



Education Sector Planning Course: EMIS, Simulation Models and Education Finance



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Introduction:

Education sector planning, covering EMIS, simulation models and education finance, is a 1-week course for ministry of education planners, policy units and education finance staff that ends with a Costed Education Sector Plan and Results Framework for a case ministry. Ministries often set enrolment and quality targets without projecting the teachers, classrooms and budgets they require, so plans stall once financing gaps appear. Nominees already prepare indicator reports, budget submissions or planning papers, and the course is taught as a modelling build in spreadsheets. CoreConcept Training Center delivers this education sector planning course.

Course Objectives:

- Conduct an education sector analysis that diagnoses access, internal efficiency, equity and management capacity across levels of the system
- Assess EMIS coverage and data quality and calculate enrolment, flow and parity indicators from school census records
- Build cohort flow and teacher demand projections that test alternative enrolment and pupil-teacher ratio targets
- Estimate unit costs, recurrent and capital spending and the financing gap for each policy scenario against budget ceilings
- Prepare a Costed Education Sector Plan and Results Framework with baselines, targets and review arrangements for a case ministry

Target Audience:

- Planning directorate staff responsible for preparing multi-year education plans and annual operational plans
 - Education policy unit analysts who prepare reform options and briefing notes for ministry leadership
 - EMIS and school census teams responsible for collecting, validating and publishing education indicators
 - Education finance and budget staff responsible for unit costs, budget submissions and expenditure tracking
 - Monitoring and evaluation officers who track sector plan targets and prepare annual sector reviews
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Course Outline:

Day 1: Education Sector Analysis and System Diagnosis

- Education Sector Analysis Scope Across Levels and Subsectors
- Demographic and Economic Context Review for Education Demand
- Access, Internal Efficiency and Equity Diagnostic Questions
- Institutional Mapping of Ministry Planning and Budgeting Functions
- Current-State Review of a Ministry Planning Cycle

Day 2: EMIS, School Census and Education Indicator Systems

- EMIS Architecture Linking School Census and Administrative Records
- UNESCO EMIS Readiness Assessment Tool Applied to Ministry Systems
- Gross and Net Enrolment Ratio Calculation From Census Data
- Repetition, Dropout and Survival Rate Cohort Analysis
- Gender Parity Index and Sub-National Disparity Indicator Tables

Day 3: Enrolment Projection and Teacher Demand Simulation Models

- Cohort Flow Model Using Promotion, Repetition and Dropout Rates
- Enrolment Projection Scenarios Under Alternative Policy Targets
- Teacher Demand Projection From Pupil-Teacher Ratio Norms
- Teacher Supply, Attrition and Recruitment Gap Estimation
- Classroom and School Construction Needs Derived From Projections

Day 4: Unit Costs, Financing Scenarios and Plan Feasibility Risks

- Unit Cost per Student Analysis by Level and Type
- Recurrent and Capital Expenditure Projection in the Simulation Model
- Medium-Term Expenditure Framework Alignment With Education Budget Ceilings
- Financing Gap Analysis and Policy Trade-Off Scenarios
- Plan Feasibility Risks From Data Gaps and Optimistic Targets

Day 5: Modelling Build of a Costed Education Sector Plan

- Case Ministry Sector Diagnosis From EMIS Indicator Tables
 - Case Enrolment and Teacher Projection Model Calibration
 - Case Costing and Financing Scenario Selection for Priorities
 - Results Framework and Joint Sector Review Monitoring Arrangements
 - Costed Education Sector Plan and Results Framework Completion
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Skills You Will Gain:

- Education Sector Diagnosis
- EMIS Data Quality Review
- Education Indicator Calculation
- Cohort Flow Modelling
- Teacher Demand Projection
- Education Unit Cost Analysis
- Financing Gap Estimation
- Sector Plan Results Monitoring

Why Attend This Course:

- Deliver a Costed Education Sector Plan and Results Framework to the ministry planning director, the finance directorate and the minister's office
- Decide which enrolment, teacher and construction targets the education budget can carry before they are announced
- Avoid plans that stall mid-cycle because teacher shortages, classroom gaps or unfunded commitments were never projected
- Share the projection and costing workbook with EMIS, budget and policy colleagues so the next planning round reuses one model

Conclusion:

Back at work, the participant presents the Costed Education Sector Plan and Results Framework to the planning director, the finance directorate and the policy unit. They use it to agree which priority programmes enter the multi-year budget, which enrolment and teacher targets are realistic and which indicators the EMIS team must supply each year. After the first annual sector review under the plan, the unit should compare actual enrolment, teacher numbers and spending with the projections and recalibrate the simulation model where they diverge.

Frequently Asked Questions FAQ:

What should participants prepare before the education sector planning course?

Participants should be comfortable with spreadsheets and already handle indicator reports, budget submissions or planning papers. Bringing anonymised school census tables, a recent education budget or an existing sector plan lets the modelling build reflect their own system.

How does an education sector planning course differ from a general public policy analysis course?

It applies planning methods to one sector, using EMIS indicators, cohort flow and teacher demand projections and unit costs to build a costed plan. General policy analysis courses cover problem framing, options appraisal and regulatory impact assessment across any policy area.

Why do education sector plans need simulation models for enrolment and finance?

Simulation models link enrolment targets to the teachers, classrooms and money they require, so planners can test whether a target is affordable before it is adopted. Changing one assumption, such as the pupil-teacher ratio, immediately shows its effect on costs and the financing gap.

What do participants take back from the education sector planning course?

Participants take back a Costed Education Sector Plan and Results Framework for a case ministry, plus an indicator calculation sheet, a cohort flow and teacher projection workbook, a unit cost and financing gap table and a results framework template.