Data-Driven Learning and Development Analytics Training Course



28 Dec 2026 - 01 Jan 2027

Boston

7500 € (Per Person)

Ref: #TDD3119_189474

Course Introduction / Overview:

This course provides a comprehensive framework for transforming Learning and Development (L&D) functions from cost centers into strategic business partners through the power of data analytics. In today's competitive landscape, organizations can no longer rely on intuition to guide their training initiatives. This program is designed to equip professionals with the skills to collect, analyze, and interpret learning data to measure training effectiveness, demonstrate return on investment (ROI), and align development programs with core business objectives. We will move beyond simple metrics like completion rates and satisfaction scores to explore sophisticated techniques for measuring behavioral change and business impact. Drawing on principles articulated by experts like Jack J. Phillips in his seminal work, "Return on Investment in Training and Performance Improvement," participants will learn to build a compelling, evidence-based case for L&D investments. BIG BEN Training Center has developed this course to empower L&D leaders to make informed decisions, optimize training resources, and prove the tangible value their programs deliver to the bottom line. This is an essential journey from activity-based reporting to impact-driven analytics, enabling a truly data-informed learning culture within any organization.

Target Audience / This training course is suitable for:

- Learning and Development (L&D) Managers and Specialists.
- Human Resources (HR) Directors and Business Partners.
- Training Coordinators and Managers.
- Organizational Development (OD) Professionals.
- Talent Management Specialists.
- HR Analysts and Data Specialists.
- Corporate Trainers and Instructional Designers.
- Department Heads and Line Managers responsible for team development.

Target Sectors and Industries:

- Technology and Information Services.
- Financial Services and Banking.
- Healthcare and Pharmaceuticals.
- Manufacturing and Engineering.
- Retail and Consumer Goods.
- Telecommunications.
- Professional Services and Consulting.
- Governmental bodies and Public Sector organizations.
- Non-profit organizations.

Target Organizations Departments:

- Human Resources.
- Learning and Development.
- Talent Management.
- Organizational Development.
- Operations Departments.
- Sales and Customer Service Departments.
- Strategy and Corporate Planning.

Course Offerings:

By the end of this course, the participants will have able to:

- Develop a comprehensive learning analytics strategy aligned with organizational goals.
- Identify and track key performance indicators (KPIs) for training effectiveness.
- Apply the Kirkpatrick Model and other evaluation frameworks effectively.
- Calculate and communicate the Return on Investment (ROI) of training programs.
- Analyze data from Learning Management Systems (LMS) and other sources to gain insights.
- Create compelling data visualizations and dashboards to report on L&D impact.
- Use data to conduct a thorough training needs analysis and identify skills gaps.
- Master data storytelling techniques to influence senior stakeholders.
- Implement a framework for continuous improvement of L&D initiatives based on data.
- Foster a data-driven culture within the L&D and broader HR function.

Course Methodology:

The training methodology at BIG BEN Training Center is designed to be highly interactive, practical, and participant-centered. This course moves beyond theoretical lectures to immerse participants in the real-world application of L&D analytics. We utilize a blended learning approach that includes expert-led presentations, dynamic group discussions, and collaborative workshops. A significant portion of the course is dedicated to hands-on exercises where participants will work with sample data sets to practice analysis and visualization techniques. Real-world case studies from various industries will be dissected to understand the challenges and successes of implementing data-driven L&D strategies. Participants will engage in team-based projects to design a learning measurement plan for a hypothetical organization, fostering practical problem-solving and teamwork skills. Throughout the course, there will be continuous opportunities for feedback and Q&A sessions to ensure concepts are thoroughly understood. Our approach emphasizes learning by doing, ensuring that participants leave not just with knowledge, but with the confidence and skills to apply L&D analytics immediately in their own workplaces.

Course Agenda (Course Units):

Unit One: Foundations of Data-Driven Learning and Development

- Introduction to L&D Analytics and its Strategic Importance.
- The Evolution from Training Metrics to Learning Analytics.
- Understanding the L&D Value Chain and Key Performance Indicators (KPIs).
- Exploring Foundational Evaluation Models like the Kirkpatrick Model.
- The Phillips ROI Methodology for Measuring Business Impact.
- Aligning L&D Metrics with Overall Business Strategy and Goals.
- Establishing a Framework for a Data-Driven L&D Culture.

Unit Two: Data Collection and Management for L&D

- Identifying Key Sources of Learning Data (LMS, LXP, Surveys, Performance Data).
- Designing Effective Pre- and Post-Training Surveys and Assessments.
- Techniques for Ensuring Data Quality, Integrity, and Accuracy.
- Introduction to Data Governance and Ethical Considerations in L&D Analytics.
- Methods for Collecting Qualitative Data through Interviews and Focus Groups.
- Integrating Disparate Data Sources for a Holistic View.
- Practical Steps for Cleaning and Preparing Data for Analysis.

Unit Three: Analyzing and Interpreting Learning Data

- Introduction to Descriptive, Diagnostic, and Predictive Analytics.
- Applying Basic Statistical Concepts to L&D Data.
- Analyzing Learner Engagement and Knowledge Acquisition Metrics.
- Measuring Behavior Change and Application of Skills on the Job.
- Techniques for Correlating Training Data with Business Outcome Data.
- Identifying Trends, Patterns, and Insights from Learning Datasets.
- Leveraging Technology for Efficient Data Analysis.

Unit Four: Data Visualization and Storytelling for Impact

- Principles of Effective Data Visualization for L&D Reporting.
- Creating Compelling Charts, Graphs, and Infographics.
- Developing Interactive L&D Dashboards for Different Stakeholders.
- The Art of Data Storytelling: Crafting a Narrative with Your Findings.
- Presenting L&D Data to Executive Leadership and Management.
- Translating Complex Data into Clear, Actionable Recommendations.
- Avoiding Common Pitfalls in Data Presentation.

Unit Five: Strategy, ROI, and Building a Data-Mature L&D Function

- Calculating the Return on Investment (ROI) of Key Training Programs.
- Building a Business Case for L&D Initiatives Using Data.
- Using Predictive Analytics for Proactive Talent Development and Skills Forecasting.
- Developing a Strategic L&D Analytics Roadmap for Your Organization.
- Overcoming Common Barriers to Implementing a Data-Driven Approach.
- Showcasing the Strategic Value of the L&D Function.
- Creating a Personal Action Plan for Applying Course Learnings.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

As L&D increasingly relies on predictive analytics, what ethical frameworks must be established to ensure employee data is used for development and not for punitive measures?

What unique qualities does this course offer compared to other courses?

This course distinguishes itself by focusing intensely on the strategic application of L&D analytics to drive and demonstrate business value, rather than merely teaching theoretical models or software-specific skills. While other programs may concentrate on the "what" of data collection, we emphasize the "so what" and "now what," equipping participants to translate raw data into a compelling narrative that influences executive decision-making. Our curriculum is built around the concept of data storytelling, a critical skill for L&D professionals seeking to secure budget and strategic buy-in. The course provides a robust, tool-agnostic framework that can be applied within any organization, regardless of its current data maturity or the specific technology platforms it uses. We prioritize hands-on, practical application through realistic case studies and a capstone project where participants design an end-to-end measurement strategy. This ensures that learning is not just absorbed but actively applied. The focus is on building strategic capability, enabling participants to evolve from training administrators to data-savvy business partners who can quantitatively prove the impact of their learning initiatives on performance, productivity, and profitability.