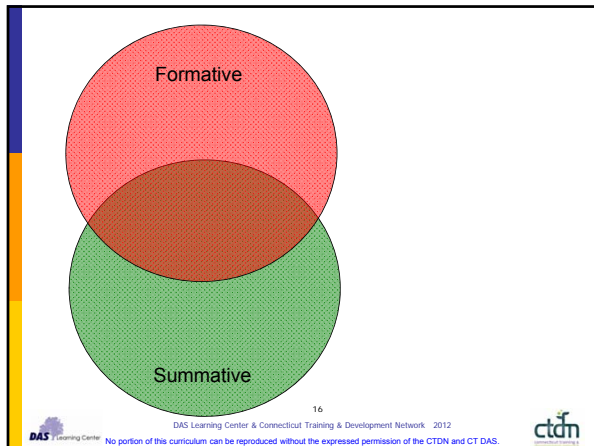
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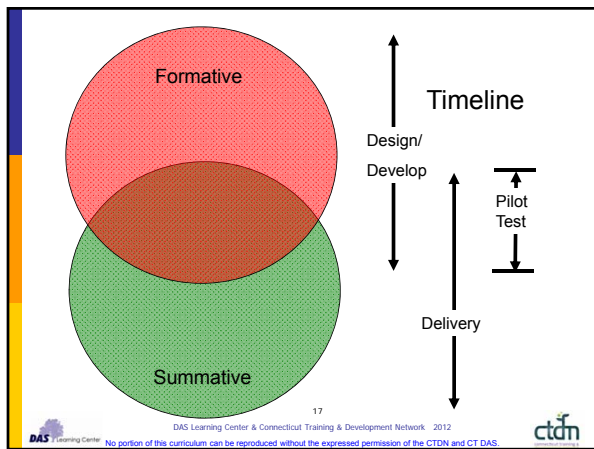
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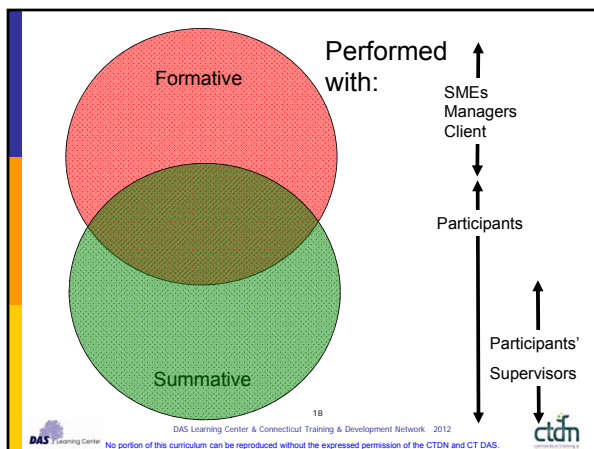
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## Formative Evaluation

Look for:

- | Objectives appropriate?
- | Material/exercises appropriate?
  - For learners
  - Tie to objectives
  - Proper amount
- | Pacing/time?
- | Topic Sequencing?
- | Details
  - Typos, colors, animations, etc.

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## Exercise 2

- | Groups of 3
- | Develop how you are going to do formative evaluation of your project
- | Report Out

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**ASPIRING LEADERS**  
*...where managers become leaders*

CONNECTICUT Executive Development Program

**Practical Formative Evaluation**

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**Summative Evaluation**

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**Kirkpatrick's 4 Levels of Evaluation**

*From Wikipedia*

<b>Reaction</b>	What they thought and felt about the training
<b>Learning</b>	The resulting increase in knowledge or capability
<b>Behavior</b>	Extent of behavior and capability improvement and implementation/application
<b>Results</b>	The effects on the business or environment resulting from the trainee's performance

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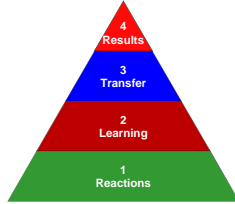
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## How They Build on One Another

In Kirkpatrick's four-level model, each successive evaluation level is built on information provided by the lower level.

It is a progressive concept.  
**Usually.**



Comments formed and quotations from a detailed article form the Encyclopedia of educational technology: "Kirkpatrick's Four levels of evaluation"

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## Level 1 Evaluation - Reactions

■ We ask the student, customer, attendee, etc. after they attend a program...

- Did they like it?
- Was it relevant?
- Etc....



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## Level 1 Evaluation - Reactions



This is one of the most well known evaluation models in Staff Development, the **Smile Sheet**

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## Level 1 Evaluation - Reactions

- Following Kirkpatrick's model; **every** program should be evaluated at least at level one
  - Allows for feedback on the program and for improvements
  - Positive comments do not necessarily assure good learning but negative ones reduce the probability and should be addressed

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## Practical Tip #2

**Nobody cares about positive smile sheet results but you !**

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## Practical Tip #3

**Pay attention to all negative feedback !**

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## Exercise - Level 1 Reaction

- Skim "Level One Evaluation: Reaction" handout
- Draft a Level 1 evaluation for your project. You may use the level 1 evaluation from your agency or any from the level 1 sample packet to design an evaluation for your project
- Be prepared to discuss with the class



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## Level 2 Evaluation - Learning

- Second type in progression of evaluations
- Did the learner gain knowledge or improve skills?
  - There are several methods from the informal to the formal to garner information
  - Pretest and post test are examples of a way to measure
  - In-class activities and exercises are another



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## Level 2 Learning

- Training programs teach:
  - Knowledge**
    - What was learned?*
  - Skills**
    - Were skills developed or improved?*



From *Evaluating Training Programs* by Kirkpatrick & Kirkpatrick

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## Relevance

- Often times lack of transfer to the workplace is blamed on the training rather than external forces. Measuring learning at the end of training establishes that failure to transfer or obtain results later is due to factors other than the training.
- Without measuring learning, you are unable to defend from a cost/time perspective the value of the training.
  - Used to improve training or to determine whether the training is necessary.

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## Level 2 Learning



Can't measure changes in behavior (level 3) unless learning took place in the training session.

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## Guidelines for Evaluating Learning

- Use a control group if practical
- Evaluate knowledge, skills both before and after the program
- Use a pencil-and-paper test to measure knowledge
- Use a performance test to measure skills
- Get 100% response
- Use the results of the evaluation to take appropriate action

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## Level 2 Learning

### Norm-Referenced

- Performance of students compared with one another and judgment made on basis of comparison
  - Example:
    - Grading on a curve
    - Best in class gets an "A"

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## Level 2 Learning

### Criterion-Referenced

- Judgment made based on comparison of a measurement with objective standard
  - Example
    - Be able to add a column of 10 numbers correctly in 30 seconds without a calculator
- We most often use criterion-referenced measurements for training purposes
- To create a pre-post test, your questions are based on your learning objectives

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## Practical Tip #4

If your learners aren't learning your program needs work!

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## Practical Tip #5

If your learners aren't applying what they learned your program needs defending!

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## The Sequel

### Objectives

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## Objectives – The Sequel

### Refresher

- Each objective will describe the (a) performance, (b) conditions, (c) standard:
  - a. What someone should be able to do
  - b. The conditions under which the doing will occur
  - c. The criteria by which the performance will be judged



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## Hard Objectives

- Examples:
  - Build a roadway
  - Create a spreadsheet in Excel
  - Identify a fraudulent document
- These things are tangible and quantifiable

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## Fuzzy Objectives

- Examples:
  - Friendlier customer service
  - More tolerant of diversity
  - Good understanding and application of ethics
- Subjective and difficult to capture

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## Exercise 3 – Project Objectives

- Groups of 4
- Review your project objectives
  - Performance, Condition, Standard?
  - Revise as needed
- Discuss evaluating those objectives
- Develop at least 1 evaluation question for a pre-post test or describe one in-class activity to use for your project
- Report out (Evaluating the objectives only)

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# Report-Outs

Each Group

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## Things to Remember Level 2 Evaluation Items

1. The evaluation item must match the learning objective
2. Make sure you match conditions in the items to reflect those in the objective
  - If the learning objective says, with the use of a desk-aid, then the criterion-referenced item should include use of the desk-aid.
3. Harden fuzzy objectives

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## Things to Remember Level 2 Evaluation Items

4. The number of items that are necessary for each objective depends on you how many items are necessary for you to say that the learning took place
5. If the learning objective lists something for the learner to be able to do, then the criterion-referenced item needs to ask them to do it
  - If you want an individual to be able to do a parallel turn while snow skiing, don't ask them to tell you the steps, ask them to do it

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## Roadblocks to Transfer

- Break into groups
- Identify roadblocks to transfer
- Report out to the class

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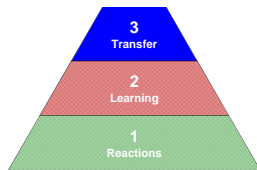
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## Level 3 Evaluation - Transfer

- Third type in progression of evaluations
- Is the learner applying their new skills, knowledge back in their work environment?
  - Training objectives define the outcomes to be measured



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## Relevance

- In order to determine that there has been a transfer of learning or behavior change you must have clear established objectives at the inception of the course.
  - Vague and/or unclear objectives prohibit measurement
  - Benchmarking establishes a start point

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## Guidelines for Evaluating Transfer

- There are several methods that can be used to obtain this data.
  - Surveys or questionnaires
  - Interviews
  - Focus groups
  - Work review
  - Structured observation

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## Evaluating Transfer

- Whatever method you chose, you must go back to the original course objectives from the course design to figure out what you should be evaluating and measuring
- There should be a direct correlation
- In good course development, the objectives are expressed in terms that assist you with the level 3 transfer evaluation.

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## Exercise



- Take 10 minutes to determine what method to use to do a Level 3 evaluation on your project and write at least one evaluation point (i.e.-observation, questionnaire, survey)
- In your table groups discuss and critique each other's evaluation method and question(s)



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## Practical Tip #6

Know why your client (agency management, etc.) wanted a training program!



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## Guidelines for Evaluating Level 4 Results

- Use a control group if practical
- Allow time for results to be achieved
- Measure both before and after the program if practical
- Repeat the measurement at appropriate times
- Consider cost versus benefits
- Be satisfied with evidence if proof is not possible

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From *Evaluating Training Programs* by Kirkpatrick & Kirkpatrick

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## Level 4 Results

### Use a control group if practical

- Eliminate factors other than training that could have caused the changes observed to take place
- Provides evidence that training caused results

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## Level 4 Results

### Allow time for results to be achieved

- Determine how long it will take before you expect to see results
- Consider all factors that may influence results
- Example:
  - You recently taught a course in new marketing strategies. As a result, your business service representatives are using the new techniques to call on business customers.
  - Results (increased use of your agency's services) will lag behind your employees' change in behavior.

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## Level 4 Results

### Measure both before and after the program if practical

- Obtaining base line data before implementation of your program and then measuring after your program provides evidence that a positive change is cause by your program.
- Example:
  - You recently taught a course in new marketing strategies. As a result, your business service representatives are using the new techniques to call on business customers.
  - By measuring the number of business customers before the program and then after the program, will give you evidence of the benefit of the program.

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## Level 4 Results

### Repeat the measurement at appropriate times

- Important to evaluate the effectiveness over time.
- Training might give you short term results which improve or decline over time.
  - What may that tell you?
  - What might you need to do?

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## Level 4 Results

### Consider cost versus benefits

- Need to determine the cost of conducting level 4 evaluations and the benefits you obtain from evaluating at this level.
- Amount of \$\$ spent on level 4 evaluation should be determined by:
  - Cost of program
  - Potential results
  - Number of times program will be offered
- The higher the value of potential results and the more times the program will be offered, the more \$\$ should be spent on evaluation.

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## Level 4 Results

### Be satisfied with evidence if proof is not possible

- How much evidence does the administration need to be satisfied that the results were caused by the training program.
  - Preponderance of evidence
  - Beyond a reasonable doubt
- Since there are so many other uncontrollable variables, improvement caused solely by the training may be difficult to establish.

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## Practice



- In your table groups read the **Case Study – Level 4 Results** and be prepared to answer the questions and discuss how you arrived at your answers.
- Be sure to record your responses on flipchart paper.
- Select a spokesperson from your table to present to the class.



From *Measuring Instruction Results* by Mager  
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# Report-Outs

Each Group

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## Summary – Kirkpatrick’s 4 Levels

- The four evaluation levels types build on each other
- Levels 1 and 2 are the most used as standard training evaluation tools
- Level 3 is critical but underused
- Reserve level 4 to use as circumstances warrant

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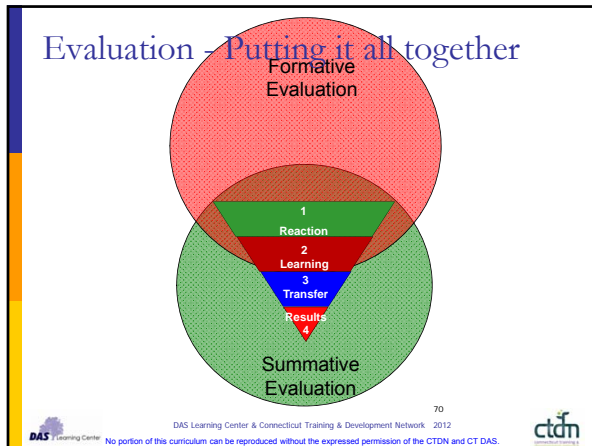
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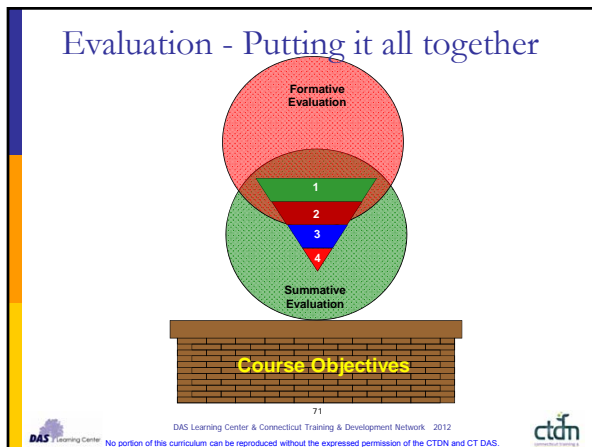
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- ### Practical Tips
1. Only evaluate what you are going to act upon.
  2. Nobody cares about positive smile sheet results but you.
  3. Pay attention to all negative feedback.
  4. If your learners aren't learning your program needs work.
  5. If your learners aren't applying what they learned your program needs defending.
  6. Know why your client wanted a training program.
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## Thank You



Thank you for attending this training and sharing your thoughts, ideas and insights with us today.

We were all teachers and learners.

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## Bibliography

Dick, Walter & Carey, Lou *The Systematic Design of Instruction*. 3<sup>rd</sup> edition, Harper Collins

Kirkpatrick, Donald L., Kirkpatrick James D. *Evaluating Training Programs*. 3<sup>rd</sup> edition, San Francisco, CA: Berrett-Koehler Publishers, Inc., 2006.

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