Evaluation Planning, Logic Models, and Program Design

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NOAA Evaluation Brown Bag Series
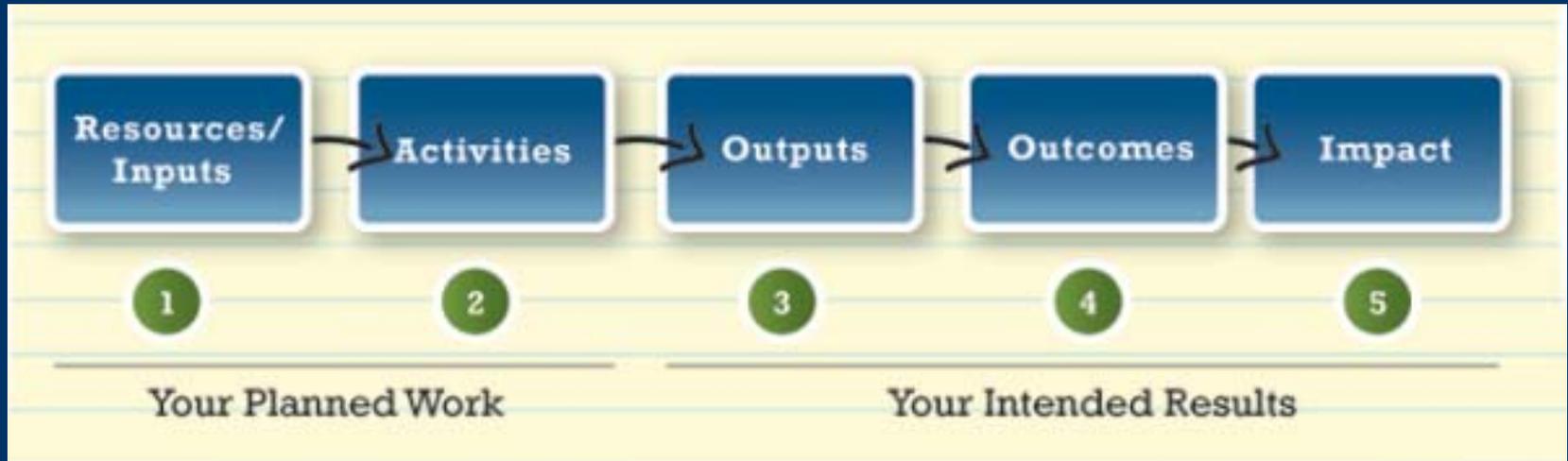
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Can You Answer All of These Questions?

- Do you have a logic model?

- What is your evaluation question?

- What is your context?

- Have you made logical connections?

- What else might change your plans?

- How are you tracking progress?

- Have you thought about data?

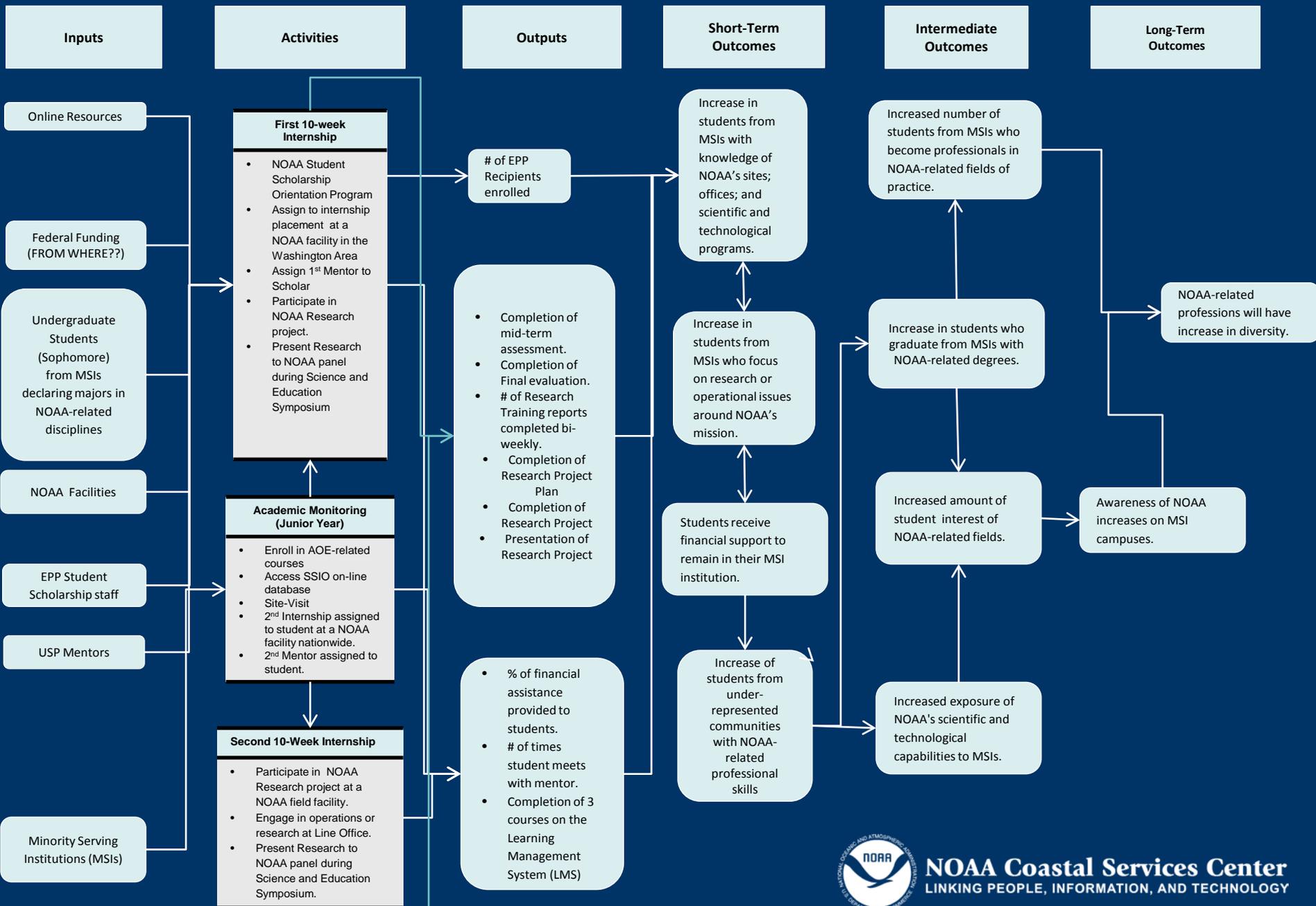- How will you tell your story?

1. Do You Have a Logic Model?

Does it include

- Your intended results?

- Your planned work?

Logic Model for Education Partnership Program Undergraduate Scholarship Program

Inputs	Activities	Outputs	Short-Term Outcomes	Intermediate Outcomes	Long-Term Outcomes

Inputs

- Online Resources
- Federal Funding (FROM WHERE??)
- Undergraduate Students (Sophomore) from MSIs declaring majors in NOAA-related disciplines
- NOAA Facilities
- EPP Student Scholarship staff
- USP Mentors
- Minority Serving Institutions (MSIs)

Activities

First 10-week Internship
- NOAA Student Scholarship Orientation Program
- Assign to internship placement at a NOAA facility in the Washington Area
- Assign 1st Mentor to Scholar
- Participate in NOAA Research project.
- Present Research to NOAA panel during Science and Education Symposium

Academic Monitoring (Junior Year)
- Enroll in AOE-related courses
- Access SSIO on-line database
- Site-Visit
- 2nd Internship assigned to student at a NOAA facility nationwide.
- 2nd Mentor assigned to student.

Second 10-Week Internship
- Participate in NOAA Research project at a NOAA field facility.
- Engage in operations or research at Line Office.
- Present Research to NOAA panel during Science and Education Symposium.

Outputs

- # of EPP Recipients enrolled

- Completion of mid-term assessment.
- Completion of Final evaluation.
- # of Research Training reports completed bi-weekly.
- Completion of Research Project Plan
- Completion of Research Project
- Presentation of Research Project

- % of financial assistance provided to students.
- # of times student meets with mentor.
- Completion of 3 courses on the Learning Management System (LMS)

Short-Term Outcomes

- Increase in students from MSIs with knowledge of NOAA's sites; offices; and scientific and technological programs.

- Increase in students from MSIs who focus on research or operational issues around NOAA's mission.

- Students receive financial support to remain in their MSI institution.

- Increase of students from under-represented communities with NOAA-related professional skills

Intermediate Outcomes

- Increased number of students from MSIs who become professionals in NOAA-related fields of practice.

- Increase in students who graduate from MSIs with NOAA-related degrees.

- Increased amount of student interest of NOAA-related fields.

- Increased exposure of NOAA's scientific and technological capabilities to MSIs.

Long-Term Outcomes

- NOAA-related professions will have increase in diversity.

- Awareness of NOAA increases on MSI campuses.

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2. What is Your Evaluation Question?

Have you

- Identified the requestor?

- Identified what the requestor needs to know?

- Prioritized evaluation questions?

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Narrowing the Focus

Does the evaluation question provide information that

- ✓ Contributes to the goals of the program or project and its stakeholders?

- ✓ Is useful and not currently available?

- ✓ Is important to a major group or several stakeholders?

- ✓ Would be of continuing interest?

- ✓ Can be translated into measurable terms?

- ✓ Can be obtained, given financial and human resources?

What Does the Requestor Need to Know?

I need to know the extent to which the Education Partnership Program Undergraduate Scholarship has increased the number of students from Minority Serving Institutions (MSIs) who have become professionals in NOAA-related fields of practice

by August 2014

because I need to decide if the goals are aligned with best practices to make a decision about program redesign.

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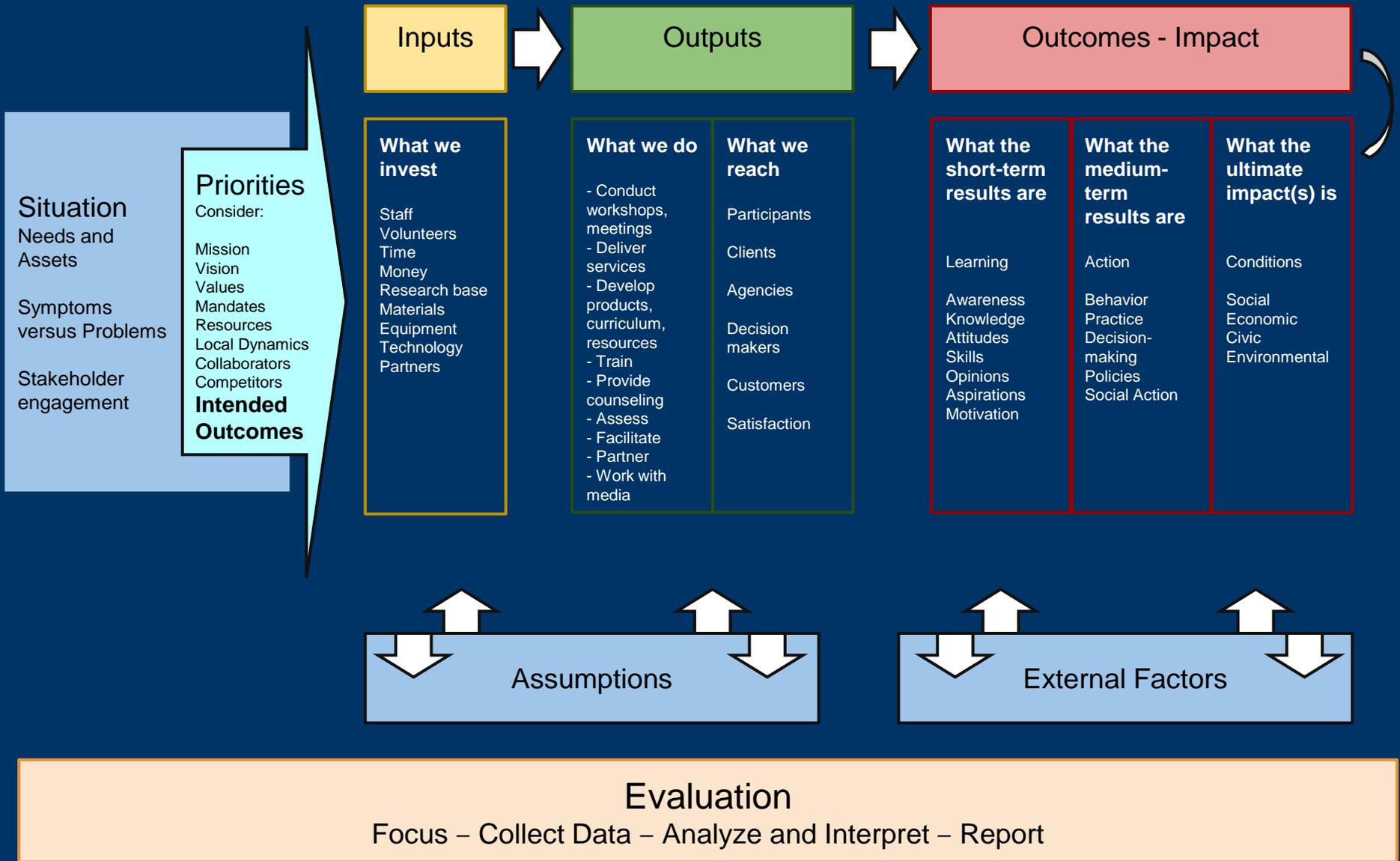LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

3. What is Your Context?

Have you adequately described

- Existing conditions?

- Drivers?

- Activity specifics?

- Target population?

- Assumptions?

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Defining the Context

Inputs → **Outputs** → **Outcomes - Impact**

Situation
Needs and Assets

Symptoms versus Problems

Stakeholder engagement

Priorities
Consider:

Mission
Vision
Values
Mandates
Resources
Local Dynamics
Collaborators
Competitors
Intended Outcomes

What we invest

Staff
Volunteers
Time
Money
Research base
Materials
Equipment
Technology
Partners

What we do

- Conduct workshops, meetings
- Deliver services
- Develop products, curriculum, resources
- Train
- Provide counseling
- Assess
- Facilitate
- Partner
- Work with media

What we reach

Participants

Clients

Agencies

Decision makers

Customers

Satisfaction

What the short-term results are

Learning

Awareness
Knowledge
Attitudes
Skills
Opinions
Aspirations
Motivation

What the medium-term results are

Action

Behavior
Practice
Decision-making
Policies
Social Action

What the ultimate impact(s) is

Conditions

Social
Economic
Civic
Environmental

Assumptions

External Factors

Evaluation
Focus – Collect Data – Analyze and Interpret – Report
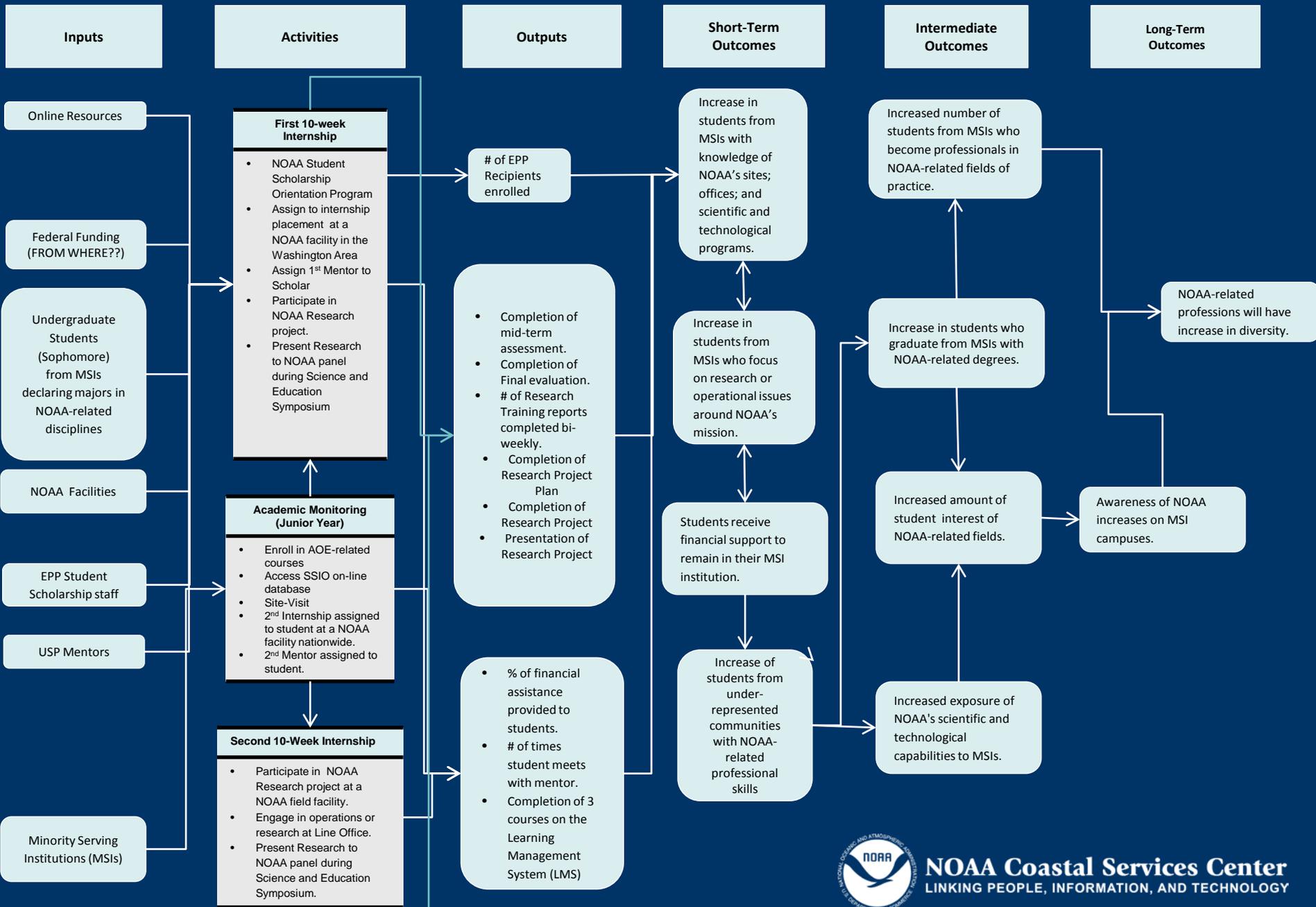
4. Have You Made Logical Connections?

Have you

- Identified the plan components that link to the evaluation question?

- Made credible, well-founded assumptions?

- Developed complete and realistic timelines?

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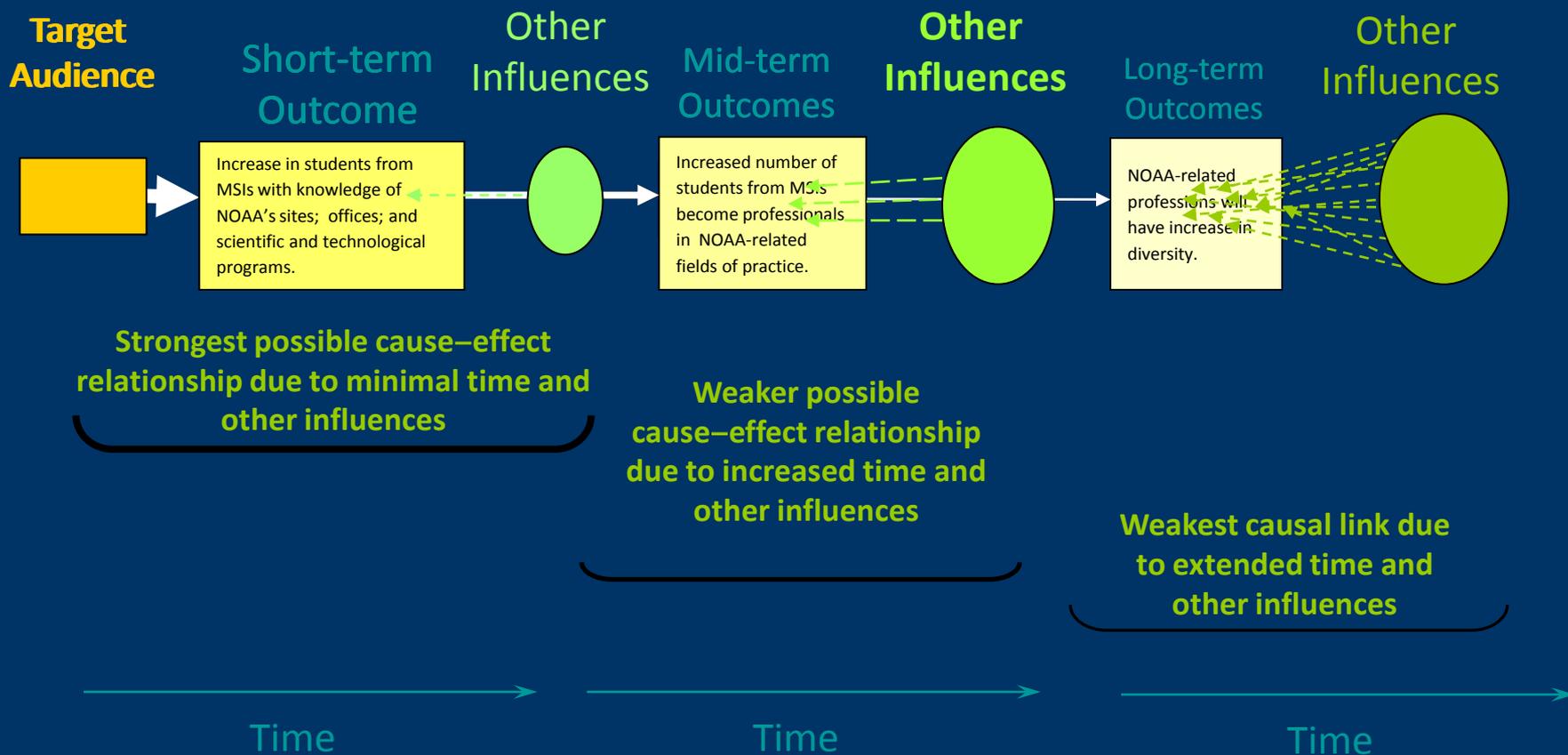LINKING PEOPLE, INFORMATION, AND TECHNOLOGY

5. What Else Might Change Your Plans?

Have you sufficiently accounted for internal and external influences that may affect your project or program?

Effect of Other Influences

Target Audience

Short-term Outcome

Other Influences

Mid-term Outcomes

Other Influences

Long-term Outcomes

Other Influences

Increase in students from MSIs with knowledge of NOAA's sites; offices; and scientific and technological programs.

Increased number of students from MSIs become professionals in NOAA-related fields of practice.

NOAA-related professions will have increase in diversity.

Strongest possible cause–effect relationship due to minimal time and other influences

Weaker possible cause–effect relationship due to increased time and other influences

Weakest causal link due to extended time and other influences

Time

Time

Time

6. How Are You Tracking Progress?

Are your performance measures

- Supportive of the evaluation question(s)?

- Linked to clearly defined sources?

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Evaluation Question:

To what extent has the Education Partnership Program Undergraduate Scholarship (EPPUS) increased the number of students from MSIs who have become professionals in NOAA-related fields of practice?

Logic Model Link

(Intermediate Outcome)

Increased number of students who graduate from MSIs with NOAA-related degrees.

Performance Measures

% of EPPUS scholars from MSIs who receive undergraduate academic awards (degrees and certificates) in NOAA-related fields of practice

% of EPPUS scholars from MSIs who complete the program

% of EPPUS scholars from MSIs who report increased interest in working in NOAA-related fields.

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7. **Have You Thought about Data?**

Have you

- Considered pre-data collection logistics?

- Selected appropriate data collection methods and instruments?

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Data Collection Issues

- Are data collection partners (internal and external) willing and able to collect data? Is the outcome already being measured by program(s)?

- Can data be collected and updated at regular intervals, such that reporting deadlines are met and the performance information is current enough to inform decision-making?

- Can data be collected in a cost-effective manner (new systems, paper administration, program implementation or changes, time or burden on staff)?

- Can data about the outcome be measured consistently each time and across programs?

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8. How Will You Tell Your Story?

Have you determined

- Requestor needs?

- Report format?

- Report outline?

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What Evaluation Can Do For You!

- ✓ Assist with Government Performance Results Act (GPRA) Modernization Act requirements

- ✓ Provide justification for funding decisions

- ✓ Provide input for program planning

- ✓ Identify program strengths and opportunities to enhance program effectiveness

- ✓ Improve organizational efficiencies

- ✓ Produce data for public use

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Thank you!

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