



NIMS Smart Solutions

June 2020







Improving performance goes beyond establishing training programs. Training alone rarely closes the **gap** between current and desired performance. This rarity is due to not having a reliable method to **validate** training.

Ultimately, employers care about...

Performance...

and performance requires
valid training

NIMS Overview

What We Do

Validate training and performance with practical experiences that reflect what employees will face on the job.

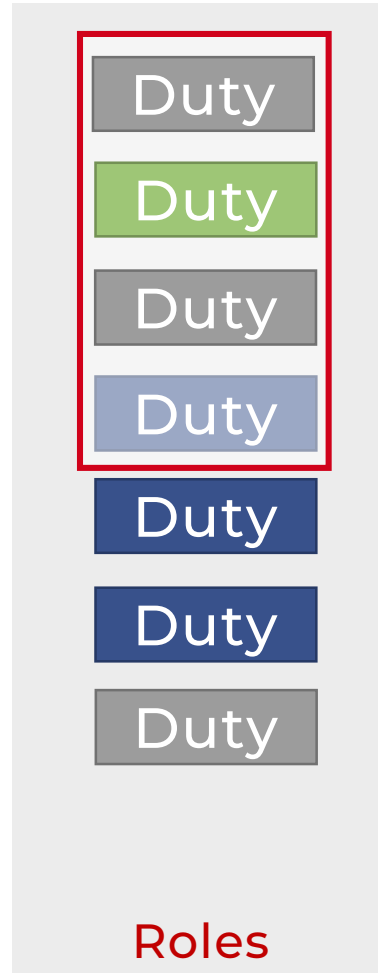
How We Do It

With our New Smart Solutions:

- Smart Standards
- Smart Performance Measures
- Smart Training Principles

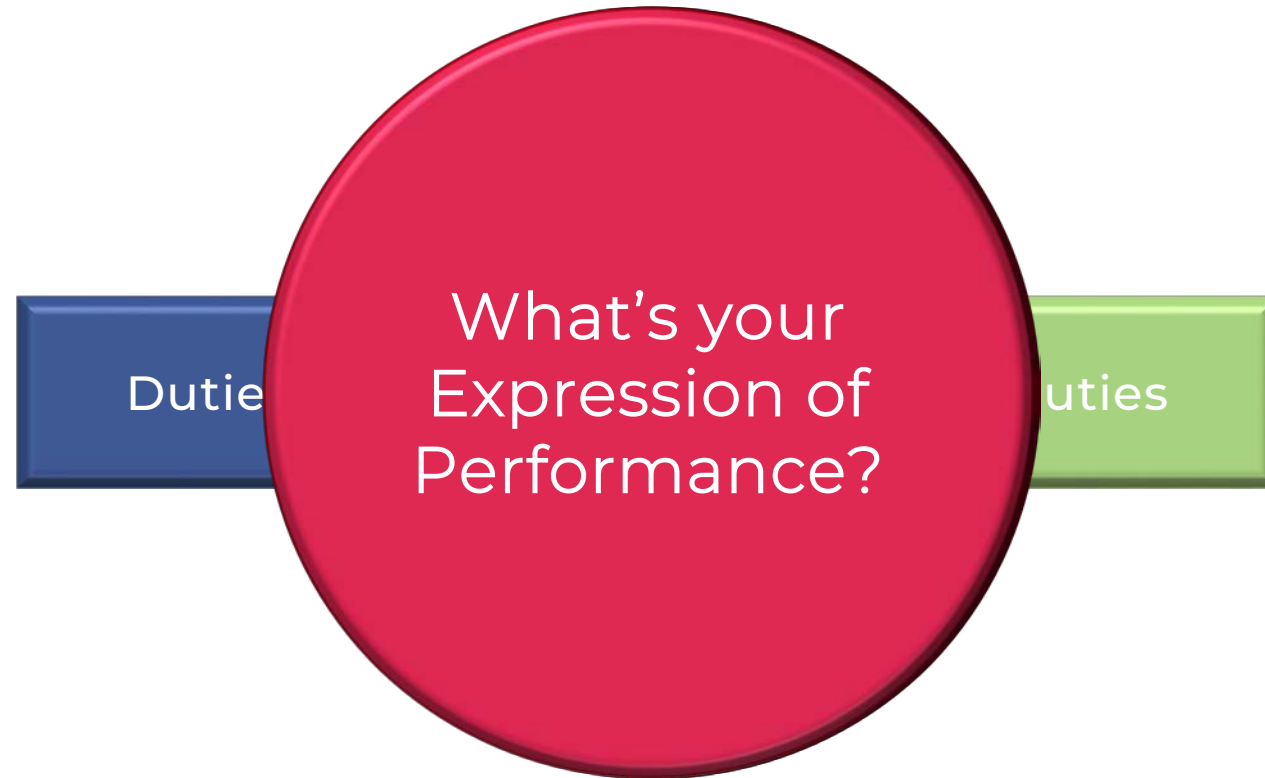
Concepts Of How We Do It

Smart Standards Role Building Concept

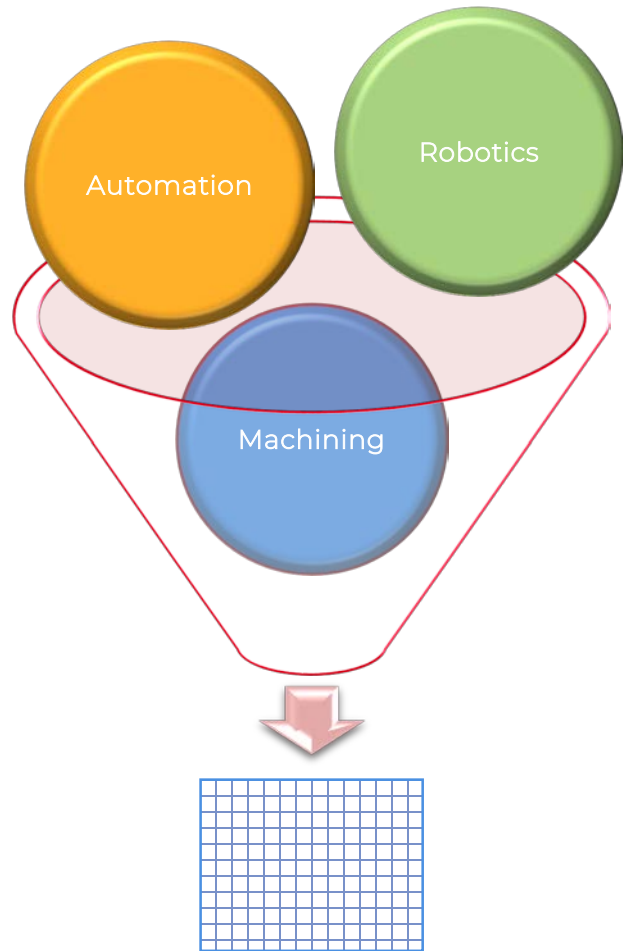


Building Your Roles

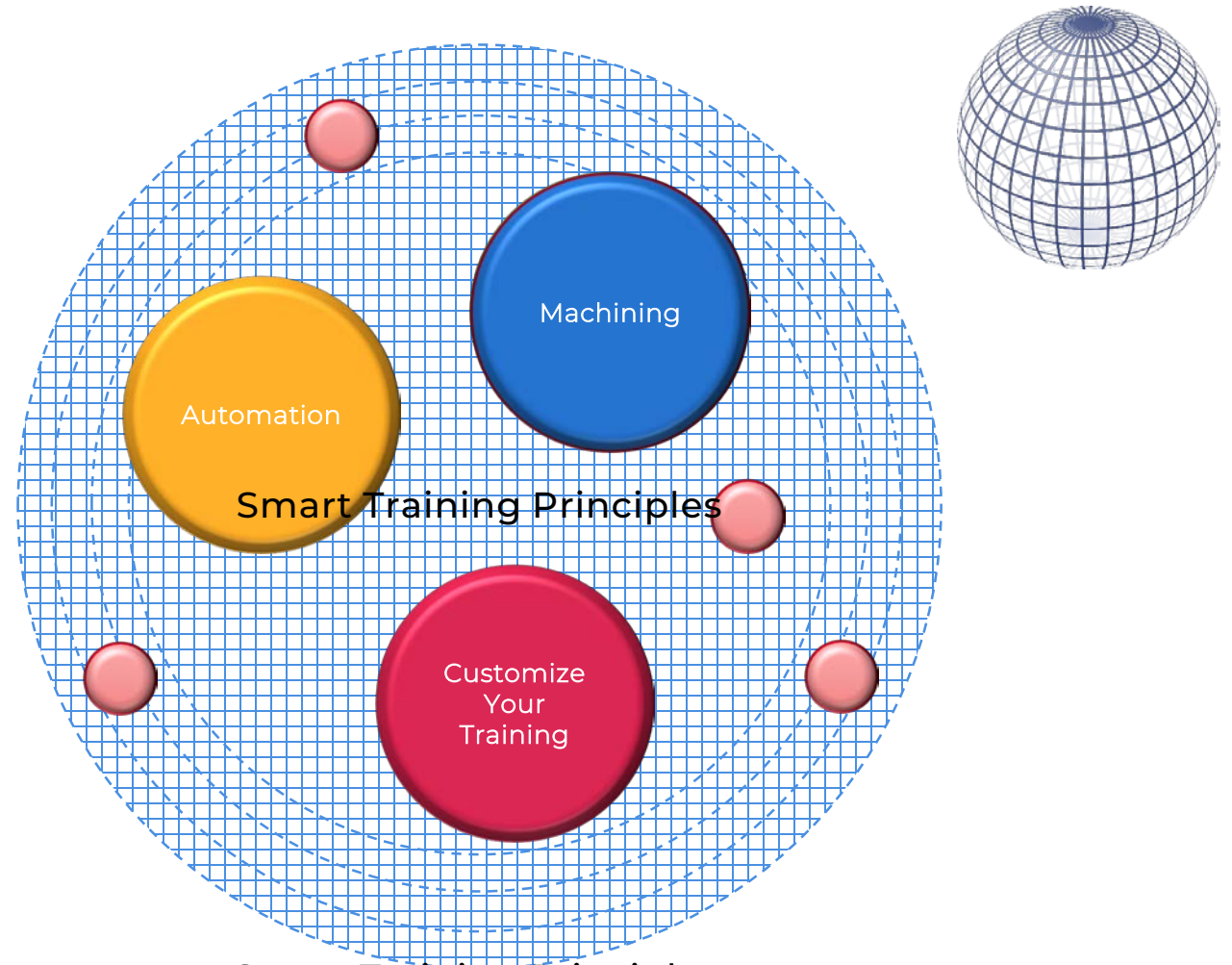
Smart Performance Measures



Smart Training Principles

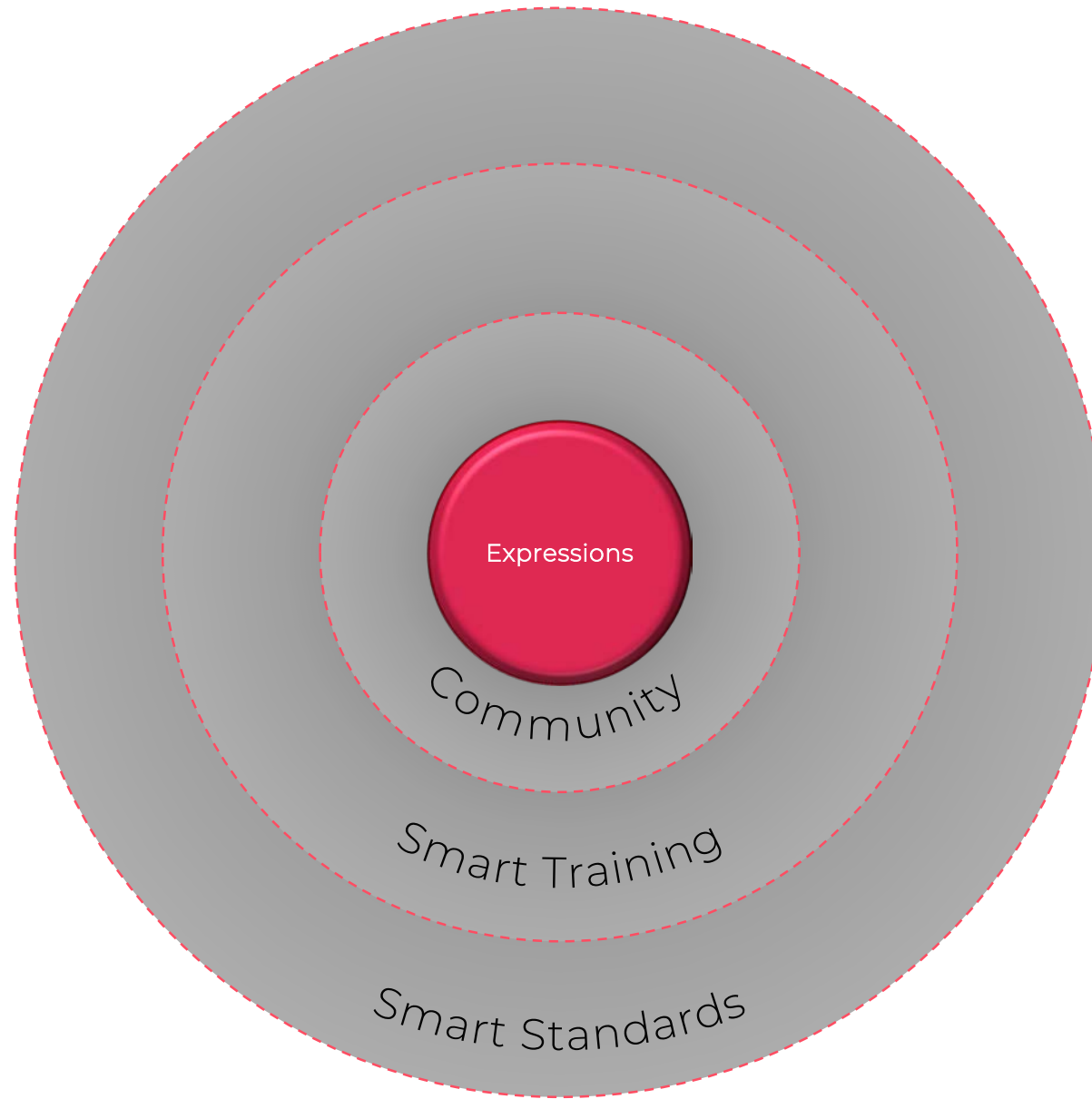


One-Size-Fits-All Training



Smart Training Principles

How It All Works Together



Smart Standards Deep Dive

Smart Standards Framework

- ▲ Duties are one pagers (see diagram)
- ▲ Duties are individual Standards
- ▲ Duties state minimum performance (**not** specs)
- ▲ Duties are used to select design performance measures (PMs)
- ▲ Duties are organized into Industry Roles
- ▲ Credentials are aligned to Industry Roles
- ▲ Roles are **not** identified by complexity levels
- ▲ Complexity is expressed through PMs
- ▲ Knowledge requirements are listed by Role
- ▲ Standards are dynamically updated



XXXX Standard

Role:

Duty Area:

Duty 1.01:

Responsibility:

Description of the duty in 100 words or less

Resources:

Resources available to perform the duty

Performance:

Practical

Learned behaviors

Critical Thinking

Judgement or decisions

Compliance:

Full or Partial demand of duty

Evaluation:

Method(s) to validate the duty

Benefits to Smart Standards

- ▲ Easy to interpret!
- ▲ Allows for a shift toward **true** competency-based training
- ▲ Easy customization while maintaining standardization
- ▲ Ideal for adding or revising duties to keep pace with emerging technologies
- ▲ Organizes training into short-term tracks that are stackable into masterful careers

Machining Roles

- ▲ CAM Milling Programmer
- ▲ CAM Turning Programmer
- ▲ CAM 5-Axis Milling Programmer
- ▲ CNC 5-Axis Milling Operator
- ▲ CNC 5-Axis Milling Specialist
- ▲ CNC Milling Operator
- ▲ CNC Milling Specialist
- ▲ CNC Turning Operator
- ▲ CNC Turning Specialist
- ▲ CNC Operator
- ▲ Manual Milling Specialist
- ▲ Manual Turning Specialist
- ▲ Benchwork Specialist

Dimensional Measurements

- ▲ Quality Technician
- ▲ Quality Engineer

Industrial Tech. Maintenance Roles

- ▲ Maintenance Operations Specialist
- ▲ Mechanical Systems Specialist
- ▲ Hydraulic Systems Specialist
- ▲ Pneumatic Systems Specialist
- ▲ Electrical Systems Specialist
- ▲ Electronic Control Systems Specialist
- ▲ Process Control Specialist

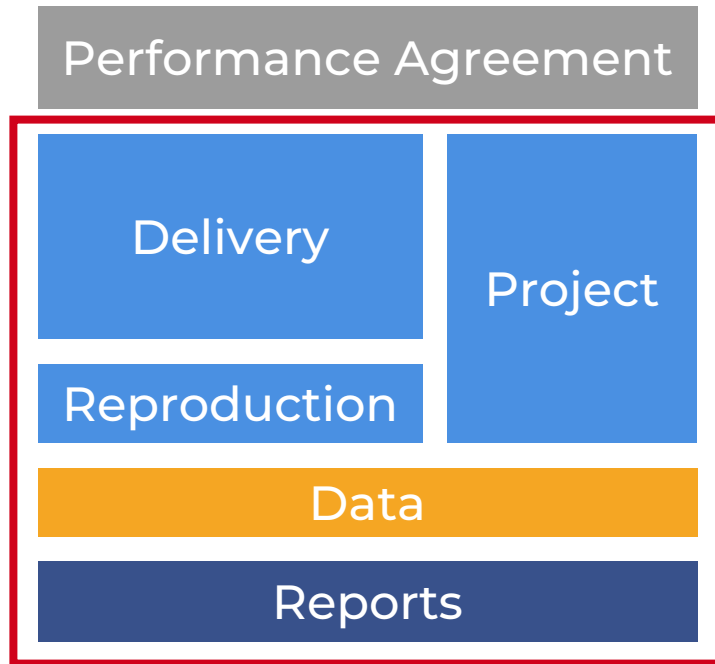
▲ Smart conversions will be completed by June 2020

Industry 4.0 Roles

- ▲ i4.0 Production Specialist
 - ▲ i4.0 Maintenance Specialist
 - ▲ i4.0 Process Specialist
 - ▲ i4.0 Systems Integration Specialist
- ▲ Standards will be ready for National validation by end of June 2020

Smart Performance Measures Dive

Smart Performance Measure



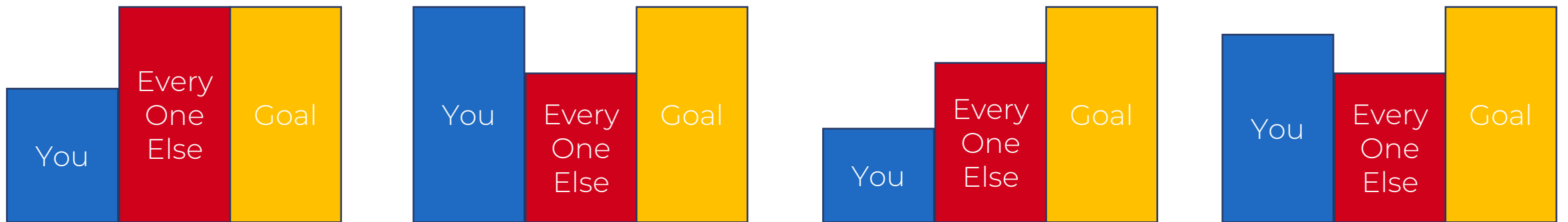
Performance Measure (PM)

Performance Measure:
Framework for defining,
validating and benchmarking
performance

Reports Structure



Ideal Performance



Possible Patterns of Performance

Benefits to Customized PMs

- ▲ Provides choices for organizations while remaining standardized
- ▲ Allows student pipelines to build portfolios of experiences relevant for to local employers
- ▲ Increases employer's community engagement
- ▲ Relevant to the performance needs of each community
- ▲ Access to NIMS digital benchmarking tool

Smart Training Principles Dive

Smart Training Principles

1. Train from the END
2. Stakeholder Environment
3. Separate Trainers and Evaluators
4. Dual Training Environments
5. True Competency-Based
6. True Performance Validation
7. Win-Win



Ideal Training Behavior



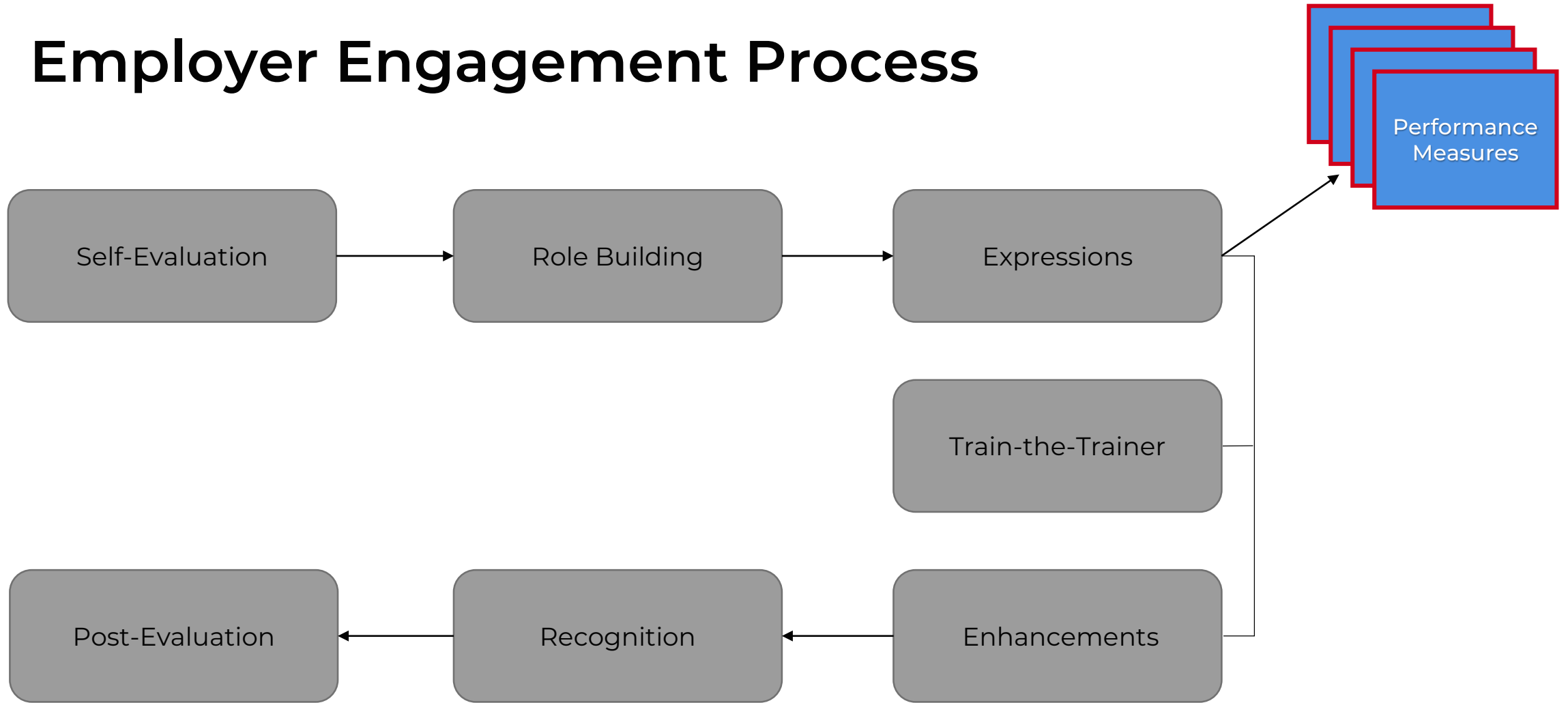
Possible Patterns of Training Behavior

Contact NIMS for a free Self-Evaluation

Benefits to Smart Training Principles

- ▲ Clearly defines the fundamentals of effective training
- ▲ Does not decay over time
- ▲ Adapts to emerging technologies
- ▲ Customizable to the needs of an organization or community

Employer Engagement Process



Takeaways

- Smart Standards:
 - Are role based (not occupational based)
 - Are dynamically updated
 - Are customized and standardized
- Smart Training Principles:
 - Are universal and timeless constants
 - Are personal training settings
 - Are used to stabilize training quality and intensity to maximize return on investment
- Smart Performance Measures:
 - Reveal END performance
 - Provides clarity, transparency, and unification for communities
 - Measures the performance of all stakeholders
 - Are customized and standardized

Q & A

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