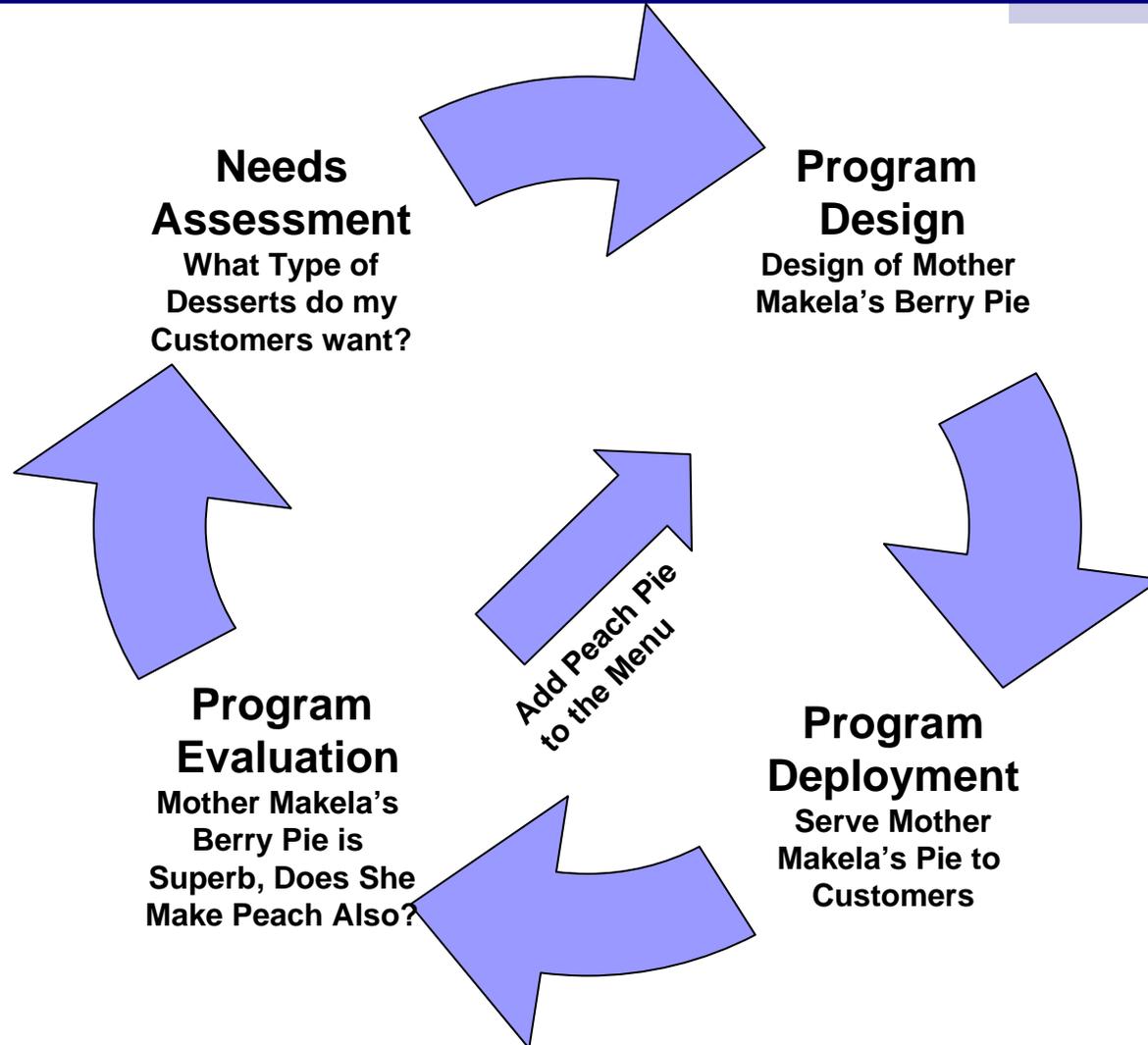


Session 3 – Training Program Evaluation

Eric Makela



Program Evaluation

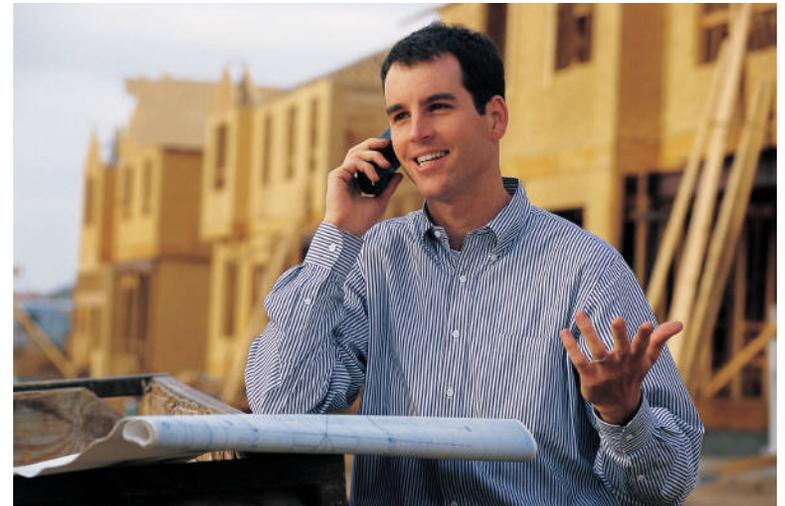


Training Program Evaluation

- Based on Donald Kirkpatrick's "Evaluating Training Programs: The Four Levels"
 - Reaction
 - Learning
 - Behavior
 - Results
- Each of the levels answers a different question and builds upon the preceding level

Reaction

- Qualitative Measurements of Customer Satisfaction to the Training
 - Customer believes/or comes to believe the training is important
 - Customer will return for future trainings
 - Customer will recommend training to others



Reaction

- Quantitative Measurements of Customer Satisfaction to the Training
 - Provide input to trainee's managers, DOE, etc.
 - Provide feedback to trainers
 - Establish standards for performance for future programs
 - Businesses won't call the restaurant for dessert catering if the pie is bad and will not recommend the restaurant to others, Mother Makela wants to improve quality of her pie

Reaction

- End of Class Evaluations – Qualitative and Quantitative
 - “Smile Forms” or “Happiness Sheets”
 - Examples of information that can be collected during evaluation
 - Assess quality of training session
 - How did the instructor do?
 - How are the handout materials?
 - How was the overall quality of the training session?
 - Did the information that you received meet your expectations?
 - Future planning
 - What additional courses would you like to see?
 - What additional information would you like to have?
 - Can be asked on paper or at end of training session as part of the discussion

Reaction

- Question Format

- Rating System - Quantitative

- Rate the training based on a scale of 1 to 5
 - Answers will vary based on participants desire to leave the training site or stay

- Open ended questions - Qualitative

- Force the participant to answer the question and not just circle a number.
 - Typically more thought put into the completion of the evaluation

Commercial IECC Best Practice Lighting

Wednesday May 17, 2006

Name _____	Jurisdiction or Business _____			
Email _____	Phone # _____			
Would you like to be notified of future training sessions? If yes, how would you like to be notified?				
<input type="checkbox"/> Fax	<input type="checkbox"/> E-mail	<input type="checkbox"/> Phone	<input type="checkbox"/> Mail _____	<input type="checkbox"/> Please Do Not Contact

(Please check the appropriate response. Your feedback is important and will be used to evaluate our instructors, design further courses and improve current seminars.)

	<u>Excellent</u>	<u>Above Average</u>	<u>Average</u>	<u>Below Average</u>	<u>Poor</u>
<u>Overall Quality of Program</u>	<input type="checkbox"/>				
<u>How would you rate the Presenter?</u>					
The presenter(s) knowledge of subject	<input type="checkbox"/>				
The presenters teaching effectiveness	<input type="checkbox"/>				
<u>Seminar Content</u>					
Received Useful Information	<input type="checkbox"/>				
Usefulness of Course Materials	<input type="checkbox"/>				
Overall, how was the session	<input type="checkbox"/>				

Please Comment on any of your above responses:

What other services/seminars can we provide? _____

Sample Reaction Form

Learning

- Used to evaluate increase in knowledge or change in attitude
 - Did the participants learn anything from the training?
 - Was their attitude toward energy conservation more favorable when they left the training
 - Example: Energy conservation is important
agree disagree
 - Example: It's Ok to serve berry pie in the winter
agree disagree

Learning

- Used to evaluate increase in knowledge
 - Standardized test administered at beginning of training with same test given at the end of training
 - Difference measures the increase in learning

Learning

- Skills Evaluation
 - Did the participants learn the desired skill?
 - Example: Can the trainees successfully input a residence into the *REScheck* software?
 - Example: Can the trainees successfully plan review a set of commercial plans for energy?
 - Example: Can the participants successfully make Mother Makela's pie crust?

Behavior



*Construction Practice –
Effective Insulation*

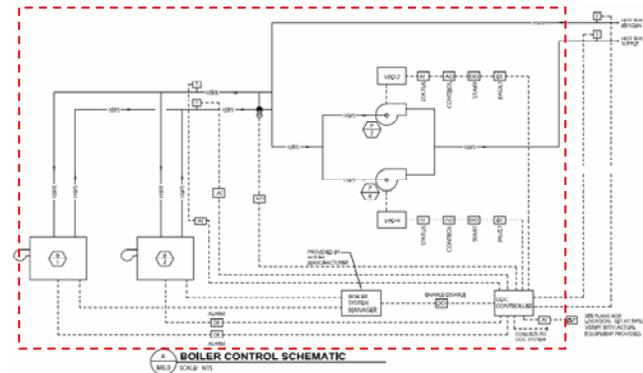


*Construction Practice – Air
Sealing*

- What happens when the trainees leave the classroom and return to their job?
- Did what they learn in training transfer to their:
 - Plan review and inspection practices?
 - Building design?
 - Construction practices?
- *For Energy Code Training—
This is What It's All About!*

Behavior

- Must be evaluated after trainee has an opportunity to put into practice what was learned at the training
 - Immediate in some cases (plan review and inspection)
 - Long term in other cases (building design)



Appropriate Design and Equipment Selection



Behavior



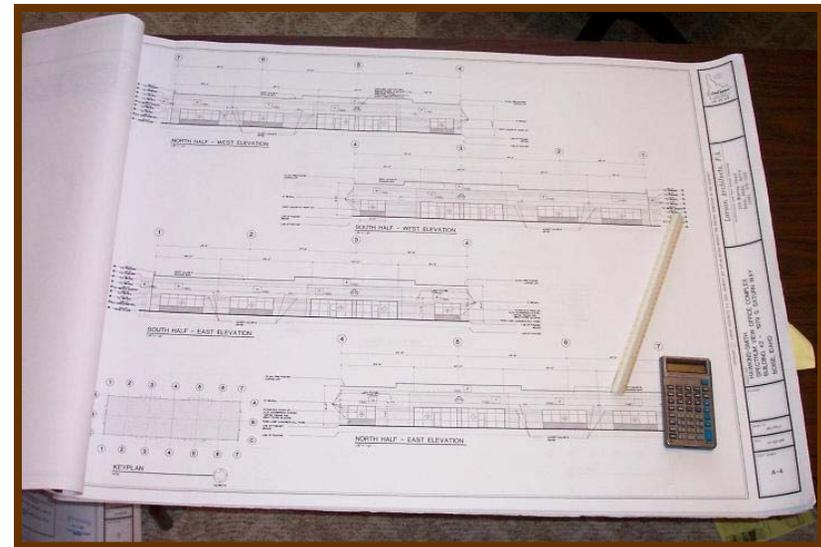
- Barriers to change
 - Trainee does not like the new practice and may not implement
 - Trainee may like the new practice but management or time constraints may prevent the change

Behavior

- So – How Do You Measure a Change in Behavior?
- Possible Alternatives:
 - Follow-up surveys to the participants
 - Paper or phone
 - Have you been able to implement what you learned from the training?
 - Why or why not?

Behavior

- Look at change in construction or design practice for those that attended training
 - Design changes can be measured during plan review
 - Fewer plan review comments
 - More complete documentation



Behavior



- Construction practice can be measured during inspection or onsite visit
 - Fewer correction notices
 - Increased level of quality of construction

Behavior

- Other Indirect Methods of Measuring Impact
 - Technical assistance requests to local jurisdiction or BECP Help Desk
 - Increase in calls following a training usually means something changed



Help Desk On-line Form

For technical assistance, please complete the form below and submit. Please do not submit requests with non-standard characters (i.e. %, ', /, &) in the subject, email, or name field. Someone from our technical support staff will contact you by phone or e-mail.

(Required fields are marked with a red asterisk: *)

*First Name:

*Last Name:

*Phone:

*E-Mail Address:

*Verify E-Mail Address:

*Subject:

*State:

*I am outside the U.S.

Product:

Please include the following information in your description when possible: 1) applicable energy code version, and 2) location of your project or code question.

*Problem Description:

Results

- \$64,000 Question:
 - Is the change in construction practice a direct result of the training????
- \$ 74,000 Question:
 - Do we care as long as practice is changed in a positive direction??

Results

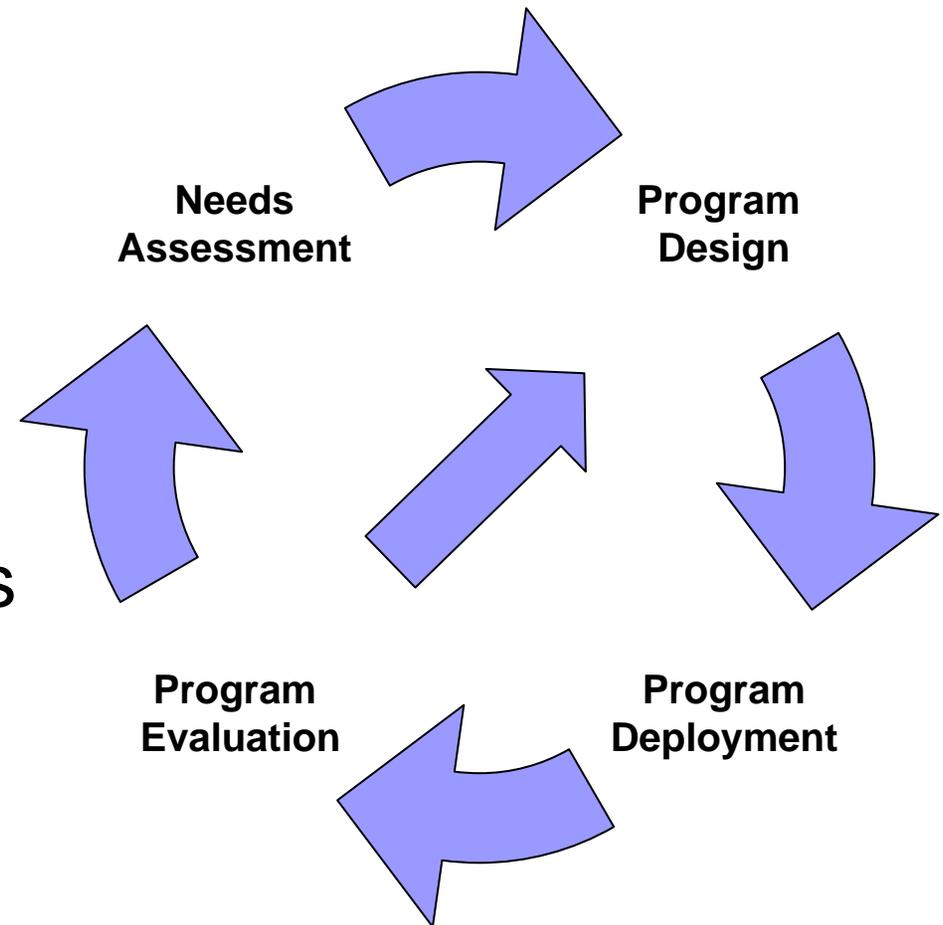
- For Energy Code Program Trainers
 - How much energy did the training really save????
 - Factors that could influence this measurement:
 - Code is mandatory
 - Current practice already above code
 - Other outreach/training programs
 - Above code programs in the region
 - Knowledgeable workforce

Results

- Need to develop a baseline to measure results
 - How much energy was used in a population of building prior to the training occurring?
 - How much energy was used in a similar population of buildings following the training effort?
 - Difference is the “return on investment” for the training program
 - $ROI = \text{Btus Saved} / \text{Training Dollars Spent}$

Evaluation Feedback Loop

- Results Should Feedback into Program Design
 - For modifying individual program
- Results Should Feedback into Needs Assessment
 - Design of future programs



Evaluation Feedback Loop

