School Performance Data Analytics Training Course

Professional Development Training Course Outline

Category	Public Sector Innovation	**Duration**	10 Days
Base Fee	$3,000 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

School Performance Data Analytics Training Course equips education leaders, administrators, policymakers, teachers, and analysts with advanced skills in educational data science, learning analytics, predictive modeling, performance benchmarking, student success metrics, academic outcomes measurement, and evidence-based decision-making. This course integrates real-world school datasets, advanced visualization tools, dashboard development, data governance frameworks, and machine learning applications to transform raw academic data into actionable insights that improve student achievement, operational efficiency, institutional accountability, and continuous improvement strategies.

Participants will gain practical expertise in student performance tracking, early warning systems, assessment analytics, attendance modeling, graduation rate forecasting, equity gap analysis, instructional impact evaluation, and school improvement planning. The training emphasizes ethical data use, FERPA compliance, education technology integration, and strategic reporting for school boards, ministries of education, donors, and accreditation bodies. By the end of the course, learners will confidently design data-driven school improvement systems that optimize teaching effectiveness, learning outcomes, and organizational excellence across K-12 and higher education institutions.

Programme Curriculum

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Course Objectives

1. Apply advanced school data analytics frameworks to improve student achievement and institutional performance.
2. Design predictive models for early identification of at-risk students using machine learning and AI techniques.
3. Develop interactive school performance dashboards for real-time monitoring and decision-making.
4. Conduct learning analytics to measure instructional effectiveness and curriculum impact.
5. Integrate assessment data, attendance data, and behavioral data into unified performance systems.
6. Implement data-driven school improvement strategies aligned with national education standards.
7. Use descriptive, diagnostic, predictive, and prescriptive analytics in academic performance management.
8. Apply ethical data governance, compliance, and privacy best practices in education analytics.
9. Perform equity and inclusion analysis to reduce achievement gaps and improve access outcomes.
10. Design performance benchmarks and KPIs for schools, districts, and education systems.
11. Translate data insights into actionable strategies for leadership, policy, and classroom practice.
12. Build institutional capacity for continuous improvement using data literacy and analytics culture.
13. Evaluate the impact of interventions using advanced statistical and causal inference methods.

Organizational Benefits

- Improved student retention, graduation rates, and academic performance outcomes.
- Data-driven instructional planning and curriculum improvement.
- Enhanced accountability, compliance, and regulatory reporting accuracy.
- Optimized resource allocation and budget efficiency through evidence-based planning.
- Strengthened early intervention and student support systems.
- Increased institutional transparency and stakeholder trust.
- Reduced achievement gaps and improved equity outcomes.
- Enhanced leadership decision-making using real-time dashboards and insights.
- Sustainable school improvement through continuous performance monitoring.
- Stronger organizational culture of analytics, innovation, and evidence-based practice.

Target Audiences

1. School principals and administrators
2. District education officers and supervisors
3. Education policymakers and planners
4. Teachers and instructional leaders
5. School data analysts and assessment coordinators
6. Education consultants and researchers
7. IT and education technology managers
8. Quality assurance and accreditation officers

Course Duration: 10 days

Course Modules

Module 1: Foundations of School Performance Data Analytics

- Principles of educational data science and analytics ecosystems
- Types of school data and performance measurement frameworks
- Data-driven decision-making in education systems
- Key challenges in school analytics implementation
- Introduction to analytics tools and platforms for education
- Case Study: Building a baseline school performance analytics framework

Module 2: Student Achievement Metrics and Academic KPIs

- Defining student success indicators and learning outcome metrics
- Designing academic performance dashboards
- Alignment with national education standards and benchmarks
- Measuring growth, proficiency, and mastery outcomes
- KPI frameworks for school improvement planning
- Case Study: Developing academic KPIs for district-wide performance tracking

Module 3: Data Collection, Integration, and Management in Schools

- School information systems and data architecture
- Data integration from assessments, attendance, and behavior systems
- Data quality assurance and validation techniques
- Data governance models for education institutions
- Secure data storage and access control practices
- Case Study: Integrating multiple school data sources into a unified system

Module 4: Descriptive and Diagnostic Analytics for Education

- Descriptive analytics for student and school performance reporting

- Diagnostic analytics for identifying root causes of learning gaps
- Trend analysis and cohort performance evaluation
- Comparative benchmarking across schools and districts
- Visualization techniques for education data storytelling
- Case Study: Diagnosing low literacy performance using school datasets

Module 5: Predictive Analytics and Early Warning Systems

- Predictive modeling concepts in student success analytics
- Risk identification for dropout and academic failure
- Feature engineering using attendance, grades, and behavior data
- Validation and performance measurement of predictive models
- Translating predictions into intervention strategies
- Case Study: Developing an early warning system for at-risk learners

Module 6: Learning Analytics and Instructional Effectiveness

- Measuring instructional impact using classroom data
- Analyzing assessment outcomes to improve pedagogy
- Curriculum effectiveness evaluation techniques
- Teacher performance analytics frameworks
- Linking instructional practices to student outcomes
- Case Study: Evaluating teaching strategies using learning analytics

Module 7: Attendance, Behavior, and Engagement Analytics

- Attendance trend modeling and absenteeism risk analysis
- Behavioral data analytics and school climate measurement
- Engagement metrics from digital learning platforms
- Designing intervention triggers based on engagement patterns
- Integrating socio-emotional learning indicators
- Case Study: Reducing chronic absenteeism through predictive analytics

Module 8: Equity, Inclusion, and Achievement Gap Analysis

- Equity analytics frameworks for education systems
- Identifying performance disparities across demographic groups
- Data-driven strategies for inclusive education outcomes
- Monitoring intervention effectiveness for underserved populations
- Ethical considerations in equity-focused analytics
- Case Study: Closing achievement gaps using targeted analytics

Module 9: Data Visualization and School Performance Dashboards

- Dashboard design principles for education leaders
- Visual storytelling with charts, maps, and scorecards
- Real-time monitoring of academic and operational KPIs
- Designing dashboards for different stakeholder audiences
- Best practices in data usability and accessibility
- Case Study: Building a school leadership performance dashboard

Module 10: Assessment Analytics and Academic Evaluation

- Formative and summative assessment data analysis
- Item analysis and test reliability evaluation
- Standards-based grading analytics
- Growth modeling and learning progression analysis
- Using assessment insights for instructional planning
- Case Study: Improving exam outcomes using assessment analytics

Module 11: School Improvement Planning and Performance Management

- Data-driven school improvement planning frameworks
- Translating analytics insights into strategic initiatives
- Monitoring progress and performance against targets
- Continuous improvement cycles in education systems
- Leadership reporting and accountability dashboards
- Case Study: Designing a performance improvement plan using school data

Module 12: Education Policy Analytics and System-Level Reporting

- Analytics for district, regional, and national education systems
- Education policy evaluation using large-scale datasets
- Longitudinal performance analysis across cohorts
- Evidence-based policy formulation and reform evaluation
- Reporting outcomes to ministries and governing bodies
- Case Study: Evaluating district reform impact using education analytics

Module 13: Data Ethics, Privacy, and Compliance in Education

- FERPA, GDPR, and student data protection standards
- Ethical data use and responsible analytics frameworks
- Risk management in educational data handling

- Transparency, consent, and accountability in analytics systems
- Building trust through ethical analytics governance
- Case Study: Designing a compliant student data governance framework

Module 14: Advanced Analytics, AI, and Machine Learning in Education

- Machine learning applications in student performance prediction
- Natural language processing for learning analytics
- Adaptive learning systems and personalized education models
- AI-driven intervention optimization strategies
- Evaluating algorithm bias and model fairness
- Case Study: Implementing AI-powered learning analytics in schools

Module 15: Capstone School Performance Analytics Project

- End-to-end school analytics solution design
- Data ingestion, modeling, visualization, and reporting
- Stakeholder presentation and executive insight delivery
- Measuring impact and performance improvement outcomes
- Sustainability and scalability planning for analytics systems
- Case Study: Developing a comprehensive school performance analytics strategy

Training Methodology

- Instructor-led expert sessions with education analytics specialists
- Hands-on labs using real-world school datasets and tools
- Group discussions on best practices and policy applications
- Interactive dashboard design and analytics workshops
- Case-based learning with school performance scenarios
- Capstone project development and peer review sessions
- Assessments, simulations, and performance-based evaluations

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.
f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	04 Dec 2026	Online	$2,000
23 Nov 2026	04 Dec 2026	Physical	$3,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$12,000
23 Nov 2026	04 Dec 2026	Physical	$9,000
23 Nov 2026	04 Dec 2026	Physical	$12,000
23 Nov 2026	04 Dec 2026	Physical	$12,000

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