

Concepts, techniques and tools that support performance budgeting

Mini-course 21A/B Decision Support Level 2

Natalie J. Webb, Ph.D.



*Defense Resources Management Institute
Naval Postgraduate School
Monterey, California*



Defense Resources Management Institute



*Defense Resources Management Institute
Naval Postgraduate School
Monterey, California
www.nps.edu/drmi*



DRMI Organization

- Sponsored by Secretary of Defense
 - Department of Defense (DoD) Instruction 5010.35
- Established in 1965 at the Naval Postgraduate School (NPS)
 - Uses NPS faculty to teach analytical and business approaches to make the best use of defense resources

“As an Army, we often focus on budget execution independent of outcomes and without accurate understanding of the true costs of our processes. This approach leads to bad business practices, a reluctance to establish measures of effectiveness and efficiency, “use or lose” fund execution, and harvesting savings from commands who find new and innovative ways to operate.”

Can Performance Information Help?

- Accurate performance information could improve our understanding of the **relationships among expenditures, outputs, and outcomes**
- Accurate performance information could reveal the **total costs associated with achieving performance goals**
- Ideally, we could use performance information to **improve program design and management**

An Old Idea

- Hoover Commission (1949)
 - “. . . that the whole budgetary concept of the Federal Government should be refashioned by the adoption of a budget **based upon functions, activities, and projects.**”
- Frederick Mosher (1959)
 - “The central idea of a performance budget . . . is that the budget process be focused on program functions: that is, **accomplishments to be achieved, work to be done.**”

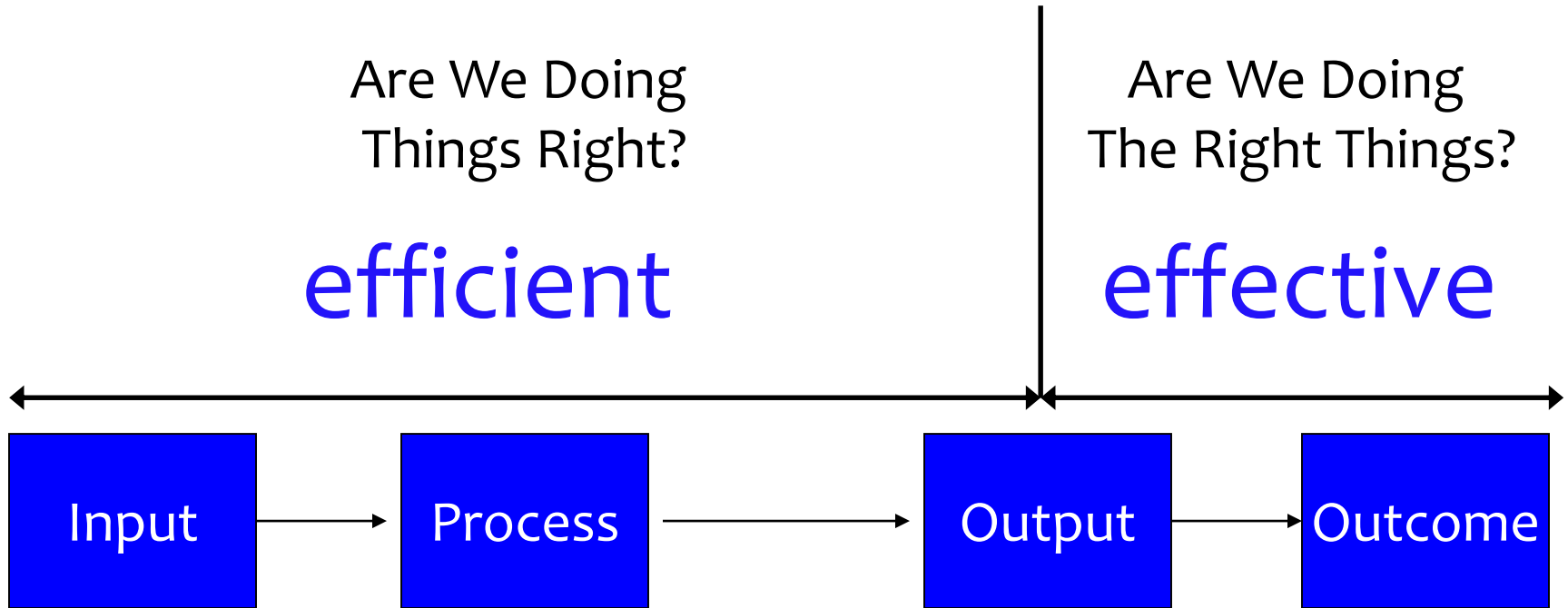
Government Performance and Results Act of 1993 (Public Law 103-62)

- Part of a series of laws in the 1990s aimed at improving federal government management
- Required federal agencies to develop
 - **strategic plans** with long-term goals
 - **performance plans** with annual goals and measures
 - **performance reports** on prior year performance
- Also required a **government-wide performance plan**, intended to provide a single, cohesive picture of federal performance

GPRRA Modernization Act of 2010 (Public Law 111-352)

- Created a new government-wide framework including
 - long-term federal government priority goals
 - revised federal government performance plan requirements
 - quarterly priority progress reviews
 - a government-wide performance website

Performance Information Should Help Us Evaluate

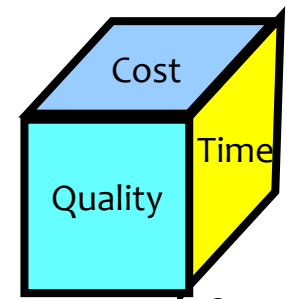


Input: Resources, including cost and workforce

Process: Activities, efforts, workflow

Output: Products and services produced

Outcome: Results, accomplishments, impacts



(New “Green” Navy) Efficient...Effective?



WHERE TO BEGIN?

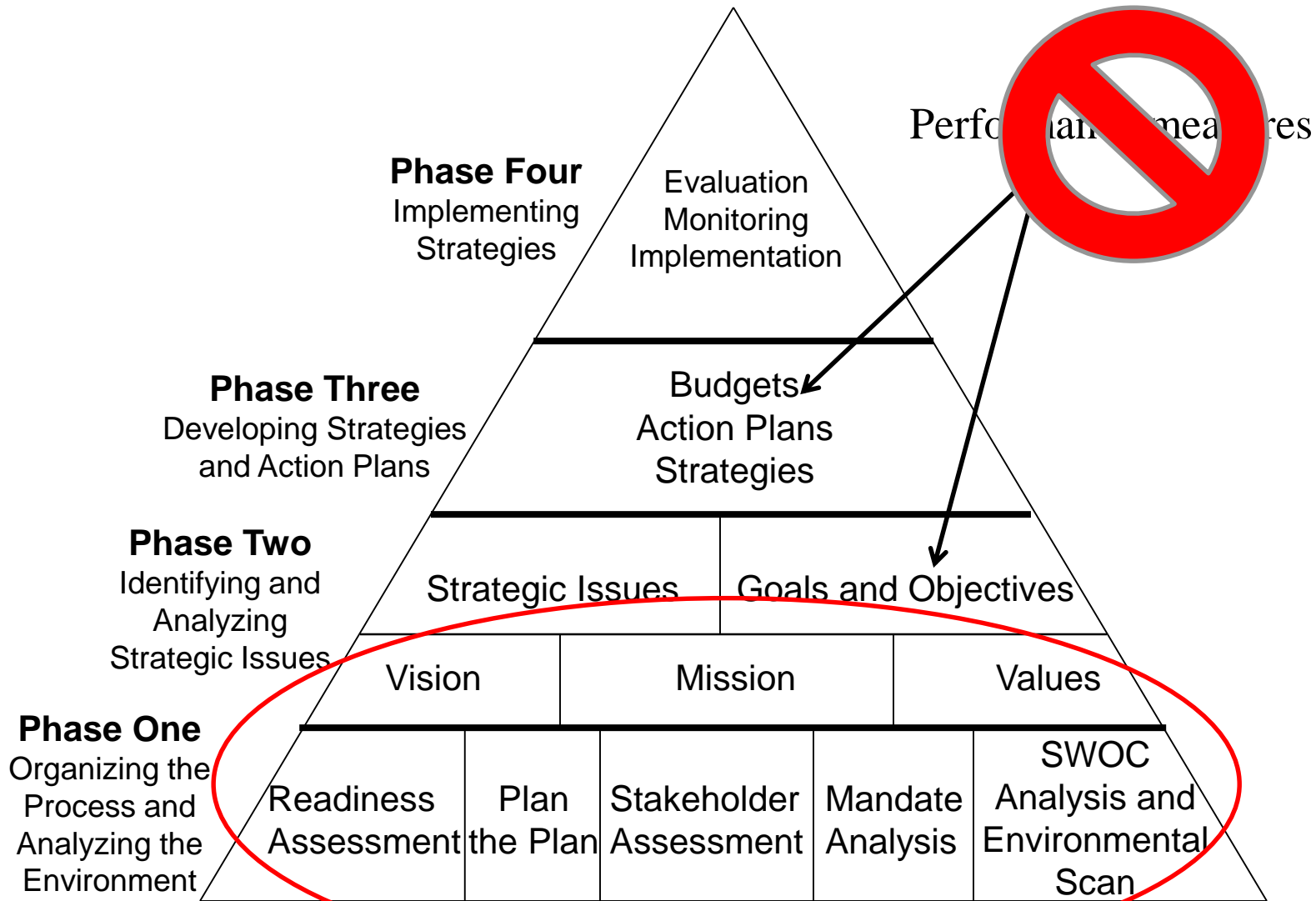
**PLANNING AHEAD: MISSION,
STAKEHOLDERS, AND
INFORMATION NEEDS**



Where to Begin?

- Perhaps counter intuitively, forget about metrics for a while
- Ask:
 - What is the purpose (mission) of the organization?
 - What is the vision?
 - What and whose needs do we serve?
 - Short- and long-term, what **outcomes** (results, impacts, achievements, benefits, effects or end-states) are we funded to provide?
- WHAT ARE WE SUPPOSED TO DO?

Building Blocks of Strategic Planning



What do your Customers Want?

End Outcomes

- Outcomes are linked to the program's overall mission—its reason for existing.
- What events, occurrences, or changes in conditions, behavior, or attitudes indicate progress toward achievement of the mission and objectives of the program?

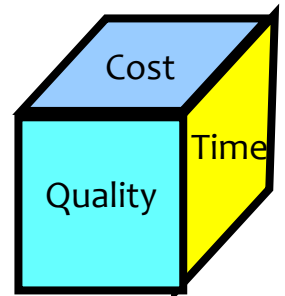
What do your Customers Want?

DoD End Outcome examples

- Improved security of a base
- Fewer compromises of national security information
- Auditable financial statements
- Increased successful missions
- Professional, certified workforce
- Less equipment out of service for repair
- Properly trained personnel
- Bills/payroll properly paid

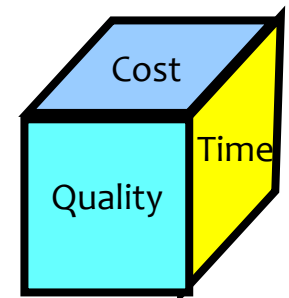
What information might we need?

- End and Intermediate Outcomes (Effects, Results, etc.)
- Outputs
- Processes (Workload or Activities)
- Inputs
- Efficiency and Productivity Measures (use inputs and outputs)
- Workload Characteristics
- Explanatory Information



Intermediate Outcomes

- Outcomes expected to lead to the ends desired but are not themselves ends
- Example: Service quality characteristics—based on characteristics important to the customers:
 - Timeliness of service
 - Accessibility and convenience of the service
 - Accuracy of the assistance
 - Courteousness of service delivery
 - Adequacy of assistance
 - Condition and safety of facilities
 - Customer satisfaction with delivery of service

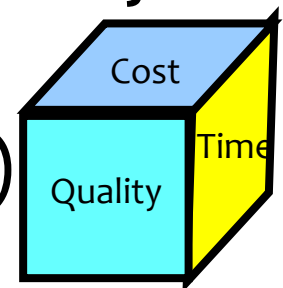


Outputs

- The things that the program's personnel have done, not changes to the outside of the organization or changes that outside organizations have made.
- Examples:
 - Number of completed maintenance actions
 - Number of students who completed course
 - Number of payments made
 - Number of reports generated

Processes (Workload or Activities)

- The amount of work that comes into a program or is in process but not completed
- Workload data can be used to produce outcome data, e.g., the size of the backlog in processing travel vouchers may be a proxy for delays of service to customers (an intermediate outcome)



Inputs

- The amount of resources actually used, usually expressed as the amount of funds or the number of employee-years or both.
- When related to outputs or outcomes, inputs produce indicators of efficiency or productivity.

Workload Characteristics

- Complexity of workload, types of work coming in perhaps including desired outputs and outcomes or location of work

Explanatory Information

- Qualitative or quantitative information to help you interpret a report, performance indicator or estimate
- “an identification of those key factors external to the agency and beyond its control that could significantly affect the achievement of the general goals and objectives.”

Check your Knowledge:

Match terms to definitions/examples

1. D

6. E

2. C

7. I

3. G

8. A

4. B

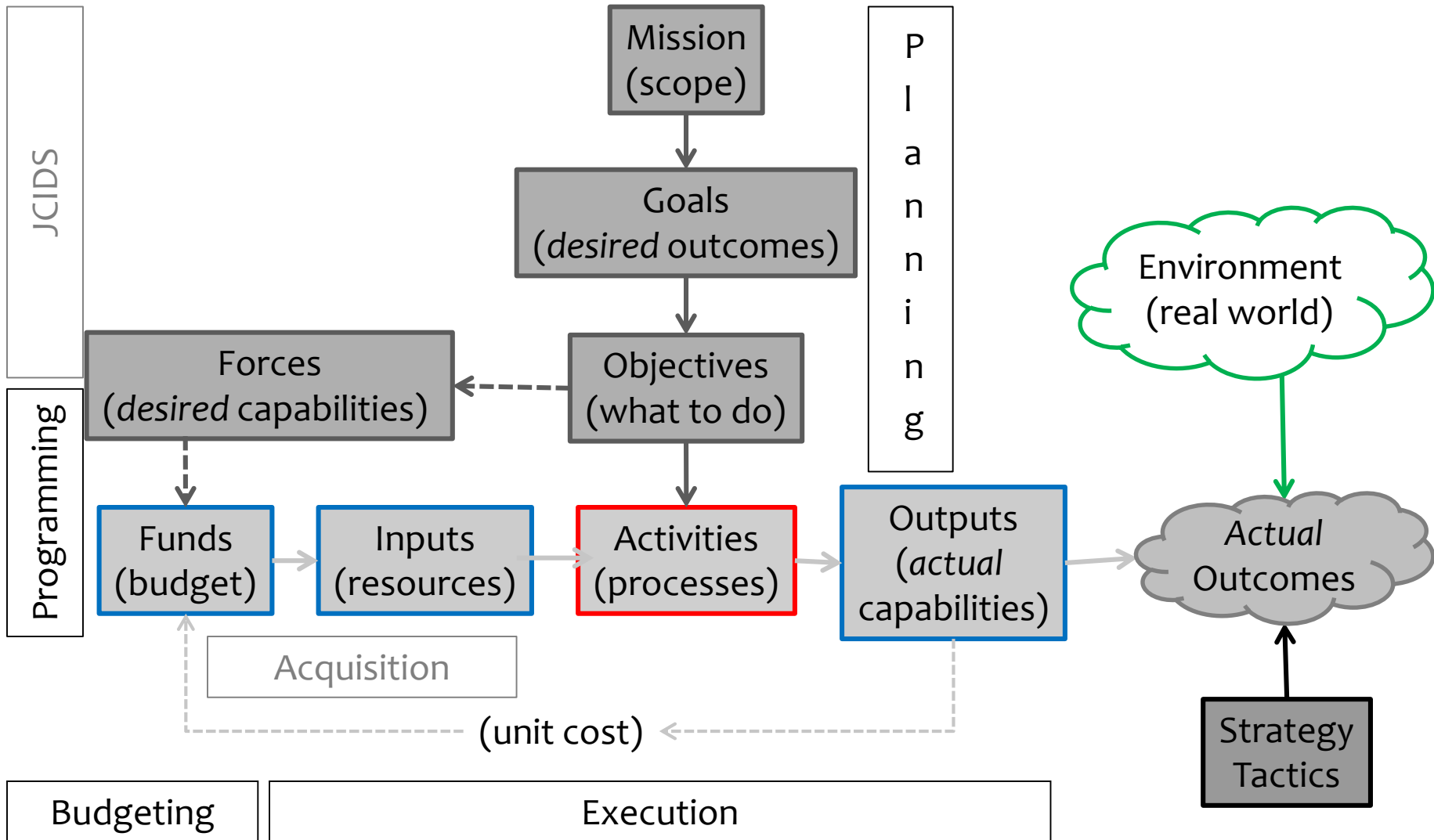
9. F

5. H

Check your Knowledge

1. What does your organization do?
2. Who are the major stakeholder(s) or customer(s)?
3. What do they care about? Give an example of an end outcome they desire.

Performance Management – Big Picture



PERFORMANCE HIERARCHIES: WHAT WILL ACHIEVE THE DESIRED OUTCOMES?



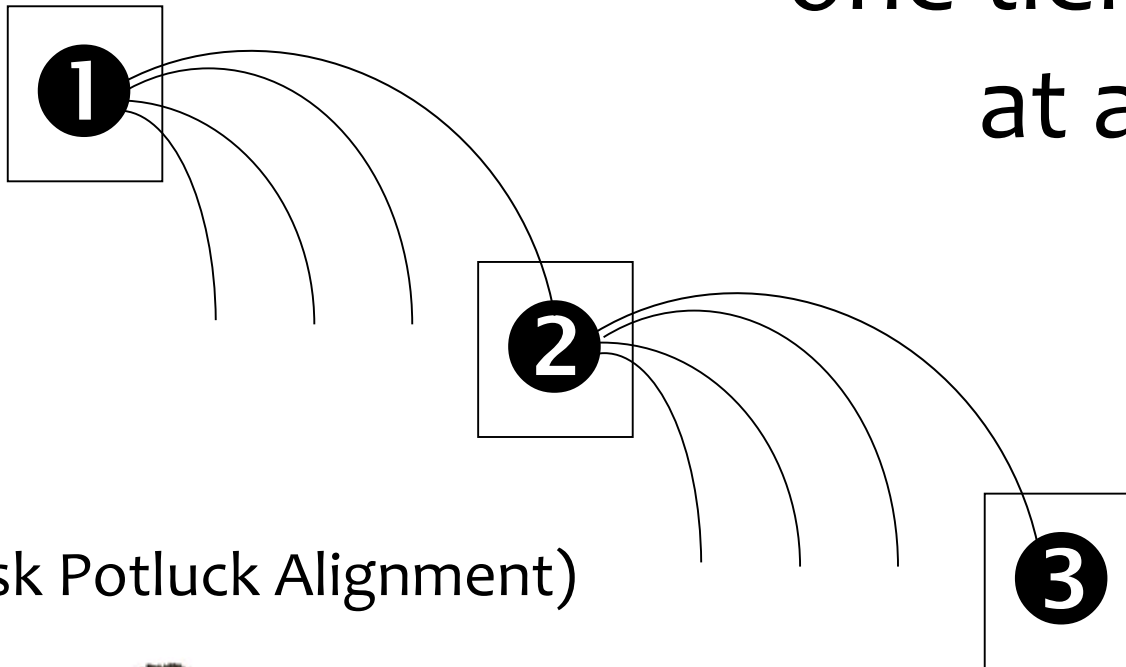
Performance Hierarchies: What will Achieve the Desired Outcomes?

- Begin with desired end outcomes: the “**what to do**” outcomes
- Follow with “**how to do**” desired outcomes – often intermediate outcomes
- Work down the hierarchy until you know what to measure.

Avoid Metric Madness!

Cascade desired outcomes

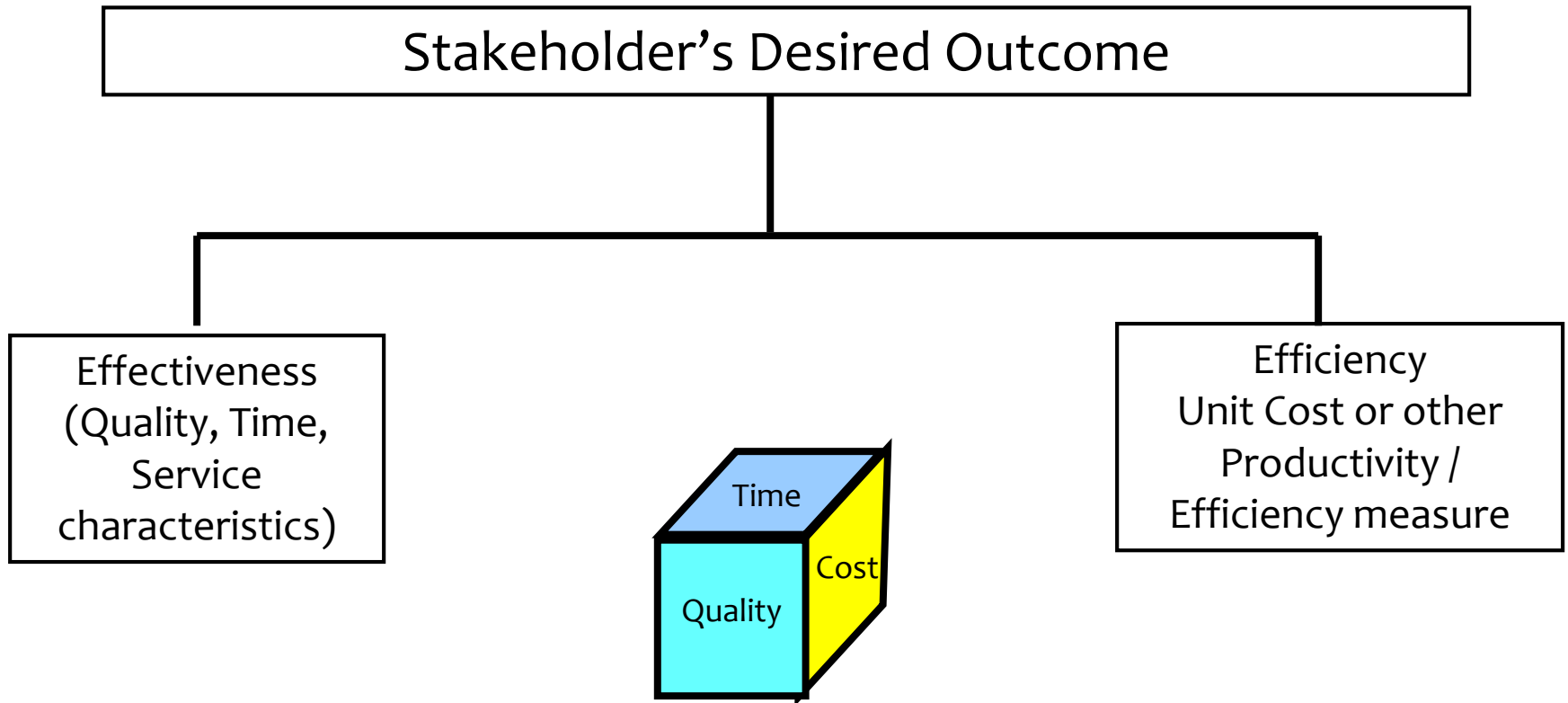
one tier
at a time



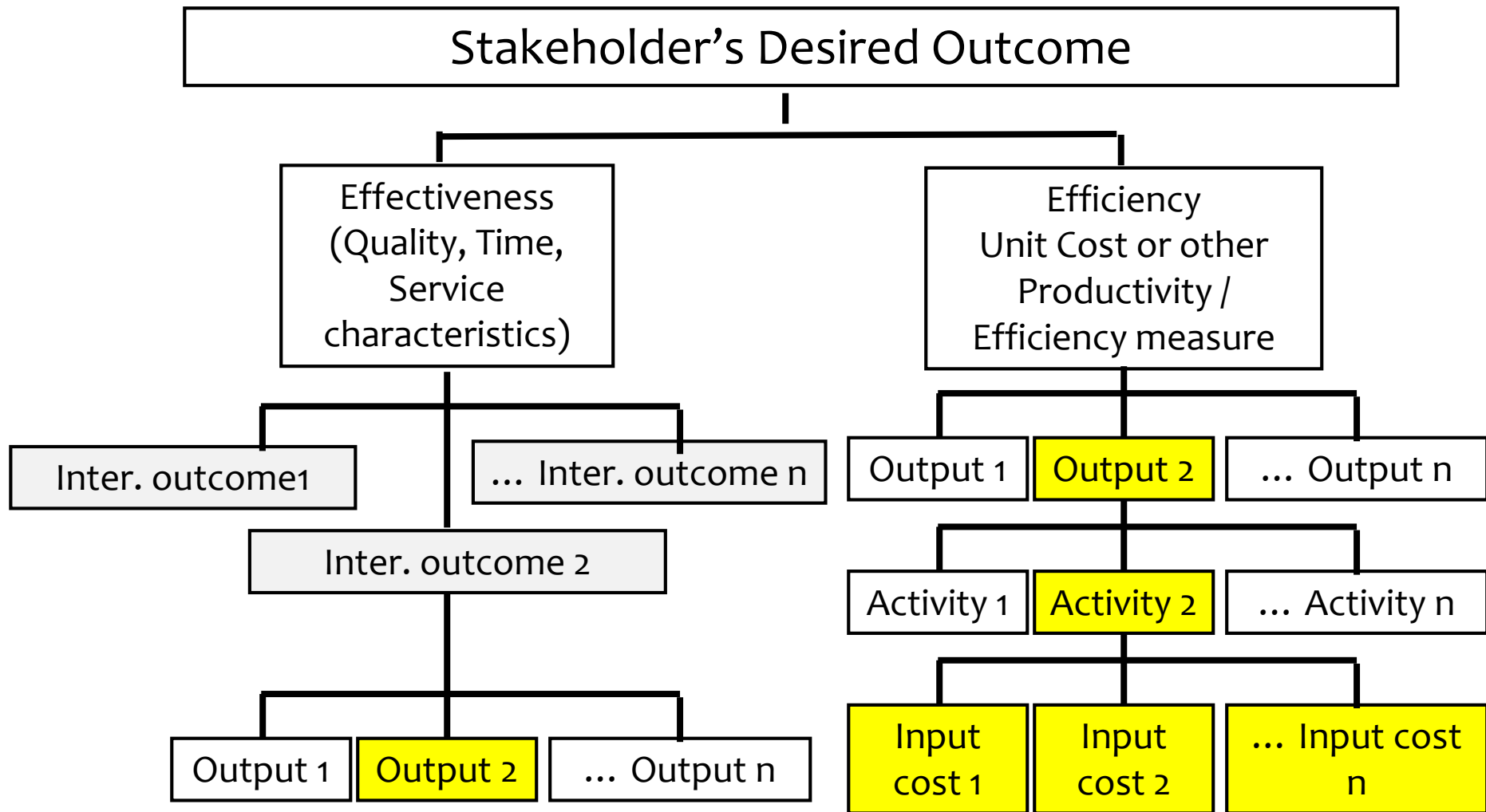
(Else, risk Potluck Alignment)



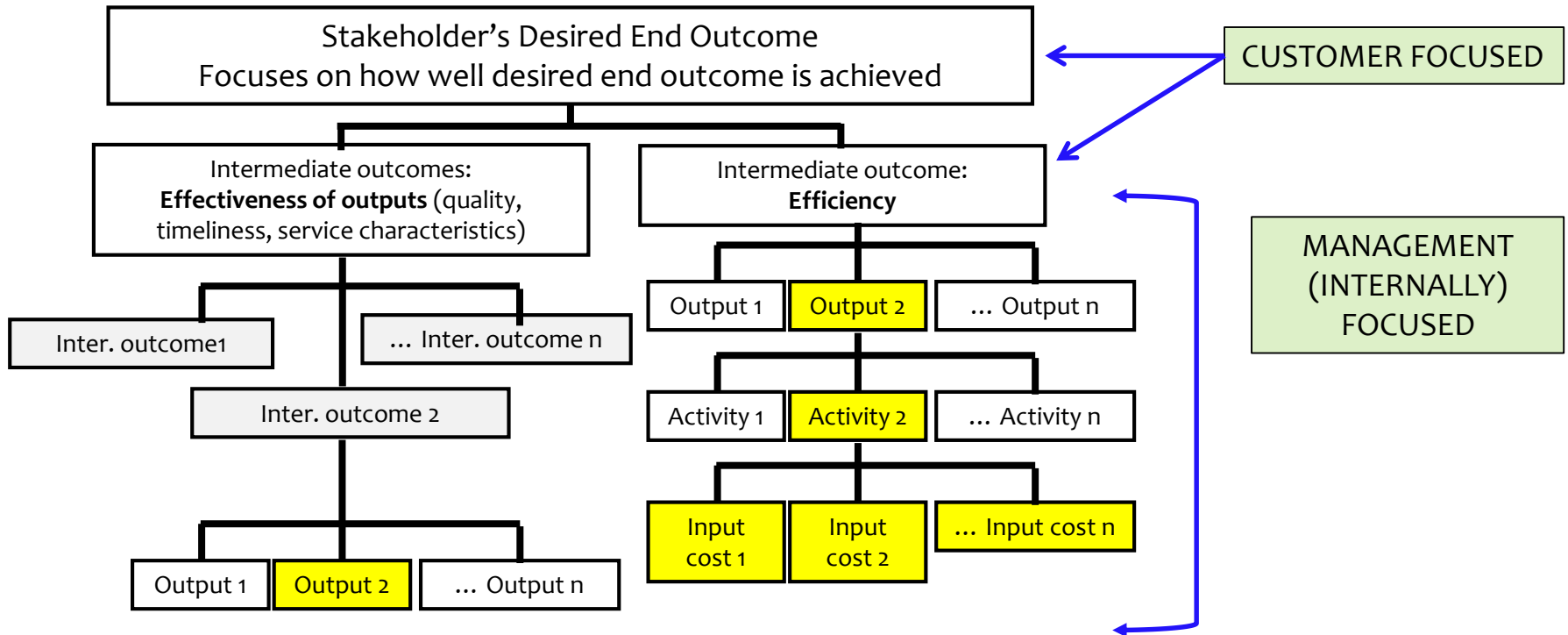
Framework: A Performance Hierarchy



Framework: A Performance Hierarchy



Framework: A Performance Hierarchy



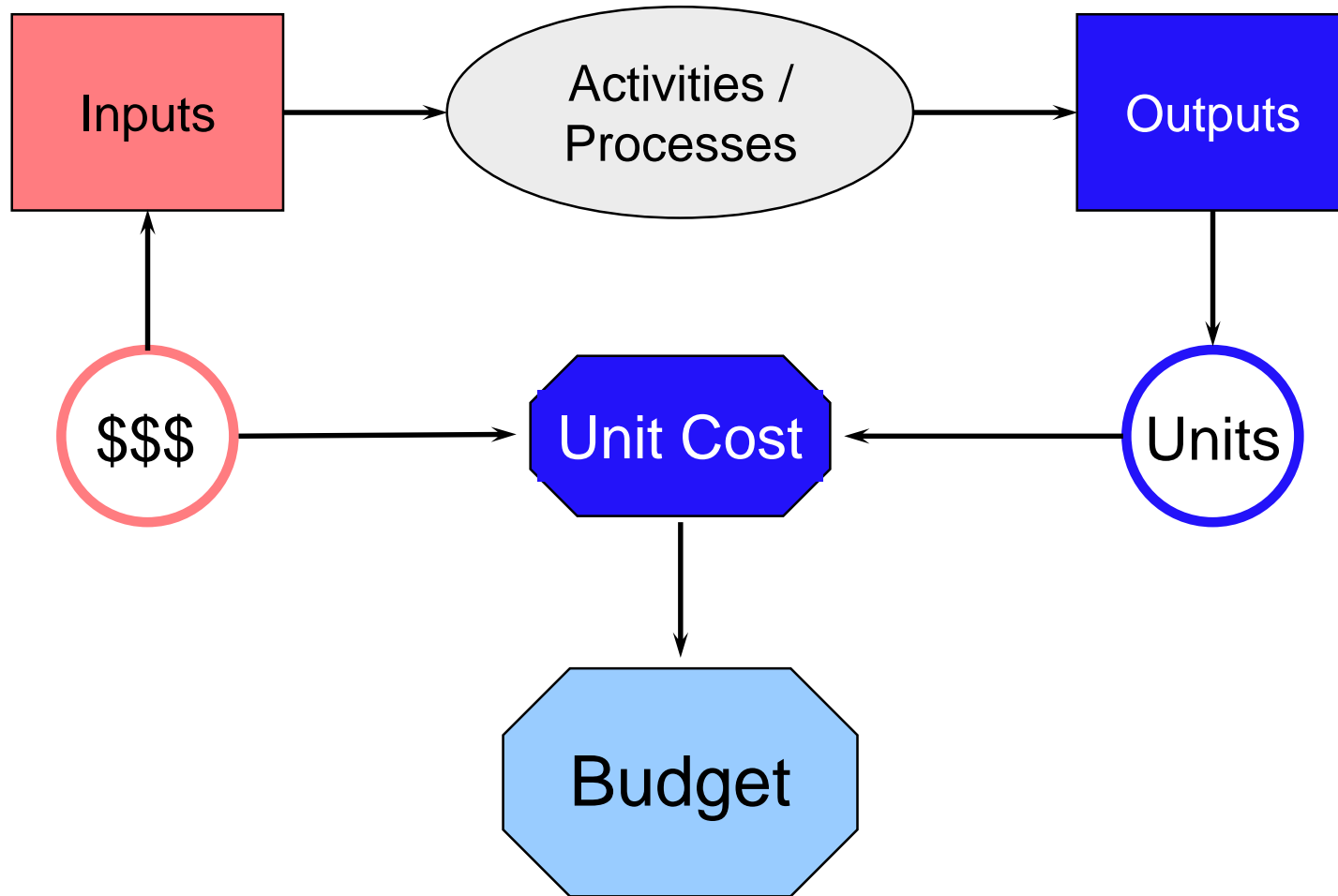
EFFICIENCY: UNIT COST



Efficiency: Unit Cost

- The relationship between the cost of inputs and the amount of outputs.
- Could be another productivity / efficiency measure (rather than unit cost)
- You must know:
 - The cost of all the inputs
 - How the outputs are produced (activities)
 - Amount and kind of outputs

Unit Cost



Spreckels Union School District Fiscal Year 2016

Revenue	Budget	Actual	Balance
LCFF Revenue	6,921,464	4,648,972	2,272,491
Federal Revenue	202,899	8,232	194,667
Other State Revenue	750,249	555,513	194,915
Local Revenue	697,628	310,749	386,878
Total Revenue	8,572,420	5,523,467	3,048,952

LCFF = Local Control Funding Formula

Spreckels Union School District Fiscal Year 2016 Budget

Expenditures	Budget	Actual	Encumbrance	Balance
Credentialed Personnel	3,298,592	2,105,270	1,212,006	72,315
Support Personnel	1,161,677	753,768	376,075	31,833
Benefits	1,644,560	1,074,245	570,938	(624)
Books and Supplies	237,108	147,103	29,266	60,737
Services/Operations	1,147,497	659,617	274,286	213,593
Capital Outlay	0	57,197	0	(57,197)
Other Outgo	429,866	233,555	0	196,310
Total Expenditures	7,919,300	5,030,757	2,371,573	516,968

Spreckels Union School District Fiscal Year 2016 Budget

	Budget	Actual	Encumbrance	Balance
Total Revenues	8,572,420	5,523,467		(3,048,952)
Total Expenditures	7,919,300	5,303,757	2,371,573	516,968
Operating Surplus	653,120	492,709	(1,878,864)	
Inter-fund Transfer	52,476	50,000		2,476
Net Surplus	600,644	422,709	(1,927,864)	
Beginning Fund Balance	2,376,246	2,376,242	2,376,242	
Net Ending Fund Balance	2,976,890	2,818,952	447,378	

Cost, Inputs, Outputs, and Outcomes

- **Total (BUDGET) expenditures = \$7,919,300**
- What are the inputs?
- What are the outputs?
- What outcomes are of interest?

Costs and Inputs

Category

- Cost (budgeted inputs)
 - \$7,919,300
- Inputs
 - 29 Teachers
 - 12 Full Time Staff
 - 5 Part-Time Staff

Measure

- The total cost of operations is equal to total revenue plus transfers from reserves
- Expenditures
 - Personnel
 - Books and Supplies
 - Services / Operations
 - Capital Outlays
 - Other

Budget Estimate I

Based on Input Unit Cost

Input Unit Cost

- Total input cost perspective
 - \$7,919,300
 - 46 full and part-time employees
- Unit cost
 - \$172,158.70 per employee

Input Budget Estimate

- Using the unit cost estimate, we can construct a budget estimate for next FY
- Assume 48 employees next year, input budget estimate is **\$8,263,618**

Problems

- The input unit cost estimate “mixes” different categories of employees
 - Instruction and support
 - Full and part-time
- The greater the level of aggregation, the less precision in the unit cost estimate
- What inputs are directly related to output?

Budget Estimate II

Based on Input Unit Cost

Input Unit Cost

- Credentialed personnel
 - \$3,298,592 (salaries)
 - 29 employees
 - **\$113,745 per employee**
- Support Staff
 - \$1,161,677 (salaries)
 - 17 staff members
 - **\$68,334 per staff member**
- Benefits
 - \$1,644,560
 - 46 employees
 - **\$35,751 per employee**
- Other costs
 - \$1,814,471 in other costs
 - **\$39,445 per employee**

Input Budget Estimate

- Assume that next year, we will have 30 credentialed personnel and 18 staff members
- What is the new budget estimate?
- $\$113,745 * 30 + \$68,344 * 18 + (\$35,751 + \$39,445) * 46 =$
\$8,101,378

Outputs

Category

- Outputs
 - Average Daily Attendance
 - 961 Students (Total)

Measure

- The number of students in attendance on average is a measure of output

Unit Cost

- Budgeted Expenditures = \$7,919,300
- Estimated students = 961
- Average Cost per Student = **\$8,240.69**



Side effects

- Performance measures include side effects, whether intended or not and whether beneficial or detrimental. If the program recognizes in advance that such side effects can occur, it should design the performance measurement process to regularly measure them.

Los Angeles' top federal prosecutor set performance goals

U.S. Atty. Thomas P. O'Brien is facing sharp criticism from prosecutors within his office who say he is pressuring them to file relatively insignificant criminal cases to **drive up statistics that make the office eligible for increased federal funding.**

- He noted “the need for increased numbers [of cases filed]”
- Cases against immigrants with felony convictions caught in the U.S. after being deported rose 380% per month.
- These cases are known for requiring little time and effort.

Spreckels Union School District Fiscal Year 2016

Revenue	Budget	Actual	Balance
LCFF Revenue	6,921,464	4,648,972	2,272,491
Federal Revenue	202,899	8,232	194,667
Other State Revenue	750,249	555,513	194,915
Local Revenue	697,628	310,749	386,878
Total Revenue	8,572,420	5,523,467	3,048,952

LCFF is largely dependent on average daily attendance:

Possible performance measure: Maintain average daily attendance of 98% of students enrolled in the district

“Bounded Targets”

- A “bounded target” has two parts:
 - What is desired, stated as a measurement
 - What cannot happen (restrictions)

a measurement
+ what's good enough
+ *what must not happen*

From performance metrics to “bounded target”

a measurement
+ what's good enough
+ *what must not happen*

Bounded Target

Maintain average daily attendance of 98% of students enrolled in the district, assuming

- Children who have a fever over 100F or other contagious illness (properly defined) stay home.
- School staff spend no more than x hours per day following up with families whose child(ren) are tardy/absent from school.
- 95% of parents report (on a survey) that they feel the reasons for their students' absences are respected by the school district.

Objective

Maximize average daily attendance.

Metric

Average daily attendance

“Bounded Targets” assure vertical AND horizontal alignment

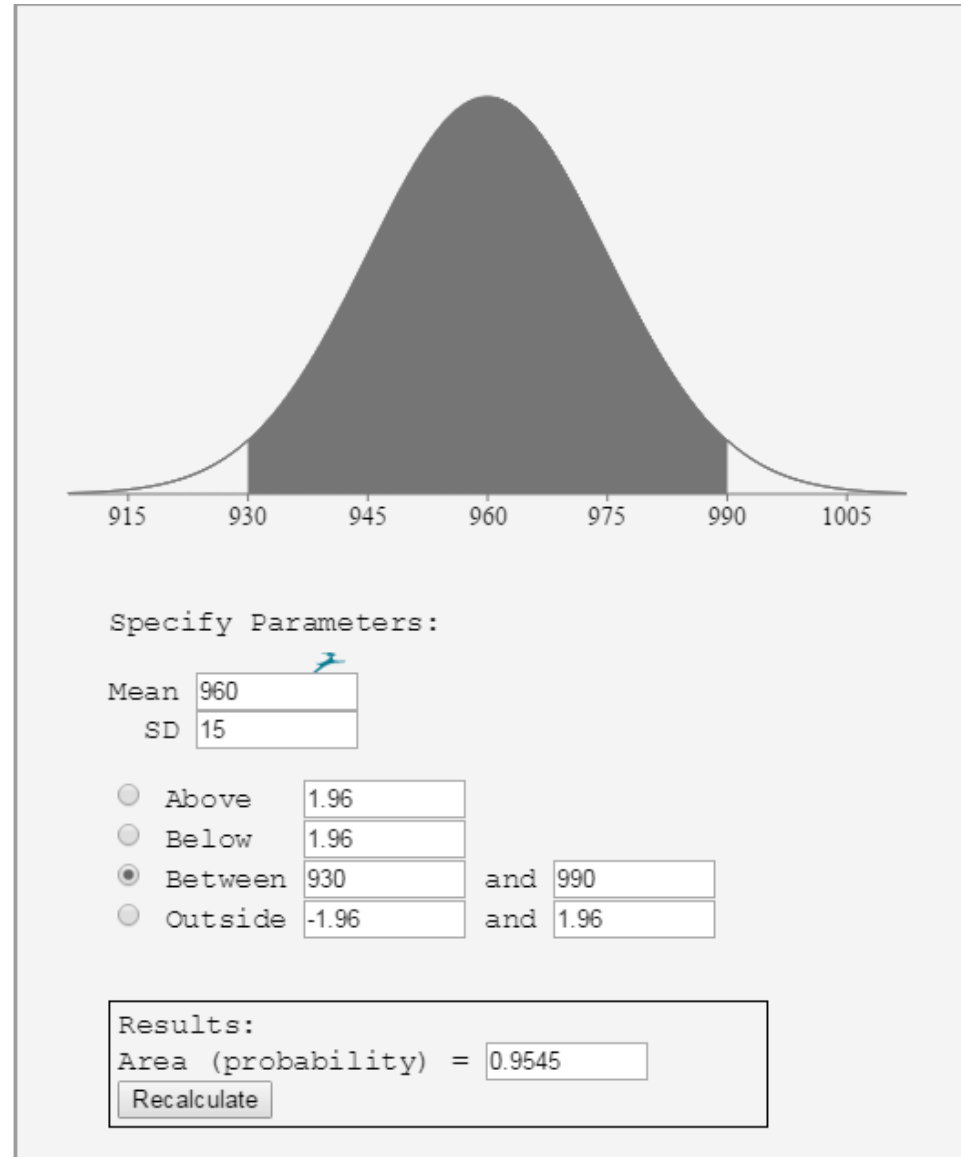
- They avoid situations where clear goals and motivation for one individual or organization have unintended negative consequences for others.

Output Budget: What about Next Year?

- Average Cost per Student = \$8,240.69
- Assume 2% Cost Growth and 970 students
- Budget estimate = $970 * (1.02 * 8240.69)$
- Budget estimate = **\$8,153,336**

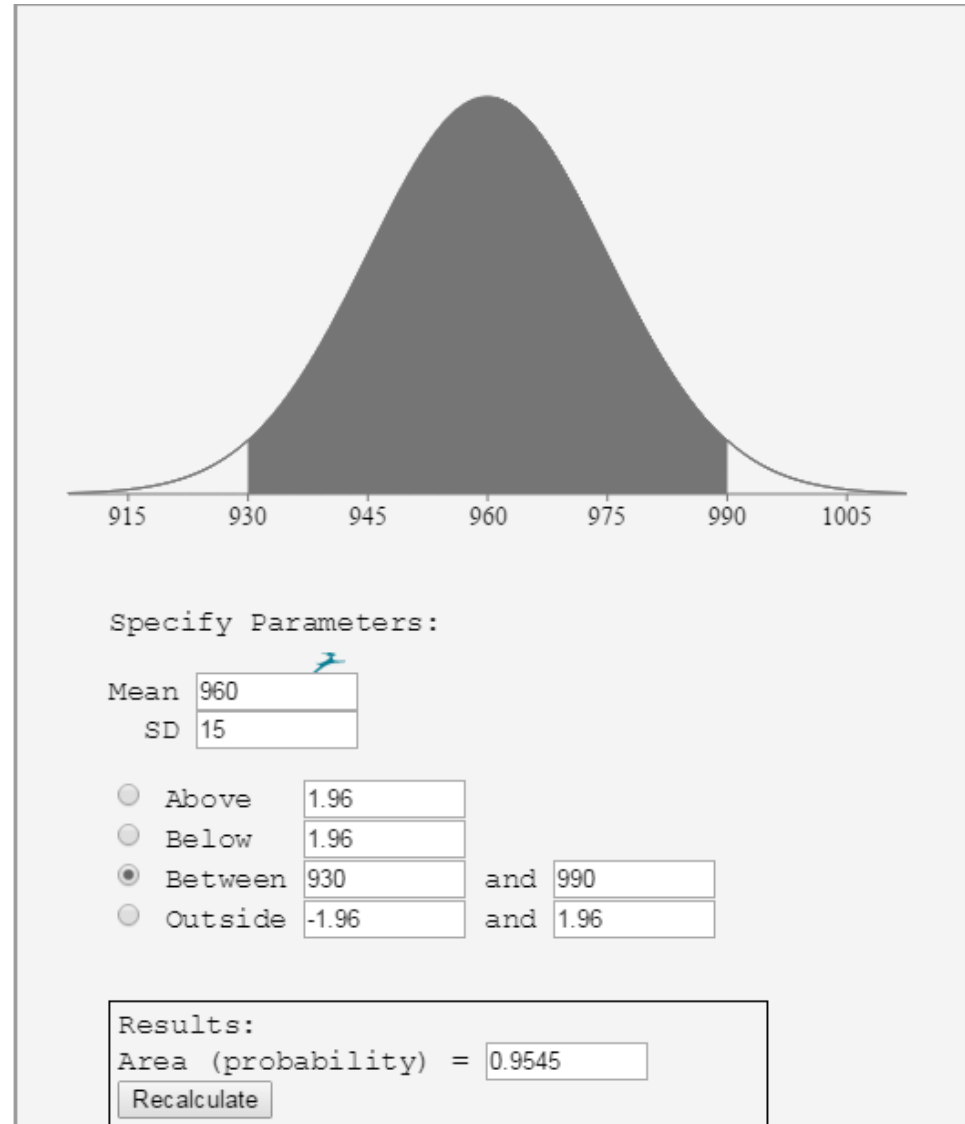
What about next year?

- Let's assume that the number of students is distributed normally
- The mean number of students is 960
- The standard deviation is 15
- How can this information help you construct a budget estimate?



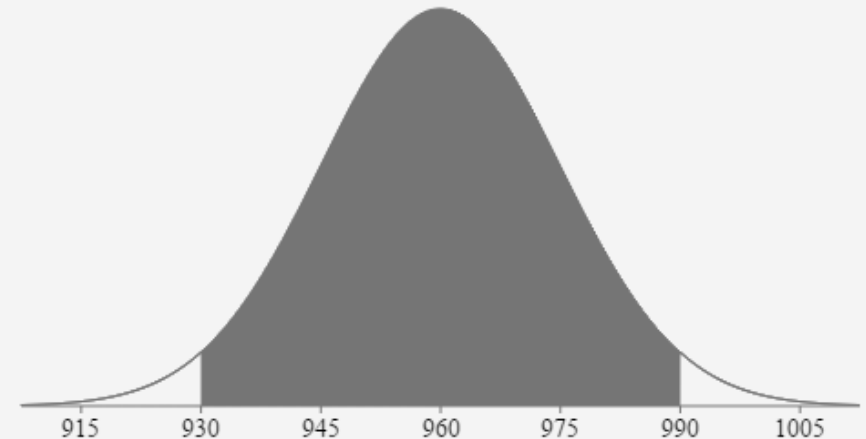
What about next year?

- What is your risk tolerance?
- What could go wrong?
 - Not having sufficient funds for instruction and services
- How likely is it?
 - 960 = 50%
 - 990 = 2.5%
 - 1005 = 0.5%
- What are the consequences?
 - Insufficient funding could lead to reductions in staff, crowded classrooms, etc.
- How would you “feel?”
 - Insufficient funding would lead to angry parents (and taxpayers)
 - You would prefer to avoid having insufficient funds



What about next year?

- Assume you are very risk averse. If you assume 990, you accept a 2.5% chance of having an insufficient budget.
- Estimate = $990 * (1.02 * 8240.69)$
= \$8,311,351
- By increasing the budget estimate, you manage the risk of being wrong about enrollment but increase the risk of being wrong and having too large a budget



Specify Parameters:

Mean
SD

- Above
 Below
 Between and
 Outside and

Results:

Area (probability) =

Wait a Minute...

- Are all the outputs the same?
- If not, what differentiates the outputs?
 - Age
 - Mode of instruction
 - Intensity of instruction
- As output heterogeneity increases, the precision of a single measure of unit cost decreases

What Are the Main Activities that Generate the Outputs?

- General Instruction
- Special Education
- Administrative Services and Other Operations
- Management

Crosswalking Unit Cost

Activities	Instruction	Special Ed Svcs.	Admin Svcs & Ops	Management	
Expenses					
Certificated Personnel					\$3,298,592
Classified Personnel					\$1,161,677
Benefits					\$1,644,560
Books and Supplies					\$237,108
Services/Operations					\$1,147,497
Capital Outlay					\$0
Other Outgo					\$429,866
Total Expenditures					\$7,919,300
Unit Cost (per student) 961 students					\$8240.69

What is the relationship among activities and inputs?

Crosswalking Unit Cost

Activities	Instruction	Special Ed Svcs.	Admin Svcs & Ops	Management	
Expenses					
Certificated Personnel	\$2,758,968	\$263,887	\$0	\$275,737	\$3,298,592
Classified Personnel	\$811,898	\$152,294	\$0	\$197,485	\$1,161,677
Benefits	\$1,316,625	\$153,451	\$0	\$174,483	\$1,644,560
Books and Supplies	\$217,433	\$18,475	\$0	\$1,200	\$237,108
Services/Operations	\$13,530	\$91,800	\$1,028,075	\$14,092	\$1,147,497
Capital Outlay	\$0	\$0	\$0	\$0	\$0
Other Outgo	\$257,920	\$34,389	\$64,480	\$73,077	\$429,866
Total Expenditures	\$5,376,374	\$714,297	\$1,092,555	\$736,074	\$7,919,300
Unit Cost (per student) 961 students					\$8240.69

Crosswalking Unit Cost

Activities	Instruction	Special Ed Svcs.	Admin Svcs & Ops	Management	
Expenses					
Certificated Personnel	\$2,758,968	\$263,887	\$0	\$275,737	\$3,298,592
Classified Personnel	\$811,898	\$152,294	\$0	\$197,485	\$1,161,677
Benefits	\$1,316,625	\$153,451	\$0	\$174,483	\$1,644,560
Books and Supplies	\$217,433	\$18,475	\$0	\$1,200	\$237,108
Services/Operations	\$13,530	\$91,800	\$1,028,075	\$14,092	\$1,147,497
Capital Outlay	\$0	\$0	\$0	\$0	\$0
Other Outgo	\$257,920	\$34,389	\$64,480	\$73,077	\$429,866
Total Expenditures	\$5,376,374	\$714,297	\$1,092,555	\$736,074	\$7,919,300
Unit Cost (per student) 961 students	\$5,594.56	\$743.28	\$1,136.89	\$765.95	\$8240.69

Crosswalking Unit Cost

Activities	Instruction	Special Ed Svcs.	Admin Svcs & Ops	Management	
Expenses					
Certificated Personnel	\$2,758,968	\$263,887	\$0	\$275,737	\$3,298,592
Classified Personnel	\$811,898	\$152,294	\$0	\$197,485	\$1,161,677
Benefits	\$1,316,625	\$153,451	\$0	\$174,483	\$1,644,560
Books and Supplies	\$217,433	\$18,475	\$0	\$1,200	\$237,108
Services/Operations	\$13,530	\$91,800	\$1,028,075	\$14,092	\$1,147,497
Capital Outlay	\$0	\$0	\$0	\$0	\$0
Other Outgo	\$257,920	\$34,389	\$64,480	\$73,077	\$429,866
Total Expenditures	\$5,376,374	\$714,297	\$1,092,555	\$736,074	\$7,919,300
Unit Cost (per student) 961 students	\$5,594.56	\$743.28	\$1,136.89	\$765.95	\$8240.69
	67.9%	9.0%	13.8%	9.3%	

What if Management is a principal paid at \$275,737 and two assistants paid \$98,742 plus office expenses of \$73,077? 60

Crosswalking Unit Cost

Activities	Instruction	Special Ed Svcs.	Admin Svcs & Ops	Management	
Expenses					
Certificated Personnel	\$2,758,968	\$263,887	\$0	\$275,737	\$3,298,592
Classified Personnel	\$811,898	\$152,294	\$0	\$197,485	\$1,161,677
Benefits	\$1,316,625	\$153,451	\$0	\$174,483	\$1,644,560
Books and Supplies	\$217,433	\$18,475	\$0	\$1,200	\$237,108
Services/Operations	\$13,530	\$91,800	\$1,028,075	\$14,092	\$1,147,497
Capital Outlay	\$0	\$0	\$0	\$0	\$0
Other Outgo	\$257,920	\$34,389	\$64,480	\$73,077	\$429,866
Total Expenditures	\$5,376,374	\$714,297	\$1,092,555	\$736,074	\$7,919,300
Unit Cost (per student) 961 students	\$5,594.56	\$743.28	\$1,136.89	\$765.95	\$8240.69

What if Services / Operations are dominated by contracts with the County for extra special education assistance?

Crosswalking Unit Cost

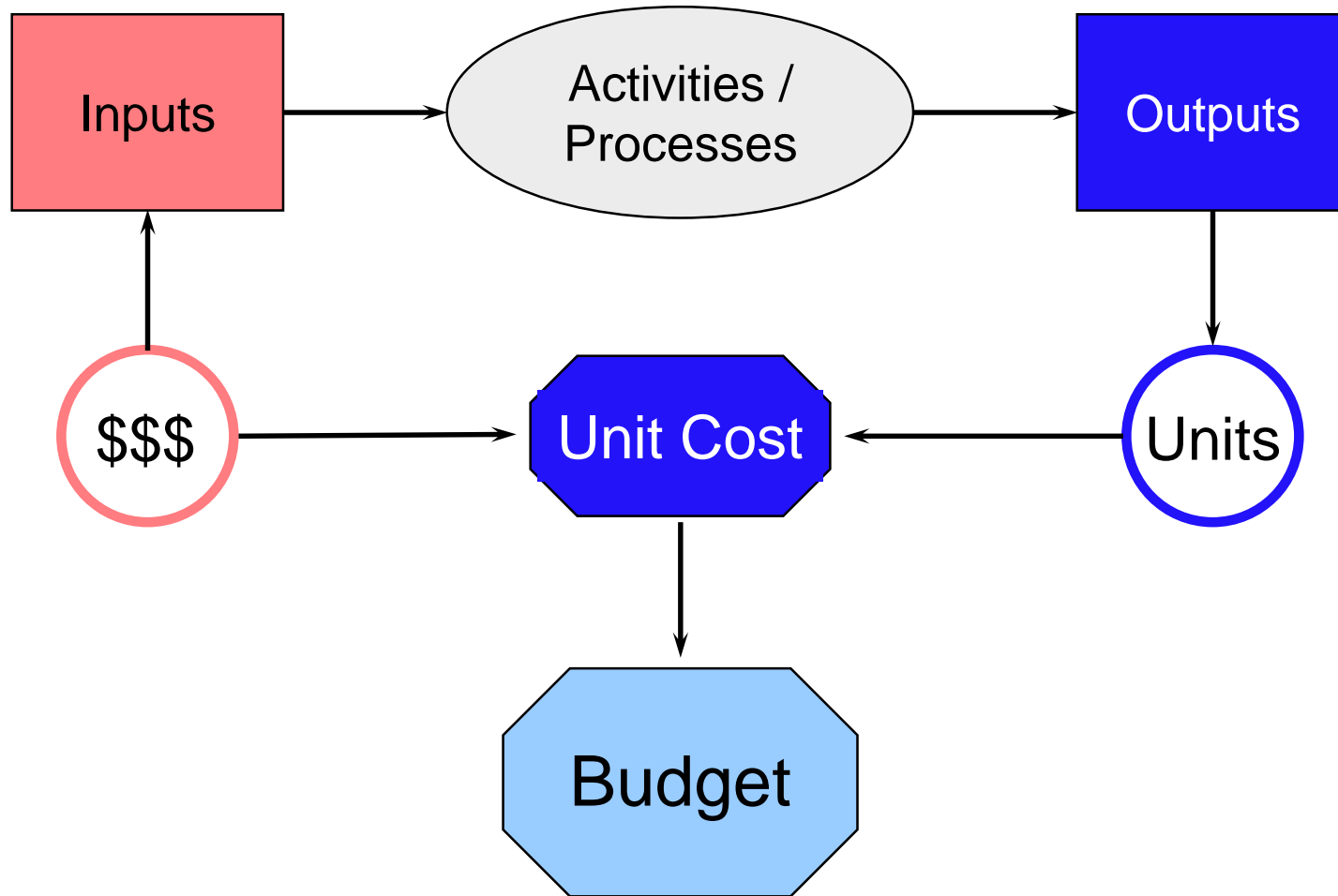
Activities	Instruction	Special Ed Svcs.	Admin Svcs & Ops	Management	
Expenses					
Certificated Personnel	\$2,758,968	\$263,887	\$0	\$275,737	\$3,298,592
Classified Personnel	\$811,898	\$152,294	\$0	\$197,485	\$1,161,677
Benefits	\$1,316,625	\$153,451	\$0	\$174,483	\$1,644,560
Books and Supplies					
Services/Operations					
Capital Outlay					
Other Outgo					
New Computers					1,000,000
Total Expenditures					\$7,919,300
Unit Cost (per student) 961 students					\$8240.69

What if the District purchased \$1m in new computers with saved funds at the end of the school (fiscal) year? Are they part of the output??

Crosswalking Unit Cost

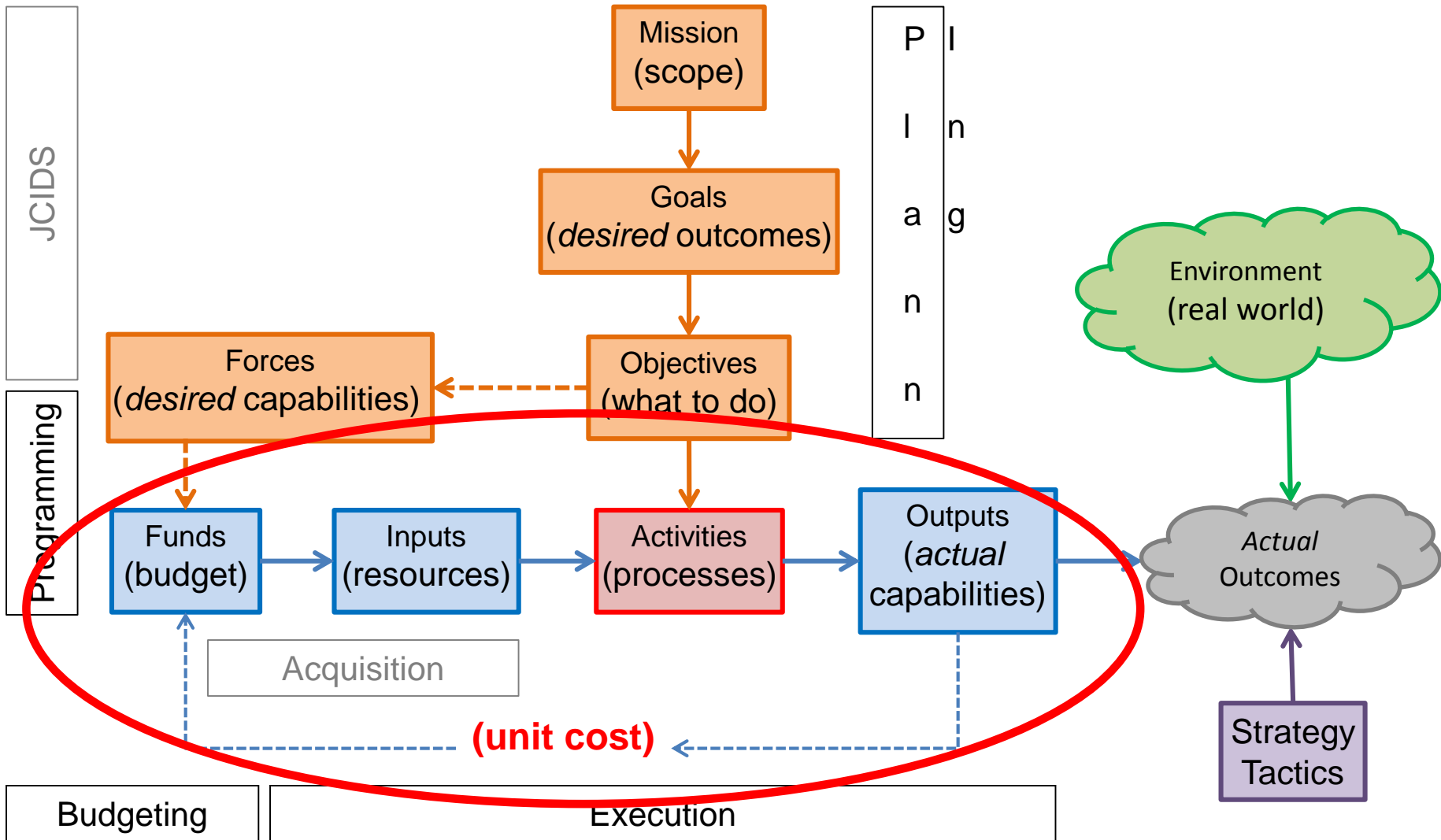
Activities	Instruction	Special Ed Svcs.	Admin Svcs & Maint	Management	
Expenses					
Certificated Personnel	\$2,758,968	\$263,887	\$0	\$275,737	\$3,298,592
Classified Personnel	\$811,898	\$152,294	\$0	\$197,485	\$1,161,677
Benefits					\$1,644,560
Books and Supplies					\$237,108
Services/Operations					\$1,147,497
Capital Outlay					\$0
Other Outgo					\$429,866
Total Expenditures	\$5,376,374	\$714,297	\$1,092,555	\$736,074	\$7,919,300

Unit Cost



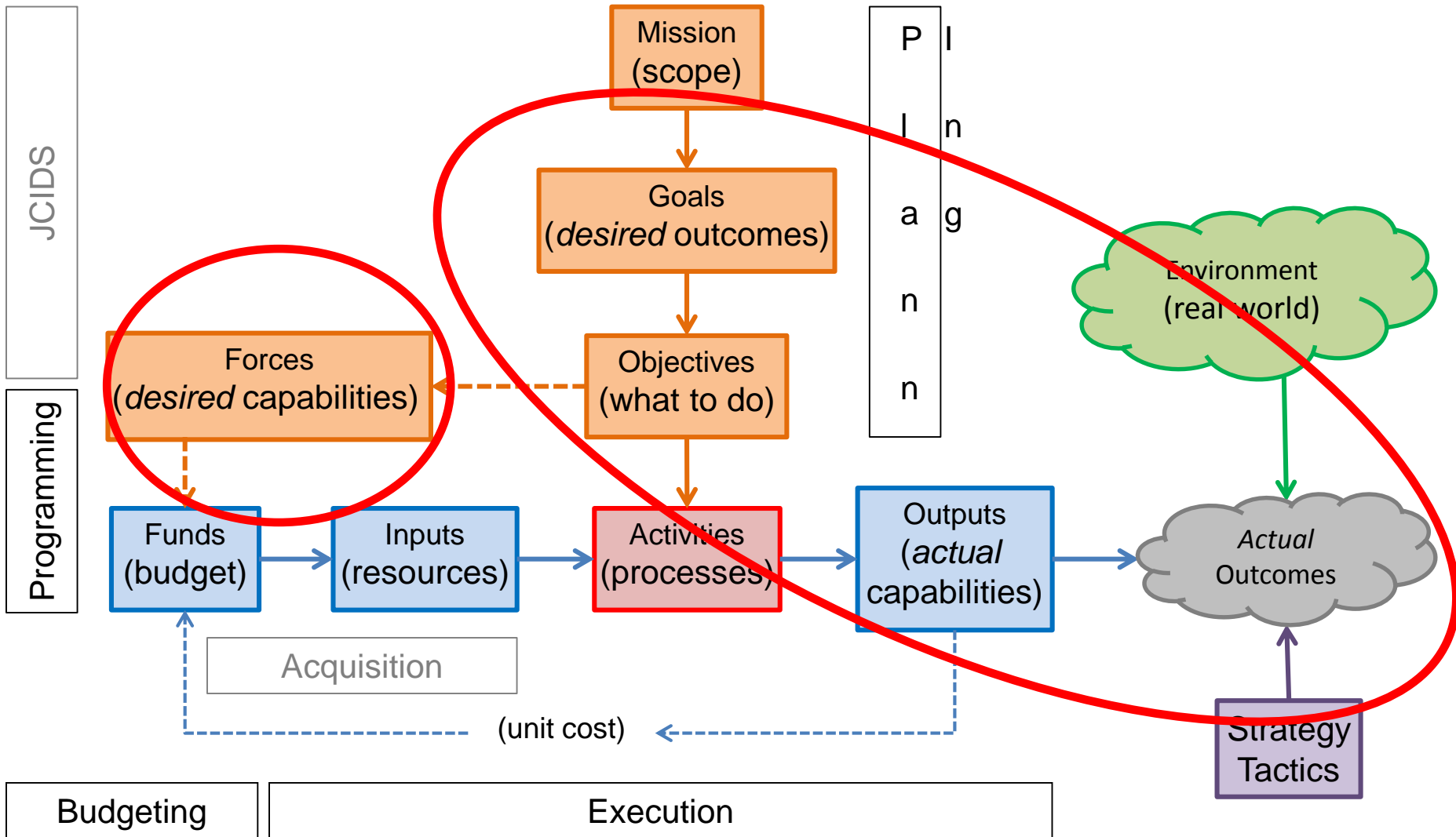
Check your Knowledge

4. What outputs (services, products) do you produce?
5. What are some of the inputs are used to produce the outputs?
6. How would you measure the unit cost of one of your outputs?
7. What side effects could arise from this measure? How might you mitigate them?



How do you connect it all?

- Now that you have unit cost and a budget estimate, how will you measure performance?
 - Number of graduates or percentage graduating?
 - Test scores?
 - Survey measures?
 - All of the above?

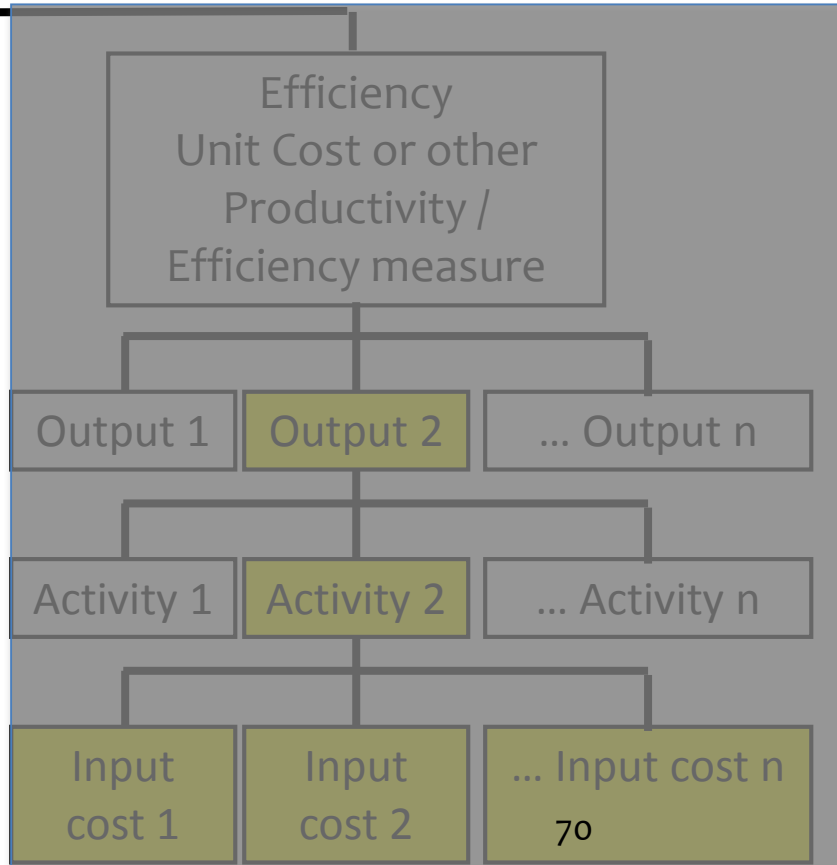
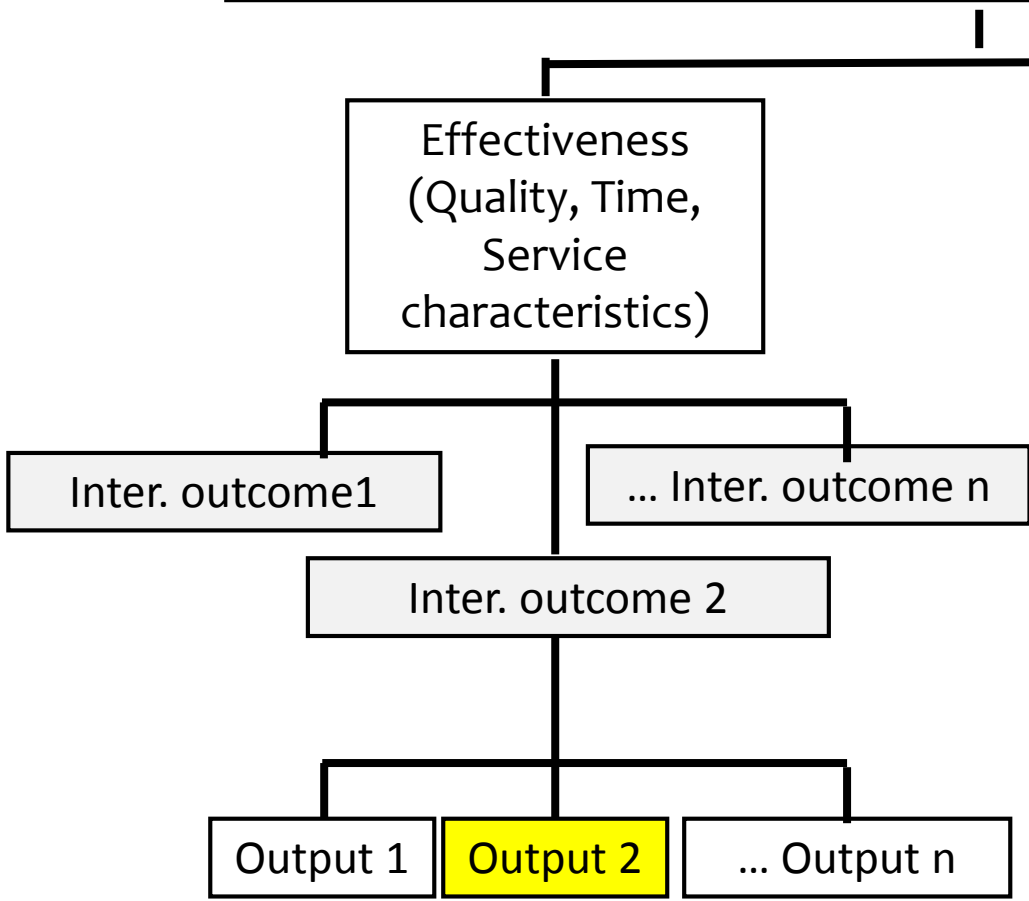


EFFECTIVENESS: MEASURES OF “PERFORMANCE”



Framework: A Performance Hierarchy

Stakeholder's Desired Outcome



Outputs and Outcomes

Category

- Outputs
 - Average Daily Attendance
 - 961 Students (Total)
- Outcomes
 - Are there natural measures?
 - Can we use proxy measures?

Measure

- The number of students in attendance on average is a measure of output
- Outcomes
 - Student performance (testing)
 - Parent satisfaction (surveys)
 - Number of graduates or percentage graduating?

Outcome Measures

▼ All Students

The "Percent of Enrolled Students Tested" showing on this Web site is not the same as "participation rate" for federal accountability purposes.


Overall Achievement

	3rd Grade	4th Grade	5th Grade	6th Grade	7th Grade	8th Grade	11th Grade	All
Number of Students Enrolled	90	108	111	N/A	N/A	N/A	N/A	309
Number of Students Tested	88	105	106	N/A	N/A	N/A	N/A	299
Percent of Enrolled Students Tested	97.8 %	97.2 %	95.5 %	N/A	N/A	N/A	N/A	96.8 %
Number of Students With Scores	88	103	106	N/A	N/A	N/A	N/A	297
Mean Scale Score	2436.3	2477.8	2511.1	N/A	N/A	N/A	N/A	N/A
■ Standard Exceeded	22 %	30 %	22 %	N/A	N/A	N/A	N/A	25 %
■ Standard Met	32 %	18 %	33 %	N/A	N/A	N/A	N/A	27 %
■ Standard Nearly Met	32 %	29 %	24 %	N/A	N/A	N/A	N/A	28 %
■ Standard Not Met	15 %	23 %	22 %	N/A	N/A	N/A	N/A	20 %


[English Language Arts/Literacy Scale Score Ranges](#)

Areas


Reading: Demonstrating understanding of literary and non-fictional texts

	3rd Grade	4th Grade	5th Grade	6th Grade	7th Grade	8th Grade	11th Grade	All
 Above Standard	23 %	25 %	19 %	N/A	N/A	N/A	N/A	22 %
At or Near Standard	56 %	45 %	50 %	N/A	N/A	N/A	N/A	50 %
Below Standard	22 %	30 %	31 %	N/A	N/A	N/A	N/A	28 %


Writing: Producing clear and purposeful writing

	3rd Grade	4th Grade	5th Grade	6th Grade	7th Grade	8th Grade	11th Grade	All
 Above Standard	20 %	28 %	33 %	N/A	N/A	N/A	N/A	28 %
At or Near Standard	58 %	50 %	47 %	N/A	N/A	N/A	N/A	51 %
Below Standard	22 %	22 %	20 %	N/A	N/A	N/A	N/A	21 %

Listening: Demonstrating effective communication skills

	3rd Grade	4th Grade	5th Grade	6th Grade	7th Grade	8th Grade	11th Grade	All
 Above Standard	20 %	21 %	11 %	N/A	N/A	N/A	N/A	18 %
At or Near Standard	72 %	64 %	75 %	N/A	N/A	N/A	N/A	70 %
Below Standard	8 %	15 %	13 %	N/A	N/A	N/A	N/A	12 %

Research/Inquiry: Investigating, analyzing, and presenting information

	3rd Grade	4th Grade	5th Grade	6th Grade	7th Grade	8th Grade	11th Grade	All
 Above Standard	19 %	15 %	32 %	N/A	N/A	N/A	N/A	22 %
At or Near Standard	63 %	50 %	55 %	N/A	N/A	N/A	N/A	55 %
Below Standard	18 %	17 %	13 %	N/A	N/A	N/A	N/A	16 %

Example: Effectiveness for U.S. Navy Surface Warfare

(responsible for preparing ships for missions)

Navy Desired Outcome: win wars, deter aggression and maintain freedom of the seas

Intermediate outcomes:
SWE Desired Outcome: Provide combat-ready ships

Intermediate outcome:
Be efficient: Keep unit costs of processes and outputs as low as possible

Personnel

Equip.
(Maintenance)

Supplies

Training
(crew)

Ordnance

Intermediate outcomes:
Readiness measures

Maintenance Effectiveness

STATUS	UNIT	Overall Effectiveness		Mission Area 1	Mission Area 2	Mission Area 3	:	:	:
--------	------	-----------------------	--	----------------	----------------	----------------	---	---	---

DEPLOYED	1	89.4		98	95	61	96	96	88
	2	91.8		98	98	90	91	96	78
	3	94		95	96	94	92	96	89
	4	72.3		94	88	23	84	94	87
	5	74.2		68	55	72	89	91	89

Ship Readiness by Mission

STATUS	UNIT	Overall Readiness	Mission 1	Mission 2	Mission 3
DEPLOYED	1	Blue	Green	Green	Red	Green	Green	Green
	2	Green	Green	Green	Green	Green	Green	Green
	3	Green	Green	Green	Green	Green	Green	Green
	4	Yellow	Green	Blue	Red	Blue	Green	Green
	5	Yellow	Red	Red	Yellow	Blue	Green	Green

Example: Performance Hierarchy and Measures for a DoD Schoolhouse

- Mandate: To conduct courses that enhance the understanding, competence, and capabilities of DoD personnel

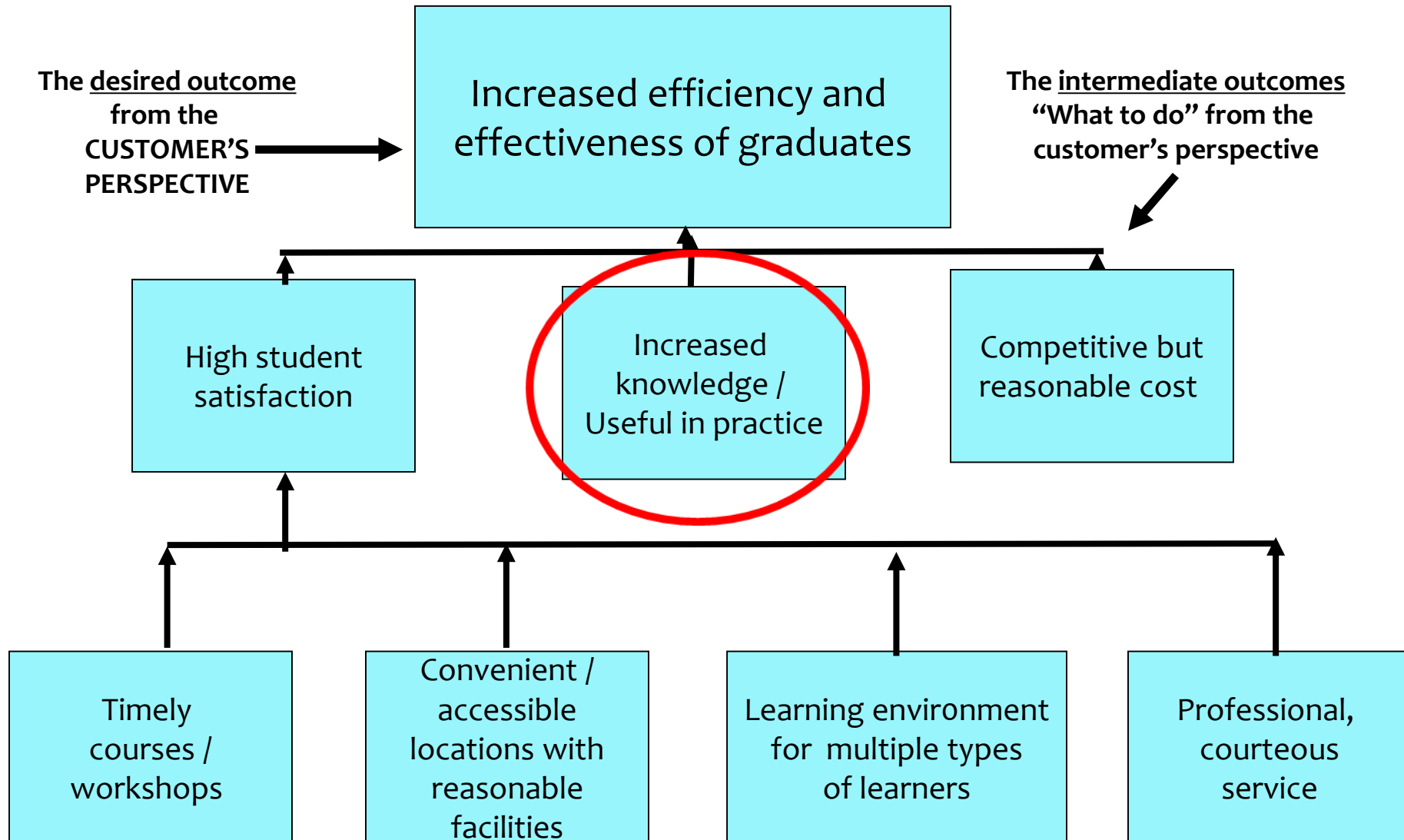
Schoolhouse Desired End Outcomes

- “Enhance the understanding, competence, and capabilities of DoD personnel”
- **Increased efficiency and effectiveness of DoD personnel who completed the course**

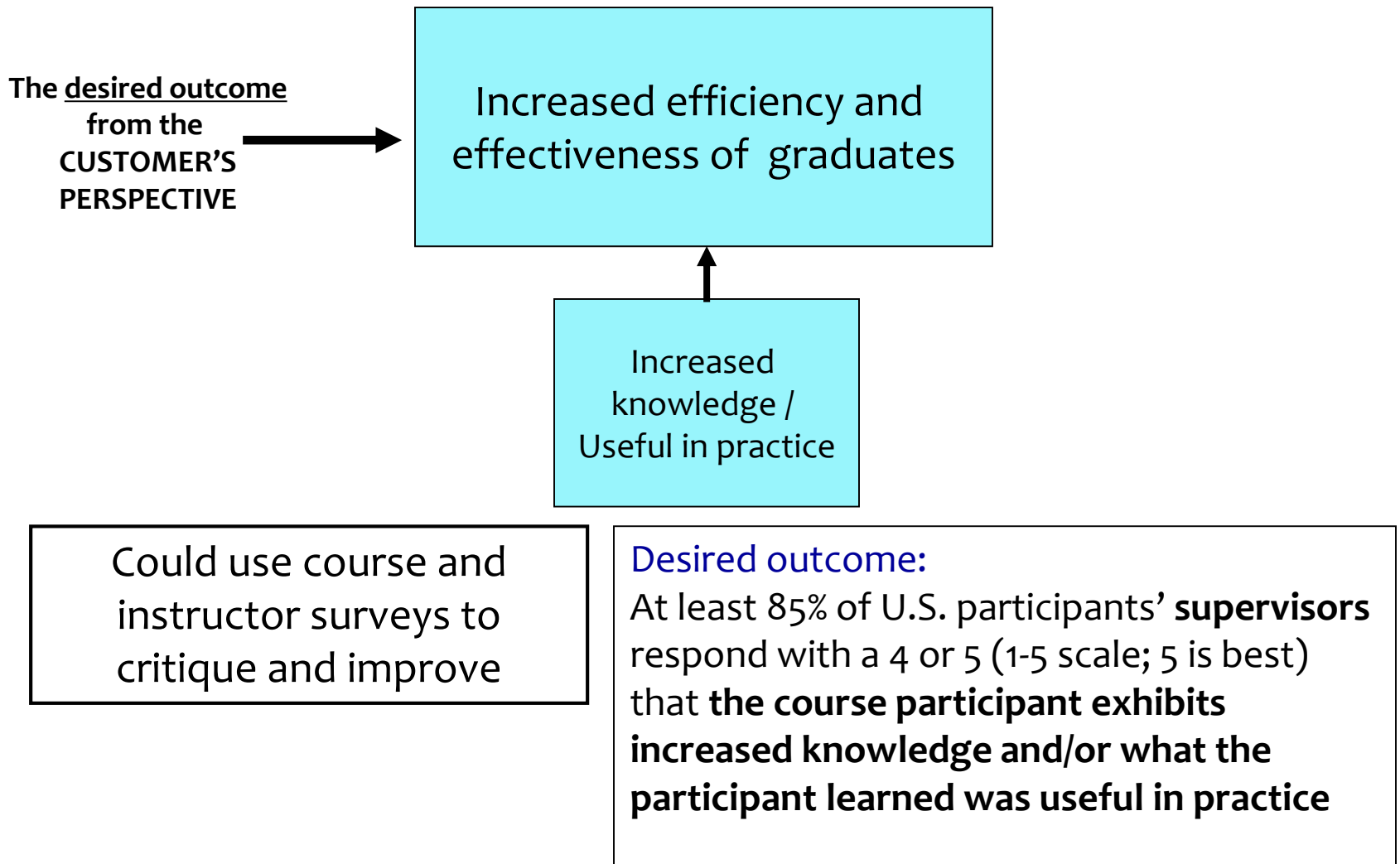
Schoolhouse Intermediate Outcomes

- Service quality characteristics—based on characteristics important to the customers:
 - Increased knowledge / useful in practice
 - High student satisfaction with experience
 - Timely courses and workshops
 - Convenient/accessible locations with reasonable facilities
 - Learning environment for multiple types of learners
 - Professional, courteous service
 - Competitive but reasonable cost

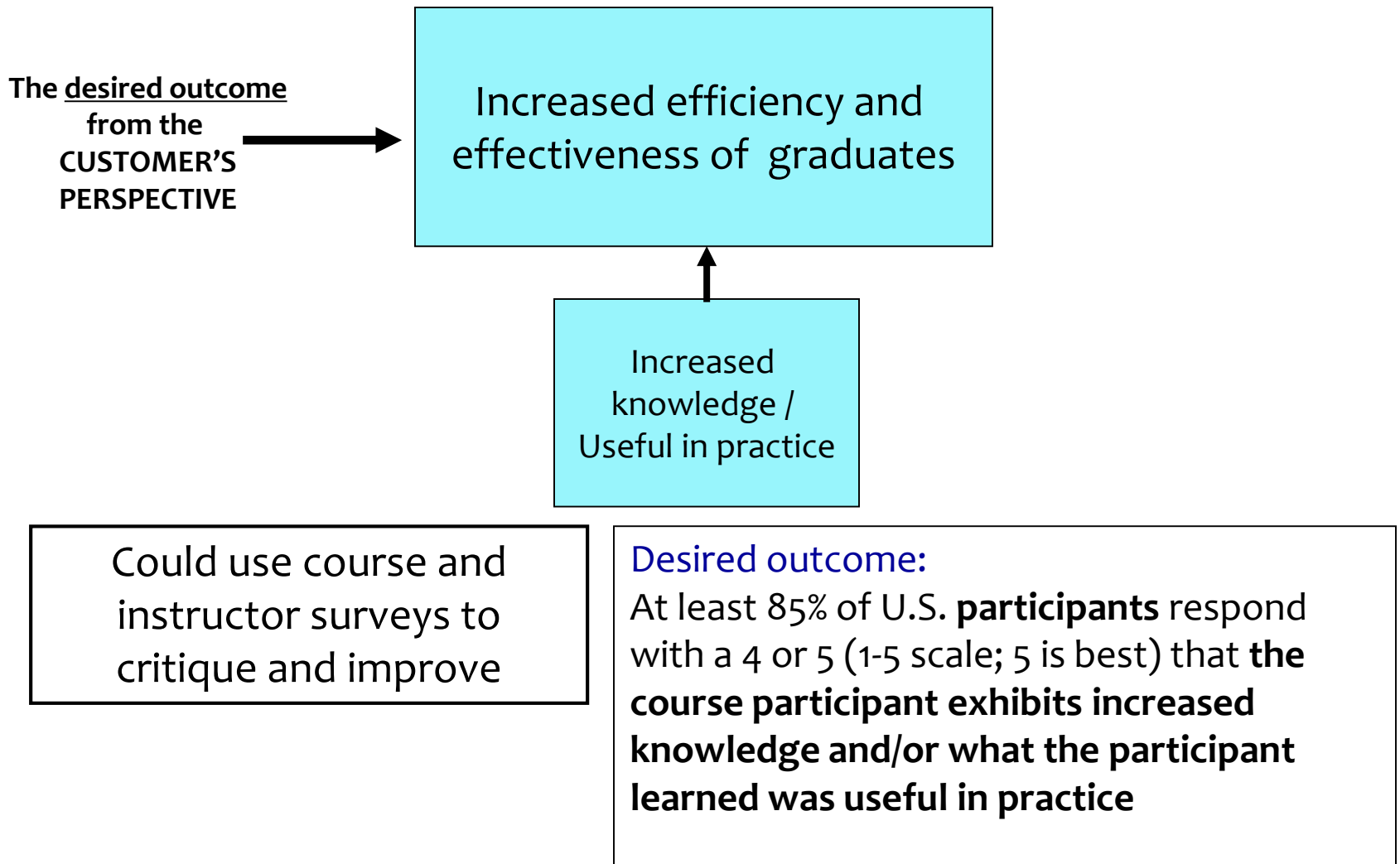
Creating a Performance Hierarchy: What will achieve the desired outcomes?



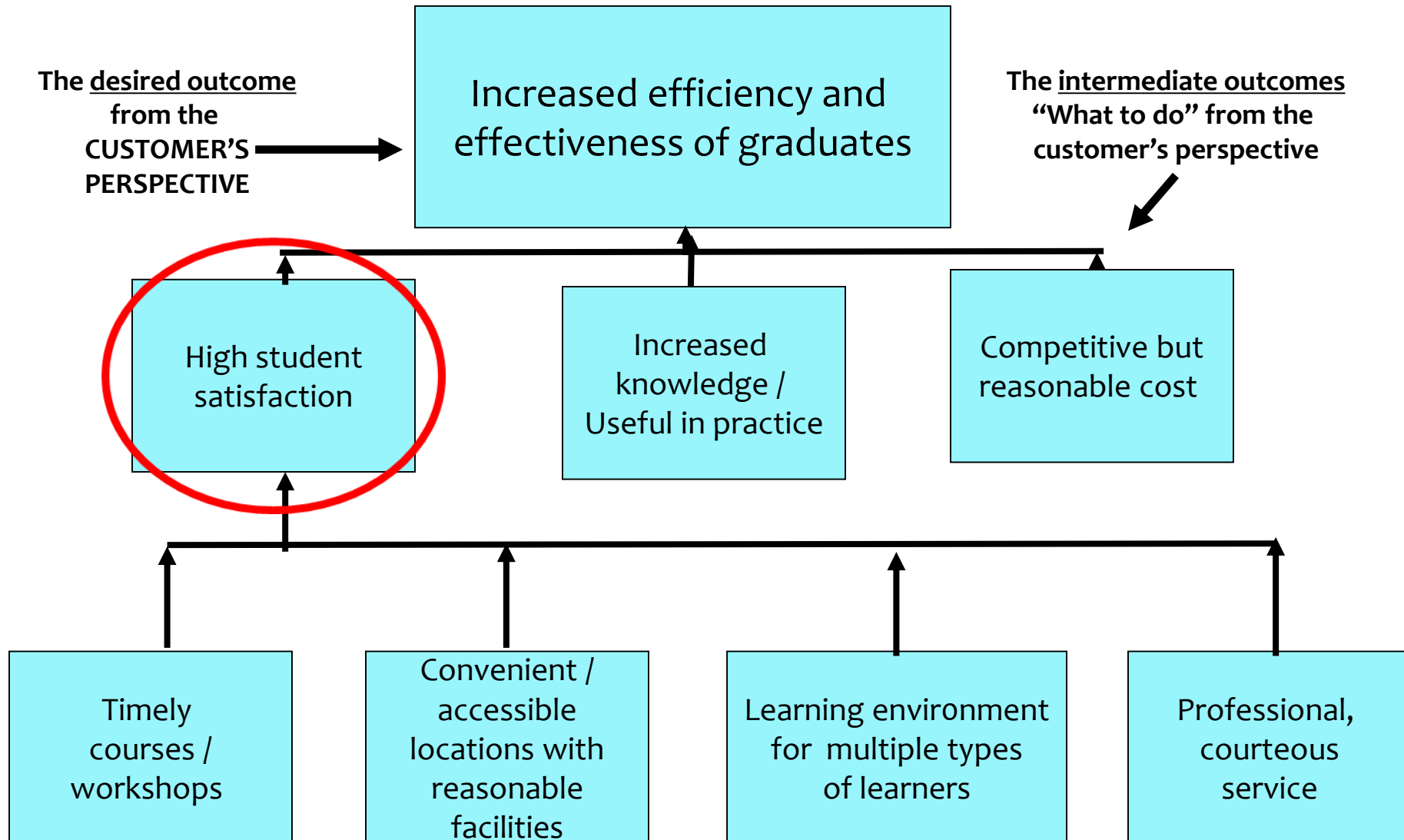
Creating a Performance Hierarchy: How to measure the desired outcomes?



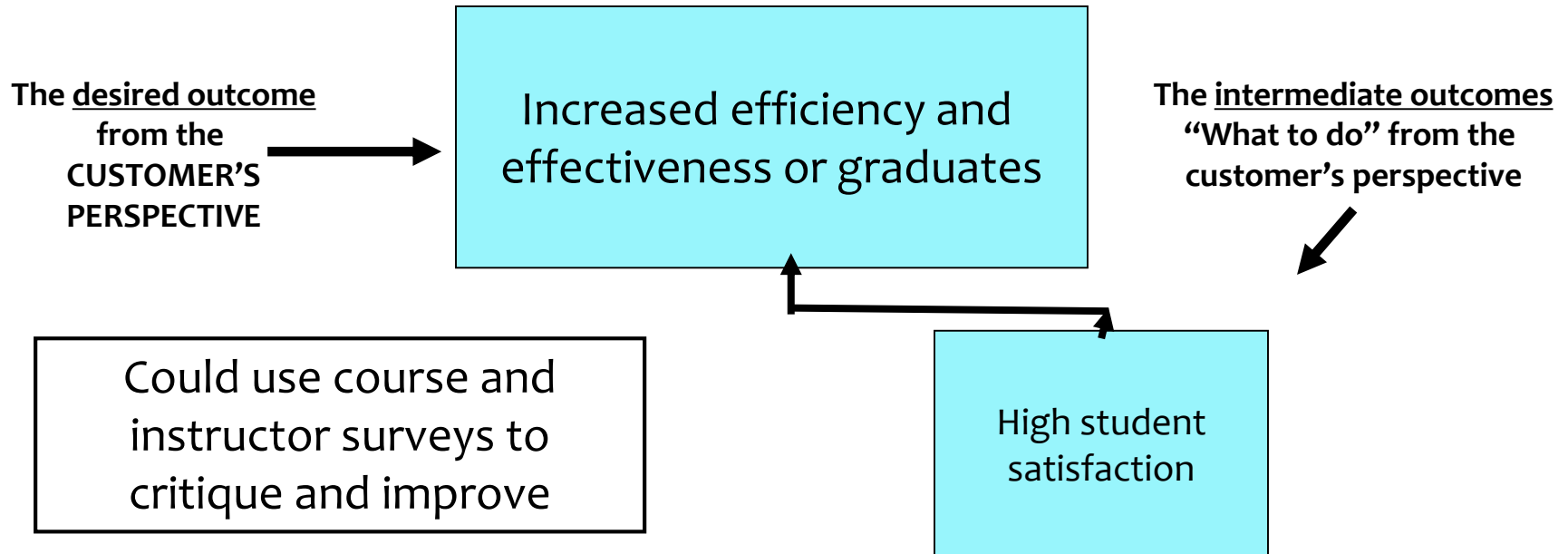
Creating a Performance Hierarchy: How to measure the desired outcomes?



Creating a Performance Hierarchy: What will achieve the desired outcomes?



Creating a Performance Hierarchy: What will achieve the desired outcomes?

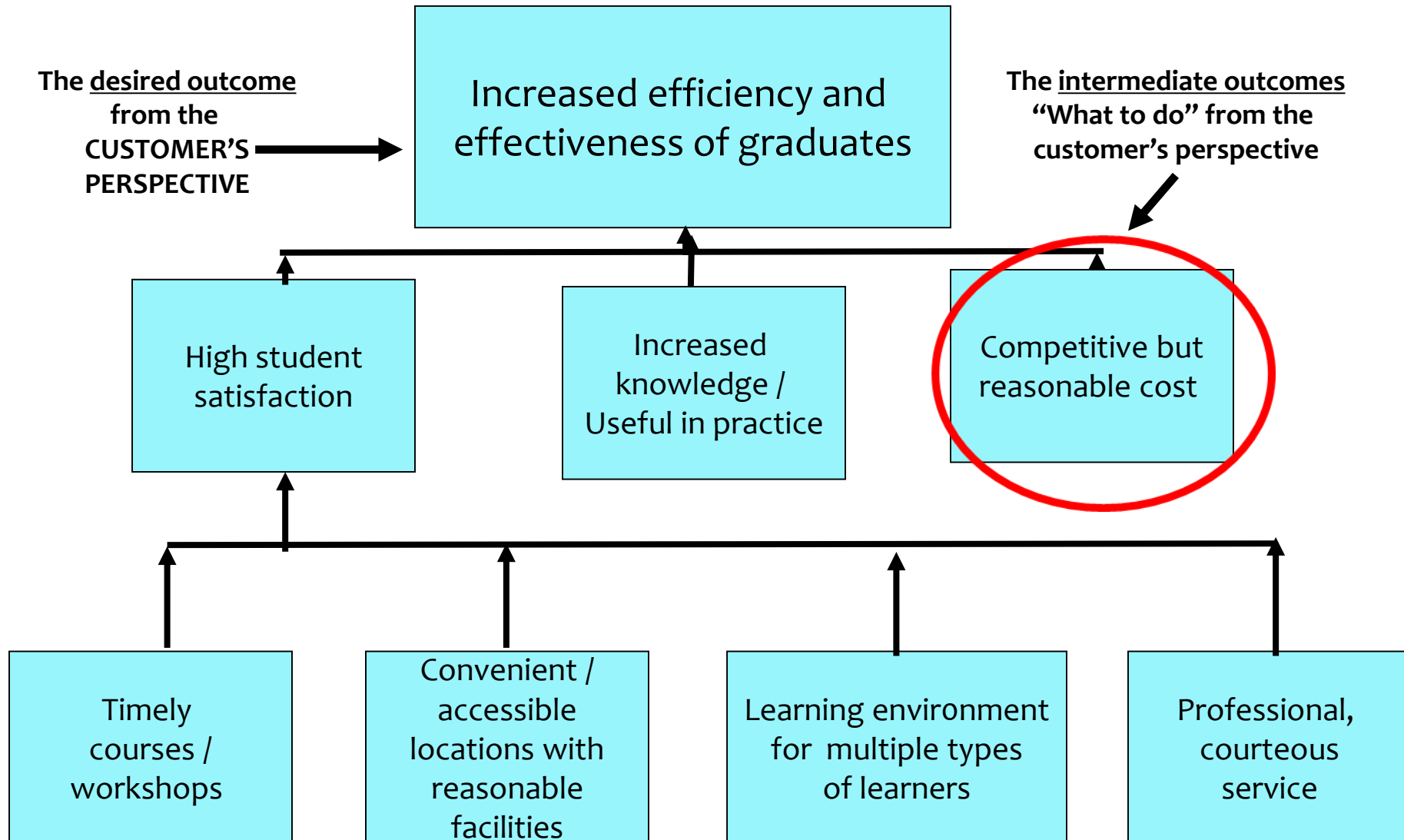


Desired outcomes:

At least 95% of U.S. participants' respond with a 4 or 5 (1-5 scale; 5 is best) that

- 1.The course was taught in a way conducive to my learning
- 2.The course was held in a convenient / accessible location
- 3.Faculty and staff were professional and courteous

Creating a Performance Hierarchy: What will achieve the desired outcomes?



Measuring Performance

- The customer's perspective often requires getting feedback (surveys, etc.) from the customer
- These can be the best measures of whether the actual outcome met the desired or expected outcome

Check your Knowledge

8. How will you assess the effectiveness (outcomes) of your organization?
9. What might be an intermediate outcome or proxy measure for the effectiveness of your organization?
10. How would you measure it?

IMPLEMENTATION ISSUES



Planning and Management*

Systems used in Governments

- Planning, programming and budgeting (PPB, PPBS, PPBES, PPBEAS, etc.)
- Zero-based budgeting (ZBB)
- Management by objectives (MBO)
- Program budgeting
- Management information systems (MIS; computerized)
- Performance measurement, reporting and monitoring
- Balanced Scorecard
- Total quality management/leadership (TQM/TQL)
- Quality circles (extended to Baldrige, etc.)
- Program analysis (prior to program approval)
- Program evaluation (after program approval)
- Forward year projection of expenditures and revenues
- Results-based leadership
- Values-based leadership

All organizations institute performance based management and budgeting systems with “good” intentions to connect strategic goals to performance measures

Why don't they work so well?

Believe the “system” will do the hard work for you

The concept of a performance “system” is deceptively seductive. The system is like an engine. You push the start button, and the system does all of the work. Sorry. It doesn’t work that way. There is no system, no start button.

Measure the wrong things

“The management law “What gets measured gets done” has a corollary. “What doesn’t get measured doesn’t get done.” This is particularly true if other tasks are getting measured. If we measure performance in math but not history, history won’t get done.”

“Metric Mania”

- Too many measures at wildly varying strategic levels to even contemplate using them to allocate individual accountability for results, thus, no one is responsible.
- The only real accountability is for collecting and reporting on metrics. Those measuring become weathermen describing the world but not changing it.

Disclose Everything

“How can an agency obfuscate while at the same time respond to the demands for transparency? Simple. Don’t just provide the requested data. Don’t just provide the key data. Instead, provide all of the available data. This is obfuscation by disclosure.”

Focus on the wrong things

‘Over a century ago, Friedrich Nietzsche wrote, “**Forgetting our objectives** is the most frequent act of stupidity.” Yet, so often today, managers in all three sectors select a management tool without first asking: “**What purpose are we trying to achieve?**”’

Key Elements to “Successful” Performance Budgeting

- Define expectations clearly
- Address structural alignment between plans, budgets and total costs
- Increase the supply of credible outcomes, measures, and information
- Promote demand for information used by actors with different needs

“Linking performance information to budgeting carries great potential to improve the budget debate by changing the kinds of questions and information available to decision makers.”

David M. Walker
U.S. Comptroller General
1998-2008