# Boost Training Transfer
# Using Predictive Learning
# Analytics

**Presented by:**

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# **Agenda**

**1.** **Examine** the impact scrap learning has on lost credibility with business executives & wasted organization resources

**2.** **Discover** how Predictive Learning Analytics provides a means to manage scrap learning

**3.** **Examine** 6 benefits for using Predictive Learning Analytics and 9 guidelines for implementing the methodology

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# Scrap Learning

Term coined by Knowledge Advisors, a CEB company, that describes **the difference between learning that's delivered and learning that's applied back on the job**

# How big is the problem?

# Magnitude of Problem

# 45%

Source: Confronting Scrap Learning CEB White Paper, 2014

# Magnitude of Problem

**> 15%** Applied new skills back on the job

**< 20%** Didn't try to apply new skills back on the job

**65%** Tried applying new skills back on the job but reverted back

Source: Robert Brinkerhoff, 2004

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# View from the individual organization level

# According to ATD 2014 "State of the Industry Report"

**Average per employee training expenditure** = **$1208**

**Average number of training hours consumed per employee** = **31.5**

# Calculating Scrap Learning at individual organization level

**$1208 X 45% =**        **$544**

**31.5 hours X 45% =**        **14.2**

**$1208 X 80% =**        **$966**

**31.5 hours X 80% =**        **25.2**

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# Houston, we have a problem!

Source:  James Lovell, Apollo 13 flight

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**The solution:** Predictive Learning Analytics

# Predictive Learning Analytics (PLA)

is a method for peering into the future, at the conclusion of a learning program, and forecasting learner outcomes and actions, with the intent of changing those outcomes and actions for the better.
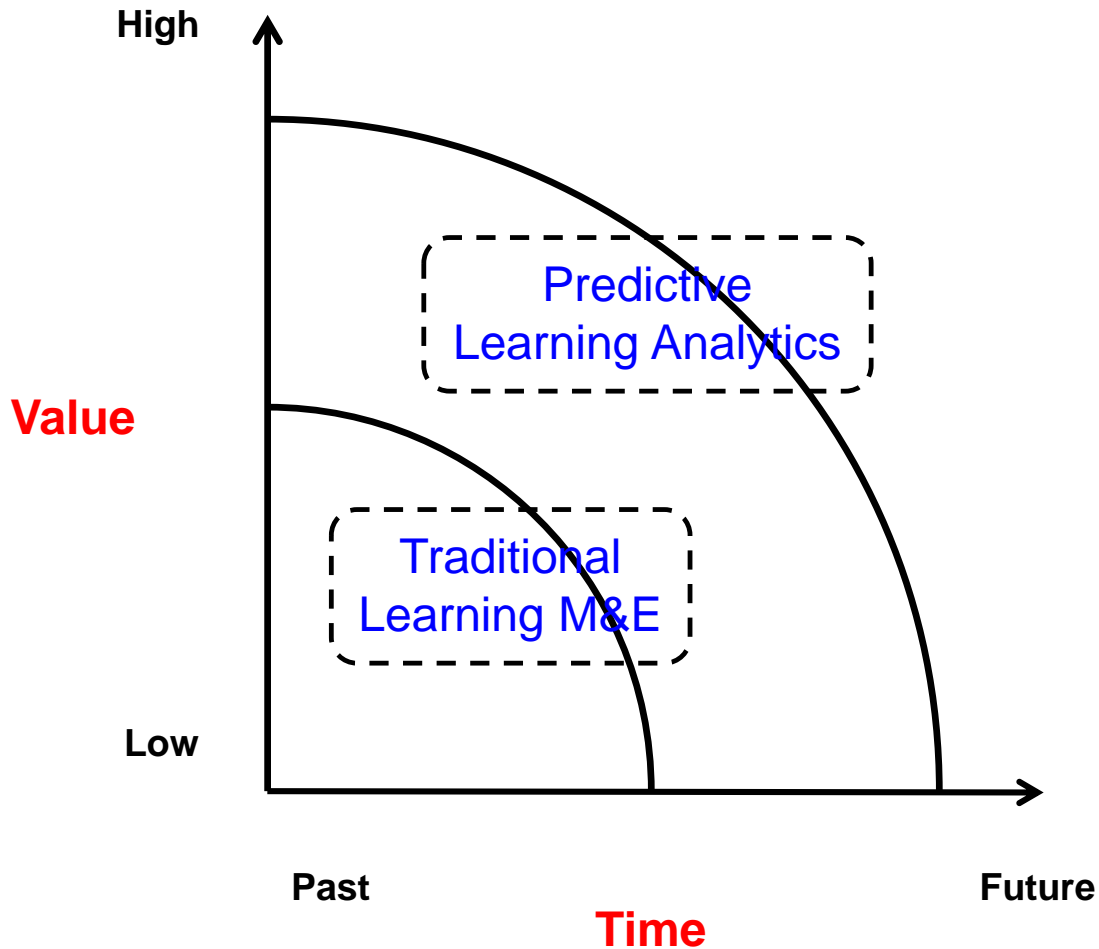
Source: Ken Phillips

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# PLA vs.

# Traditional M&E

# Kirkpatrick / Phillips Evaluation Model

| Levels of Evaluation | Measurement Focus | Time Frame |
|---|---|---|
| Level 1: Reaction | Participant favorable reaction to a learning program | Conclusion of learning program |
| Level 2: Learning | Degree to which participants acquired new knowledge, skills or attitudes | Conclusion of learning program or within 6 to 8 weeks after |
| Level 3: Behavior | Degree to which participants applied back-on-the-job what was learned | 2 to 12 months |
| Level 4: Results | Degree to which targeted business outcomes were achieved | 9 to 18 months |
| Level 5: ROI | Degree to which monetary program benefits exceed program costs | 9 to 18 months |

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# PLA vs. Traditional Learning M&E

**High**

**Value**

**Low**

Predictive Learning Analytics

Traditional Learning M&E

**Past**    **Future**

**Time**

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**Predictive Learning Analytics**

• Focuses on individual learners

• Predicts future likelihood of certain behaviors and actions

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**Traditional Learning M&E**

• Focuses on programs or cohorts

• Describes what has happened

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**Heart of PLA:** Algorithm consisting of 9 questions that research shows have a strong positive correlation with either Level 2 learning, Level 3 behavior or Level 4 results

These nine questions, also known as **"training transfer truths"**, identify things that need to happen during a learning program in order for training transfer to occur.

# Level 2 – Learning "Truths"

## Learners need to:

**1.** Acquire new information – knowledge, skills or attitudes

**2.** View program as relevant to self and job

**3.** View program as an important investment in one's career development

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# Level 3 – Behavior "Truths"

**Learners need to:**

**4.** Be personally motivated to apply what was learned

**5.** Have confidence in their ability to apply what was learned

**6.** Reflect on key lessons learned & how they can help improve performance

# Level 3 – Behavior "Truths"

## Learners need to:

**7.** Be actively engaged by manager post-program, regarding what was learned

**8.** Have an immediate opportunity to apply what was learned

# Level 4 – Results "Truth"

**Learners need to:**

**9.** See a likely improvement in business results if new information learned is applied

# Using the Algorithm

# Using The Algorithm

**Step 1:**   Combine all 9 predictive questions into an individual **Learner Application Index** score for each program participant

**Step 2:**   Place the **Learner Application Index** scores into numeric order from highest to lowest

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# Using The Algorithm

**Step 3:** Identify participants who are **most** and **least** likely to apply what they learned back on the job

**Step 4:** Target participants who are **least likely** to apply what they learned for reinforcement activities to help increase training transfer

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# Optional

# Calculations

# Overall Program Quality

Calculate **Overall Program Quality** score by summing all Learner Application Index scores into a single number

Use **Overall Program Quality** score to compare the quality of one program with another

Target programs not delivering value for either revision or elimination

# Manager Training Support Index

Calculate **Manager Training Support Index** score by sorting learners into groups arranged by manager or department

Compute average Learner Application Index score for each manager/department and place in numeric order from highest to lowest

Identify managers who do a **good** and **poor** job of supporting learning, and work with those who need help doing a better job

# Benefits of Using Predictive Learning Analytics

# Benefits Of Using PLA

**1.** Boost training transfer by using data to manage scrap learning

**2.** More effective & efficient use of follow-up & reinforcement activities by targeting those participants least likely to apply what they learned in a program back on the job

# Benefits Of Using PLA

**3.** Increase personal credibility in eyes of business executive stakeholders

**4.** Enhance personal reputation among L&D colleagues

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# Benefits Of Using PLA

**5.** Identify learning programs in need of revision or elimination using a single program quality score

**6.** Objective way to identify managers/departments that do a **poor** job of supporting learning so that their approach can be improved

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# Guidelines for

# Implementing  PLA

# Guidelines

**1.** Select single, high profile, costly program for PLA initiative & initially stay "under the radar"

**2.** Calculate amount of "scrap learning" associated with program

**3.** Build your Predictive Learning Analytics algorithm

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# **Guidelines**

**4.** Collect data & calculate individual Learner Application Index score for each program participant

**5.** Identify learners least likely to apply what they learned back on the job for follow-up & reinforcement activities

**6.** Collect Level 2 – learning & Level 3 – behavior evaluation data in order to demonstrate accuracy of PLA algorithm

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# Guidelines

**7.** Calculate amount of scrap learning associated with program following implementation of PLA methodology

**8.** Report results to business executive stakeholders

**9.** Enhance accuracy of PLA algorithm by including additional data from company LMS or HRIS, if available

# **Summary**

" The issue of scrap learning has been around forever. But, what's different today is that with Predictive Learning Analytics there now is a way to manage it. "

# Free Articles

Phillips, Ken, "Eight Tips on Developing Valid Level 1 Evaluation Forms", *Training Today*, Fall 2007, pps. 8 & 14.

Phillips, Ken, "Developing Valid Level 2 Evaluations", *Training Today*, Fall 2009, pps. 6-8.

Phillips, Ken, "Capturing Elusive Level 3 Data: The Secrets of Survey Design", Unpublished article, 2013.

Phillips, Ken, "Level 1 Evaluations: Do They Have a Role in Organizational Learning Strategy?", Unpublished article, 2013.

Phillips, Ken, "Business Results Made Visible: Designing Proof Positive Level 4 Evaluations", Unpublished article, 2013.

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