



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

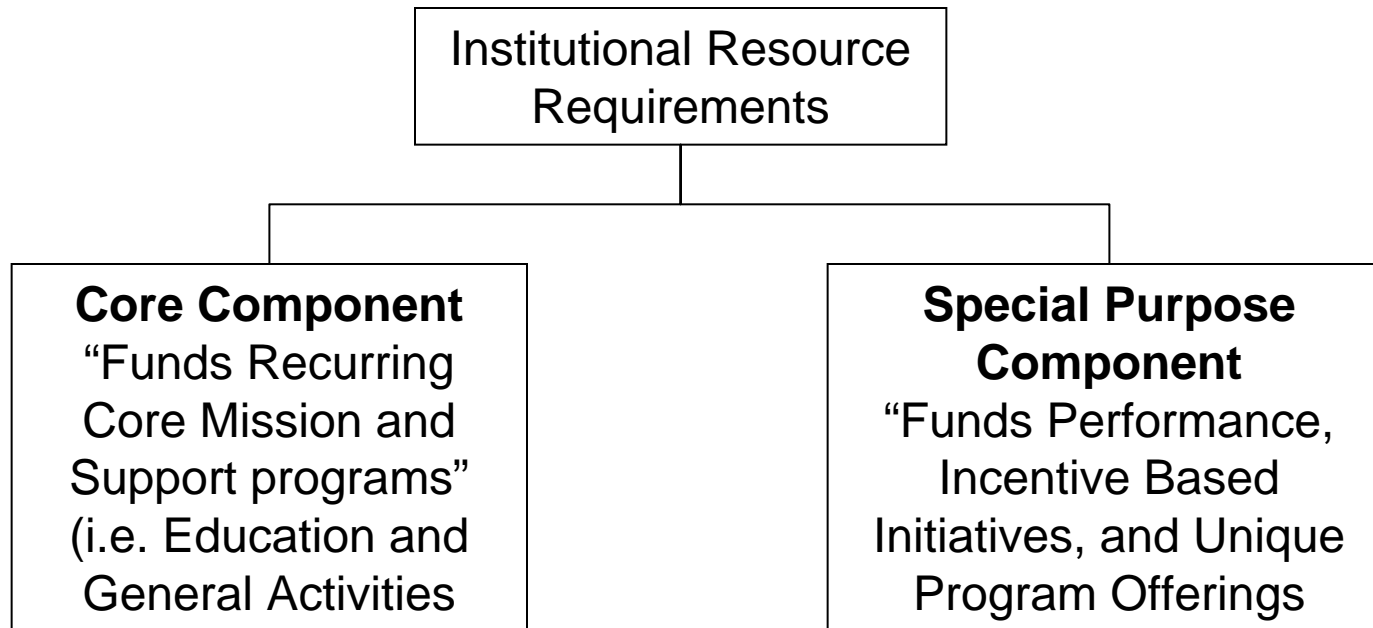


Funding Model Background and Concepts

(continued)

Figure 1

Funding Model Architecture

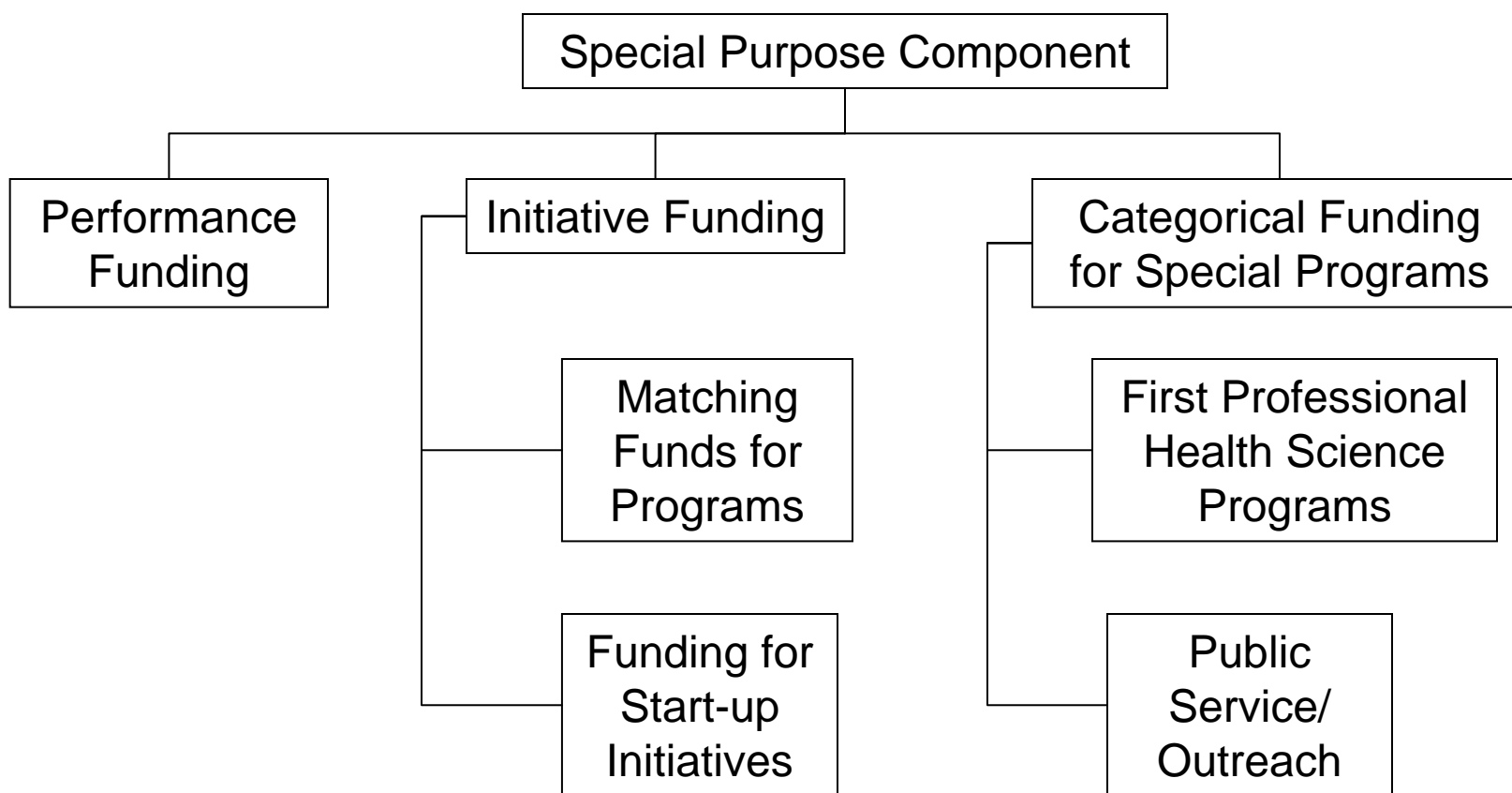




Funding Model Background and Concepts

(continued)

Figure 1 (Continued)





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, 015 cm/l3f



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)**
 -



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

| Discipline | Lower Division | Upper Division | Masters | Doctoral | 1st Prof |
|--------------|----------------|----------------|---------|----------|----------|
| Liberal Arts | 1.00 | 1.77 | 4.01 | 9.94 | - |
| Fine Arts | 1.50 | 2.51 | 5.65 | 9.78 | - |
| Pharmacy | 1.75 | 3.85 | 14.90 | 22.27 | 5.13 |
| Engineering | 2.45 | 3.51 | 7.39 | 17.05 | - |

Formula * Weight (\$59.02)

| Discipline | Lower Division | Upper Division | Masters | Doctoral | 1st Prof |
|--------------|----------------|----------------|----------|------------|----------|
| Liberal Arts | \$59.02 | \$104.47 | \$236.67 | \$586.66 | - |
| Fine Arts | \$88.53 | \$148.14 | \$333.46 | \$577.22 | - |
| Pharmacy | \$103.29 | \$227.23 | \$879.40 | \$1,314.38 | \$302.77 |
| Engineering | \$144.60 | \$207.16 | \$436.16 | \$1,006.29 | - |



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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