Needs Assessment for Weatherization

March 13, 2025

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Session Preview

- Introduction
- What is a needs assessment?
- Performing a needs assessment
- Selected methods for finding gaps
- Framework for assessment
- The needs assessment process
- Wrap-up

Learning Objectives

- Learn about the needs assessment process and why it is important
- Discuss what the needs assessment process involves
- Learn about the importance of stakeholder/staff engagement in the process
- Learn about improving your organizational culture
- Discuss the process of conducting an effective needs assessment

What is a Needs Assessment?

- A thoughtful and systematic look at the performance gaps (needs) of an organization with the purpose of making adjustments to eliminate gaps, all within the framework of the mission and objectives of the organization.

- Finding differences between the organization's performance (what is) and objectives (what should be).

- Purpose: To fill the gaps and gain insight into the organization

What's the Purpose? One Perspective

- Define the issue
- Find a solution
- Follow the plan
- Create a process of continuous evaluation and improvement
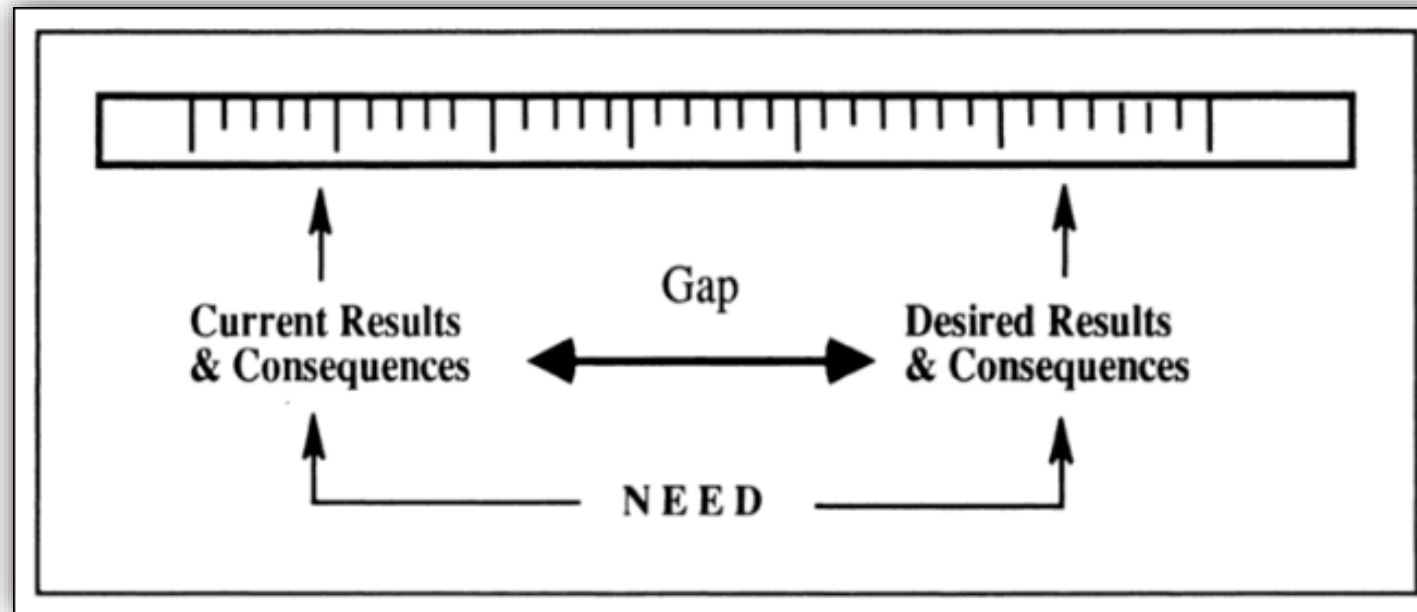
What's the Purpose?
Another Perspective

Where are the gaps (needs) in the structure of your organization? What is the best way to find and fill them?

- Do you need experts to help find them?
- Are you able to find them?
- How do you incorporate differing opinions?

What's the Purpose?
Another Perspective

Source: *Needs Assessment: A User's Guide*, Kaufman, Rojas, Mayer. Educational Technology Publishers. 1993, page 4.

Many Kinds of Needs Assessments

- Training assessment
- Management assessment
- Financial
- Resource
- Organizational culture analysis
- Client needs assessment
- SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis
- Inventory analysis
- And many more . . .

Sound Familiar?

- Training assessment
- Management assessment
- Financial
- Resource
- Organizational culture analysis
- Client needs assessment
- SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis
- Inventory analysis
- And many more . . .

- T&TA Plan Development
- ACSI survey
- Fiscal Monitoring
- Tools, equipment, training, inventory management
- Community needs assessment

Performing a Needs Assessment

Levels of Assessment/ Intervention

- Entire organization
  - Grantee
  - Subgrantee (agency)
- Teams or work categories
  - Energy auditors/energy audits
  - Crews/installations
- Individual staff member(s)
  - This usually falls into the category of a personal evaluation

The Needs Assessment Process

What's the purpose of the assessment?

Who will perform the work?

How to gather information necessary for our assessment?

Where is the organization/staff deficient? What are we doing right?

How will we measure, organize, and prioritize our results?

Who will develop our action plan?

Who will write our report? Who is the audience?

How will we manage/implement our results and plan?

Objectives Might Vary

- Rectify performance gaps to support Organization's mission
    - Eliminate DOE "findings"
    - Better state monitor results
    - Eliminate bad QCI reports
    - Lower absenteeism
    - Resolve tension between field staff and management
    - Others?
- Often, we "see" the problems, but it is a challenge to find the cause and solution

Root Cause Analysis

Fishbone Diagram
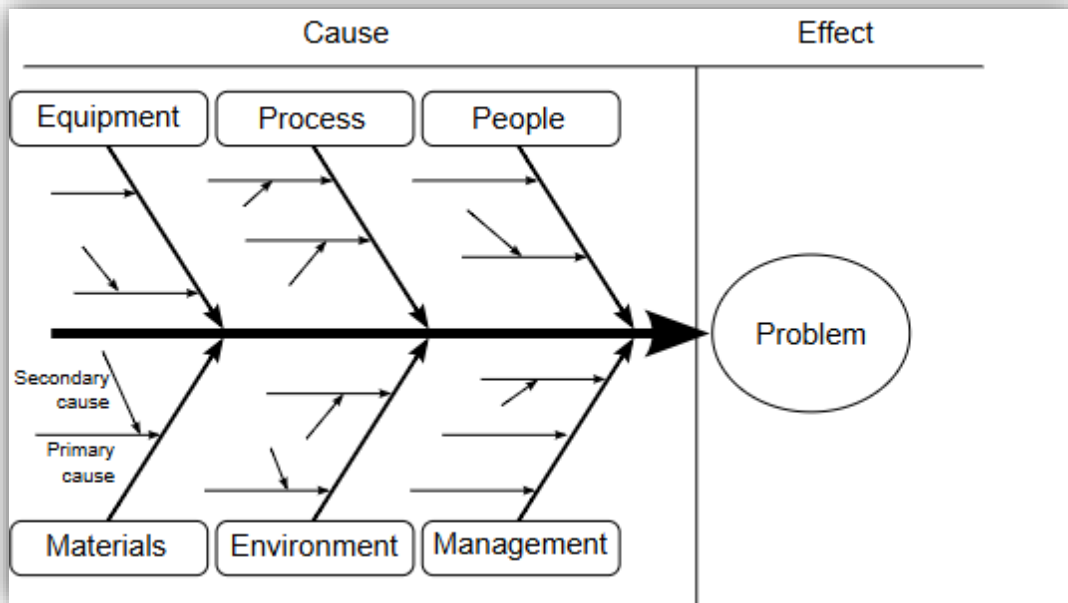
'5 whys'

Root Cause Analysis Resources in the Session Tool Kit

Start with the WAP Mission Statement

"...to increase the energy efficiency of dwellings owned or occupied by low-income persons, reduce their total residential energy expenditures, and improve their health and safety, especially low-income persons who are particularly vulnerable such as the elderly, the disabled, and children."

Primary Objective: Satisfy Our Customers

- Primary Customers (clients)
  - The WAP mission statement addresses primary customers, not supporting customers
  - What do our primary customers value?
  - As a Grantee, who is your primary customer?

- Supporting Customers (partners)
  - DOE – monitors, management
  - Grantee – management, state trainers, state monitors, boards
  - Subgrantees (agencies) – management, QCIs, boards
  - Staff, field workers, management, etc.
  - What do our supporting customers (partners) value?

Your position in a state WAP will determine your perspective; are you a grantee, a subgrantee, etc. It depends on "where you are sitting".

Select People to Perform Assessment

- Assessors will have an ongoing involvement in the process
- Impacted personnel can be involved with questionnaires, surveys, and interviews
- Applicable rules, regulations, laws, and polices?

Build assessment into your organization:
foster feedback
act quickly
build trust

Assessor's Attitude During the Process

- Stay focused on mission and objectives

- Collaborate

- Be inquisitive

- Practice objectivity

- Avoid condescension

- Establish trust

- Promote an atmosphere of respectful dissent

- Look for successes too!

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Challenges to Needs Assessment Process - 1

- Power struggles

- Poor training

- Deficient hiring practices

- Staff compensation issues

- Dysfunctional organizational culture
  - This can be very broad and deep
  - It can also have roots in almost-forgotten historical events

- Limited resources, including money, time, and staff

Contractors can be more challenging because they are not direct employees

Challenges to Needs Assessment Process - 2

- **Engagement of participants (clients, staff, management, etc.)**
- **Ensuring staff doesn't feel attacked**
- **Reliability and quality of the collected information**
- **Building consensus among participants**
- **Implementing changes**
- **Changing an organization is working against inertia, it is difficult and takes time**

"What if we don't change at all ... and something magical just happens?"

Success Can Be An Obstacle to Assessment and Change

- No success is forever. Success is difficult to abandon, but this is often necessary for moving forward because there are strong emotional attachments to success.

- *"A success that has outlived its usefulness . . . may, in the end, be more damaging than failure."* (Drucker, 1999, p 61)
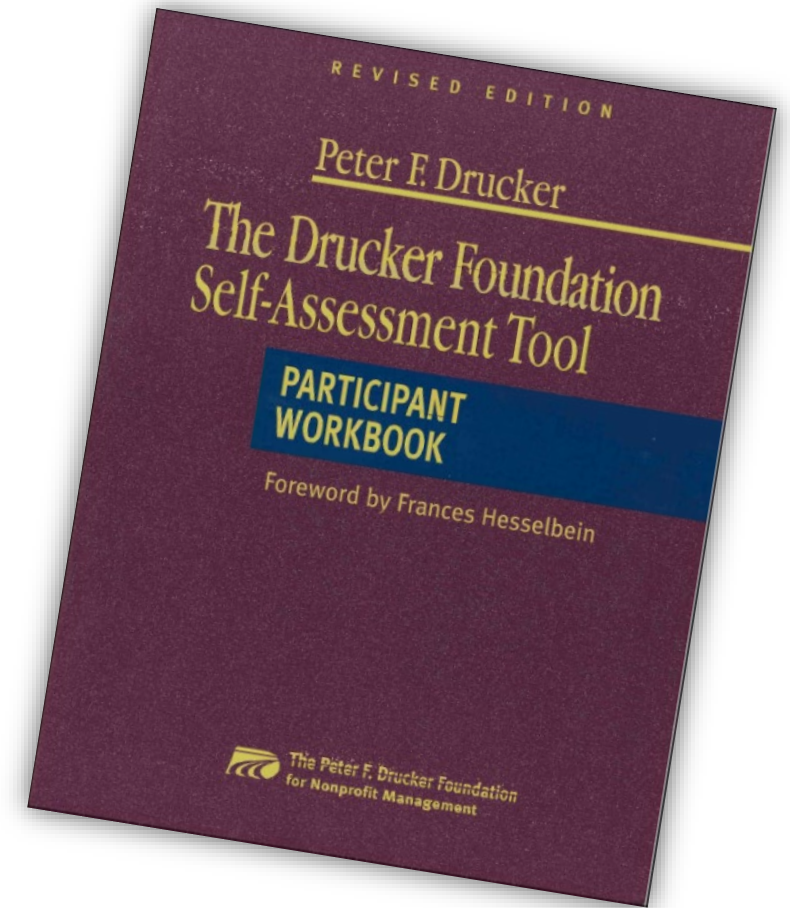
Finding Performance Gaps

Framework for Assessment

- Management might assume they are aware of organizational problems, but this is not always correct

- Include as many personnel as possible

- Interviews with staff and/or clients

- Provide an atmosphere of trust

- Allow and encourage respectful dissent

- Recognize the complexity of the WAP network

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Elements of Assessment: Documents

- DOE monitoring reports (findings, concerns, recommendations)
- State monitoring
- QCI activities
- State program manuals and field guides
  - Are these documents up-to-date?
  - Are these important documents being used properly by staff?

Elements of Assessment: Training

- Evaluate existing training
  - Adopt peer-to-peer training within your state network
  - Use DOE mentoring model (see WPN 22-4)
- Are your field practices aligned with the training received?
  - Are there errors in the how-to documents?
  - Are there errors in the training?
- Job Task Analysis (JTA) review

Elements of Assessment: Personnel Income

- Quantifiable benefits (pecuniary) income
  - Salary, fringe benefits
  - [NASCSP wage study](#)

- Psychic income
  - Emotional and other qualitative benefits
    - Feelings of security, trust, support
    - Ability to identify with values of the organization
    - Belonging
    - Teamwork

Elements of Assessment: Individual Interviews

- Don't assume you know the problems or solutions
- Asking encourages cooperation
  - Your subordinates will think better of you as a leader if you ask
  - Asking demonstrates that you believe in the interviewee.
  - In some cases, focus groups work well
- Make asking a part of the organizational culture
- Asking falls short without intent listening

Individual Interviews

- Select interviewer(s)
- Select list of interviewees
- Allow about 30 minutes for interview
- Confidentiality should be announced at beginning
- May be conducted in-person, via phone, or at job site.

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Individual Interviews

- Look for the facts:
  - What's working, what isn't?
  - Obstacles within/outside the workplace?
  - Needed training? Is available training effective/sufficient?
  - Needed support from management?
  - Are there wage and benefit issues?
  - Interpersonal conflict?
  - How is morale?
  - How can we improve things?

See session Tool Kit for *Sample Wx Program Interview Form for Needs Assessment*

Elements of Assessment: Fieldwork Evaluation

Visit worksites to evaluate work and interview crew and contractor personnel

Use JTAs as guide for field evaluation

Time consuming, but yields detailed results

Monitoring and QCI are structured field evaluations

Sample Fieldwork Evaluation

	Blower Door Testing			
	Present Tools, Materials and Techniques Used	**Problems or Concerns**	**Training Needs**	**Comments/Questions**
3	Used to justify the replacement of doors and windows, crew uses to do before and after air sealing.		Blower door basics. Finding air leaks cost effectively, in a timely manner. Blower-door directed air sealing. Relationship between cfm's and sq. in. Working top to bottom, in-depth. Stress individual hands-on.	How much documentation will be expected? Should only have to document what is necessary. How far under minimum can one go and then what does one do then? Low cfms and adding exhaust fans that will then back draft combustion appliances.
7	Bower door guided air leakage.	Minimums seem to be too small for the houses.	Class on getting large volume homes down to minimum when nothing seems to work. Beginning blower door, set-up, zeroing, calibration of magnahelic.	Small classes, and make sure everyone knows how to do the tests (proficiency test). Train on how to do the BTL on the TI-86 to check the WXEOR. Discuss the reasonableness of reaching 1200 cfm.
2	Crew does blower door-guided air sealing, they do the test pre- and post-air sealing.	Windy days.	Calibrations: how and how often. Can't reach 50. Basic fundamentals of both blower doors and pressures of the house. Hands-on. Blower door directed air-sealing techniques. Use of IR camera with the blower door, understanding what and how the pressures are doing.	Training should be done after October. Have several sessions set up and rotate crews through. Have several trainers involved doing different sessions at different times on different measures. Bring all agencies in to one location at the same time.
4	Estimator does pre-test, crew does diagnostics and post-test. Digitals are calibrated.	All agencies should be inputting the same info to get the same minimums.	Inputting the same numbers, TI-86 and WXEOR. Blower door guided air-sealing techniques for the crew. Calibrating blower doors. Explain the terms and what they mean, LBL. Correlate air exchanges with cfm50. Interior wall leakage, when to check for a pressure difference. Use blower door testing trailer at crew meetings to calibrate.	
6	Crews do pre-test, 1-, and 5- or 6-point, then do blower door guided air sealing. And final	Windy days, do you plug the chimney or fireplace before doing the test?	Basic blower door: where, what, and how to seal leaks. Blower door guided air sealing, the last 500 cfms. What does the input stand for, how is the minimum decided (reasoning behind it)? Defining air and thermo barrier.	Use small groups, hands-on. Have everyone participate, not sitting back and watching. Divide groups into agency crews; possibly bring 2 agencies in for a day. Why is there a difference in the readings after a few hours when nothing is done?
7	Estimator does blower door with client education and audit. Crew does blower door guided air sealing and post-test, 1-point.	TI-86 and WXEOR differ. How to find leaks in the attic with existing insulation? Occasionally the final is lower than the pre-test.	How to get the last cfms down to the minimum. Basic blower door. Use the house of pressure when training. Take enough time to do a complete job.	This agency has a nice form for recording blower door data.
1	The crews do the pre- and post-testing using the blower door. They don't do any sealing at first. Attics are sealed before they do the attic insulation. Major air sealing and "hunt and peck" air leak searching is done after all major work (such as insulation measures) have been completed.	They feel the minimums are too low. How are they being calculated? What do we do if a house is too tight? What if a house is 200 cfm below minimum and there is no signs of moisture problems and have good draft on vented appliances? How accurate is a 1-point test compared to a 4-point test?	Calibrating gauges. Difference between types of gauges. How accurate is one compared to the other? Would like basic training for newer crew members and more advanced refresher courses for more experienced staff. Refresher courses for some staff. Basic courses for newer staff.	Why is the 4-point test needed?

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Use JTAs as guide
- Crew leader
- QCI
- Energy Auditor

Elements of Assessment: Networking

- Examine other successful state/agency weatherization programs
  - Grantee Peer Exchange
  - Regular in-state gatherings
  - Mentor/mentee relationships
  - State, regional, and national conferences
  - WAP Trainers Consortium

Needs Assessment vs. Organizational Culture

- Related, but distinct
- Both can lead to improved performance
- A needs assessment should address organizational culture.
- Organizational culture
  - organization mindset, behaviors, and values that determine how people interact, make decisions, and approach work.

Elements of Assessment: Organizational Culture

- Examine organizational culture (personality)

- *". . . a collection of values, beliefs, attitudes, systems, and rules that outline and influence employee behavior within the organization."* Kellie Wong

- Example: If an energy auditor forgets to close three skylights during a blower door test, how will her supervisor deal with this mistake?

# Elements of Assessment: Organizational Culture

- A healthy organizational culture helps achieve the mission

- Culture can be at the core of organizational malfunction

- Various sub-cultures within the organization might work against one another (the sub-cultures of field, office, and training staff, for example)

Elements of Assessment: Organizational Culture

- A healthy organizational culture increases effectiveness and resiliency

- Create a culture of belonging

- A healthy organizational culture is based on the organizational mission

- Value-based culture is best

- Influenced by management style, the history of the organization, type of service offered, technology, type of employees, location, etc.

- Culture influences workplace decision-making, philosophy, communication, employee identity, motivation, loyalty, and sense of self-worth.

- *Like it or not, your organization has a culture, so do your best to examine it and move it in a positive direction*

Organizational Culture Probe

1. Define organizational culture in a collaborative way

2. Include all levels of Wx network: state and agencies

3. Include all levels of management and staff in process

4. Ensure the organizational culture aligns with the network policies and procedures

5. Administrators, supervisors, and managers must commit to the process and results
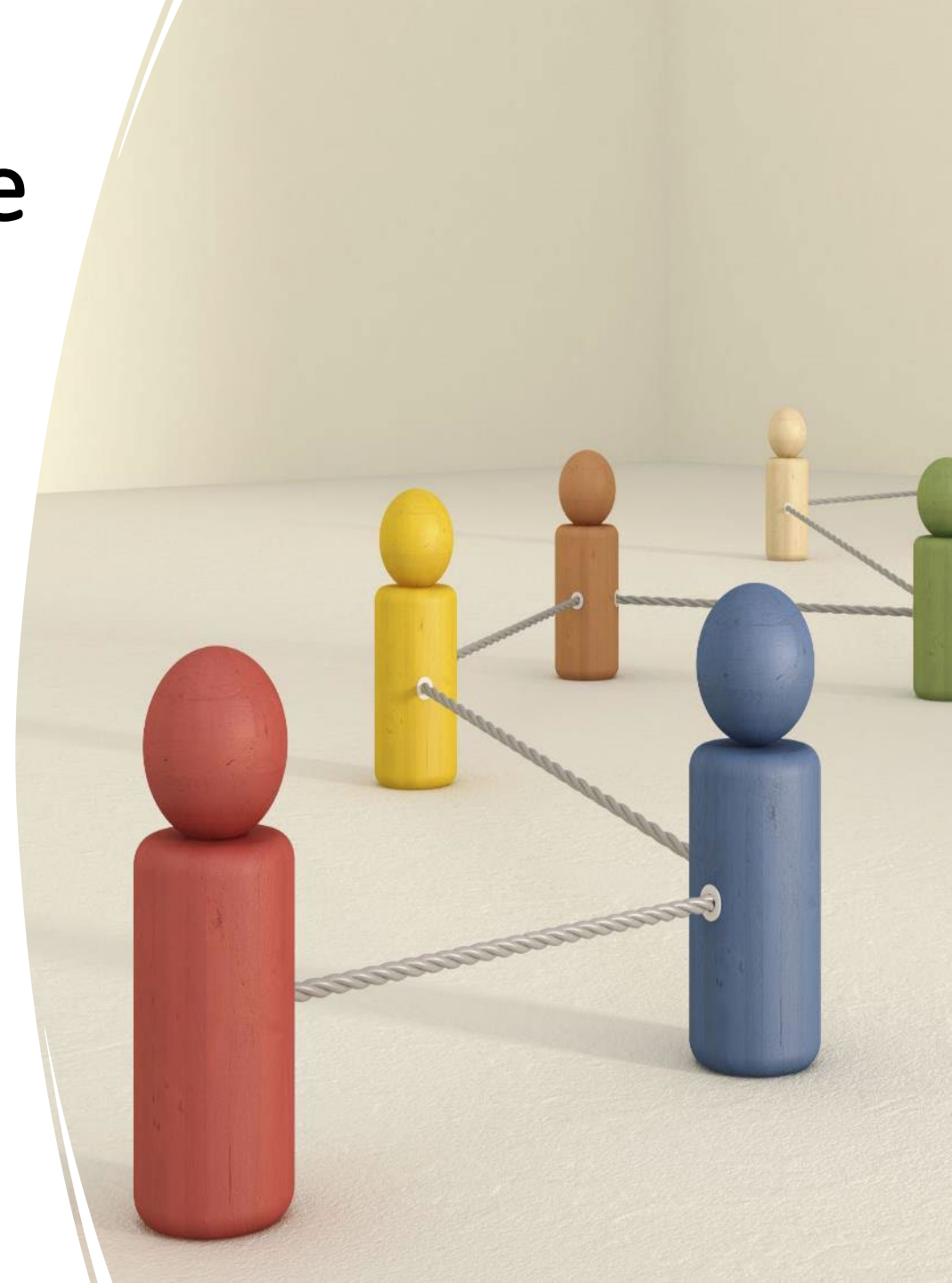
# Improving Organizational Culture

- Commitment to the new culture

- Communication channels must be open, safe, and characterized by respect and trust

- Employee recognition must be fostered and developed

- Training on network culture within the state should be developed and delivered

Needs Assessment Report Overview

- Introduction
  - Methods, documents referenced
- Discoveries
  - Recent state program changes
  - Selected interviewee statements
  - Appraisal of state documents
- Recommendations
  - Improving quality assurance results
  - Technical document revisions
  - Training recommendations
  - Enhancing and sustaining collaboration and morale
  - Job qualifications for hiring technical staff
- Resources

See *Sample Needs Assessment Report Outline* in the session Tool Kit
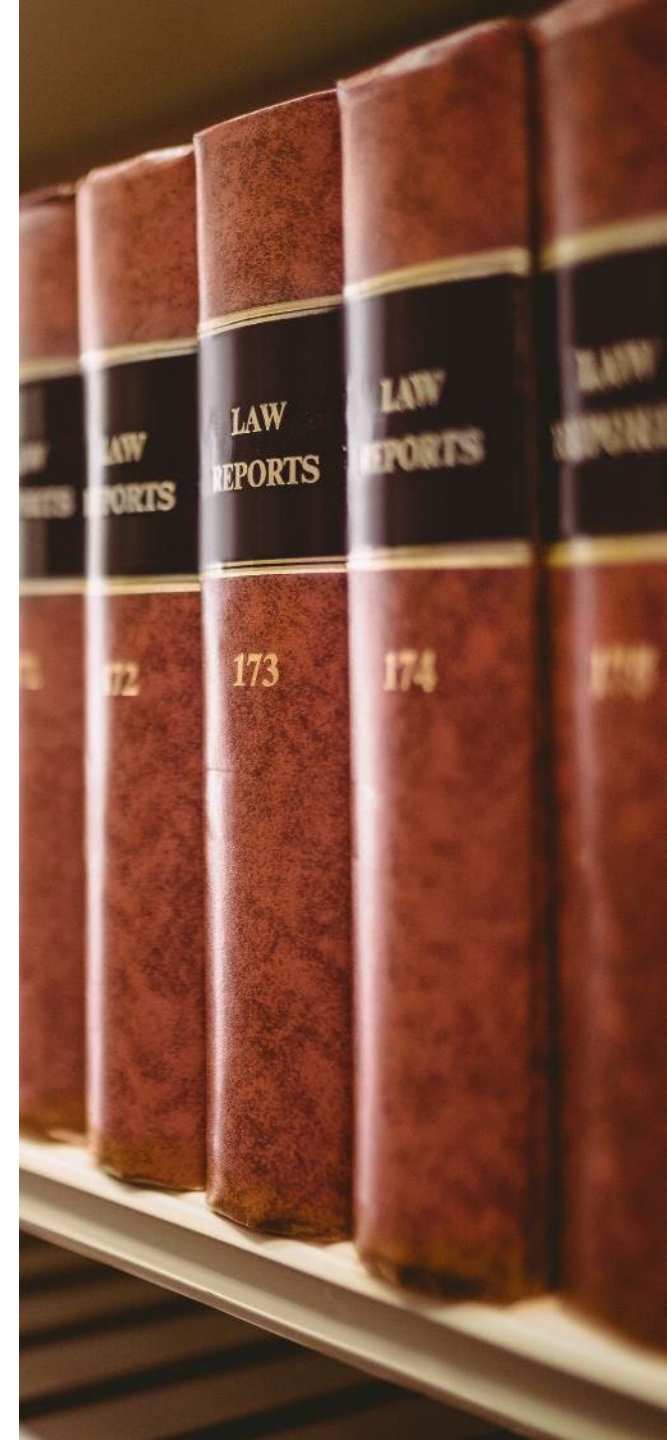
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8. How will we manage/implement our results and plan?

See "How to Perform a Needs Assessment – Quick Guide" in the session Tool Kit

Closing Thought from Plato

"The life which is unexamined is not worth living."

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Wrap-Up

- Questions
- Tool kit for session
- Follow-up coaching sessions
- Contact information

Rick Karg
Residential Energy Dynamics
rjkarg@redcalc.com

Jonathan Ballew
NASCSP
jballew@nascsp.org