Predictive Learning Analytics™



The L&D Revolution: New Rules. New Tools.

"The goal of L&D
is to help
learners achieve
GREAT RESULTS,

not merely provide great training."

A revolution is coming to the world of measurement and evaluation of learning. With CEOs under increasing pressure to drive growth and deliver results, Learning & Development (L&D) professionals must find a way to boost training transfer and ensure their learning programs add value by contributing to productivity and growth.

Rob Brinkerhoff, professor emeritus Western Michigan
University and noted L&D expert, put it succinctly: "The goal of
L&D is to help learners achieve great results, not merely
provide great training."

To answer this challenge, Phillips Associates developed

Predictive Learning Analytics™ (PLA), a revolutionary new way
to apply predictive analytics and data-driven decision making to
learning to maximize training transfer.





What is the #1 issue facing L&D professionals today?

Scrap learning not only WASTES scarce organizational resources, it THREATENS your credibility

professionally.

PHILLIPS

ASSOCIATES

It's SCRAP LEARNING*— and if you're not familiar with the term, you will be!

Scrap learning is the gap, or wasteland created when training is delivered but not applied back on the job. It's is a critical issue for organizations—and for you—because scrap learning wastes money and time, two scarce organization resources. It also reduces your credibility in the eyes of business executives.

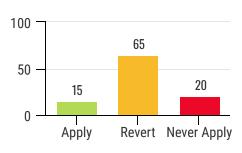


SCRAP LEARNING:

the gap created when training is **DELIVERED** but **NOT APPLIED** back on the job.



Two benchmark studies indicate the seriousness of the problem.



In 2004, Rob Brinkerhoff found that only slightly more than 15% of learners actually apply what was learned in a training program back on the job, close to **20%** never attempt to apply any of what they learned, and another **65%** try to apply what they learned but within 30 days or less revert back to their old ways. **That amounts to 80-85% scrap learning!**

More recently KnowledgeAdvisors (now Explorance) reported that in the average organization 45% of all delivered training is not applied. **



Whether it's 45% or 85%, think about the **wasted money** and **time**, your **diminished credibility** and the **lost opportunity** from training delivered but not applied!

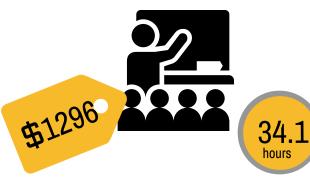
^{*} A term coined by KnowledgeAdvisors (now Explorance)

^{**} Confronting Scrap Learning, CEB Whitepaper, 2014



Putting a price on Scrap Learning

Average money and time spent per year PER EMPLOYEE*



Average training expenditure per employee Average number of training hours consumed per employee

The Cost of Scrap Learning at the Individual Organization Level



Using KnowledgeAdvisors data:

\$1296 X 45% = **\$583 DOLLARS WASTED**

34.1 hours X 45% = **15 HOURS WASTED**



How much is Scrap
Learning costing
YOUR organization

do the math

DOLLARS WASTED

of employees

X \$1296

X 45% =

HOURS WASTED

of employees

X 34.1 hours

x 45% =

*According to ATD 2018 State of the Industry Report





The Solution: Predictive Learning Analytics™

What if...

...there was a **proven way** to pinpoint the underlying causes of scrap learning associated with training programs within your organization?

...you could **identify those learners** least likely to apply the training they have received and **target them directly** for reinforcement activities?

... you could **identify those** managers who are likely to do a poor job of supporting training and target them for help and assistance?

...you could pinpoint which of the three key training transfer components—
Learning Program Design,
Learner Attributes, and
Learner Work Environment,
and the 12 training transfer factors—are contributing the least to training transfer so you could make adjustments?

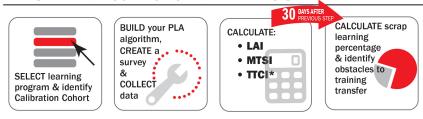
...you knew **the specific obstacles** that are preventing participants from applying what they learned so you could mitigate or eliminate those obstacles?

Now you can with Predictive Learning Analytics (PLA)



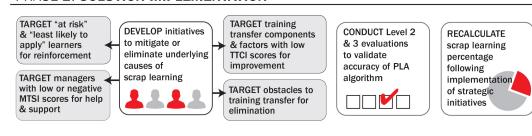
The 3 Phase, 9 Step PLA Process

PHASE 1: DATA COLLECTION AND ANALYSIS



^{*} Learner Application Index Scores, Manager Training Support Index Scores (MTSI) and Training Transfer Component Indices

PHASE 2: SOLUTION IMPLEMENTATION



PHASE 3: REPORT YOUR RESULTS







How PLA Differs From Traditional Measurement & Evaluation (M&E)

Predictive Learning



Traditional M&E



Focuses on pinpointing the UNDERLYING CAUSES of scrap learning



Focuses on producing METRICS



Concentrates on INDIVIDUALS and predicting their future behaviors & actions



Concentrates on measuring PROGRAMS or COHORTS



PREDICTS the future and is forward looking



Focuses on what happened in the PAST and is backward looking





The Heart of PLA: The Algorithm

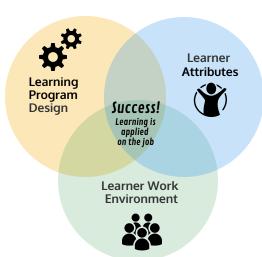
Three Components of Training Transfer

Three research-based training transfer components—Learning Program

Design, Learner Attributes and Learner Work Environment and 12

research-based training transfer factors serve as the heart of the

Predictive Learning Analytics™ algorithm. Each component consists of four training transfer factors and together they provide the data needed to make predictions and data-driven decisions regarding training transfer.



12 Training Transfer Factors



- 1. Acquire NEW INFORMATION
- 2. See a program as **RELEVANT** to themselves and their job
- 3. See a program as an important INVESTMENT in their career development
- 4. See a likely improvement in a KEY DEPARTMENT BUSINESS METRIC if new information learned is applied



Learner Attribute factors

- 5. Be PERSONALLY MOTIVATED to apply what was learned
- 6. Have **CONFIDENCE** in their ability to apply what was learned
- 7. **REFLECT** on key lessons learned & how they can help improve their performance
- 8. View program as an OPPORTUNITY TO LEARN challenging new things



Learner Work Environment — factors

- 9. Discuss training program with manager PRIOR TO ATTENDING
- 10. Be actively engaged by their manager POST-PROGRAM
- 11. Be SUPPORTED BY WORK COLLEAGUES, post-program
- 12. Have an IMMEDIATE
 OPPORTUNITY to apply what was learned
- 3 Components + 12 Factors = 1 Algorithm that provides data for making predictions and datadriven decisions for measuring, monitoring and managing scrap learning





5 Key PLA Measures to Boost Training Transfer

Five key measures—two predictive and three data-driven—make the PLA methodology a powerful force for increasing training transfer. When used together, these measures not only ensure more learners actually apply what they learned in a training program back on the job, but also provide a clear-cut means for monitoring and continuously improving learning program value.



LEARNER APPLICATION INDEX (LAI) SCORES identify which learners are most likely, at risk, and least likely to apply what they learned in a training program back on the job. Knowing which learners fall into each of these categories enables you to increase training transfer by targeting the at risk and least likely learners for reinforcement.



OBSTACLES preventing training

transfer are often numerous and difficult to pinpoint. Knowing what specific obstacles are preventing learners from applying all that they learned in a training program back on the job positions you to develop specific initiatives to mitigate or eliminate these obstacles and increase training transfer.

Pinpoint the Underlying

the Underlying Causes of Scrap Learning



MANAGER TRAINING SUPPORT INDEX (MTSI)

SCORES identify which managers are likely to do a good or poor job of supporting the training they send their employees to attend. Knowing which managers are likely to do a poor job enables you to provide support to those managers who need help in improving their approach.





TTCI™ SCORES

SCRAP LEARNING describes the wasteland of learning that is delivered but not applied back on the job. It's a critical business issue because it wastes money and time — precious organizational resources. Calculating the amount of scrap learning associated with a particular learning program is the first step in being able to manage it.

TRAINING TRANSFER COMPONENT INDICES (TTCI) SCORES

identify which of the three training transfer components— Learning Program Design, Learner Attributes, and Learner Work Environment and 12 training transfer factors—are contributing the most and least to training transfer. Knowing this enables you to focus your efforts first on the component and factors that are going to increase training transfer the most.





TOP 6 REASONS to Implement Predictive Learning Analytics

Benefits of Using Predictive Learning Analytics

- Less money & time wasted on learning that is delivered but not applied back on the job scrap learning
- 2 Increased personal credibility in eyes of business executive stakeholders
- More effective & efficient use of reinforcement activities by targeting participants who are at risk & least likely to apply what they learned in a program back on the job
- Objective way to identify managers who are likely to do a poor job of supporting learning so that their approach can be improved
- Objective way to assess the contribution to training transfer made by each of the three training transfer components: Learning Program Design, Learner Attributes, and Learner Work Environment and the twelve training transfer factors
- **Enhanced reputation** among L&D colleagues







About Phillips Associates

Phillips Associates, a consulting and publishing company provides, consulting services and seminars focused on Predictive Learning Analytics and the measurement and evaluation of learning.,

Who's behind the PLA Methodology?



Ken Phillips, CPLP PLA Creator and Methodology Architect

Ken Phillips, CPLP, founder and CEO of Phillips Associates, has more than 30 years experience designing learning instruments and assessments and has authored more that a dozen published learning instruments. He regularly speaks to Association for Talent Development (ATD) groups, corporate L&D groups and university classes. Since 2008, he has spoken at the annual ATD International Conference on topics related to predictive learning analytics and the measurement and evaluation of learning.



Jack Butler, MBA PLA Data Analyst

Jack Butler's specialty is in working with information-based systems. Some examples include: the design, development and delivery of training to support the implementation of a web-based system supporting a nationwide sales force; creation of an e-learning training program introducing an automated voice-based warehouse picking system; and development of a multi-lingual online training program introducing a quality incident reporting and correction system.

For more information about Predictive Learning Analytics, contact Ken at **Ken@phillipsassociates.com** or **(847)231-6068** or visit the Predictive Learning Analytics website at www.theplamethod.com.

