

Effective Needs Assessment

North Dakota

Best Practices for Wx Project,
Boston Wx Region O4S Project, &
NH & Maine Auditor Field Certification

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Effective Needs Assessment

What We Will Discuss

- Elements of needs-based training.
- Needs-based training requirements.
- Three example Wx projects:
 - Best Practices for North Dakota Wx project.
 - Boston Wx Region O4S project.
 - New Hampshire and Maine Wx auditor certification.
- Needs-based training requirements review.

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Elements of Needs-Based Training

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What is Needs-Based Training?

- Training based on the **ACTUAL** discovered needs of the participants, not based on assumptions.
 - [Sometimes a needs-based analysis goes beyond training into the areas of health, wages, family support, etc. This was not the case with these example projects.]

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Effective Training Program

- Discovery of needs.
- Curriculum development.
- Training presentation.
- Evaluation of training.

Best if you design
a comprehensive
program.

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The Needs-Based Dilemma

- Discovering one's training needs is, by definition, discovering one's inadequacies.
 - For the majority of people, this is an anxious process.
 - Probably, for most people, the greater their level of anxiety the less apt they are to be insightful and perform proficiently.
 - However, discovering needs is important to a successful program.

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The Needs-Based Dilemma

- So, what can we do?

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The Needs-Based Dilemma

- We must design and use a needs-based program that minimizes the level of trainee anxiety.

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Boston Wx Region
O4S Project



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Needs-Based Anxiety Index

- The lower the level of trainee anxiety during the discovery process, the more likely we are to find true needs.
- The Needs-Based Anxiety Index has a range from 1 to 5, one being the lowest and five being the highest level of anxiety.

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Needs-Based Training Requirements - 1

- Must select the right person(s) for the needs assessment. This is vital.
- Very important that diplomacy and politics be considered throughout.
- Project manager(s) posture: "What can /do to help *you* do a better job?"
- Ask, ask, and ask. Don't assume!

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Needs-Based Training Requirements - 2

- Use face-to-face dialogue.
- Create a safe environment for open communication.
 - "Warm up" the dialogue.
 - Make it a "kitchen table" conversation.
 - Remove supervisors from site, if possible.
 - Point no blame.
 - Tenaciously hold on to anonymity during and after visitation.
 - Express genuine interest (can't fake this).
- Ask, ask, and ask. Don't assume!

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Needs-Based Training Requirements - 3

- Assessor should listen and observe.
- Create buy-in and develop cooperation at all levels of program.
- All levels should participate in training. Upper levels of hierarchy should act as models for honesty and openness.
- Ask, ask, and ask. Don't assume!

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Needs-Based Training Requirements - 4

- Assessor must attempt to let go of bias for his preferred methods and remain open to ideas.
- Use "best practices" as point of reference and ask:
 - What training do you need?
 - What can you contribute to the training?
 - What are your specific problems?

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Needs-Based Training Requirements - 5

- Participation on-site
 - Use local program experts for on-site training.
 - Leave enough flexibility for others to excel.
 - Work on client houses in field.
 - Solve problems together.
 - Put foreman in charge of getting things done during on-site training.
 - Conduct recap of on-site experience.

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Needs-Based Training Requirements - 6

- Try to structure as a comprehensive program, rather than a one-time event.
 - This sets up structure of continuity.
 - Brings credibility to efforts.
- Develop a support network.
 - Names, telephone numbers.
 - Assemble once or twice each year to discuss issues.
- Solicit feedback after training.
- Ask, ask, and ask. Don't assume!

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Needs-Based Training Requirements - 7

- Always keep the program/agency mission statement in mind. This helps cut through self-interest.

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Best Practices for North Dakota Wx Project, Phase 1, 2002 Phase 2, 2003

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Best Practices for North Dakota Wx Project: Background

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The ND Wx Program

- Eight agencies.
- 67 percent site-build homes.
- 33 percent mobile homes.
- Very few multi-family units.
- All weatherization work performed by agency crews except heating system replacement.

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Mobile Home Wall-Stuffing Method



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Project Personnel

- Karg as project manager and contractor.
- Sage as project overseer.
- Steiner as subcontractor and ND Wx insider.
- Weatherization technical committee members as advisors and document reviewers.

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Installing Foundation Insulation



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Major Tasks of Project, Phase 1

- Update ND Field Standards to include best practice.
- Interview and observe agency Wx staff to determine their needs – needs assessment.
- Base curriculum on Wx staff needs.
- Present training tailored to staff needs.

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Update Field Standards

- Review of other state Wx field standards.
- Based on review of cold-climate best practices.
- Flexible and adaptable document for future changes.
- Review by ND Wx Technical Committee.

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Siding Removal: Sharing Methods



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Needs Assessment of Wx Staff

- Agreement from State Director and agency Executive Directors that no agency or person would be identified in visitation reports.

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Taping Registers & Grilles for Duct Leakage Testing



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Curriculum Development

- Used visitation reports as a guide for development of needs-based curriculum.
- Used field training as much as possible on clients' homes. This was requested by many agency staff.

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Sealing Duct Boots with Mastic



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Training Delivery

- In classroom and in field.
 - Mobile home weatherization.
 - Siding removal and sidewall insulation.
 - Health and safety.
 - Heating systems.
 - Overview of new field standards.
 - Diagnostics procedures.
 - Blower door.
 - Duct blower.
 - Worst-case draft testing.
 - Etc.

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North Dakota Gothic



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Best Practices for North Dakota Wx Project: Needs-Based Features

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Needs-Based Characteristics of Project

- High degree of diplomacy.
- Promote personnel "buy-in" at all levels (executive directors, energy coordinators, foremen, and crew members).
- Respect for needs and routine at all levels.
- Anonymity during visitation.
- Best practices tailored for North Dakota Wx.
- Technical Committee will help maintain and sustain project effort.

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Major Tasks of Project, Phase 2

- Update ND Field Standards to include best practice.
- Interview and observe agency Wx staff to determine their needs – needs assessment.
- Base curriculum on Wx staff needs.
- Present training tailored to staff needs.

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ND Best Practices Project Update - 1

- Phase 2 of this project is now underway.
- More observation and focus than Phase 1.
- Curriculum will be based on Wx staff needs.
- Training tailored to staff needs.

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ND Best Practices Project Work, Phase 2


- Used pre-visit questionnaire for initial focus.
- Interview, and observe agency Wx staff to determine their needs – needs assessment.
 - Used questionnaire results.
 - Looked at six or seven styles of homes and discussed what should be done.
 - Observed crews doing work (watched for big and small things).
 - Discussed what a future monitoring will demand.
 - Asked for feedback about new ND Field Standards.

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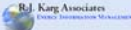
Anxiety Index for Project

- What do you think the Anxiety Index is?

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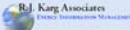
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Boston Wx Region
One-on-One On-Site
(O4S) Project,
Winter 2002 - Present

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Boston Wx Region
One-on-One On-Site
(O4S) Project:
Background

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Boston Wx Region O4S Project

- One-on-One, On-site training for weatherization installers in New England.
- Pilot phase: Five days in each of the six New England states.
- Full phase: Five or more days in each of the six New England states.
- On-demand training presented during measure installation.


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Boston Wx Region O4S Project




Five blower doors at once in Vermont

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Boston Wx Region 045 Project

- In practice, one-on-one instruction has not often actually happened. It varies among:
 - Entire group (4 - 20 people),
 - Sub-groups (2 - 8 people), and
 - One-on-one.
- Sessions attended by contractors, foremen crews, auditors, and state monitors. Occasional visits from state program managers.

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Boston Wx Region One-on-One On-Site (045) Project: Needs-Based Features

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Boston Wx Region 045 Project

- Needs discovered by
 - Instructor observation.
 - Trainee questions.
 - Program managers' informed assumptions.
- Instructor often works along side the trainee.


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Boston Wx Region 045 Project




Lunchtime discussion among contractor, instructor, and auditor.

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Anxiety Index for Project

- What do you think the Anxiety Index is?

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NH & Maine Auditor Field Certification, Fall 2000 & Spring 2003

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New Hampshire audit site

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NH & Maine Auditor Field Certification: Background

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Auditor Field Certification

- New Hampshire, fall 2000
 - Second phase of auditor certification.
 - Fourteen auditors given three hours to conduct energy audit. All in same house.
 - Gray and Karg followed each and evaluated.
 - Gray, Eckberg, and Karg scored each.
 - Those who failed were retested in a focused manner.
 - Training assessment secondary to professional certification.

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Auditor Field Certification



New Hampshire audit house.

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Auditor Field Certification

- Maine, spring 2003
 - Second phase of auditor certification.
 - Twenty auditors given 2 ½ hours to conduct energy audit. All in same house
 - Gill and Karg followed each and evaluated.
 - Gill, Bondeson, and Karg scored each.
 - Those who failed will be retested in a focused manner.
 - Training assessment secondary to professional certification.

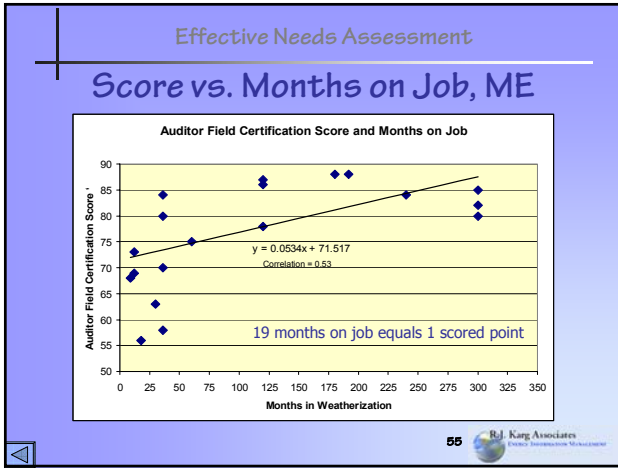
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Maine audit house

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NH & Maine Auditor Field Certification: Needs-Based Features

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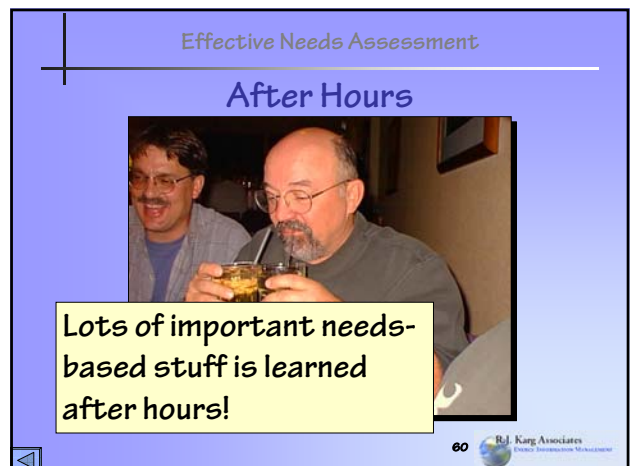
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- ### Auditor Field Certification
- Needs discovered by
 - Evaluators' observations.
 - Scorers' findings.
 - Training needs based purely on observation and performance.
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- Effective Needs Assessment
- ### Anxiety Index for Project
- What do you think the Anxiety Index is?
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Needs-Based Training: The Important Stuff

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Needs-Based Training Requirements - 1

- Must select the right person(s) for the needs assessment. This is vital.
- Very important that diplomacy and politics be considered throughout.
- Project manager(s) posture: "What can /do to help *you* do a better job?"
- Ask, ask, and ask. Don't assume!

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Needs-Based Training Requirements - 2

- Use face-to-face dialogue.
- Create a safe environment for open communication – complete confidentiality.
- Assure state and agency managers that wages and personnel problems will not be discussed.
- Ask, ask, and ask. Don't assume!

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Needs-Based Training Requirements - 3

- Assessor should listen and observe.
- Create buy-in and develop cooperation at all levels of program.
- All levels should participate in training. Upper levels of hierarchy should act as models for honesty and openness.
- Ask, ask, and ask. Don't assume!

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Needs-Based Training Requirements - 4

- Assessor must attempt to let go of bias for her preferred methods and remain open to ideas.
- Use "best practices" as point of reference and ask:
 - What training do you need?
 - What can you contribute to the training?
 - What are your specific problems?
 - What are you not doing?

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Needs-Based Training Requirements - 5

- Participation on-site
 - Use local program experts for on-site training.
 - Leave enough flexibility for others to excel.
 - Work on houses in field with client.
 - Solve problems together.

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Needs-Based Training Requirements - 6

- Try to structure as an ongoing process, rather than a one-time event.
- Develop a support network.
- Solicit feedback after training.
- Ask, ask, and ask. Don't assume!

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Needs-Based Training Requirements - 7

- Always keep the program/agency mission statement in mind. This helps cut through self-interest.

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Methods for Sustaining Program

- Comprehensive training program with buy-in at all levels.
- Regular technical committee meetings.
- Experimental/research philosophy in field (e.g., North Dakota).
- Mentoring network.
- Peer trainers (e.g., senior auditors).
- Certification or merit-based rewards.
- Proficiency testing (e.g., BPI).

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Zone Pressure Testing?

