Designing Learning Systems in Organizations: What Matters

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Overview

I. Why we should care about learning and training in organizations?

II. What do we know about learning and training?
   - The Science
   - The Elements for Success

III. What matters when you design, delivery and/or evaluate learning systems?
   - Principles and tips

IV. Closing Remarks
Chapter I

Why we should care about learning and training in organizations?
Why we should care about learning and training in organizations?

- It is a big investment...
  - $250B
- Believe that it creates a competitive edge...
  - More talent, skills...
- Believe that “those who learn the fastest, win”...
  - Continuous learning
  - Easy access
  - On the job learning
Why we should care about learning and training in organizations?

- We know training works…
  - Reviews & meta-analyses
- We know training doesn’t always work…
- Organizations that are productive, invest more in training (ASTD)
- There is a science…
  - Not used, leveraged or exploited
  - Many myths, misconceptions
Why we should care about learning and training in organizations?

How can organizations get maximum value of their learning & training efforts?
Chapter II

What do we know about learning and training?
The Science...

- Alive and well...
- Lots of empirical work...
- Lots of significant findings that matter...
- A number of principles uncovered...

Reviews:
- Tannenbaum & Yukl, 1992
- Salas & Cannon-Bowers, 2001
- Salas et al., 2006
The Science...

- **Books:**
  - Noe, 2002
  - Goldstein & Ford, 2002
  - Kraiger, 2002

- **Meta-Analysis:**
  - Colquitt et al, 2000
  - Arthur et al, 2003
  - Klein et al, 2007
We know that...matters

- Instructional design...
- Motivation to learn...
- Opportunity to perform...
- Goal orientation...
- Supervisory support...
- Climate...
We know that...matters

- ...Learning expectations...
- ...Organizational alignment...
- ...Diagnostic feedback...
- ...Guided practice...
- ...Simulation...
- ...Coaching...
- ...and on!
What are the elements for success?

- Employees
- Leaders & Managers
- Work Environment
- Supporting Mechanisms
- Learning Environment
Chapter III

What matters when you design, delivery and/or evaluate learning systems?
What Matters…

- **Principle 1:** Focus on uncovering the needed competencies (i.e., KSAs).

  **Tips:**
  - Conduct a training needs analysis
  - Conduct job/task analysis
  - Conduct a cognitive task analysis; uncover cognitive aspects of the job
  - Train competencies, not tasks
  - Develop learning outcomes; serve as guide
  - Pay attention to organizational factors
  - Assess organizational climate
What Matters…

- **Principle 2**: Prepare the organization for training.

  **Tips:**
  - Conduct organization analysis
  - Send positive message about training
  - Make employees see value of training
  - Make sure you have top-level support
  - Make sure key players are on-board
What Matters...

- **Principle 3**: Adopt a *systems* approach.
  
  **Tips:**
  - Think about the “before,” “during,” and “after”; not only the classroom or the simulation

- **Principle 4**: Rely on sound theories of learning.
  
  **Tip:**
  - Seek guidance from literature
Framework for Training Effectiveness
What Matters…

- **Principle 5:** Set up appropriate pre-practice conditions.
  
  **Tips:**
  - Use advanced organizers when possible
  - Provide preparatory information

- **Principle 6:** Ensure trainee motivation.
  
  **Tips:**
  - Show value of training
  - Attend to prior training experiences
  - Send positive messages about training and safety
What Matters…

- **Principle 7**: Apply sound instructional principles to the design.

**Tips:**
- Tailor instructional strategy to learning outcomes
- Provide hands-on practice
- Provide constructive as diagnostic feedback
- Match fidelity to task
- Guide practice
- Present relevant information
- Demonstrate skills to be learned
Principle 8: Seek to diagnose KSAs deficiencies.
Tips:
- Develop performance measures
- Focus on process measures

Principle 9: Set up the training environment.
Tips:
- Train the trainers
- Provide adequate resources
What Matters...

- **Principle 10**: Set a climate for learning.

  **Tips:**
  - Clarify expectations early
  - Encourage participation
  - Promote self-efficacy
  - Use technology to support learning process
What Matters…

- **Principle 11**: Prepare the transfer environment.
  Tips:
  - Provide incentives
  - Reinforce desired behaviors
  - Show management support
  - Create opportunities to practice
  - Keep sending positive signals

- **Principle 12**: Use simulation when possible.
  Tips:
  - Scenario-based training; scenario “the curriculum”
  - Embed instructional features; metrics
  - Diagnose performance
What Matters…

- **Principle 13:** Determine training effectiveness.
  
  **Tips:**
  - Examine training objectives and link evaluation criteria to them
  - Measure at multiple levels (reactions, learning, behavior)

- **Principle 14:** Assess organizational impact.
  
  **Tips:**
  - Ensure link between training objectives and safety outcomes
  - Measure desired outcomes at appropriate levels
Chapter VI

Closing Remarks
Closing Remarks...

- The science of learning and training can help organizations...
- Training when design systematically--works...
- Need to educate organizations...
- Need to translate our findings...
- Much work remains to be done!!
Questions?