Applying a Competency Model to Manufacturing Workforce Needs

John Hindman
Tooling U-SME Professional Services Manager
“By understanding the magnitude of the challenge and investing now to cultivate the next generation of professionals, all stakeholders can ensure that a skills crunch won’t derail the U.S. manufacturing resurgence.”
Skills Gap – The Latest Research

- Work with schools, government agencies and nonprofits to work on pipeline.
- Use demographic risk-management and workforce-planning tools to understand future manufacturing-skills challenges and to enlarge the pool of potential candidates.
- Return to investment in internal training programs to build job competence.
- Build up visibility in schools and create greater awareness of attractive manufacturing careers.
# Addressing the Learning Culture

## High Impact Learning Organizations vs. Traditional Training Programs

<table>
<thead>
<tr>
<th>High Impact Learning Organizations</th>
<th>Traditional Training Programs</th>
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<tbody>
<tr>
<td>Facilitates and enables learning.</td>
<td>Training organization is “The Place for Learning.”</td>
</tr>
<tr>
<td>Focuses on building an environment that includes informal learning, collaboration and many organizational activities (e.g., coaching, action learning, mentoring and collaboration) to facilitate continuous learning.</td>
<td>Focus on training programs, delivery and measurement.</td>
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<tr>
<td>Promotes learning as a continuous process.</td>
<td>Learning as an event.</td>
</tr>
<tr>
<td>Enables employees and managers to drive learning themselves, making many learning opportunities available.</td>
<td>Learning driven by the training organization.</td>
</tr>
</tbody>
</table>
Addressing the Learning Culture

PRIMARY OWNER FOR THE HIGH-IMPACT LEARNING CULTURE PRACTICES

- HR / L&D: 62%
- Leadership: 18%
- Management: 20%
Performance-based Training

• How do we tie training to performance?

• What are the steps to create a performance-based training program?
Building Performance-based Learning and Development Programs

- Business Objective
- Measured Impact
- Learning Solution
- Job Performance
- Competency (Knowledge/Skills)
Tie Learning to Business Needs

• Partner with organizational leaders to identify business goals.

• Manage expectations with stakeholders

• Establish goals

  – S (Specific) ------------------> Link goals to a particular business initiative
  – M (Measurable) --------------> Set goals that you can assess
  – A (Attainable) --------------> Ensure you have the resources to reach the goals
  – R (Relevant) --------------> Verify your goals have value to your stakeholders
  – T (Timely) --------------> Set meaningful timeframes
Tie Learning to Business Needs

**Business Objective**: Achieve a 11% reduction in safety claims by June 30

**Stakeholder**: Sammy Sosa, Manufacturing Manager

**Business Problem or Opportunity**: Decrease in workers compensation claims and insurance costs

**Impact Value**: Limited revenue growth and decreased market share

**Consequence of not impacting**: Limited revenue growth and decreased market share
Define Job Performance

*Performance*

The accomplishment of a task in accordance with a set standard of completeness and accuracy.

- **Business Objective**: Increased cycle time for assembly
- **Current Performance**: 10 pieces per hour
- **Ideal Performance**: 20 pieces per hour
- **Realistic Performance**: 15 pieces per hour
- **By When?**: End of Third Quarter
Define Job Competency

Worker

Knowledge, skills, and abilities

Performance-based knowledge and skills

Competency

Work
Align Learning Solutions

Related instructional units or modules delivered through different learning modalities covering a major subject area.

- E-learning
- Instructor-led Training (ILT)
- Virtual Instructor-led Training (Virtual ILT)
- On-the-Job Training (OJT)
- Self-Instruction (books, videos)
- Job Performance Aids

*Media selection must be based on the learning context, the skills to be taught, the practicality of the situation and what theory indicates would be appropriate.*

—Dick and Carey (1996)
Elements of a Training Program

Knowledge-Based Curriculum

OJT – Standard Work

Ongoing Performance Evaluation
Standardizing OJT

Best Practice Steps

1. Prepare the Learner
2. Explain the Operation
3. Practice the Operation

Be Patient!!!!
Measure Impact

We must evaluate. If we don’t evaluate, we just as well should not have analyzed, design a consistent training approach, or implemented the program properly, because the end product is the same: training is suspect – it might be good, or it might not be good.
Measure Impact

Level 1
Reaction and/or Satisfaction

Level 2
Learning

Level 3
Behavior Change / Job Application

Level 4
Business Impact

Level 5
Return on Investment (ROI)
Building Performance-based Learning and Development Programs

- Business Objective
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### SME – Brandon Hall Survey 2013

Does your organization have a company-wide plan in place for addressing your skills gaps?

<table>
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<tr>
<th>Plan Description</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Yes, we have a company-wide plan for filling our skills gaps among skilled workers in critical roles through the next 12 months.</td>
<td>25.6%</td>
</tr>
<tr>
<td>Yes, we have a company-wide plan filling our skills gaps among skilled workers in critical roles through the next 5 years.</td>
<td>14.1%</td>
</tr>
<tr>
<td>No, we do not have a company-wide plan in place for filling our skills gaps among skilled workers in critical roles at this time.</td>
<td>54.3%</td>
</tr>
<tr>
<td>Don't know</td>
<td>6.0%</td>
</tr>
</tbody>
</table>
Reminders

According to Department of Labor.

Percentage of manufacturing workers aged 55 to 64 years and the share of workers older than 65 years have both significantly increased since 2000.

Reports that the median age of the manufacturing workforce rose from 40.5 years in 2000 to 44.1 years in 2011.
The New Workforce.

Gen Yers will comprise 50% of the workplace in 2014. Gen Yers make a decision about whether to stay with a company long-term by the end of the first day.

What is needed for retention?
- Pipeline development and recruitment
- Strong onboarding and development
- Clear career pathways
- Succession planning and pay scale
Questions and Discussion