General Structure/Architecture of State Level Higher Education Funding Models

Data for Informed Decisions: Who is in the Driver’s Seat?
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Session Overview

• Introduction of Panelists
• Funding Model Background and Concepts
• Review of General Types of Models
• Uses and Limitations of Each type
• Role of Institutional Research
• Questions and Answers
Why Does IR Care?

• What do Funding Models Have to do with IR?
  – Models are Typically Data Intensive
  – Likelihood of IR Involvement in Analytical Support
  – Growing Trend in Accountability and Performance Measurements
Funding Model Background and Concepts

• Major Components of State Level Funding Models:
  – Multipurpose Component
    • Fund Core Mission and Direct Support Functions
    • Examples:
      – Incremental
      – All-Inclusive
      – Functional
      – Peer Based
  – Single-purpose Component:
    • Performance Funding,
    • Initiative Funding
    • Special Program Funding
  – Most States Have Both
Funding Model Background and Concepts

(continued)

Figure 1
Funding Model Architecture

Institutional Resource Requirements

Core Component
“Funds Recurring Core Mission and Support programs”
(i.e. Education and General Activities)

Special Purpose Component
“Funds Performance, Incentive Based Initiatives, and Unique Program Offerings"
Funding Model Background and Concepts

(continued)

Figure 1 (Continued)

Core Component

- Core Mission Elements
  - Instruction
  - Research
  - Public Service

- Support Program Elements
  - Academic Support
  - Student Services
  - Institutional Support
  - Operation & Maintenance of Physical Plant
Funding Model Background and Concepts
(continued)

Figure 1 (Continued)

Special Purpose Component

- Performance Funding
- Initiative Funding
  - Matching Funds for Programs
  - Funding for Start-up Initiatives
- Categorical Funding for Special Programs
  - First Professional Health Science Programs
  - Public Service/Outreach
Funding Model Background and Concepts
(continued)

• The Missouri Experience
  – Functional Model – Early 1970’s to Mid-1980’s
  – Modified Functional Model – Mid-1980’s to 2000
  – Funding For Results (FFR) – 1990’s
  – Mission Enhancement – 1990’s
  – Incremental – 2000’s On
  – What Next?
Four Approaches to Allocating Funds

• Incremental
• All-Inclusive
• Functional
• Peer Based
All-Inclusive Funding Model

• Goal - fund core mission and support functions
  – Only State Support
  – Single Formula

• Student Count as a Base Factor:
  – Headcount
  – FTE or SCH
  – Weighted FTE Weighted (by Level and/or Discipline)

• Excludes:
  – Special Purpose Components, e.g. Dentistry, Medicine, COOP/Extension
  – Performance and Initiative Funding
All-Inclusive Funding Model
(continued)

• Model Stabilization
  – Buffering: insulate appropriations from sudden enrollment shifts
  – Threshold: Allows Appropriations to Increase or Decrease by a Maximum Amount
  – Corridor: Use of a set Percentage Range in Which Appropriations Can Change.
All-Inclusive Funding Model

(continued)

• **Advantages:**
  – Vertical and Horizontal Equity
  – Transparent and Easy to Understand
  – Enrollment Sensitive
  – Fairly Valid and Reliable Data
  – Can be made to be Relatively Stable
  – Can Help Limit the Role of Politics

• **Disadvantages:**
  – Unresponsive to Internal and External Changes
  – Fails to Address Issue of Adequacy
  – Does Not Address Research and Public Service
  – Limited linkage to State-wide Goals
Functional Funding Model by Expenditure Classification

• Structured According to Functional Expenditure Categories (NACUBO)
• Use of Program Classification Structure (PCS)
  • Instruction
  • Research
  • Public Service
  • Academic Support
  • Institutional Support
  • Operation and Maintenance of Physical Plant
  – Not Included:
    • Scholarships/Fellowships
    • Auxiliary enterprises
    • Hospitals
    • Mandatory Transfers
Functional Funding Model

(continued)

• Calculations
  – Rate per Base factor
  – Percentage of Base Factor
  – Base Factor-Position with Salary rates

• Base Factors:
  – Student headcount
  – Full-time Equivalent (FTE)
  – Student Credit Hour
  – Number of Faculty and/or Staff Positions
  – Square Footage or acreage
Functional Funding Model by Expenditure Classification

• Instruction
  – Examples:
    » Rate per student/faculty ratios by level and discipline
    » Rate times a weighted SCH or FTE

• Research
  – Examples:
    » Percent of External Sponsored Research
    » Percent of Instruction and Academic Support

• Public Service
  – Examples:
    » Percent of Instruction and Academic Support
    » Base plus Percent of Instruction

• Academic Support
  – Examples:
    » Percent of Instruction
    » Base Plus per SCH Computation
Functional Funding Model
(continued)

• **Student Services**
  - Examples:
    » Percent of Instruction
    » Base Plus per SCH Computation

• **Institutional Support**
  - Examples:
    » Base Plus Percent of E&G (less institutional support)
    » Percent of E&G (less institutional support)

• **Operation and Maintenance of Physical Plant**
  - Examples:
    » Flat Rate per Square Foot
    » Differentiated Rates by Category of Facility
Economies of Scale and Scope

• Institutional Differentiation
  – Horizontal and Vertical Equity
  – Economies of Scale and Scope

• Relative Institutional Sizes May Cause Variations in Per Unit Costs
  – Carnegie Foundation Thresholds
    • 1,000 to 1,300 FTE for Comprehensive Institutions
    • 5,000 to 5,500 FTE for Research Institutions
  – Most Pronounced in Institutional Support, Student Services, and Physical Plant

• Responses
  – Fixed Cost Factors (i.e. Minimum Guaranteed Funding)
  – Differentiated Funds for Complex Institutions
Functional Funding Model

(Continued)

• Advantages
  – Comprehensive in Design
  – Horizontal and Vertical Equity
  – Flexibility to Control Support Functions

• Disadvantages
  – Complexities
  – Data Intensive
  – Data Validity and Reliability
  – Leveling of Institutional Mission
Peer-Based Funding Model

• 8 States use some form of the Peer-based Model
  – Examples: Kentucky, Oklahoma, West Virginia, South Carolina

• Tend to be Linked to Explicit Plans for Improvement
Peer-Based Funding Model

(Continued)

• Use of Comparative Benchmarks
  – For Example, Funding per FTE

• Single mechanism to Fund Core Missions and Support Functions
Peer-Based Funding Model

(Continued)

• Peer Selection Methods
  – Cluster Analysis
  – Hybrid Approach
  – John Minter Process
  – Panel Review
Peer-Based Model

(Continued)

• Advantages
  – Transparency
  – Ease of Understanding
  – Highlight the Levels of State Support for Higher Education
  – Can Directly Address Funding Gaps

• Disadvantages
  – Peer Selection Process and Politics: Athletic Conference, Competitors, Aspirations, Similarity
  – Hard-to-Find Peers
Role of Institutional Research

- **Data Requirements to Support Funding Models**
  - **All-Inclusive Model**
    - Student Credit Hours (SCH) or Full-time Equivalency (FTE)
    - Discipline and/or Level Weighting
      - National Benchmarks for Discipline Weightings: National Study of Instructional Costs and Productivity
      - Instructional or Student Level
Role of Institutional Research (continued)

• Data Requirements to Support Funding Models
  – Functional Model
    • Discipline Weighting
    • Instructional or Student Level Weighting
    • E&G Expenditures by Classification of Instructional Program Structure (CIP)
    • Student/Faculty Headcounts
    • Plant – Square Feet and/or Replacement Value
Role of Institutional Research

(continued)

• Data Requirements to Support Funding Models
  – Peer Based Model
    • Determination of Peers – Perils of Peer Selections
    • IPEDS Peer Analysis System
    • Estimation of Peer Funding Gaps – Per FTE
Level and Discipline
Weightings

• National Study of Instructional Costs and Productivity (“Delaware Study”)
• Methodology
• Use of Clusters for Greater Simplification
Level Weightings Example: Texas 2008-2009

http://www.thecb.state.tx.us/reports/PDF/1419.PDF

Formulas

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Formula * Weight ($59.02)

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What Should IR Do?

• Funding Models And IR?
  – Many Models are Data Driven
  – Analytical Support
  – Growing Trend in Accountability and Performance Measurements
Questions and Further Discussions
Thank You for Your Time
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