Survey Development Workbook

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March 21, 2023

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Introduction

When considering the need for learner and training data, organizations typically focus on identifying gaps, challenges, and lack of clarity they currently have. Although these factors must be remedied to create a successful learning analytics program that informs training improvement, a more informative approach is to first **identify the drivers for data collection and analytics**.

Research and experience show that **organizations are more successful with collecting actionable data when they start by defining the ultimate goals that drive their evaluation efforts**. With defined objectives and use cases for the data to be collected, an organization can build a roadmap to advance their mission and pivot resources as necessary to fulfill their needs.

This workbook summarizes experience from data collection through surveys in government and private sector organizations over 10+ years from an instructional design perspective. This experience includes application of evidenced-based approaches to improving workplace performance, including Will Thalheimer's Performance-Focused Learner Surveys and the Center for Talent Reporting's Talent Development Reporting Principles (TDRp) framework, at program-specific and Enterprise-wide levels.

The identified best practices presented throughout this workbook should help you realize the important elements of learning data collection strategy through five stages—Preparation, Goal Setting, Writing Questions, Administration, and Data Maturation—providing you and your team with a foundation on which to build a roadmap to learning data transformation. The workbook identifies deliverables and outlines how Learning & Development Services may provide support as you mature your data collection effort. By following this workbook with a dedicated team, you should be able to:

- Assemble a team to develop a targeted survey as part of your collection efforts for data-informed decision-making.
- Develop a common mindset for learning data collection, analysis and reporting.
- Set clear objectives for the team or working group to collect actionable data.
- Provide learning services development support with materials and content for survey administration to ensure a significant response rate.
- Guide discussions with contributors and interested parties about maturing collected data into actions that will improve training to meet mission objectives.

A Resource section at the end of this workbook provides useful resources and templates to assist with your efforts. Let's get started!

Preparation

Selecting the correct team for survey development or data collection is essential to ensure diversity of perspectives and continuity of the plan over time. The goal at the preparation stage is to build a diverse team of key contributors and interested parties to assist with data collection and interpretation, as well as support taking action based on the results of data collection efforts.

Gather Contributors and Interested Parties

A dedicated team of interested parties can provide various perspectives for a comprehensive understanding of the survey audience and for how mission/organizational decisions may affect changes to workforce development. These questions should help identify critical components of your team:

1. What key organizations and programs should we canvas to ensure that we acquire data useful for their mission(s)? (Consider secondary organizations that may benefit from or have insight for your efforts.)
2. Who are the key interested parties in leadership for the mission? What information do they need to make decisions that affect your learner audience?
3. Who has deep knowledge of the curriculum or subject area you will survey on? (Consider instructors, supervisors, and affiliates with years of experience, especially if they are mentors.)
4. What data science resources does your team have? Can you acquire these or leverage them from other organizations?
5. Where might identified people best serve in your survey development journey? Who may contribute as a content developer or supply front-end analysis support, versus participate in a survey Pilot or provide support through authorized official messaging?

Consider Your Audience

As you prepare, keep the diverse perspectives, values and needs of your audience in mind.

- Is the audience made up of people with varied backgrounds, including employees in relevant roles at various points in their careers, full-time and part-time employees, as well as seasonal hires? Does it include members of underrepresented communities? In what missions/roles do people serve and in which duty locations? What development programs might they be involved in?
- How will you identify and group the audience (e.g., supervisors vs. non-supervisors)? What are the key communication channels for each group?
- What are the concerns/values of each subgroup? What metrics will show measurable success for each group?
- Are there elements outside the training realm that affect how training is delivered, received, or transferred to the work role? (There always are: Be prepared to ask hard questions about these.)
- What best practices can you identify from those who are successful in your audience or from those who supervise the more successful employees or affiliates?

> Identify experienced mentors as well as those just getting started in your audience and conduct open interviews to learn their concerns.

Data Audit

When thinking about collecting learning data, it's useful to consider information that you may already have available about the issue you are researching. This data may reveal areas you need to validate further or that you may combine with your survey data to tell a larger story about audience behavior or track ongoing developments. Some considerations for reviewing available data sources include:

- What reports do you currently use to evaluate learning in your organization?
- How frequently do you evaluate learning (e.g., Monthly, Quarterly)?
- What gaps do the previous data efforts show?
- What actions were taken in the past to collect data (prior surveys or databases)?
- If a curriculum-focused effort, when was the curriculum last audited or reviewed/updated?

> Contributors should know about previous surveys, reports or databases that may be leveraged.

- What development pathways use this curriculum? Do statistics exist from quality control tools for tradecraft used in this work role or are there performance metrics for this work role (e.g., from industry or other agencies)?
- Who has access to any pre-existing data? Can/will they share?
- Overall, review what you know and examine:
    - What aspects do you have good insight to versus little insight into?
    - With your collaborators (keeping your audience in mind), determine what you'd like greater insight about.

Key Outcomes

From this Preparation stage, your goals should be:

- Create a team roster including curriculum or program managers, key instructors, mission leaders, and data science resources.
- Define the audience to be surveyed, including key leadership contacts and avenues for effectively messaging them.
- Identify any existing sources of data that may contribute to your effort to provide a bigger picture.

Support

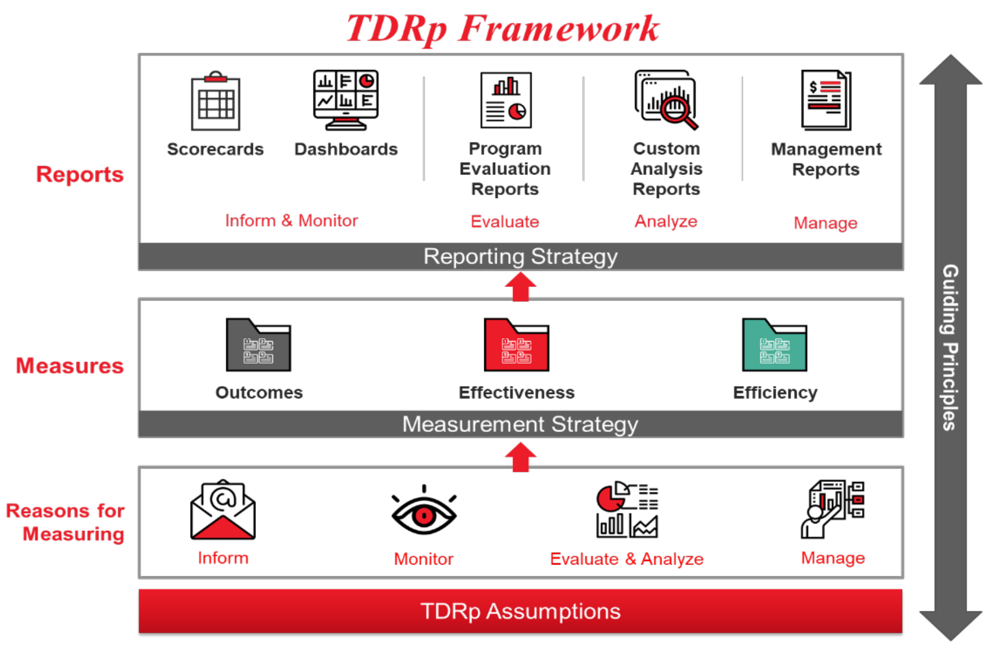
Support will mainly come from within your organization and team at this point. L&D may be able to assist with brainstorming introductions to key resources and templates from previous surveys, as well as review of survey questions to ensure that they are clear and comprehensive.

Goal Setting

With your team identified and a clear idea of the audience you will collect data from, as well as consideration for what data you are lacking, you can proceed to define your objectives, or reasons for measuring.

TDRp Framework

As Talent Development reporting is becoming a more formalized activity, metrics for measuring learning and development are increasingly more standardized and *required*. Using a standard, repeatable framework like the Talent Development Reporting Principles (TDRp) can help to orient your team to align their Reasons for Measuring with the correct Measures and Reports that leadership needs and your program can use to assess progress. In the TDRp framework, survey tools are typically used to measure for Inform and Monitor reasons, such as pivoting workforce training to meet new organizational goals or determining how well a national program is meeting the needs of a new audience. The framework is presented below; APPENDIX A presents an overview of the TDRp framework.



Define *Reasons for Measuring*

What are your reasons for measuring (surveying)? This is a question you should be continuously ask and return to stay oriented to collecting the data you need. On the TDRp framework it is a critical question, and it aligns with initial front-end analysis of why training is needed. As you define these objectives, you'll want to consider the preparation work the team has done and what they need to be able to measure to fulfill the objectives—specifically, what indicators exist that will help provide the required data. The table that follows provides examples of alignment between Reasons to Measure and Measurement Indicators:

Reasons to Measure (*What do we want to know or learn more about?*)	**Measurement Indicator** (*What will help us measure what we need to know?*)
Level of safety certifications	Current or in-process certifications in various safety areas.
Identify performance support tools	Tools and online resources that accomplished workers are using
Determine least and most effective training offerings	Most and least effective internal and external courses/trainings (typically, L1/L2 evals of evidenced-based factors for effectiveness – such as performance supports, engagement, confidence/intent/planning to apply)
Monitor adjunct faculty/facilitator retention and implementation of training	Factors that influence commitment to delivering courses post-training
Increase and learn from near-miss incidents	Post-training reporting of near-miss incidents increases in the Safety Management Information System (SMIS).

Map Measurable Objectives to Use Cases

After open discussion of your reasons to measure with contributors and interested parties, you should arrive at basic objectives for undertaking a survey. Consider the overall stakeholder objectives and how collected and analyzed survey data will be leveraged to take action (make changes). Below is a mapping of objectives for employees in safety roles to use cases that will inform development of their training; the aligned objectives and use cases are organized into topic areas to help track the development of useful survey questions.

Stakeholder Objectives	**Use Cases**	**Topic Areas (for Question Development)**
Capture characteristics of Collateral Duty Safety Officers (CDSCs) and Supervisory respondents	Establish baseline understanding of CDSC audience (size, background, work areas) and enable filtering of all data Inform targeted design and delivery of instruction	AUDIENCE ANALYSIS topic
Determine satisfaction with key aspects of existing training	Understand perceptions of how current training meets defined competencies and audience needs to improve future training offerings, messaging, and processes	SATISFACTION
Identify best practices/supports versus barriers to training	Update training to remove roadblocks and identify useful supports	BEST PRACTICES
Uncover motivations for learning	Rework content to align with typical motivations for learning for the learner audience	MOTIVATION
Identify respondents who wish to provide more detailed feedback	Enable needs analysis team to conduct deeper follow-up discussions with willing respondents.	OPEN COMMENTS / FOLLOW-UP

Writing Questions

All of the above exercises are intended to provide a firm foundation on which to draft your items for analysis, or questions. For all questions, you should be prepared to describe why you are asking respondents to take the time to answer a question: What will you do with the resulting data? How does the question help with your need to inform or monitor the area you are concerned with improving? If you are monitoring learning, does the question help you distinguish between success or failure?

Choosing Question Types

Writing effective survey questions is a craft unto itself. There are some basic principles to consider that will help anyone write straightforward questions that will return data in a useful format. Most survey tools allow the following question types:

> Never ask a question that can't or won't be used to make an improvement.

- Yes/No or True/False
- Closed -- Single Choice Answer
- Closed - Multiple Choice Answer
- Ranking
- Likert or Other Scaled
- Fill in the blank
- Open comment

In general, as you move toward the bottom of this list, the question types return data that requires a greater amount of work to analyze, provide visualizations for, and interpret. **Imagine a survey of 20 questions that allow respondents to enter any text they like - How will you review/analyze all of the comments? Can you be truly objective (free of bias) about assumptions you make from these?**

Open vs. Closed Questions

As noted, in most cases, closed (targeted) questions are preferred over open comment questions that allow a wide range of responses. Closed questions allow the writer to carefully consider different options to offer (according to the data they wish to collect); responses can reveal rich data and indicate measures of success or failure, indicating thresholds *at a glance*.

> When writing choices, ensure that each one will return some useful data - indicating success/failure or a choice that allows you to take action.

Creating Closed/Targeted Questions with Thresholds

Consider the following *closed* question, with choices between real alternatives that distinguish between *success* and *failure*:

How able are you to put what you've learned into practice on the job?

A. I'm NOT AT ALL ABLE to put the concepts into practice.
B. I have GENERAL AWARENESS of the concepts taught, but often NEED MORE PRACTICE/ TRAINING/ GUIDANCE/ EXPERIENCE to DO ACTUAL JOB TASKS using the concepts from the course.
C. I am ABLE TO DO WORK ONE ACTUAL JOB TASKS but I'll need MORE HANDS-ON EXPERIENCE to be fully competent.

D. **I am ABLE TO PERFORM ACTUAL JOB TASKS at a FULLY COMPETENT LEVEL using the concepts taught.**

What thresholds do these responses represent? Response A is clearly unacceptable, and B may also not be acceptable in many circumstances. The remaining responses point clearly to changes that might be made to boost respondents toward the more expert level. In some cases, full competence is all that is required, but in others (e.g., training for a first responder or chain saw operator) you want expert level performance. Compare the above question to a typical Likert-type scale that might have been used to ask learners to answer on a scale of "how likely they are" to apply their training. The scaled responses would not provide data that you can take action on (e.g., what does "SOMEWHAT LIKELY [to apply training]" mean? What improvements can you infer to make from that response?).

For a complete understanding of how to write more performance-focused assessment and survey questions, consult the book *Performance-Focused Learner Surveys* by Will Thalheimer.

Collecting Comments to Enhance Closed Question Data

Some questions may require respondents to select from various options and you may wish to discover options you didn't think of. In these cases, including an Other option and room for a short comment allows you to collect richer data.

It is a best practice to always include a short comment field with *Other* options, since, by itself, *Other* reveals little data. (This is critical when scaled-type questions must be used.)

Writing Clear Questions

When writing questions, avoid using qualifiers or negatives so that the question (and resulting data) is clear. It is also important to make sure that the terms you are using are fully understood by your respondent audience - avoid jargon or undefined terms.

- Avoid “fill-in-the-blank” or “complete this statement” formatted questions (research shows that these cause cognitive overload as responders must repeatedly refer to the question stem and evaluate it for each response).
- Leave "Negatives" out. Avoid asking "Which of the following is NOT...." or "Which is your LEAST favorite..."
- Ensure that qualifiers like "always" or "never'' are not confusing the question.
- Avoid organization-specific terms.
- Spell out all acronyms.

Using Pre-Requisite Questions

You may use questions as a pre-requisite to route respondents to additional questions or to branch them into other areas of the survey. This technique allows you to customize a survey based on specific responses, so that it may be shorter or longer depending on the pre-requisite question. For example:

- Answering No to an initial question of "Do you expect to continue as an adjunct instructor or facilitator?" might route respondents to a final question about why they will not

Conduct an internal pilot with people from various experience levels and orgs to resolve issues. This can be achieved by emailing questions in a document before development in a survey tool.

continue, whereas answering Yes would route them to a series of questions about their ongoing needs as instructors.
- Asking responders to identify as Supervisors versus non-supervisors at the start of a survey will enable you to filter data from a survey; if your survey tool permits, you may even route people to differently worded questions after they answer this filtering questions.

Using Stealth Questions for Repeat Surveys

For surveys that may have a repeated or wide audience (e.g., all L&D training evaluations), inserting some explanatory information or simply asking about factors that are not often discussed may provide valuable information in "Stealth" mode that can influence learner behavior. Consider the following question about how learners use specific tools and resources:

> **Using web-based tools in your training has been shown to increase learning transfer when back on the job. Which of the following web-based tools do you use in your work role?**
>
> **A. Tool A**
> **B. Tool B**
> **C. Tool C**
> **D. Tool D**
> **E. I've never heard of these tools.**
> **F. Other [with comment field]**

From the way this one question is written you can:

- Plant the idea in learner's minds that they should be learning about these tools (in training or on their own).
- Learn which tools people are/ are not using.
- Learn about tools you hadn't considered (from Other comments).
- Determine which tools need to be better socialized and introduced by instructors (i.e., tools the most experienced or most respondents are using but others have not heard of).

The question could be altered to ask about learning community supports or wherever learners may get performance supports to inform best practices.

Identifying Contacts for Follow-Up

If desired, and you have the resources to make use of the information, you may include an open question at the survey close to ask respondents if they agree to discuss their comments or participate in follow-up interviews. This is useful (essential) if you would like to setup Focus Groups on different subject areas.

Key Outcomes

In this stage, you should seek to:

- Define your reasons for measuring and what you need to know to measure.
- Map those objectives to write questions you will pose in your survey.
- Present a list of carefully crafted questions for L&D to review for development in the survey tool.

Support

After contributors and interested parties have coordinated to develop drafts of their objectives/ use cases and mapped them to questions, L&D can provide support by reviewing documents to provide feedback. It is recommended that teams conduct internal reviews with key members of the audience and to obtain leadership approval to solidify objectives and questions before seeking outside review.

This stage of survey development may require the subject matter team to hand off survey development to the L&D Development Team, so that it may be built in the survey tool and setup to be sent out.

Administration

Provide Survey Population Data

Most survey tools allow for sending surveys with links that are associated with individuals through unique identifiers; employee emails are the default unique identifier for most assessments. In some agencies, survey tools also allow you to choose to setup and associate other custom fields (such as org ids, work locations, or affiliations) with the identifier, depending on your needs.

> If your survey is ANONYMOUS, include a question at the end that asks if respondents would discuss responses (or engage in a focus group) and request contact information.

Having identified your audience at earlier stages along with the avenues for communicating with them, you should be able to call upon those communication channels to provide unique identifiers/emails and any customized field information to be used to filter survey response data. This may be as simple as a list of emails and associated roles or names in a spreadsheet. This information should be gathered in a spreadsheet and provided to L&D for the development team to use. Surveys outside of the Learning Management System may simply be sent for anonymous response; in this case, a link is generated that may be used by any respondent.

Marketing the Survey

Marketing and socializing a survey can be critical to collecting a significant response. Depending on the population, strategic messaging about the survey's importance may be useful coming from supervisory/leadership or skill communities, organizations, or development programs. Here are a few best practices regarding messaging:

- Draft and send advanced messaging through leadership at least 2 weeks before the survey is released. Ensure that leaders (and supervisors) understand the need to vocally support survey completion.
- Identify one or more leaders to provide signatures to advanced email messaging and receive approval for the message; if it may help, mention that L&D (an impartial organization) is involved.
- Identify the channels and setup distribution lists for your message(s).
- Consider if it may be valuable for instructors to socialize the need to complete the survey during classes held at the time the survey is open (i.e., if related to a specific curriculum or a agency-wide survey). If so, provide instructors with open and close dates and a message of why completion is valuable.

> **NOTE:** Response rates of 40% or higher are typically considered acceptable (e.g., 180 responses for 430 invites). Keep in mind, however, that this rate becomes less significant and the usefulness of data decreases with a smaller survey population (e.g., 22 responses out of 55).

Introduction and Close-Out Messaging

Draft a short introduction for the survey that will appear as it opens. This typically includes the rationale for the survey and reminder of how important respondent feedback is. Include information about whether the survey is ANONYMOUS, who will see the data, and how it will be used. Always include a short close-out message to thank respondents for taking the time to participate (in MSForms, this is setup in the Settings for the form).

Campaign Invite Messaging

Draft a message that will be included in the initial invite to complete the survey. This message typically includes:

- Reasons why participation is needed and how the data will be used.
- A note about the confidentiality of responses - considered confidential or anonymous? With sensitive issues, an ANONYMOUS survey may enable the best response. (NOTE that surveys sent with unique identifiers cannot be called anonymous but can be designated as confidential.)
- A signature of authority that respondents will recognize and respect.
- The unique survey link.
- Deadline to submit.

> Always note who will see the responses, individual or aggregated.)

Open Period

Typically, 2 weeks is sufficient time for a survey to remain open; any longer and people may forget about it. Be mindful of when you are sending the initial email with a survey link: early morning on Tuesday through Thursdays may get the best response, as people are busy with catching up Monday and finishing up on Fridays. Consider if any holidays are falling within your open survey period.

Tracking and Reminders

During the open period of your survey, track the response rate; check in about halfway through and consider who is (or is not) responding (if you have identifiers to do so): Does one organization need a bigger nudge than others? In most cases, sending a reminder email out will result in a greater response. It is also a good idea to send an email the day before you close the survey as a final notification.

In some survey tools, messages can be setup as part of the campaign to send automatically at intervals only to respondents who have not completed the survey. This message will be a variation of the initial invitation.

Key Outcomes

In this stage, you should provide the following to L&D if you are seeking help from the development team:

- The survey questions.
- All messaging for the survey and campaign.
- Compiled spreadsheet of identified respondents with unique identifiers and any custom field content.
- Dates for the survey collection period and deadlines.

- Unique identifiers and custom data for the Internal and External Pilots.

Support

During this phase, L&D development support may be engaged to use the components you provide to:

- Setup and format the survey questions in the survey tool.
- Setup templates for initial emails and follow-up reminders (if supported).
- Setup the overall campaign associated with your survey.
- Import the respondent information you provide (assignments).
- Create and help with sending internal/external pilot (test) surveys.
- Incorporate pilot feedback and send the live survey.
- Monitor the live survey, reminders and survey close.

Data Maturation

This stage involves reviewing the collected data, reporting it out to contributors and interested parties, and working with your team to mature it to the point that data-informed decisions may be made.

Reviewing Reported Data

Most tools provide some basic reporting of data with visualizations along with the raw export of data (e.g., in csv format for analysis in Excel or Tableau). Most provide some standard scorecard-type reports for data with very basic visualizations (bar charts), as well as raw data exports that you may use to develop more advanced analysis and visualizations. Standard reports that may be available or that you can generate from data include:

> Gather resources for data analysis well in advance of receiving your data and include them in stakeholder meetings. Identify strategies you will take once you have your data.

- Item Analysis Reports: Response breakdown for each item (question)-no unique identifiers or custom data fields
- Related Comment Reports/Exports (Comment, Essay and text Review): Anonymous response breakdown of data collected from open comment fields (related to "other" responses)
- Open Question Exports: Anonymous response breakdown of data for any open-response questions
- Response Rates and Times: Participant response rate and times for a select time period.
- Complete Response Export: Raw data in csv format showing all responses with related unique identifiers and custom fields

Steps to Informed Decision-Making

It's important to keep in mind that surveys are the *initial effort* of collecting raw data. It is the expertise of the stakeholder team that provides the human element required to interpret and mature this data into the wisdom needed for data-informed decision-making. Basic steps toward maturing survey data include:

- Review Collected Data
- Add Insight to Mature the Data
- Identify Action:
    - Consult with the Stakeholder group

- Consider results in light of Reasons to Measure (Defined Objectives/Uses)
- Report Out

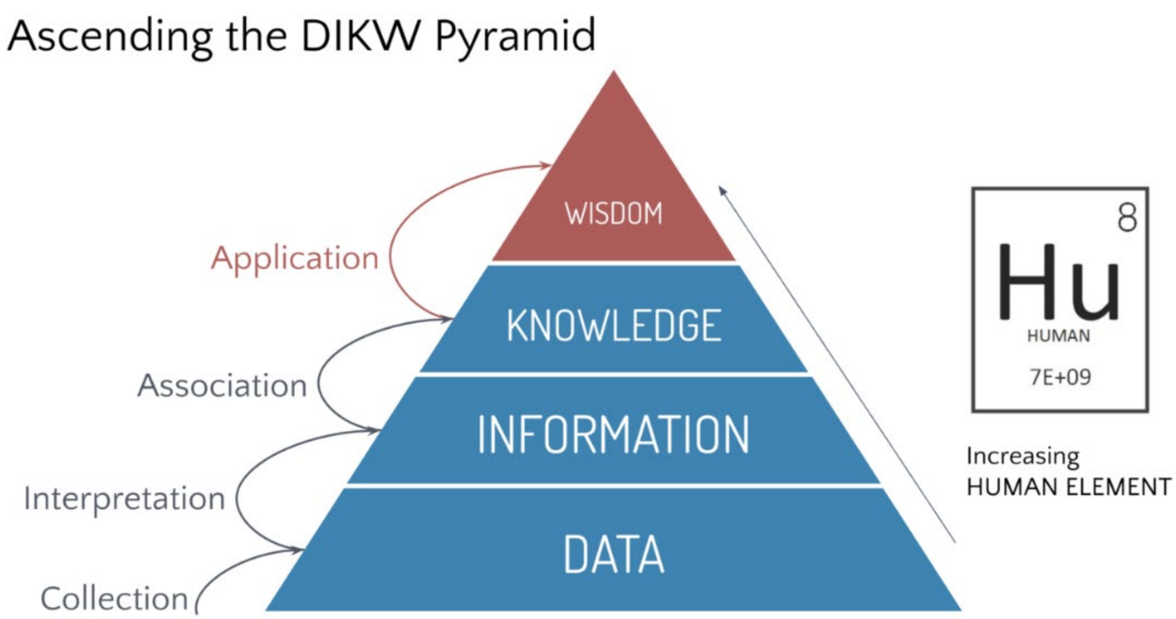
Review Collected Data

The initial step is to review the data captured in a survey with any reports of aggregated data that are available from the survey tool.

- MS Forms provides a visualization of Item Analysis results; you may download a summary of the results as well as raw data to create your own visualizations or compile reports in Excel or other visualization tools.
- DOI Talent provides the following access to survey evaluation data: Those with Admin access to DOIT may access the course and view the feedback for the training, including Item Analysis with full (open comment) responses and exporting raw data.
    - Those without Admin access may ask a Training Manager or Training Specialist to send the reports and data to them.

Add Insight to Mature the Data

The Data Maturity model shown in the DIKW (Data, Information, Knowledge, Wisdom) Pyramid shows how collected data needs to be combined with human knowledge through several stages to become WISDOM, so that it can be used to inform decision-making and taking ACTION.



L&D is charged with COLLECTION of raw data, which we present through basic scorecard reports and raw data from survey tools -- though we may also offer some initial insights/reporting to enable interpretation.

The work needed to transform collected data into WISDOM, where it can be applied for data-informed decision-making, needs to be done with input from SMEs/interested parties who have close knowledge of the training pathway.

Identify Actions

Consult with Stakeholder Group

After receiving the collected data, the stakeholder group should discuss the findings to provide the interpretations and association that will help mature it into application (actions). Individuals may review the data reports and note their observations and then all comments can be compiled to be discussed and interpreted in the group or by key group leaders. These discussions may surface the need to develop more advanced visualizations and combine data for a more detailed look at particular aspects of the data. The group may also determine new thresholds of acceptable success measures from these discussions, which can help establish standards of measurement going forward. If adopted, such standards should be socialized among the contributors and interested parties.

Consider results in light of Reasons to Measure (Defined Objectives/Uses)

Throughout stakeholder discussions of reported data, continuously refer back to the reasons to measure. These objectives are the foundation for your inquiry and data should be considered for how it can help to achieve the outlined objectives. Objectives may evolve over time and should be revisited for any subsequent surveys.

Report Out

This step involves identifying the parties who are interested in the report of data and actions you will take and reporting to them. Depending on the level reported to, this may include a written report with data visualizations as well as a presentation to brief interested parties on report contents and respond to questions about strategic actions you will take.

Support

At this stage, L&D support consists of exporting the basic scorecard reports and raw data reports from the Survey tool and briefing the stakeholder group to orient them to reading the reports - what they tell you and what they don't tell you. You may choose to invite those with a need to know or who will be supporting your efforts to mature data to this brief out.

We may follow-up this meeting by delivering a report and raw data export that you may share with your group for further analysis. Upon request, L&D may be able to recommend/provide additional support resources.

APPENDIX: Resources

Talent Development Reporting Principles (TDRp) Framework

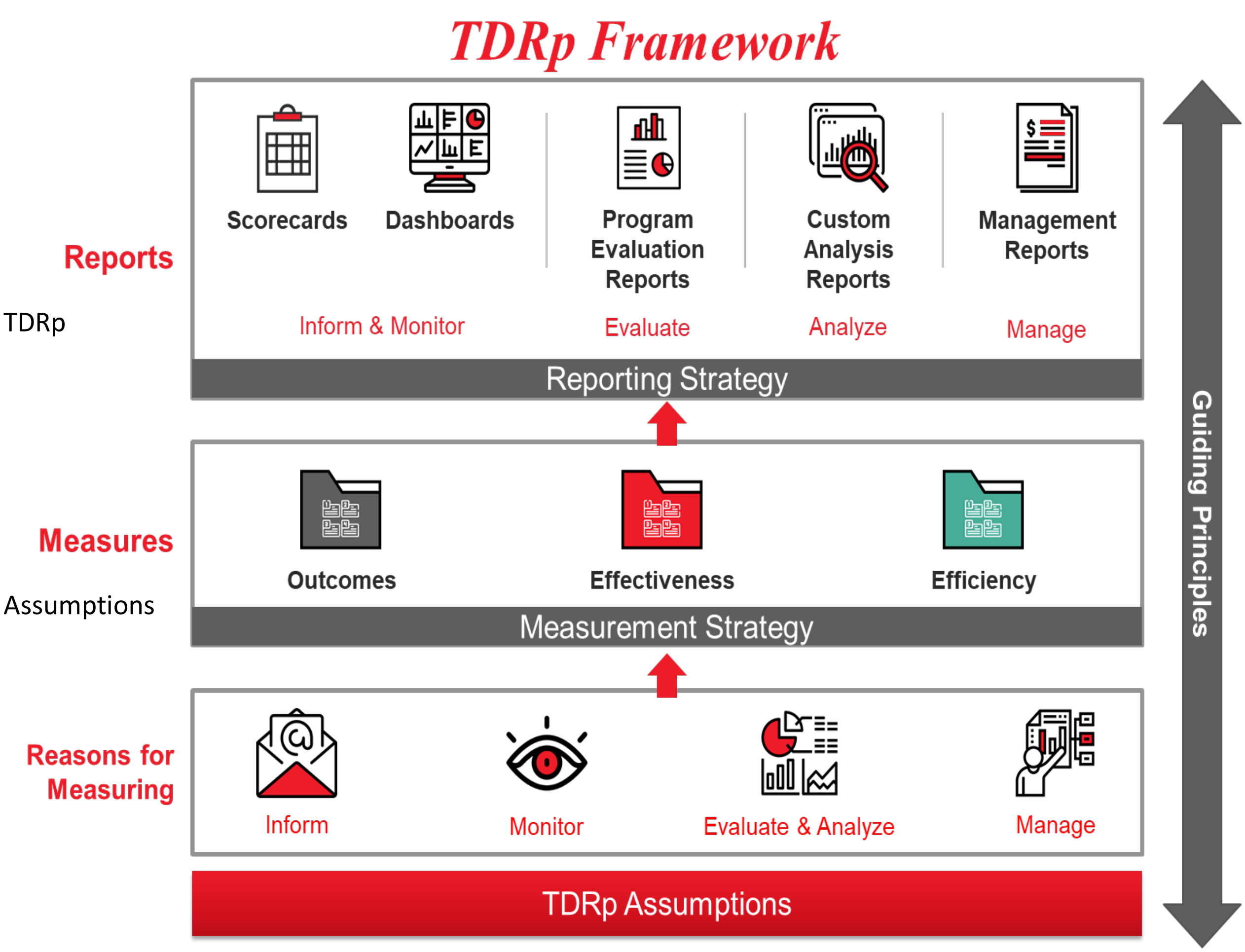
The Center for Talent Reporting (CTR} is an industry resource dedicated to enabling the reporting of actionable Talent Development data according to industry standards. The CTR's principle framework for talent reporting, the Talent Development Reporting principles framework (TDRp), offers a highly regarded methodology for L&D to measure, manage and report out on various aspects of training, in much the same way that other business metrics are reported across organizations. Within this framework are standard measures of talent development that may be leveraged across different learning measurement strategies.

Overview

TDRp comprises three steps that can be modified to create a measurement strategy for any program:

1. **Establishing Reasons to Measure -** to Inform, Monitor, Evaluate & Analyze, or Manage
2. **Identifying associated Measures needed -** Outcomes, Effectiveness or Efficiency
3. **Identifying Report mechanisms -** Scorecards, Dashboards, Program Evaluation Reports, Custom Analysis Reports, Management Reports

The figure below represents the framework, which progresses from **TDRp Assumptions** to development of a **Measurement Strategy**, and then a **Reporting Strategy**.



TDRp

Assumptions

All strategies and measurement requirements are developed from the assumptions - the reasons for measuring - which mature along with the purpose for measuring (i.e., from Inform up to Manage).

Applying this framework to most agencies / companies will reveal that learning measurement is still in an early developmental phase, in which Reasons for Measuring are simply to Inform and Monitor on the large volume of courses delivered and only inform on the formal courses delivered. More mature measurements of Evaluation/ Analysis and Management can only be made through coordination with HR and Mission to gather/analyze performance evaluation data and set strategic thresholds, then build to Evaluate/Analyze and Manage areas.

A data-informed strategy for continuous improvement should take into account both quantitative and qualitative data. Effectiveness and Efficiency Measures are the most prevalent type of quantitative data this is readily available from LMS and other related systems. Assessment and Evaluations from L&D, at best, provide basic qualitative data in the form of Level 1 (Student Reaction/Immediate Feedback) data. Reporting is made at this level in the form of Scorecards and Dashboards.

Identified Reasons to Measure

To answer requests for L&D to provide assistance in creating a Level I Evaluation, measuring the effectiveness and efficiency of a Program, L&D would engage with key contributors and interested parties to pose a series of important questions to clarify the focus of inquiry:

- What do you want to measure?
- What measures are currently available?
- How do you plan to use the measurements?
- Who needs to see what level of measures?
- What does success look like (including Mission Outcomes) for these measurements?

Learn More

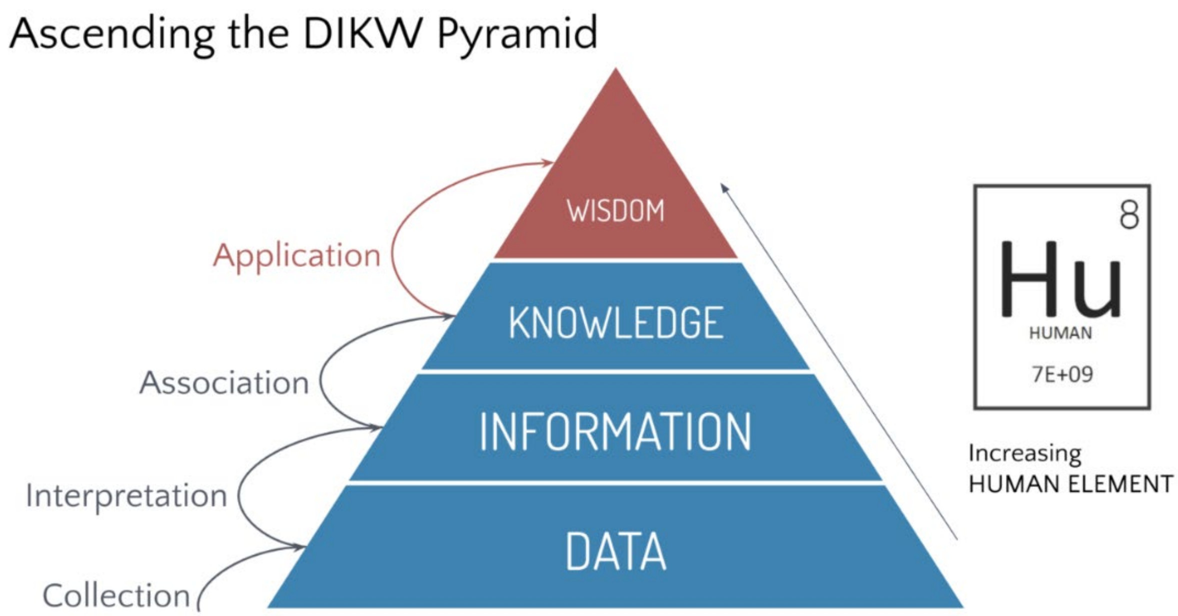
A Better Framework for L&D Measurement and Analytics (TD Magazine)

Center for Talent Reporting website (Stewards of the TDRp)

L&D Reporting (CTR)

From Reported Data to Informed Decision-Making

(U) The ultimate goal for collected data should be to develop it into Wisdom to be used for data-informed decision-making. The DIKW Pyramid indicates how collected Data may be transformed into Wisdom, through increasing input from Human elements. From the current base of Data Collection, the Survey data may be transformed into Information (through interpretation by Subject Matter Experts [SMEs]), then further translated into Knowledge (by association with other information). Moving from Knowledge to Wisdom—to enable true data-informed decision-making—requires additional human inputs (e.g., from mission elements) to consider how Knowledge can/should be applied.



Templates

Checklist for Development Team Handoff

Use this checklist to prepare and gather materials for a survey development request.

Deliverable	Format	Delivered?	Notes
Survey questions	Word or excel		Have you aligned these with Reasons to Measure?
Messaging for the survey and campaign: Intro/Closing, Email and Reminder text, survey contact, leadership endorsement	Word		Identify a champion or leader who will reinforce the message of importance for the survey.
Spreadsheet to Identify potential (targeted) respondents	Excel		If specific email addresses are to be used.
Dates for survey collection period	Email		Consider opening on a Tuesday and closing on a Thursday, as well as how holidays or seasonal entry/exit of employees may affect response.
Unique identifiers and custom data for Internal/External Pilots	Varies		If you want to filter on supervisors vs. non-supervisors or seasonals vs. permanent, note up front.

Interpretation of Survey Data

A simple spreadsheet with appropriate headings will enable evaluation of data from survey questions and identifications of actions or decisions made as a result. This spreadsheet allows a group to discuss and add to data to elevate it into Knowledge and Wisdom levels for decision-making. The goal is to align with Reasons for Measuring and determine next steps with the data at hand. A sample appears below:

TOPIC	Objective	Use Case	Item	Question/Comment about item (for followup)	Key Results (What Data showed)	Interpretations
AUDIENCE	Capture characteristics of Collateral Duty Safety Officers (CDSCs) and Supervisory respondents	Baseline understanding of CDSC audience (size, background, work areas) and enable filtering of all data	Supervisor vs. Non-Supervisor	What different supports do CDSCs as Supervisors need vs. just CDSCs?		
		Inform targeted design and delivery of instruction		Should Supervisor CDSCs have a different level of training (have more responsibility)?		
	Determine what size park/unit CDSCs work in	Filter responses to see if those in larger or smaller parks have different needs	Size of Park/Unit		About 75% from small to medium parks	May have less support at smaller to medium sized
BEST PRACTICES	Identify best practices/supports versus barriers to training	Update training to remove roadblocks and identify useful supports		What resources are CDSCs who are HIGH performing using to succeed?		
FOLLOW-UP	Identify respondents to provide more detailed feedback	Enable needs analysis team to conduct deeper follow-up discussions with willing respondents.	May we contact you for follow-up?	Hold discussions with these folks to identify questions for the whole CDSC training group to answer?	About 30% indicated a desire to participate in followup discussions	CDSCs are eager to participate and contribute