School-Based Data:
How to Tie Program Services to Outcomes

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Agenda

1 – Integrating Service Programming and Outcomes

2 – Connecting Programming and Data to Increase Effectiveness and Impact

3 – Strategic Engagement
Let’s Discuss Where We Are
Before we dive in...
GEAR UP Objectives, Indicators, Performance Measures

The progress of all GEAR UP grants is measured by:

- 3 National GEAR UP Objectives
- GPRA Performance Indicators
- Program Measures Defined in the GEAR UP Application
- Project-Specific Measures Identified by Grantee at Time of Application
GEAR UP Objectives

1. **National Objective 1**: To increase the *academic performance and preparation for postsecondary education* of participating students;

2. **National Objective 2**: To increase the rate of *high school graduation* and participation in postsecondary education of participating students; and

3. **National Objective 3**: To increase *educational expectations* for participating students and increase student and *family knowledge* of postsecondary education options, preparation, and financing.
Government Performance and Results Act Performance (GPRA) Indicators*

1. The percentage of GEAR UP students who pass Pre-Algebra by the end of 8th grade.
2. The percentage of GEAR UP students who pass Algebra 1 by the end of 9th grade.
3. The percentage of GEAR UP students who take two years of mathematics beyond Algebra 1 by 12th grade.
4. The percentage of GEAR UP students who are on track for graduation at the end of each grade.
5. The percentage of GEAR UP students who are on track to apply for college as measured by completion of the SAT or ACT by the end of 11th grade.
6. The percentage of GEAR UP students who graduate from high school.
7. The percentage of GEAR UP students who complete the Free Application for Federal Student Aid.
8. The percentage of GEAR UP students and former GEAR UP students who are enrolled at an IHE.
9. The percentage of GEAR UP students who place into college-level math and English without need for remediation.
10. The percentage of current GEAR UP students and former GEAR UP students who are on track to graduate from an IHE one year after enrolling in an IHE.

*Performance Indicators from the FY 2018 Applications.
Integrating Service Programming and Outcomes
Just because we measure something doesn’t mean we change it.
The Typical Service/Outcome Relationship

- Services are provided to students and families
- Outcomes are reported
- We assume that there is connectedness
Two Sides of a Coin

Program Staff
• You implement services but you need to know the grant’s goals.
• You need to know which areas need focus.
• Just because you implement good services doesn’t mean they are the right services.

Leadership Staff
• You provide program staff with a list of required and permissible GEAR UP services.
• Schools are left to determine the services they will provide.
• You report outcomes.
The leader provides oversight and handles all reporting.

The program staff provides services—and they are really good at that—but they don’t really understand how those services connect the big picture.
The Ideal Service/Outcome Relationship

- All staff knows goals
- Services are decided based on data
- Services are revised based on needs
- Outcomes are assessed intermittently
- Outcomes improve
A Solution

Everybody—leadership staff and program staff are on the same page. They all understand the goals of the grant, the data at respective schools, the service suite, and which services need to be applied to which schools and/or students.
It’s not as easy as it seems.
Let’s start with some basics.
1. Have you read the entire grant proposal of the grant you are working on?
2. Do you know the required and permissible GEAR UP activities?
3. Do you know the current data on all (or any) goals for schools you work in?
4. Do you have access to data on individual students?
Let’s Check In (for leadership staff)

1. Does your grant have a logic model?
2. Do you share your logic model with all staff and partners?
3. Is your logic model a “working document”?
4. Do you provide data back to schools?
5. Can you easily articulate the data gaps in your program?
What Can We Do?

1. Everybody has a copy of the grant narrative (sans the budget).
2. Everybody understands the goals and benchmarks, i.e, the target.
3. Services are strategic for schools and/or students.
4. Grant leadership, school staff, and program providers communicate regularly.
5. Program staff are trained on GEAR UP services and provided with access to data.
Here’s What Happens...

We go from this...

Leadership runs the grant
Program staff implements services
Leadership Reports Outcomes

To this.

Leadership Sets the Vision
Program Staff are Involved
Outcomes Are Impacted
Students and Families get Strategic Services
What Does this Take?

Setting the Vision

Time
Planning
Commitment
Activity 1
Connecting Programming and Data to Increase Effectiveness and Impact
An Ineffective Example

There’s a wonderful tutoring program—either online or in person—and if students take advantage of it, great, and if not, oh well.

We’ll just document what happens.
An Effective Example

In a rural community with not many places to work, students are asked about the jobs of their parents. 70% of students report that someone in their family owns their own business. An entrepreneurial program established through GEAR UP to teach kids how to run a business.
Thinking Strategically

1. What college should we visit?
2. Where would the majority of our students be likely to enroll?
3. What college would provide good overall expose to our students?
4. Is this college feasible for most of our students?

Let’s go on a College Visit!
Ways to Understand Program Needs

- Baseline Data
- Survey Data
- Student Information Systems
- Aggregate School Report Card Data
- Postsecondary Data
- Understanding Family Needs
Let’s Dig In

Service Activity
Data
GEAR UP Student Service Data

1. Supportive services*
2. Rigorous academic curricula*
3. Comprehensive mentoring*
4. Financial aid counseling/advising*
5. Counseling/advising/academic planning/career counseling
6. College visit/college student shadowing
7. Job site visit/job shadowing
8. Summer programs
9. Educational field trips
10. Workshops
11. Family/cultural events

*Required GEAR UP Services
GEAR UP Family Service Data

Family/Parent Services

1. Workshops on college preparation/financial aid
2. Counseling/advising
3. College visits
4. Family events
What Do We Need to Examine?

Outcome Data
GEAR UP Outcome Data

Enrolled and completed the following:

• Pre-algebra
• Algebra I or Equivalent
• Geometry
• Algebra II
• Calculus
• Chemistry
• Physics
• Trigonometry
• Pre-Calculus
• Biology
• English & Language Arts

• At Least One Advanced Placement Class
• At Least One International Baccalaureate Class
• At Least Two Years of Math Beyond Algebra I
• A Non-credit Bearing Remedial Course
• Number of Unexcused Absences
• PSAT/PLAN Exam
• ACT/SAT Exam
• FAFSA Completion
• Graduated High School
The Big Goal!

Postsecondary Data
GEAR UP Postsecondary Data

1. Did students enroll?
2. What type of college? (2-year, 4-year, certificate program)
3. Do students persist?
4. Do students graduate from college?
It’s not just about getting kids into college.
If you wait until students enroll in college to look at data...it’s just too late.
Activity 2
Strategic Engagement
Getting Grounded in Evaluation.
Formative Evaluation

• Evaluation conducted and reported on an ongoing basis throughout the project to continuously assess the project.

• Provides program staff with knowledge of how the quality and impact of project activities can be improved.

• Allows for ongoing data-driven decisions to be made.
Summative Evaluation

• Evaluation conducted at the conclusion of the project to assess the overall impact of the project in terms of meeting goals and utilizing efficient resources.

• Used to report final program outcomes.
Definition: Attempt to *describe things* as they currently are.

Note: The study does not change anything and the study is not trying to prove that one thing causes another.

Example: A school or district would like to know their current drop-out and graduation rates. These rates would be tracked over the duration of the study and then reported on at the conclusion of it.
Impact Studies: Correlational

**Definition:** Attempt to *identify a relationship* between two or more things.

**Example:** A school district is interested in exploring the relationships between attendance and high school graduation.

**Note:** The study does not change anything and the study is not trying to prove that one thing causes another.
Impact Studies: Quasi-Experimental

**Definition:** Attempt to *demonstrate a causal relationship* between two or more things without random assignment.

**Note:** These studies typically a quasi-experimental research and evaluation design that allows for comparison between groups. Propensity score matching is an example of how groups can be constructed for analyses.

**Example:** A GEAR UP program is interested in determining if students who participate in GEAR UP have increased postsecondary enrollment, persistence, and graduation rates.
Impact Studies: Experimental

**Definition:** Attempt to *demonstrate a causal relationship* between two or more things.

**Note:** These studies involve two or more groups (control group and experimental group) that are randomly assigned.

**Example:** A GEAR UP program is interested in determining if students randomly assigned to a summer-melt counseling intervention have increased postsecondary enrollment, persistence, and graduation rates.
What is a Logic Model?

• A logic model (also referred to as theory of action or strong theory) includes:
  ✓ A well-specified conceptual framework that identifies key components of the proposed process, product, strategy, or practice;
  ✓ The active “ingredients” that are hypothesized to be critical to achieving the relevant outcomes; and
  ✓ A description of the relationships among the key components and outcomes.

Note: There are varying ways to depict a logic model, i.e., tabular, figure, etc. I will provide one example based on the format that ED has used in the past. It is a simple, easy to follow process.
Logic Model Template

**Input**
- What resources and information goes into the program?

**Activities**
- What activities does the program undertake?

**Output**
- What is produced by the program activities?

**Short-Term Outcome**
- What short-term changes result from the services or activities?

**Mid-Term Outcome**
- What mid-term changes result from the services or activities?

**Long-Term Outcome**
- What are long-term goals of your program?

Formative Evaluation

Summative Evaluation

Source: Structure modified from U.S. Department of Education training, 2014
## Logic Model Example

<table>
<thead>
<tr>
<th>Input</th>
<th>Activities</th>
<th>Output</th>
<th>Short-Term Outcome</th>
<th>Mid-Term Outcome</th>
<th>Long-Term Outcome</th>
</tr>
</thead>
</table>
| • Federal and matching funds  
• Grant staff  
• Demographic data  
• Course and assessment data  
• Postsecondary data  
• Family data  
• School data  
• State data | • Student  
  • Student activities (list)  
• Family  
  • Family engagement  
• School  
  • Course offerings  
• PD  
• Partner  
  • Summer camps | • 4,000 students served  
• 4,000 families served  
• At least two new course offerings per school  
• One PD offering for each school per year tied to curriculum. | • 70% of students participating  
• 50% of families participating  
• Increased aspirations (from baseline) about college enrollment  
• Increased school alignment with GEAR UP | • 85% of students participating  
• 75% of families participating  
• Increased pre-Algebra enrollment  
• Increased attendance  
• Increased financial aid knowledge  
• Increased course completion | • Increased academic performance  
• Increased postsecondary applications  
• Increased high school graduation  
• Increased postsecondary enrollment  
• Increased postsecondary persistence |

**Formative Evaluation**

**Summative Evaluation**

The counterfactual is statistically matched students in non-GEAR UP, low-income schools.

Source: Structure modified from U.S. Department of Education training, 2014
Activity 3
Discussion

Wrap Up

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