Measurement

and Evaluation...

Made Simple

Create Level 2 Quizzes &
Tests That Measure Job
Application, Not Just
Recall

Participant Handout

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Ken Phillips is the founder and CEO of Phillips Associates and the creator of the Predictive Learning Analytics™ (PLA) learning evaluation methodology. He is also a measurement and evaluation master, having spoken and received rave reviews at the ATD International Conference on measuring and evaluating learning issues every year since 2008. He has also presented on similar topics at the Annual Training Conference and Expo every year since 2013.

Ken has pooled his measurement and evaluation knowledge and experience into workshops and

presentations for L&D professionals. All the sessions are highly engaging, practical, and filled with relevant content most L&D professionals have yet to hear. In short, they are not a rehash of traditional measurement and evaluation theory.

Before pursuing a Ph.D. in the combined organizational behavior and educational administration fields at Northwestern University, Ken held management positions with two colleges and two national corporations. He has more than two dozen published learning instruments and articles. Ken is also a contributing author to five L&D books and the author of the recently released ATD TD at Work publication Evaluate Learning with Predictive Learning Analytics.

Ken earned the Certified Professional in Learning and Performance (CPLP®) credential from ATD in 2006 as a pilot pioneer and has recertified five times, most recently in 2021.

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Measurement and Evaluation...
Made Simple

Session Overview

Welcome to my *Create Level 2 Quizzes and Tests That Measure Job Application, Not Just Recall* presentation. The session will help you acquire knowledge and build skills, enabling you to create Level 2 quizzes and test questions that measure whether a participant learned something and knows how to apply it.

Specifically, you will learn practical tips and guidelines for creating Level 2 quizzes and tests that produce data connecting Level 2 and 3 evaluation results into an integrated measurement and evaluation approach. Further, the results will provide valuable insight into the cause when Level 3 evaluation results indicate little or no application back on the job occurred.

Session Description:

According to a recent Association for Talent Development (ATD) research study, eighty percent of organizations evaluate their learning programs at Level 2 of the five-level evaluation model (Reaction, Learning, Application, Impact, and ROI). Yet only 63 percent of organizations view the data they collect as having high or very high value.

While these numbers indicate a significant disconnect, there is a proven way to increase the value of Level 2 evaluation data. It involves writing multiple-choice test questions that measure job application rather than merely recalling facts and information.

Learning Objectives

After attending this informative, highly interactive workshop, you will be able to:

- Use facts from a recent Association for Talent Development (ATD) research study to benchmark your organization's use of Level 2 evaluations.
- Write test questions that measure job application, not the mere recall of facts and information.

What past participants have said:

"This was by far the best breakout session of my three days attending the conference. I will take this model back and will put it in place."

"Good information. Can't wait to apply it."

"Amazing and loved the techniques."

"Everything in the session is related to my job and is beneficial knowledge."

"Ken's insight into evaluations raises the bar for how L&D professionals solicit feedback."

Create Level 2 Quizzes & Tests That Measure Job Application, Not Just Recall Job Aid

Level 2 Facts

According to a 2019 ATD research study titled *Effective Evaluation: Measuring Learning Programs for Success*, three noteworthy facts about Level 2 evaluations are:

- 1. 80% of organizations evaluate at least some learning programs at Level 2
- 2. On average, organizations that use Level 2s evaluate 48% of all their programs at Level 2
- 3. 63% of organizations view the data they collect from their Level 2 evaluations as having high or high value. Conversely, 37% of organizations don't find the information they collect to have much value!

Why the Disconnect?

- ✓ L&D professionals and business executives perceive the test items as too easy or difficult.
- ✓ The test questions measure the simple recall of facts or information and not application on the job.
- ✓ The test is administered immediately following the learning program. As a result, high positive scores are not seen as credible.
- ✓ The data collected is not systematically analyzed and used to evaluate program effectiveness or demonstrate program value.

The Solution

- 1. Create valid, scientifically sound Level 2 test items that measure job application and not just mere recall (more about this later).
- 2. Wait 1-3 weeks after the learning program's conclusion before administering the knowledge test. This time delay enables the test to be used for both evaluation and reinforcement and increases the credibility of the results.
- 3. Use the test score data to determine learning program effectiveness, demonstrate program value, and improve test item validity.

Writing Level 2 Job Application Test Questions

Writing valid, scientifically sound Level 2 test questions is an art and a science. Writing job application-focused test questions rather than mere recall questions is even more challenging.

Recall questions only test whether someone learned something. In contrast, job application questions test whether someone learned something and if they know how to apply it on the job.

Another way to view the difference between recall and job application questions is through the eyes of Benjamin Bloom's (1956) taxonomy of different levels of learning and critical thinking skills. Listed in order of complexity from highest to lowest, they are:

- Evaluation
- Synthesis
- Analysis
- Application
- Comprehension/Understanding
- Knowledge/recall

Bloom's Taxonomy



"The single most useful improvement you can make in test development is to write test items above the knowledge/recall level."

Source: Shrock and Coscarelli, 2

As you can see, job application-focused test questions provide greater insight than recall test items and require higher critical thinking. In short, job application test questions provide Level 2 learning data and insight into Level 3 job application data. However, writing job application test questions is more demanding than writing recall questions because it requires a deep understanding of the learners' work environment and the training program content to develop realistic job situations to include in the test items. In contrast, writing recall test questions requires only a deep understanding of the training program content and a superficial understanding of the learners' work environment.

The following guidelines will aid you in writing job application test questions. In addition, several examples of recall versus job application-focused test questions will help you understand the difference.

Guidelines for Writing Job Application-Focused Test Questions

- 1. Select a learning objective from your target training program.
- 2. Consider what learners need to know and do to meet the objective.
- 3. Identify real-life situations that reflect the actual application of the program content covered by the objective.
- 4. Choose one of the situations and write the stem (the question or problem) in 1 to 3 sentences.
- 5. Identify plausible distracters think of things someone might say or do who thought they knew the content associated with this learning objective but didn't understand.

Recall vs. Job Application Test Questions

Recall	Job Application
The best leadership style for dealing with	A leader takes over a team that needs clear
marketplace changes is:	direction and significant change to respond to
	recent marketplace changes. The best
	leadership style for this situation is:
The best leadership style for taking over a	You're taking over a team that has significant
team where trust is nonexistent is:	challenges. Trust is absent, and there are rifts
	to heal. Consequently, the team members
	feel considerable stress. The best leadership
	style for this situation is:
The best leadership style for dealing with a	A supervisor discovered a compliance
compliance problem is:	problem with their team that could
	substantially negatively impact customers if
	not reported and corrected immediately. The
	best leadership style for this situation is:
What does the letter "E" in the ADDIE model	You sent a detailed design document to a
stand for?	group of SMEs to solicit their feedback
	regarding a training program design. What
	element in the ADDIE model does this
	represent?
What is the best leadership style for a team	You are leading a team of highly experienced,
when you have an urgent challenge to	competent, and self-driven high performers.
address?	They are self-motivated and hold themselves
	to a very high standard. You have an urgent
	challenge requiring everyone on the team to
	help address it. The best leadership style for
	this situation is:

Writing Job Application Test Questions

Instructions:

- Use the "Guidelines for Writing Job Application-Focused Test Questions" on the previous page and the "Anatomy of a Multiple-Choice Test Question" information below to help you create your job application-focused test items.
- Templates for recording your test questions are available on the next page if you want to use them.
- Be prepared to share your test questions with the whole group.

Reminder:

Recall Questions

Test only whether someone learned something. Writing them requires a deep understanding of the training program content but no understanding of the learners' work environment.

Application Questions

Test whether some learned something and if they know how to apply it. Writing them requires a deep understanding of the training program content and the learners' work environment.

Anatomy of a Multiple-Choice Test Question

Stem: The question or problem described in I to 3 sentences

Guidelines for writing the stem:

- ✓ Contains clear and direct wording.
- ✓ Ask a single question.
- ✓ End with a question mark or colon.

Key: The correct answer

Distractors: 2 or 3 other <u>plausible</u> response options

Test Item Writing Templates

STEM:	
Key:	
D	
Distractor:	
Distractor:	
Distractor:	
STEM:	
Key:	
Distractor:	
Distractor:	
Distractor.	
Distractor:	



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Ken Phillips is available to present on the following topics. All include the valuable, "how-to" tips and hands-on measurement and evaluation techniques that L&D professionals crave—and can't find anywhere else! All topics can be delivered as 75-90 minute programs or webinars.

- Discover Pure Gold—and Highly Valued Data—in Your Level 1 Evaluations
- Add Muscle to your Level 1
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- Create Level 2 Quizzes & Tests That Actually Measure Something
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- Rx for Scrap Learning: Insights and Solutions for Training Transfer
- Business Results Made
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 Level 4 Evaluations
- Boost Training Transfer
 Using Predictive Learning
 Analytics[™] (PLA)
- Going the Distance: Making Sense Out of Evaluation Data

Contact Ken Phillips at 847.231.6068 or ken@phillipsassociates.com

Ken Phillips, CPTD, delivers all programs and workshops in his signature style: PROFESSIONAL, ENGAGING, and APPROACHABLE.

Ken Phillips is the founder and CEO of Phillips Associates and the creator of the Predictive Learning Analytics™ evaluation methodology. He is also a measurement and evaluation master, having spoken—and getting rave reviews—at the ATD International Conference on measuring and evaluating learning issues every year since 2008. He also has presented at the Annual Training Conference and Expo every year since 2013 on similar topics.

Ken has pooled his measurement and evaluation knowledge and experience into four workshops explicitly designed for L&D professionals. The workshops are highly engaging, practical, and filled with relevant content most L&D professionals haven't previously heard. In short, they are not a rehash of traditional measurement and evaluation theory. In addition, each workshop builds learner confidence for application back on the job by practicing the tips and best practices learned.

