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- The old practice of dunce caps as a symbol for trait-based dismissal of individuals (just put the dimwits in the corner and ignore them); not much to do but keep yelling at them
- Skinner's alternative approach: Blame the environmental contingencies
- One of the simplest but most important lessons of our field: The rat is always right



- The extension of this lesson to education
- If the child didn't learn, then the teacher didn't teach

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- However, this doesn't mean we should scapegoat the teacher
- Sometimes there is a failure to extend the lesson even further out to the teacher and others involved in the educational system
- Let's examine the behavior of teachers and other types of employees in the educational systems using an OBM approach

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 Teacher's behavior, like any other employee's, is a product of learning history (prerequisite knowledge) and workplace contingencies (measurement and incentives)



- OBM would note at least three basic problems: Measurement, consequences, and prerequisite knowledge
- We don't often do functional assessments in OBM, but often the problems can be traced to common issues
- For more on assessments in OBM, see recent article:
 Johnson, D. A., Casella, S. E.,
 McGee, H., & Lee, S. C. (2014). The use and validation of pre-intervention diagnostic tools in Organizational Behavior Management. *Journal of Organizational Behavior Management*, 34, 104-121.
 doi:10.1080/01608061.2014.914009

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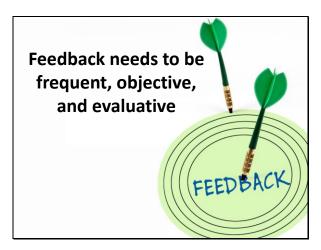
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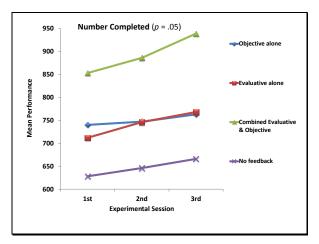
- Issues with measurement
- Assessment of performance
- Annual or quarterly performance reviews are typical and insufficient
- These reviews tend to be vague and therefore non-directive in any practical sense
- Exception: Measures related to the performance of children on standardized tests (typically infrequent)

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 Measurement and feedback: Should be frequent, objective, and evaluative

Slide 9



Data from:
 Johnson, D. A. (2013). A component analysis of the impact of evaluative and objective feedback on performance. *Journal of Organizational Behavior Management*, 33, 89-103. doi:10.1080/01608061.2013.785879

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- Employees often are unclear on what they specifically need to do, other than just "be good"
- Vague goals are always met ("educate for the whole child," "educate for justice"), yet no progress is made
- In education this vagueness is embraced by constructivism and discovery learning
- No one quite knows what they're supposed to do beyond vague guidelines of be nurturing or supportive

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- Only one specific measure: Pass the standardized test
- Behaviors needed to support this outcome are only vaguely explained
- Therefore we have pinpointed no relevant behaviors and only one result
- "Teaching to the test" is often decried as a horrible thing, but it should be expected given the contingencies established by our measurement system
- Even if we fixed measurement system, we still need to attend to incentives

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- Although reinforcer preference assessments exist, I would argue that finding a good incentive is fairly easy
- It is the delivery of that incentive that is complicated and more important
- The same incentive delivered two different ways can have very different effects
- Money has often motivated and demotivated performance depending on delivery (e.g., "here's a bonus for terrific performance" vs. "here's your bribe because apparently you can't just do your basic job without it")

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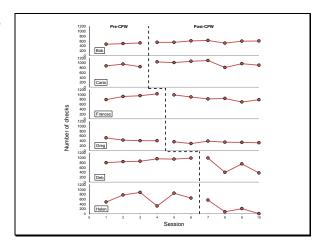
 To illustrate a poor delivery system, let's look at Employee of the Month

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 The once-per-year design of most EOM programs

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Data from:
 Johnson, D. A., & Dickinson, A. M.
 (2010). Employee-of-the-month
 programs: Do they really work?
 Journal of Organizational Behavior
 Management, 30, 308-324.
 doi:10.1080/01608061.2010.520144

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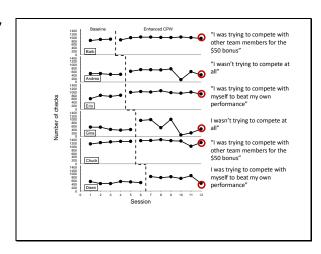
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- Even if fixed the frequency issue and vagueness issue, still have the basic problem of winner-take-all
- Good, but not quite the best, performance will be neglected

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Data from:
 Johnson, D. A., & Dickinson, A. M.
 (2010). Employee-of-the-month programs: Do they really work?
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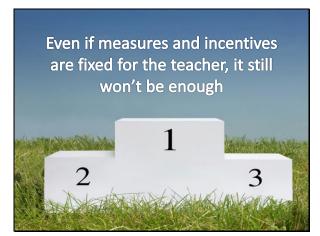


 In education and workplace in general, there is much to be done in regards to measurement and incentives

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 Cannot fix measurement and incentives for just the individual employee if lasting change is desired

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- Align consequences throughout system
- Behavioral systems analysis and management/administration
- To change the child's behavior, you must change the teacher's behavior
- To change the teacher's behavior, you must change the principal's behavior
- To change the principal's behavior...and so on
- Analogous to trying to correct a child's behavior while neglecting parent training

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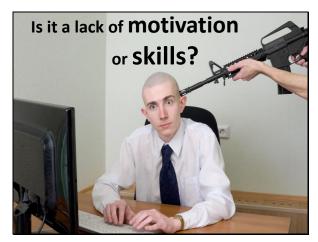


 Perfect incentives are useless if the organism doesn't have the repertoire to perform the desired behavior

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• Gun test (not literal, of course)

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- Often they genuinely don't know how to best teach
- Typical employee training (3 standard approaches that are flawed) and Colleges of Education (liberal arts sampler platter)

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- Training / instructional design
- Can be used to decide how to best train teachers and teach students
- Knowledge or education or training: Lofty but often vague as hell; need to operationalize

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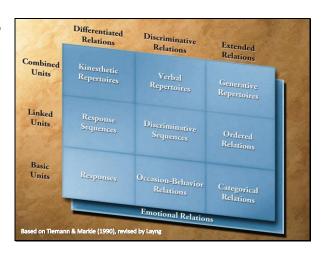
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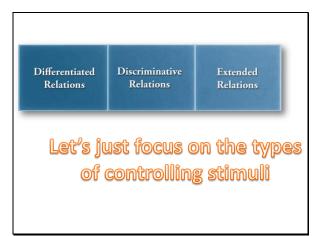
- · Trivial and unhelpful distinctions
- Commonality across terms: Trying to establish new behaviors under appropriate stimulus control

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 Markle's 10 boxes of relations to establish: Behavior types and stimuli types

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 For simplicity, focus on three broad stimulus control classes

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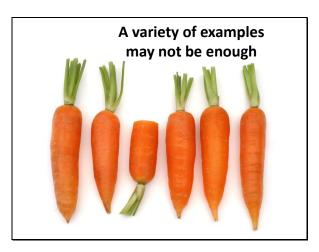
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- Good instructional design
- Just writing clear objectives or constructing a syllabus does not make one an instructional designer
- Behavior-based instructional design is NOT simply telling definitions and/or using multiple exemplar training; in regard to extended relations, it is a systematic approach to critical and variable features

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- Concept formation done systematically
- Multiple exemplar training can lead us astray

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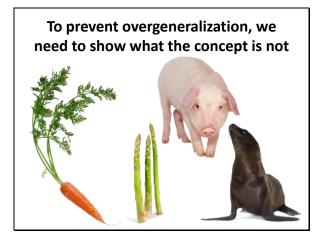


 Need to be systematic to prevent undergeneralization

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- Need to be systematic to prevent overgeneralization
- Examples and non-examples should not be randomly selected
- Some stimuli are better than others for teaching

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 Greater efficiency and accuracy when using behavior-based instructional design

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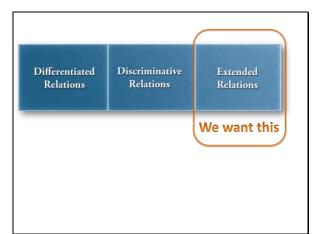
- We don't want just rote learning (too narrow stimulus control)
- In regards to instruction, we want generic (all critical attributes) and maybe metaphorical (some, but not all, critical), but not metonymical (no critical, but some variable) extensions
- In other words, same, similar but not quite the same, and superficially similar

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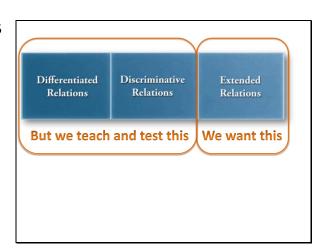
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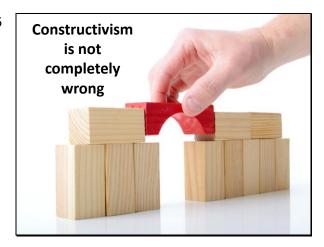
Our one clear result (pass test) was wrong

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 In the absence of knowledge on instructional design, they tend to alternate between too narrow stimulus control and no stimulus control (discovery learning)

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- The stated goals of constructivism / discovery learning are worth attending to
- The problem is their ineffective methodology

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 By using behavior-based instructional design, we can systematically engineer discovery and creativity

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 There is much to be done, but we have many tools to help us get there

