BOOST Training Transfer using Predictive Learning Analytics™

Presented by:
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August 18, 2017

Agenda

1. **Discover** meaning of term “scrap learning” & its impact on wasted organization resources & lost credibility with stakeholders
2. **Analyze** how to build an algorithm that predicts which learners are **most** & **least** likely to apply what they learned in a training program back on the job & which managers of the learners are likely to do a **good** and **poor** job of supporting the training
3. **Examine** the 3-phase, 9-step Predictive Learning Analytics methodology using data from an actual implementation
4. **Examine** the 6 benefits of using Predictive Learning Analytics

Scrap learning:

What is it?

Scrap Learning

Term that describes the **gap** or **difference**

between learning that is **delivered**

and learning that is **applied** back on the job

Coined by KnowledgeAdvisors, a CEB company

How big

is the problem?

Poll

In the average organization, what percent of learning that is delivered ends up as scrap?

A. **25%**

B. **45%**

C. **65%**

D. **85%**

Benchmark Study 1

45%

Source: Confronting Scrap Learning CEB White Paper, 2014

Benchmark Study 2

> 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

Houston,
we have a problem!

Source: James Lovell, Apollo 13 flight

The solution:

Predictive Learning Analytics™

Definition

Predictive Learning Analytics:

Methodology for peering into the future,

at the conclusion of a learning program,

and predicting learner outcomes and actions,

with the intent of changing those outcomes

and actions for the better

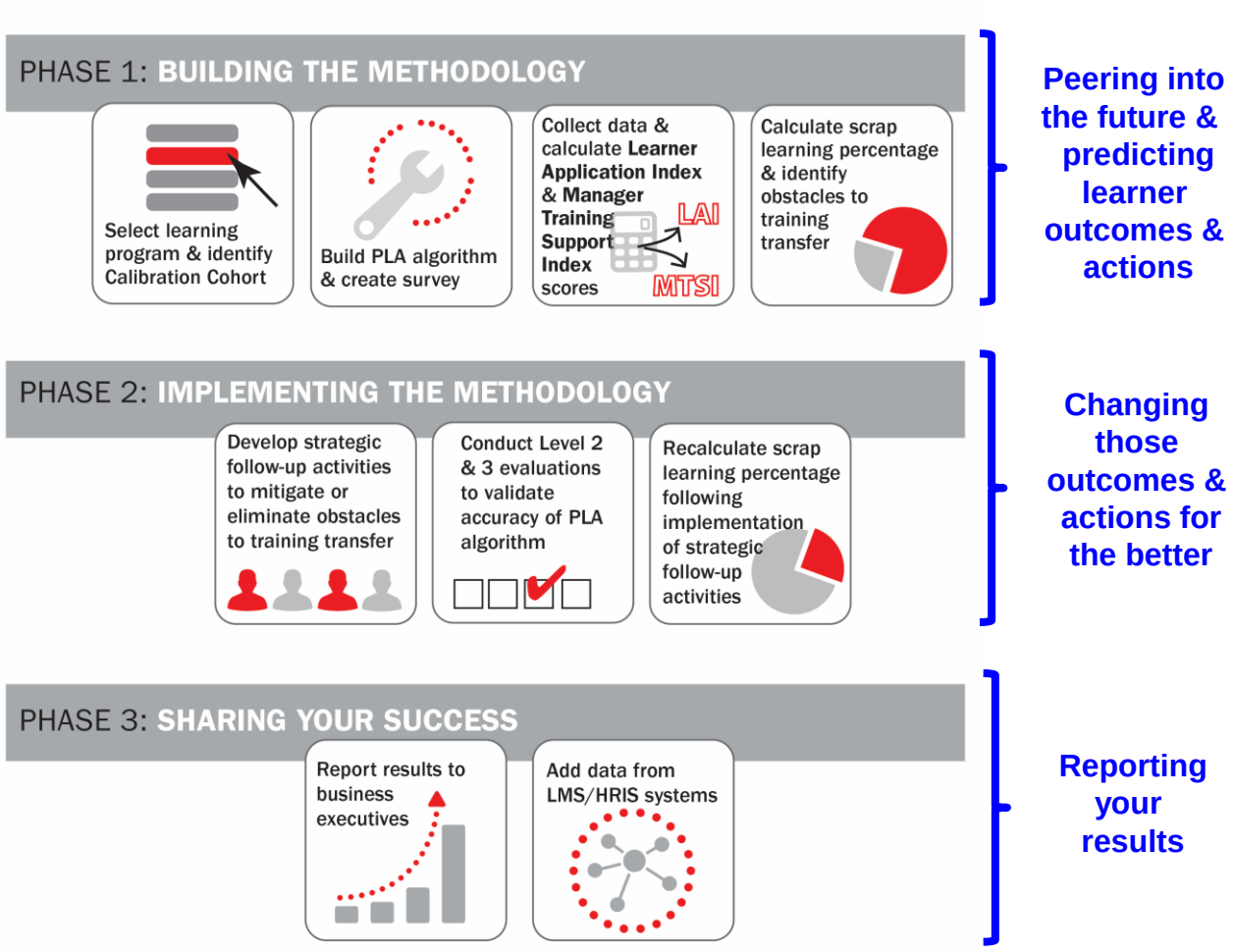
PLA Mission

To provide L&D professionals

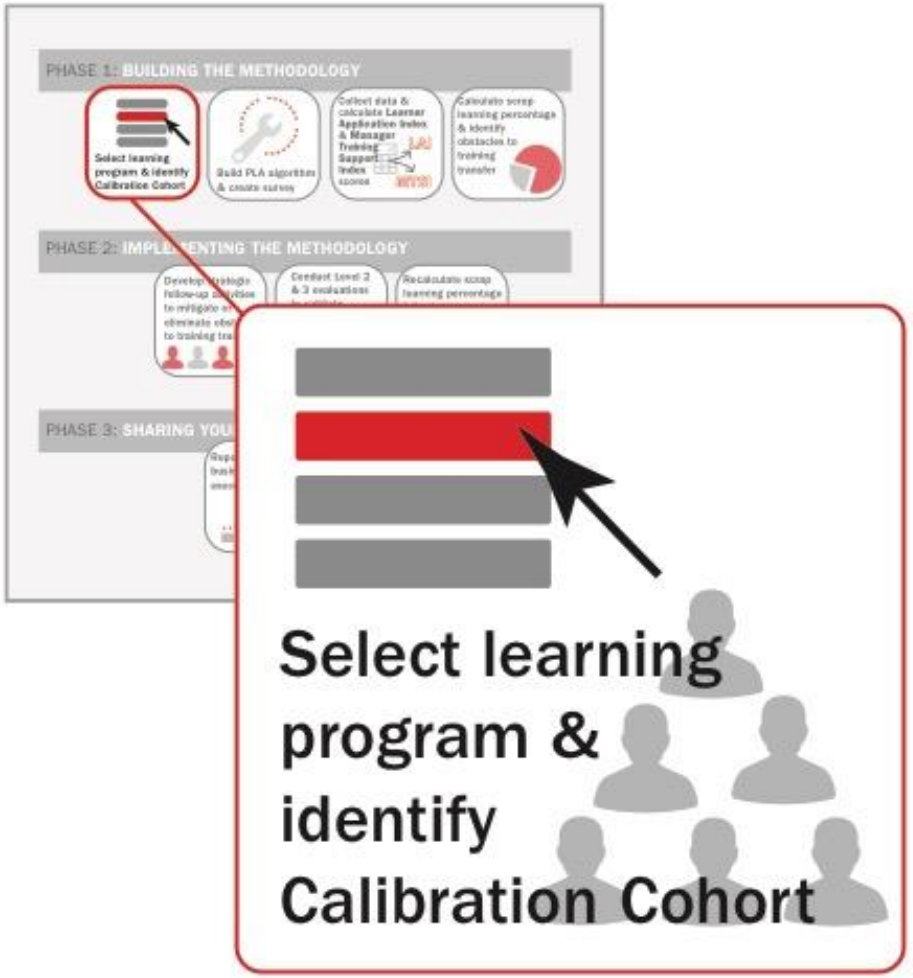
with a standardized methodology

for **measuring** and **managing** scrap learning

The PLA Methodology



Phase 1: Step 1



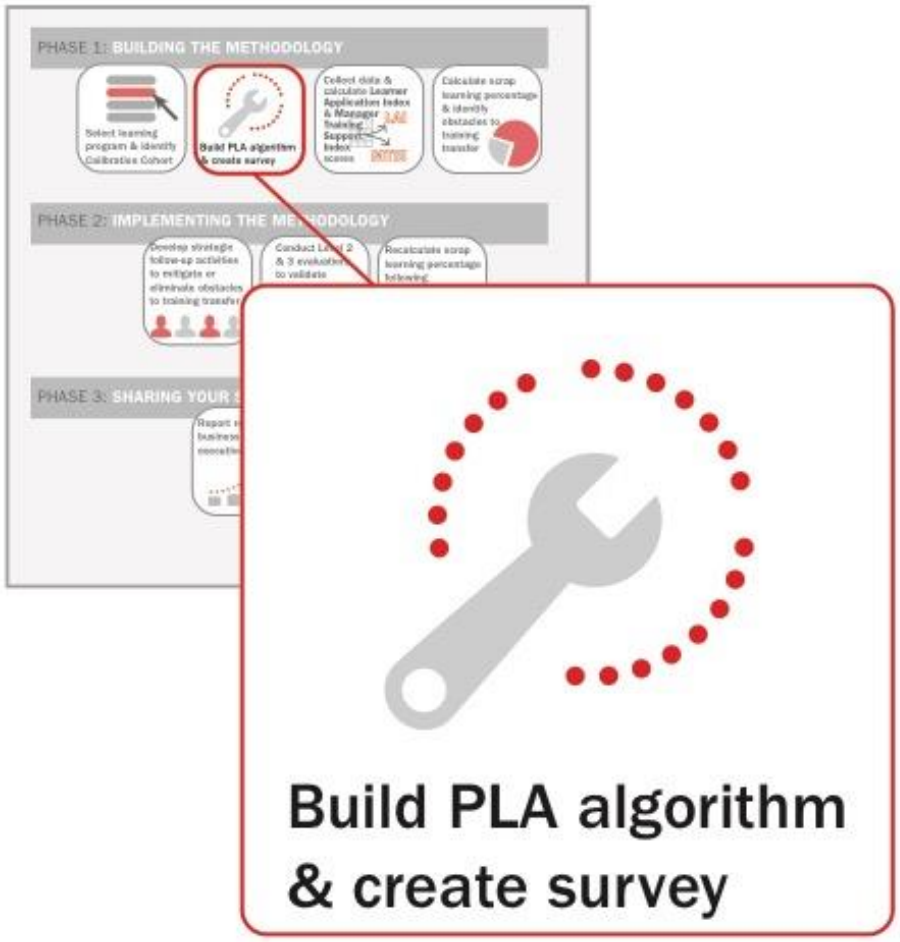
A Closer Look

Select a Learning Program

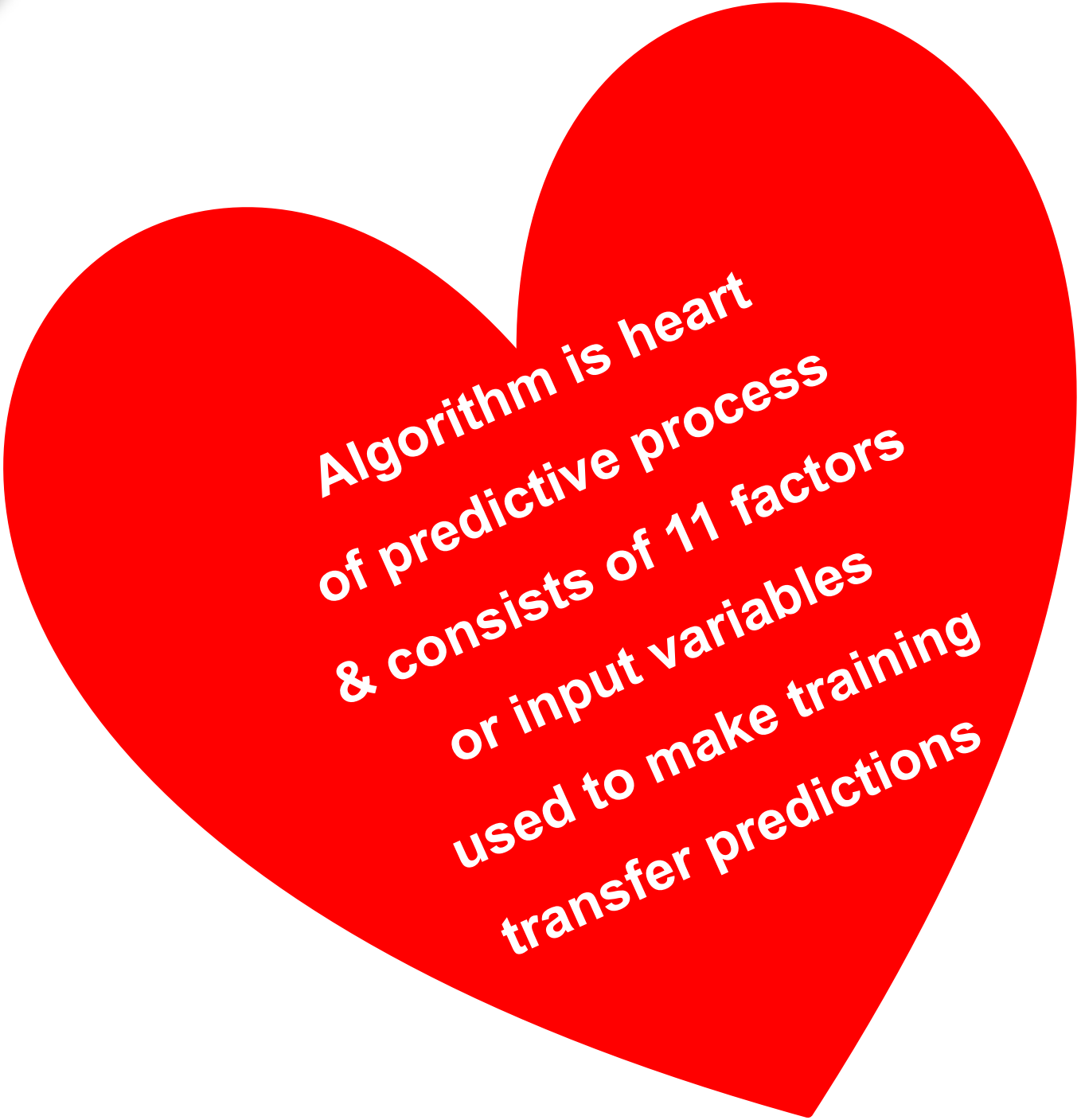
Three Guidelines:

1. Planned learning initiative not informal learning event
2. Has a high profile
3. Large number of participants are scheduled to attend

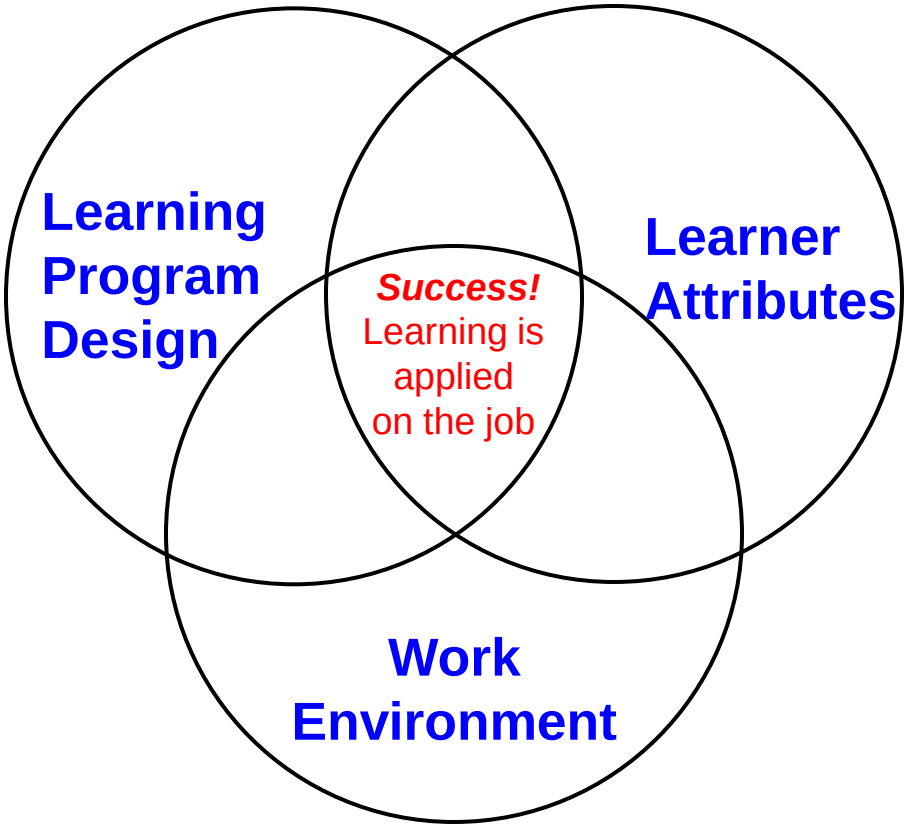
Phase 1: Step 2



A Closer Look



The 11 Factors



All factors are derived from 3 components of training transfer

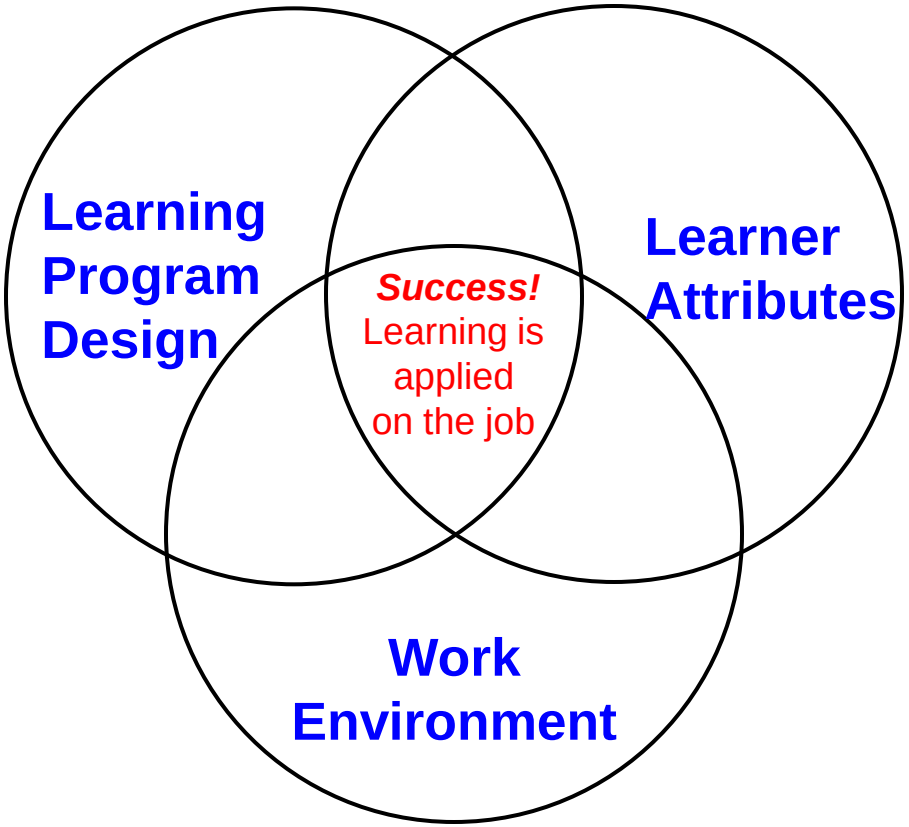
Sources: Baldwin & Ford 1988; Colquitt et. al. 2000; Scaduto et. al. 2008

Type In Chat

Keeping in mind the 3 training transfer components, what factors are you aware of that are known to contribute to training transfer?

Example: Training transfer increases when learners have an immediate opportunity to apply what they learned in a program back on the job (Work environment)

3 Training Transfer Components



A Closer Look

Program Design Factors

1. **New information** is acquired
2. Program viewed as **relevant** to self and job
3. Program viewed as important **investment** in own career development
4. Likely improvement in **key department business metric** if new information learned is applied

Continued

A Closer Look

Learner Attribute Factors

5. **Personally motivated** to apply what was learned

6. **Confident** in own ability to apply what was learned

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

8. View program as an **opportunity** to learn challenging new things

Continued

A Closer Look

Work Environment Factors

9. **Managers actively engage** learners, post-program, regarding what was learned

10. **Work colleagues support** learners, post-program, when applying new things learned

11. Learners have **immediate opportunity** to apply what was learned

Create a Survey

First Convert 11 factors into survey items that reflect content of target program

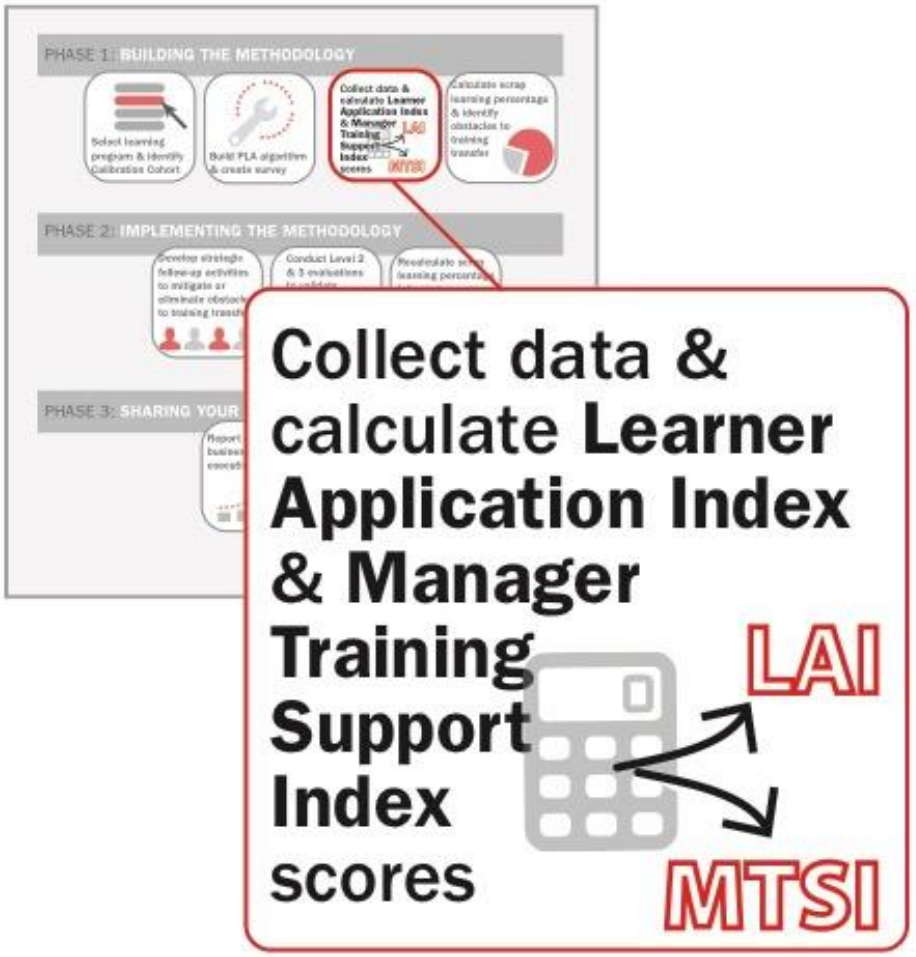
Then Incorporate survey items into an existing Level 1 evaluation or administer as a separate survey

Sample Survey Items

How relevant is the (insert program name) program to you and your job?

How confident are you in your ability to apply the knowledge, skills and behaviors you learned in the (insert program name) program back-on-the-job?

Phase 1: Step 3



Case Study

Company: Water utility in the UK

Business objective: Reduce absenteeism and turnover

Learning program: Developing Personal Resilience

Calibration cohort: 150 delegates

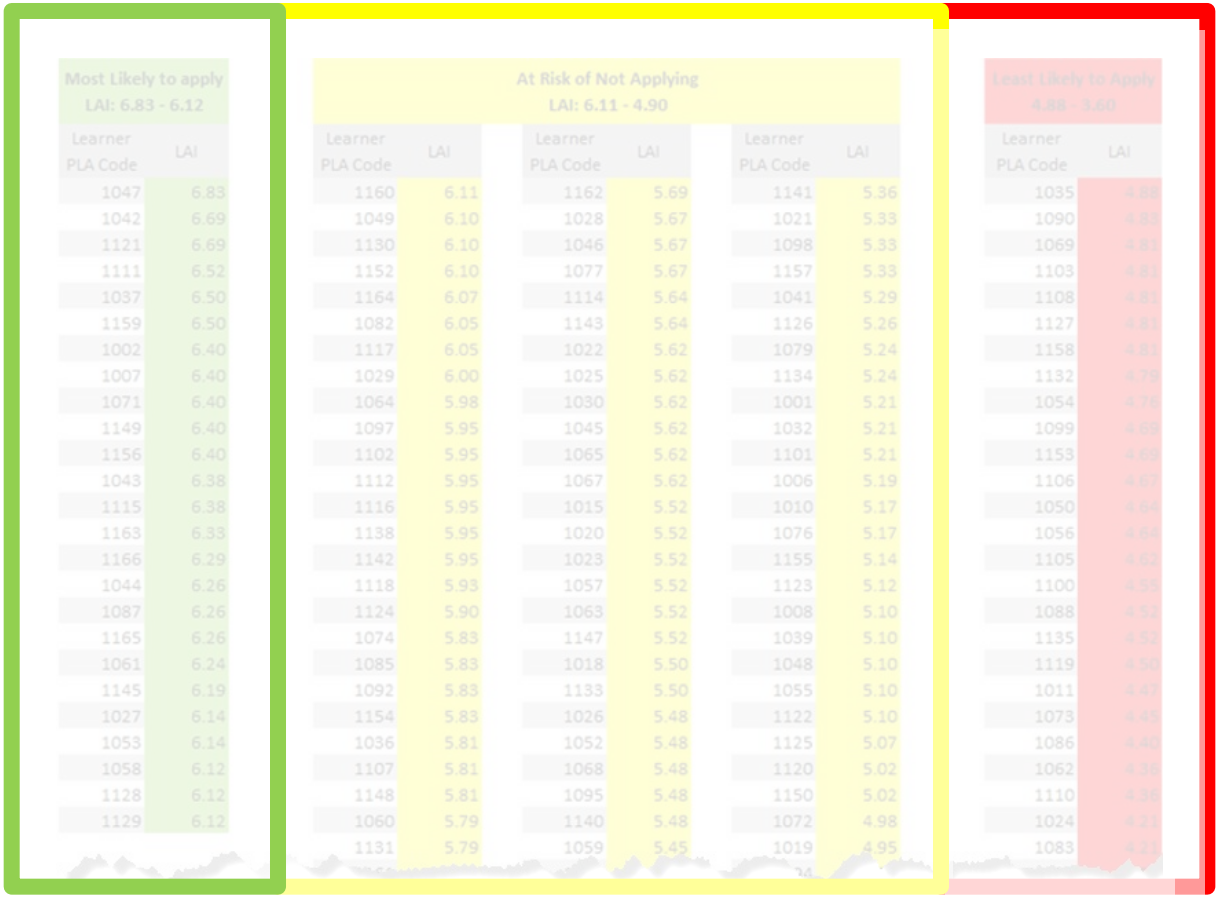
A Closer Look

LAI Individual Scores

Most Likely to Apply

At Risk of Not Applying

Least Likely to Apply



Most Likely to apply
LAI: 6.83 - 6.12

Learner PLA Code	LAI
1047	6.83
1042	6.69
1121	6.69
1111	6.52
1037	6.50
1159	6.50
1002	6.40
1007	6.40
1071	6.40
1149	6.40
1156	6.40
1043	6.38
1115	6.38
1163	6.33
1166	6.29
1044	6.26
1087	6.26
1165	6.26
1061	6.24
1145	6.19
1027	6.14
1053	6.14
1058	6.12
1128	6.12
1129	6.12

At Risk of Not Applying
LAI: 6.11 - 4.90

Learner PLA Code	LAI	Learner PLA Code	LAI	Learner PLA Code	LAI
1160	6.11	1162	5.69	1141	5.36
1049	6.10	1028	5.67	1021	5.33
1130	6.10	1046	5.67	1098	5.33
1152	6.10	1077	5.67	1157	5.33
1164	6.07	1114	5.64	1041	5.29
1082	6.05	1143	5.64	1126	5.26
1117	6.05	1022	5.62	1079	5.24
1029	6.00	1025	5.62	1134	5.24
1064	5.98	1030	5.62	1001	5.21
1097	5.95	1045	5.62	1032	5.21
1102	5.95	1065	5.62	1101	5.21
1112	5.95	1067	5.62	1006	5.19
1116	5.95	1015	5.52	1010	5.17
1138	5.95	1020	5.52	1076	5.17
1142	5.95	1023	5.52	1155	5.14
1118	5.93	1057	5.52	1123	5.12
1124	5.90	1063	5.52	1008	5.10
1074	5.83	1147	5.52	1039	5.10
1085	5.83	1018	5.50	1048	5.10
1092	5.83	1133	5.50	1055	5.10
1154	5.83	1026	5.48	1122	5.10
1036	5.81	1052	5.48	1125	5.07
1107	5.81	1068	5.48	1120	5.02
1148	5.81	1095	5.48	1150	5.02
1060	5.79	1140	5.48	1072	4.98
1131	5.79	1059	5.45	1019	4.95

Least Likely to Apply
4.88 - 3.60

Learner PLA Code	LAI
1035	4.88
1090	4.85
1069	4.81
1103	4.81
1108	4.81
1127	4.81
1158	4.81
1132	4.79
1054	4.76
1099	4.69
1153	4.69
1106	4.67
1050	4.64
1056	4.64
1105	4.62
1100	4.55
1088	4.52
1135	4.52
1119	4.50
1011	4.47
1073	4.45
1086	4.40
1062	4.36
1110	4.36
1024	4.21
1083	4.21

A Closer Look

Manager Training Support Index™ Score

MGR	#	MGR AVE	LAI AVE	MTSI
1115	6	5.67	5.35	0.32
1939	3	6.00	5.79	0.21
1960	5	6.20	6.10	0.10
1921	4	5.00	5.63	-0.63
1929	5	4.00	5.57	-1.57

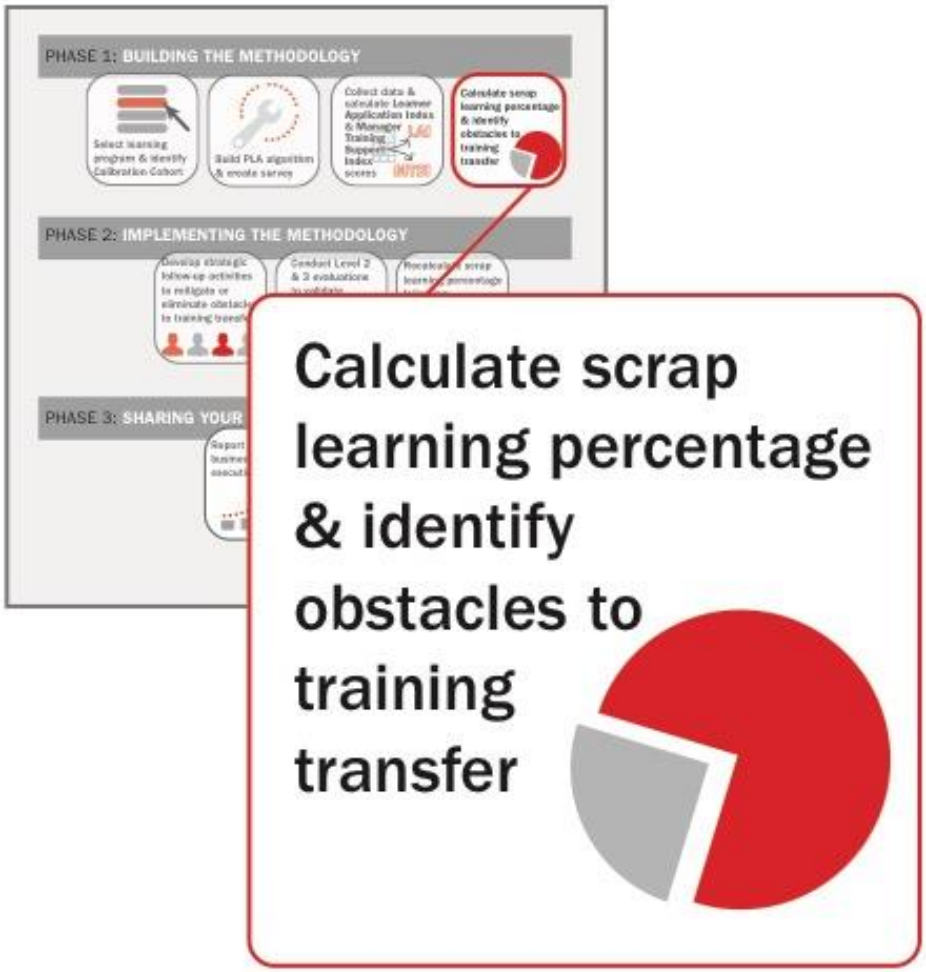
Managers doing a good job

Managers in need of help

Average score on factor measuring how likely manager is to be actively engaged with learner post program regarding what was learned

Average LAI score for all employees reporting to same manager & is an indication of training transfer potential

Phase 1: Step 4



A Closer Look

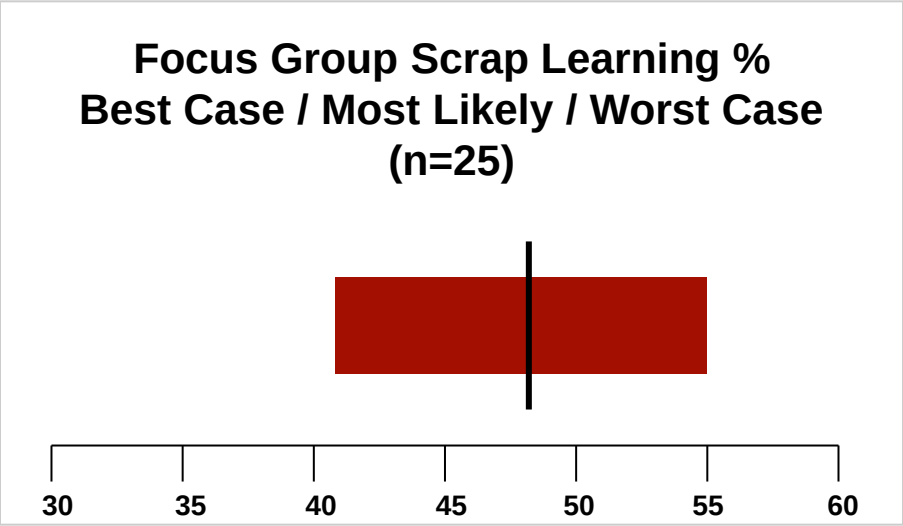
30 Days Post-Program:

Collect data from random sample of Calibration Cohort participants regarding:

1. % of program material applied back on job
2. Confidence level of estimate
3. Obstacles preventing application back on job

A Closer Look

Scrap Learning Calculation

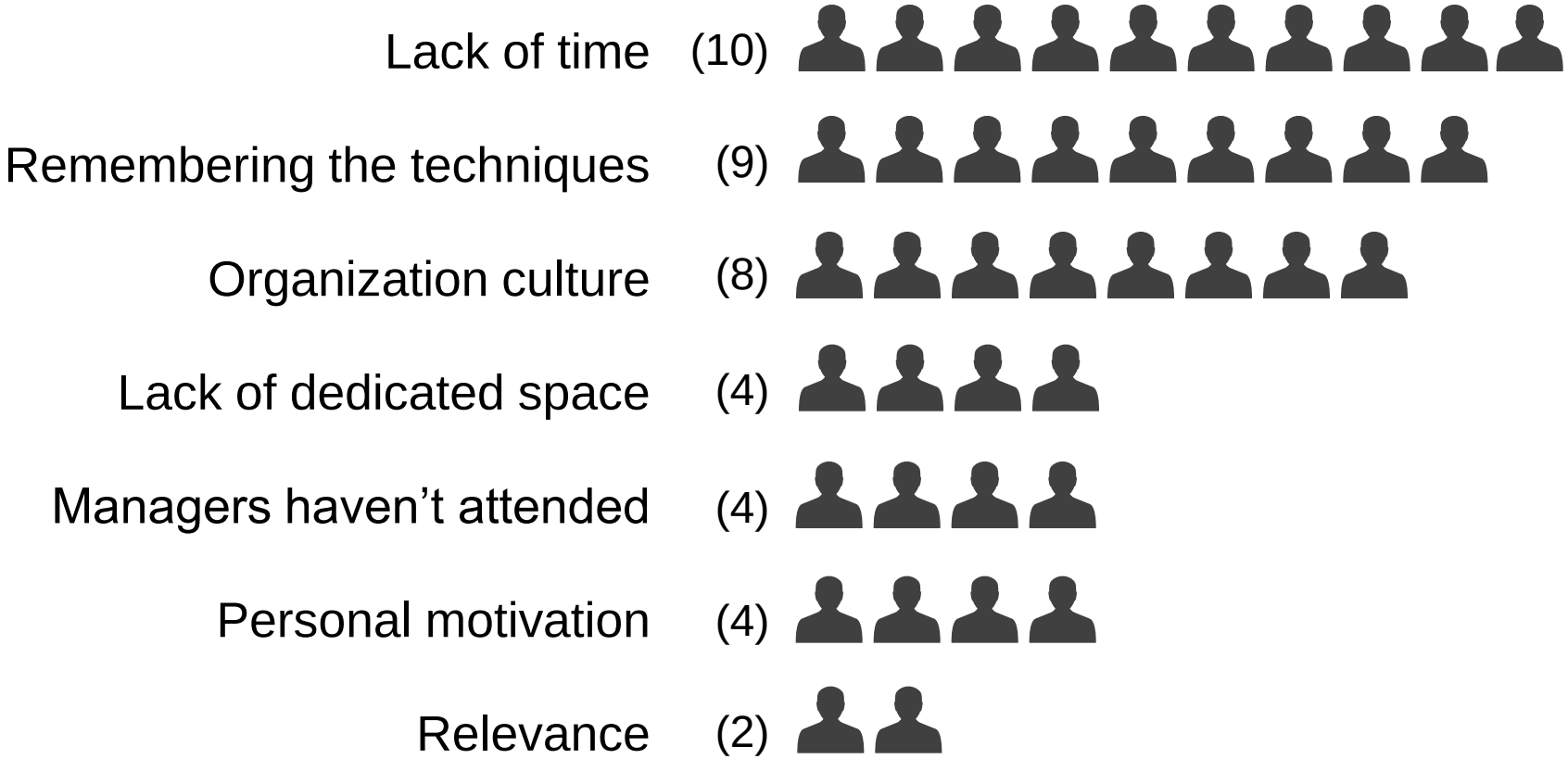


	Baseline (Before PLA process completion)
Best Case	41%
Most Likely	48%
Worst Case	54%

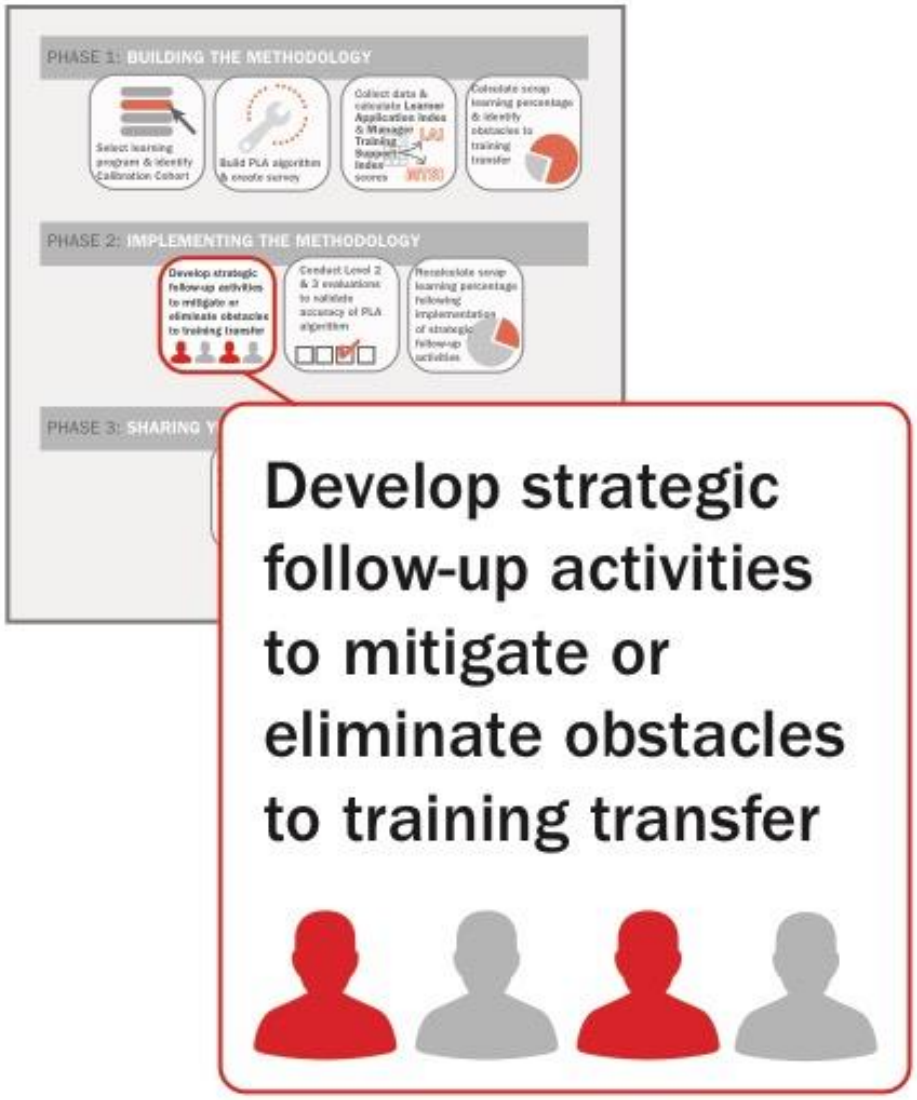
These align with industry standards of 40% - 50% scrap.

A Closer Look

Obstacles to Training Transfer



Phase 2: Step 5

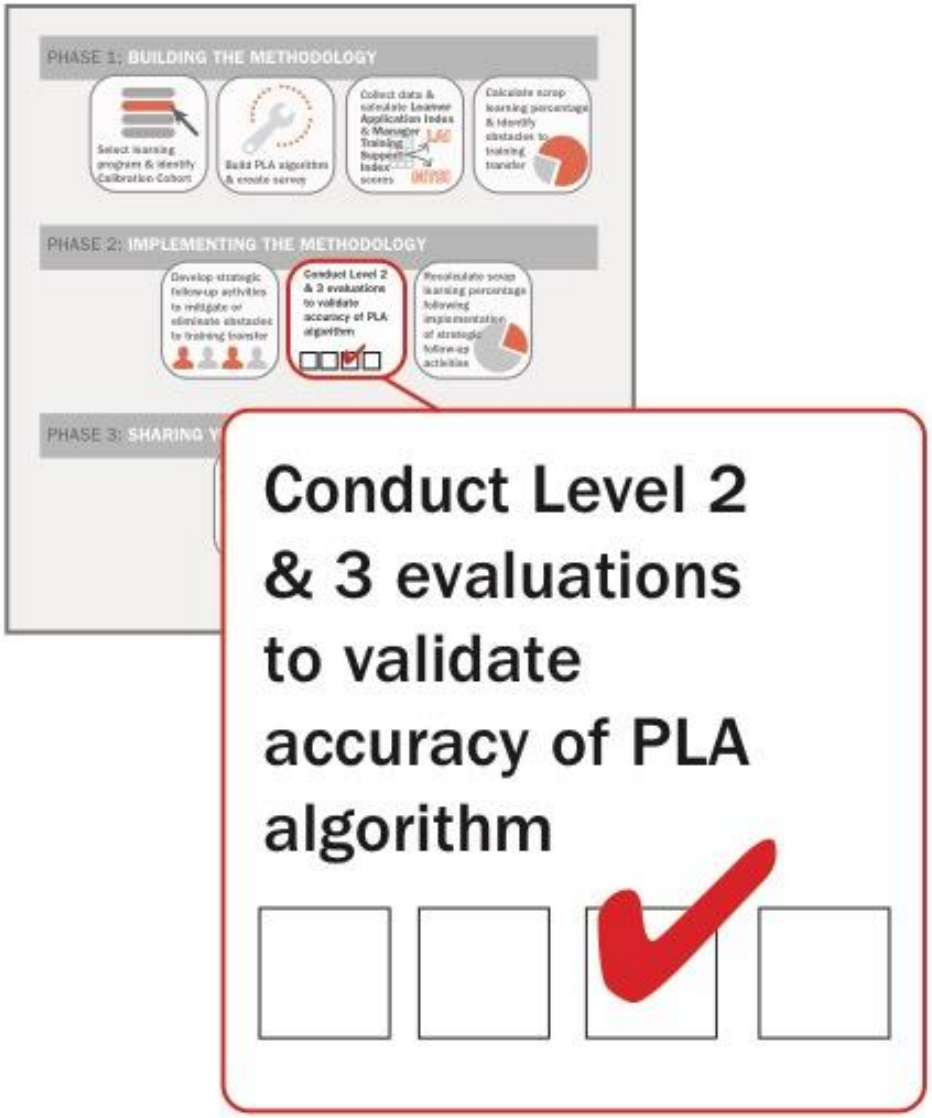


A Closer Look

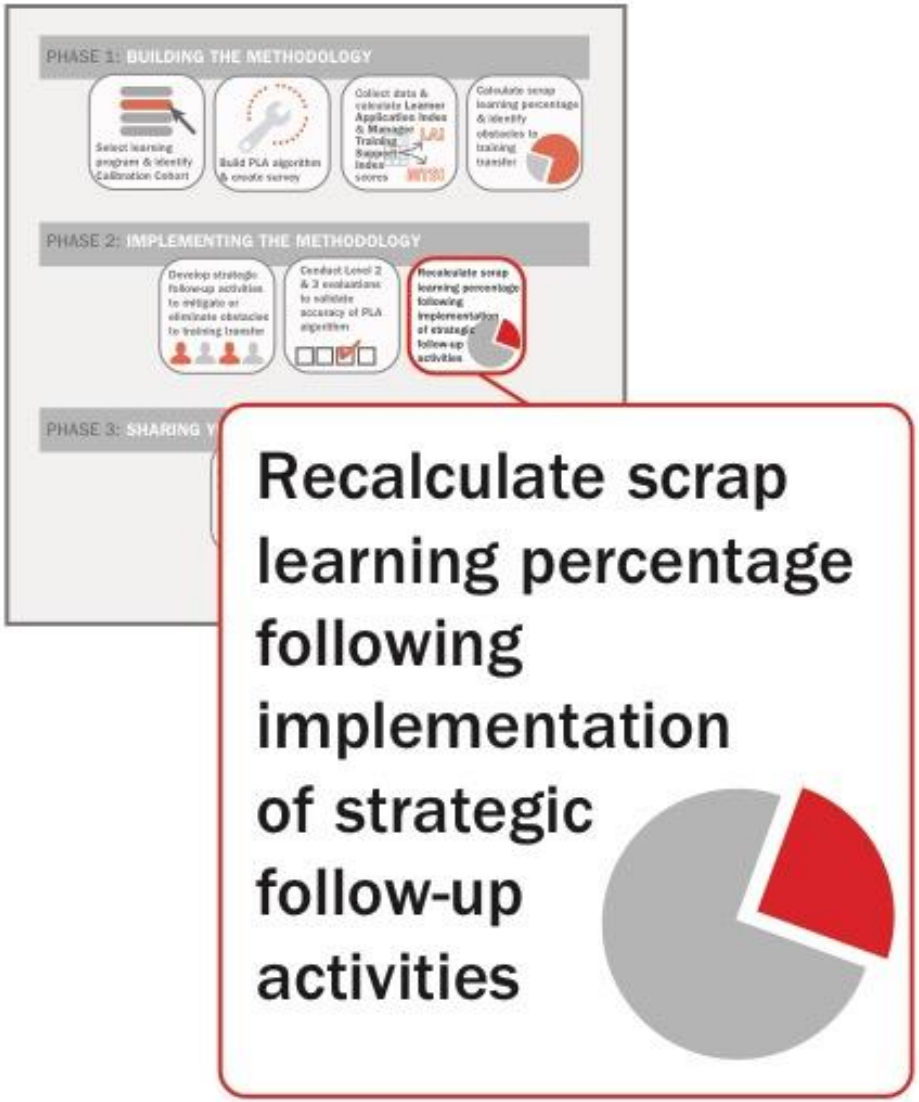
Strategic Follow-up Activities

- ✓ Email tips
- ✓ Job aid
- ✓ Private space identified
- ✓ Managers to attend workshop
- ✓ Executives to attend workshop

Phase 2: Step 6



Phase 2: Step 7



A Closer Look

Recalculate Scrap Learning

After implementing strategic initiatives &

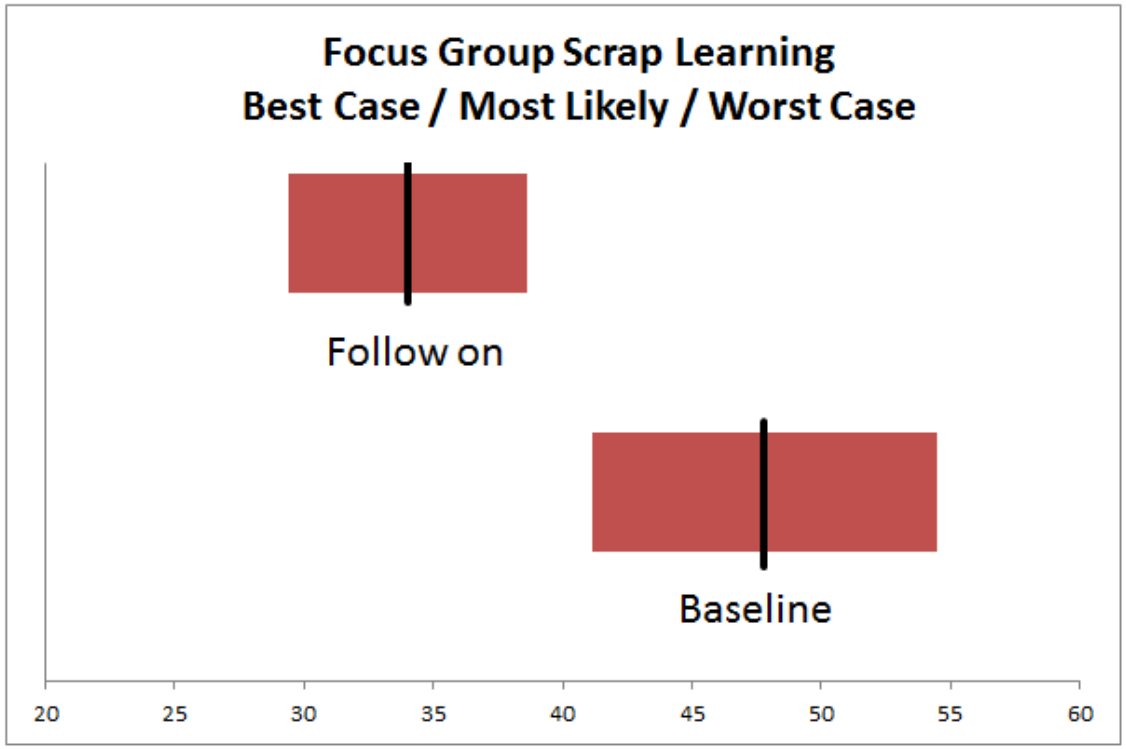
using a **new wave of learners,** collect data

from random sample of participants regarding:

1. % of program material applied back on job
2. Confidence level of estimate
3. Obstacles preventing application back on job

A Closer Look

Scrap Learning Recalculation



	Baseline	Follow on
Best Case	41	29
Most Likely	48	34
Worst Case	54	39

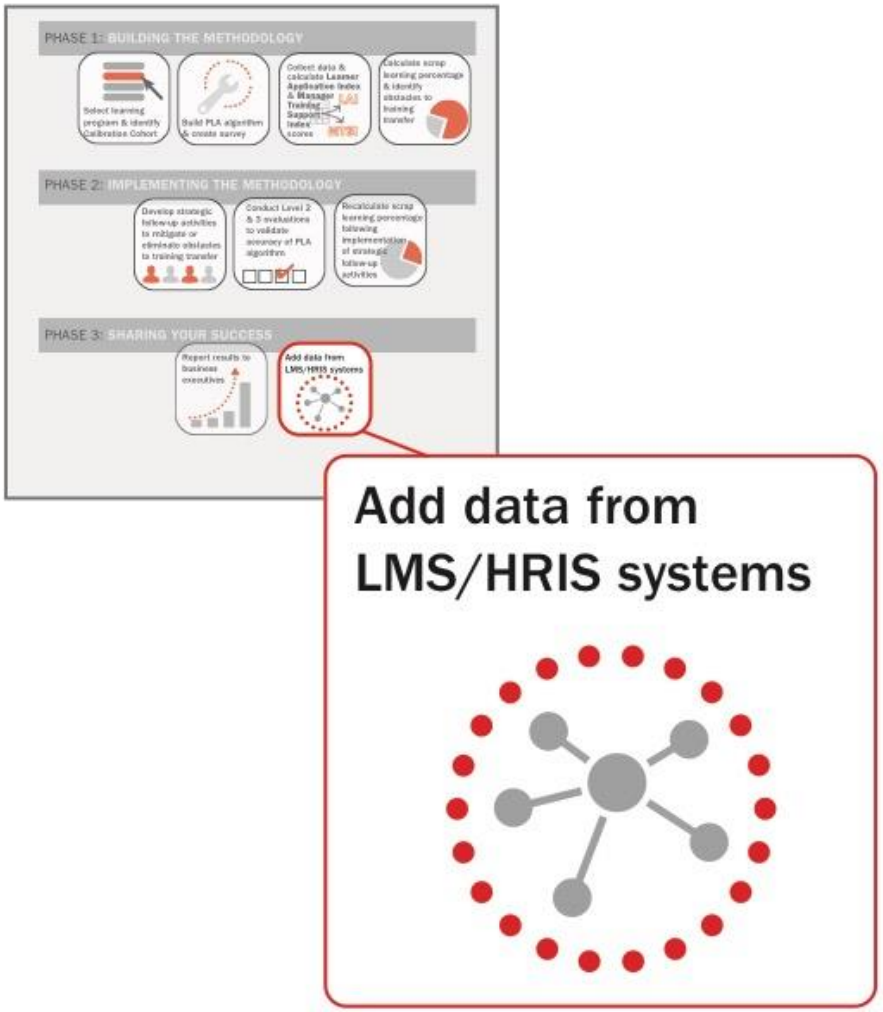
Phase 3: Step 8

A Closer Look

Training Transfer Lift

	Baseline	Follow on	Lift
Best Case	59	71	+12
Most Likely	52	66	+14
Worst Case	46	61	+15

Phase 3: Step 9



Benefits of Using PLA

1. 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

Benefits of Using PLA

3. More effective & efficient use of follow-up activities by targeting participants who are **at risk** & **least likely** to apply what they learned in a program back on the job

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

Benefits of Using PLA

5. Objective way to compare the overall quality of one learning program with another using a single number

6. Enhanced reputation among L&D colleagues

Summary

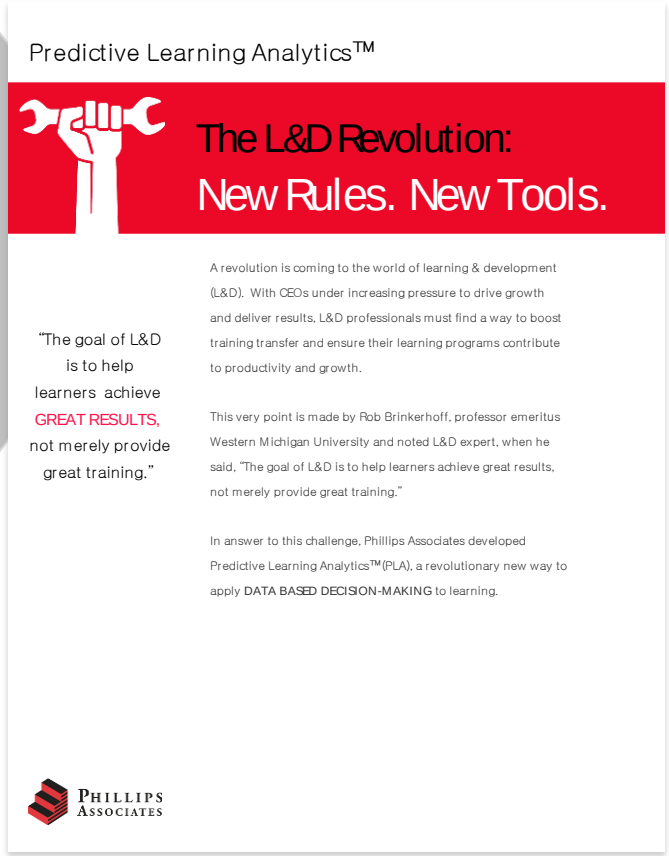
“The issue of scrap learning has been around forever. But, what’s different today is that with Predictive Learning Analytics™ there now is a way to measure and manage it.”

~ Ken Phillips

Learn more about Predictive Learning Analytics

Request our FREE ebook:

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



Cut the Scrap in Your Organization!

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Type In Chat

Imagine you are on the L&D staff of the water utility company

Keeping in mind the obstacles to training transfer just mentioned, what types of strategic follow-up activities might be used to mitigate or eliminate them?

A Closer Look

Obstacles to Training Transfer