Turning Data Into Action: Goals and Strategies to Increase Students' Career and College Readiness

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Objective

- The overall goal of this session is to:

  1. Examine the effectiveness of the Health Science Capacity Building (HSCB) project.

  2. Provide information that could help guide program improvement, and present data that assessed the performance of the program.

  3. Assess the impact of the HSCB programs on the students' knowledge, experience, and confidence related to healthcare careers.

Performance Gaps

- Evidence that people do not evaluate the course of performance gaps:

  - We impulsively select and implement the wrong solutions that most of the time do not solve the problem and often make it worse.

 - When solutions do not work we often blame the people who have the problem.

- Three major causes of performance problems:

    – **Knowledge**: We don't know how (why, where, when).

    – **Motivation**: We don't want to do it (or think we can't).

    – **Organizational procedures:** We are prevented by policy/procedures and/or lack of facilities and equipment.

Seven Assessment Questions

1. What is our student performance goal?
2. Where are students now (related to goal)?
3. What is the size of the gap?
4. **What is causing the gap?**
5. What solutions will close the gap?
6. How do we implement the solutions?
7. How do we measure our progress?

The Seven Steps of Gap Analysis

GOALS → STATUS → GAPS

EVALUATE   SOLUTIONS ← CAUSES

IMPLEMENTATION
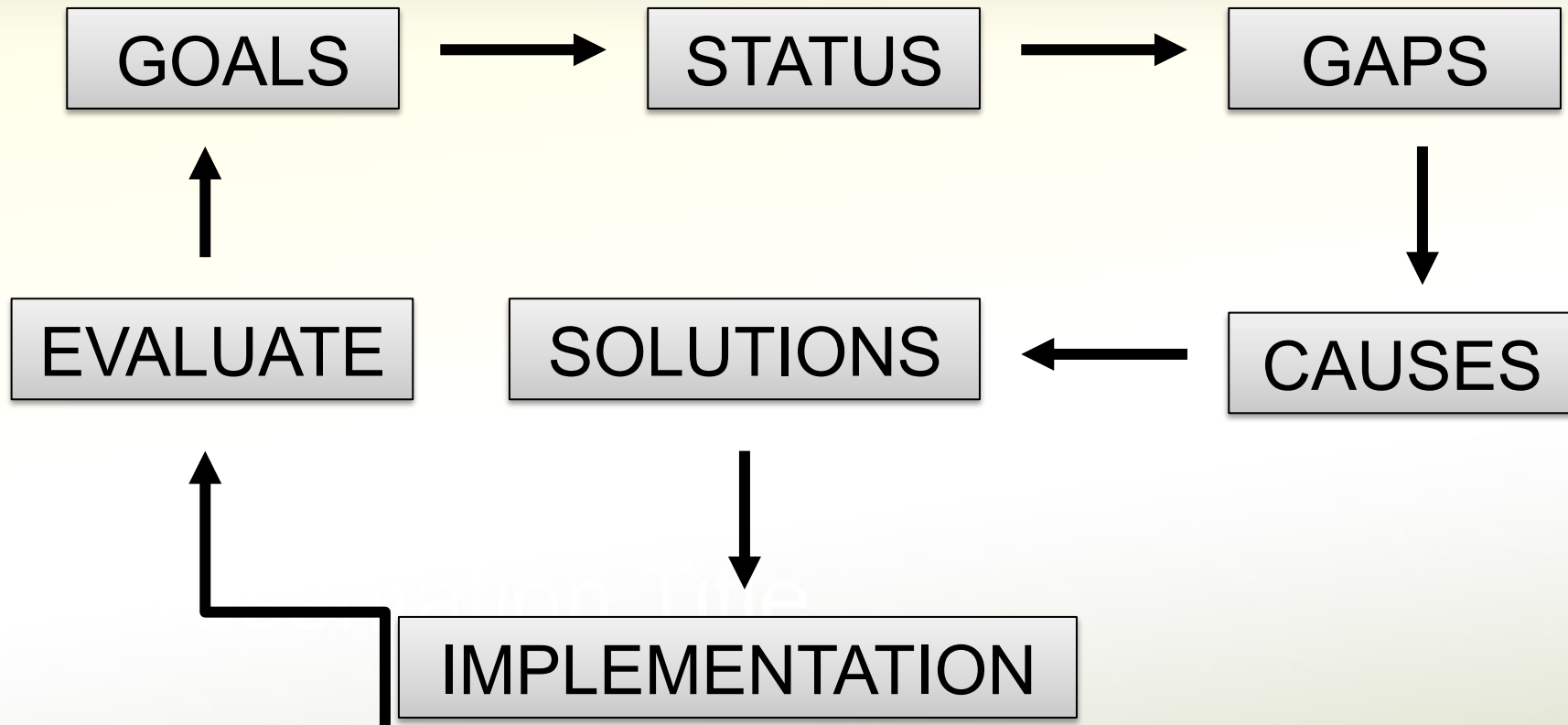
The Seven Steps of Gap Analysis

STEP 1: GOALS

- Goal: By June 2011, 90% of pathway students will be knowledgeable about employment opportunities, employability requirements, and educational resources to pursue careers in health sciences

- List <u>educational</u> and <u>performance</u> goals (desired outcomes)
  - Progress indicators
  - How will you measure each goal?

The Seven Steps of Gap Analysis

STEP 2: STATUS

- What goal level has been achieved currently?

- Measure current progress

- Triangulate 3 types of measures
  - Survey, interviews
  - Observe unobtrusively
  - Collect school-related data

The Seven Steps of Gap Analysis

STEP 3: GAPS

- Measure gaps between future goal and current status for program:

    - Subtract the goal from the current status to quantify the gap
    - Validate beyond opinion

STEP 4: CAUSES

- Analyze three types of causes:

    - **Knowledge** - Can they do it?
        - Do they know how, when, where etc.?
        - Know how they can do it successfully?
    - **Motivation** - Are they doing it?
        - Have they started, are they persisting?
    - **Organizational**: Do they have necessary materials/resources

The Seven Steps of Gap Analysis

STEP 4a: VALIDATE CAUSES

- Triangulate measures

    - Surveys, interviews
    - Observe unobtrusively
    - Collect school performance-related data

The Seven Steps of Gap Analysis

STEP 5: SOLUTIONS

- Match solutions/strategies to causes

    - Knowledge gaps require learning
    - Motivation requires value and confidence
    - Organizational/procedures require process changes

The Seven Steps of Gap Analysis

STEP 5a: MATCH SOLUTIONS

- Motivation Goals
    - Action (not simply intention)
    - Persistence (in the face of distractions)
    - Effort (to learn new things)

- Solutions
    - Self-efficacy (believe in self)
    - Values (incentives)

STEP 6: IMPLEMENTATION

- Stage implementation in different areas

    - Pretest - implement - posttest - modify
    - Improve solution with experience
    - Assume mistakes that can be corrected

The Seven Steps of Gap Analysis

STEP 7: EVALUATE

- Four Levels of Evaluation (Kirkpatric, 1994)
    - **Reactions**: Measures how students react to the training/curriculum
    - **Learning**: Measures what students have learned from the training/curriculum
    - **Behavior**: Measures whether what was learned is being applied on the job
    - **Results**: Measures whether the application of the training/curriculum is achieving results

HSCB* Survey Measures

- Student background (e.g., gender, ethnicity, grade, etc.)
- Academic plans after high school
- Value and importance of CTE program
- Teacher collaboration and curriculum alignment
- Work-based learning
- Career development activities
- Knowledge (related to health science standards)
- Experience (related to health science standards)
- Confidence (related to health science standards)
- Teacher-student relationships
- Other: Self-efficacy, self-regulation, career awareness

* Health Science Capacity Building

Pretest and Post-test Design

- Fall
  - Knowledge of health science standards.
  - Experience applying health science standards.
  - Confidence of being capable of using skills.

- Spring
  - Knowledge of health science standards.
  - Experience applying health science standards.
  - Confidence of being capable of using skills.

Career Readiness: Three Domains

Healthcare Career **Knowledge** (Technical Skills)

Healthcare Career **Experience** (Experiential Learning)

Healthcare Career **Confidence** (Self-efficacy)

Sample Questions

- **Indicator: Knowledge and Skill**
  - **Students** - "How much <u>knowledge</u> do you have about using the skills needed for healthcare careers?"
  - **Teachers** - "How much <u>knowledge</u> do your CTE students have about using the skills needed for healthcare careers?"

- **Indicator: Experience**
  - **Students** - "How much <u>experience</u> do you have using the skills needed for healthcare careers?"
  - **Teachers** - "How much <u>experience</u> do your CTE students have using the skills needed for healthcare careers?"
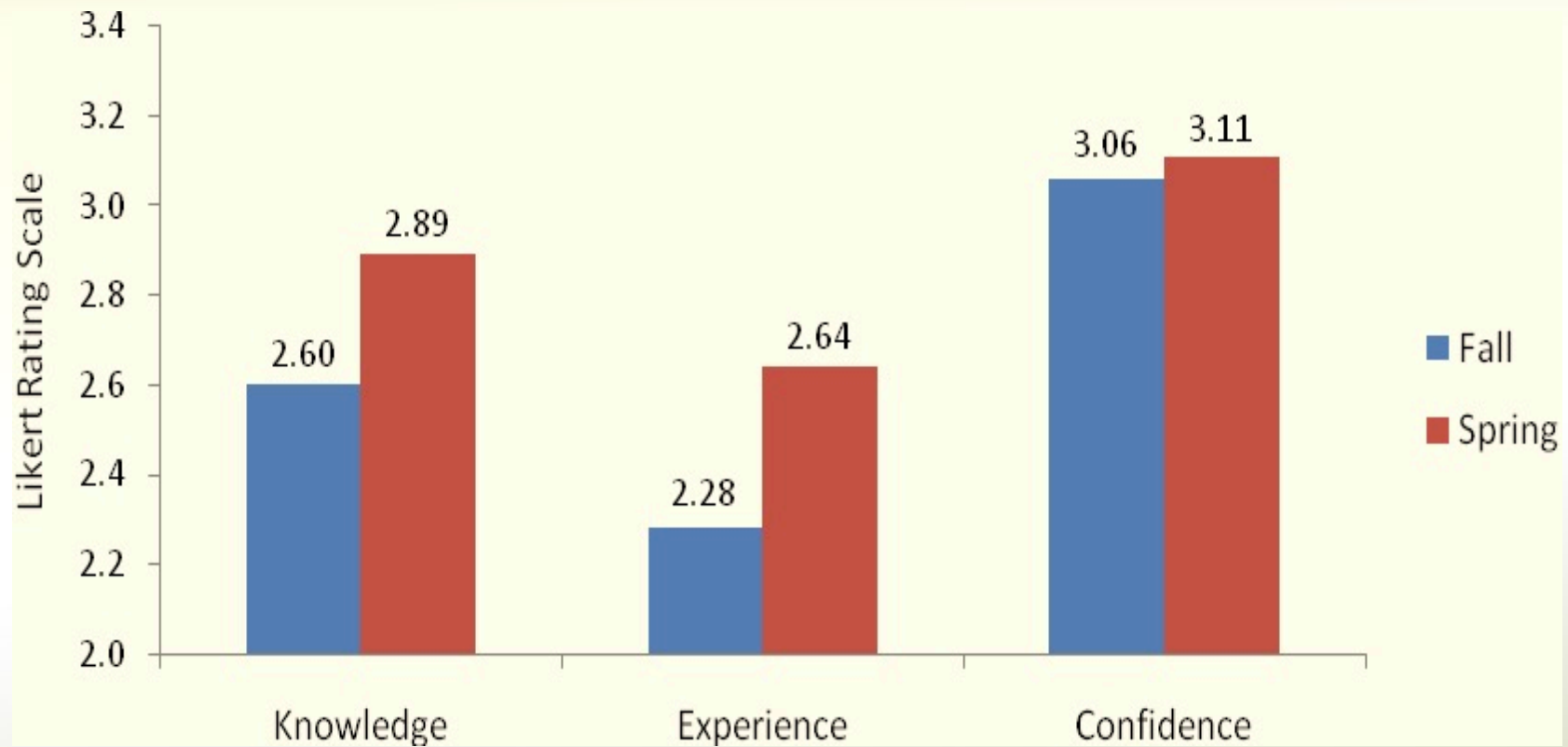
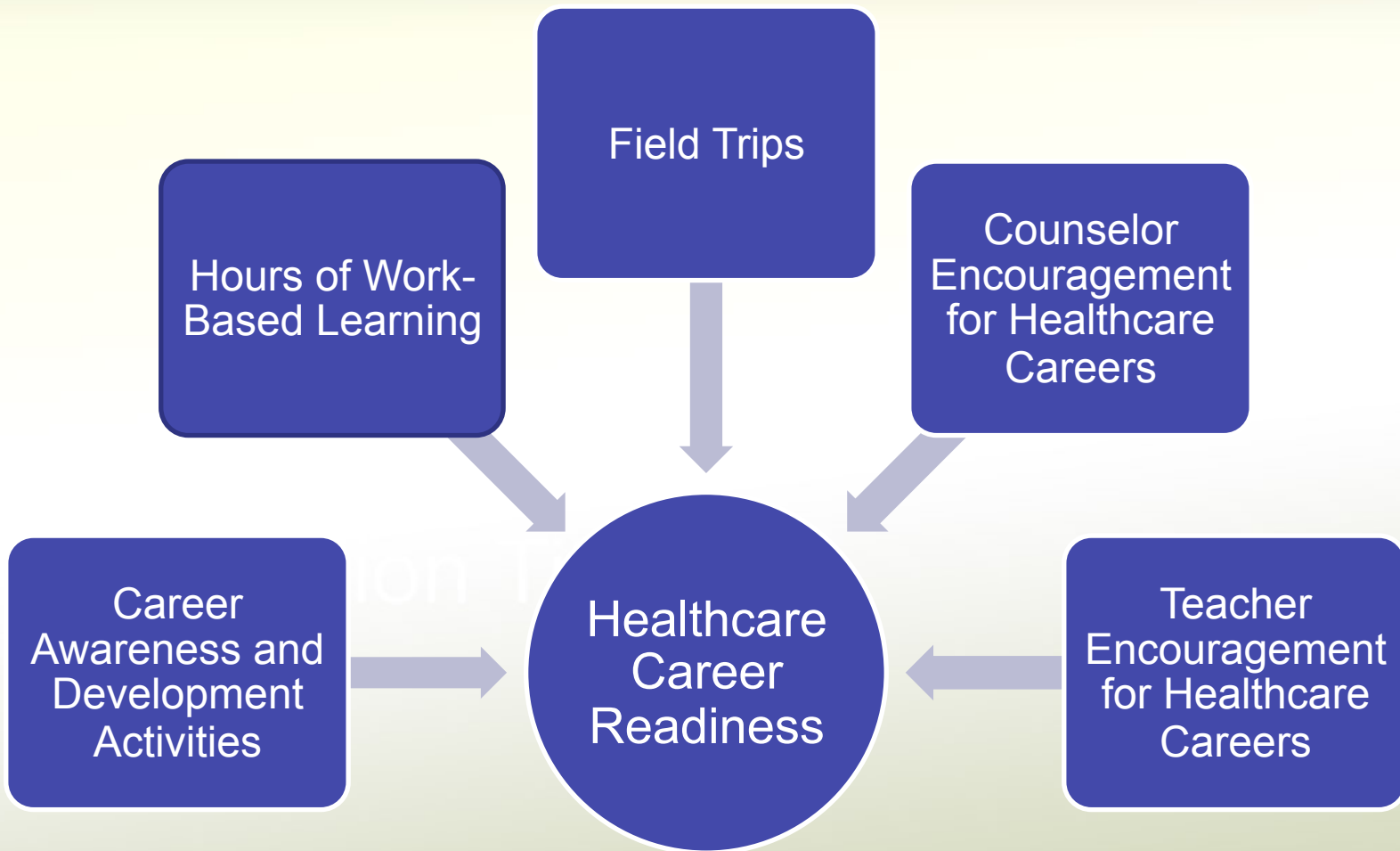fppt.com

- **Indicator: Confidence**
  - **Students** - "How much <u>confidence</u> do you have that you can use the skills needed for healthcare careers?"
  - **Teachers** - "How much <u>confidence</u> do your CTE students have that they can use the skills needed for healthcare careers?"

Results of Pretest/Posttest

Pathway Components: Five Activities

Field Trips

Hours of Work-Based Learning

Counselor Encouragement for Healthcare Careers

Career Awareness and Development Activities

Healthcare Career Readiness

Teacher Encouragement for Healthcare Careers

Sample Questions

9. Before you joined this health careers academy, how much did you know about health care careers?
- ○ None
- ○ A little
- ○ Some
- ○ A lot

10. How many hours of your internship have you completed this school year?
- ○ Less than 10 hours
- ○ 11-30 hours
- ○ 31-50 hours
- ○ 51-100 hours
- ○ More than 100 hours
- ○ Don't know
- ○ Don't have an internship this year

11. Overall, how much has this health careers academy shaped your college/career interest?
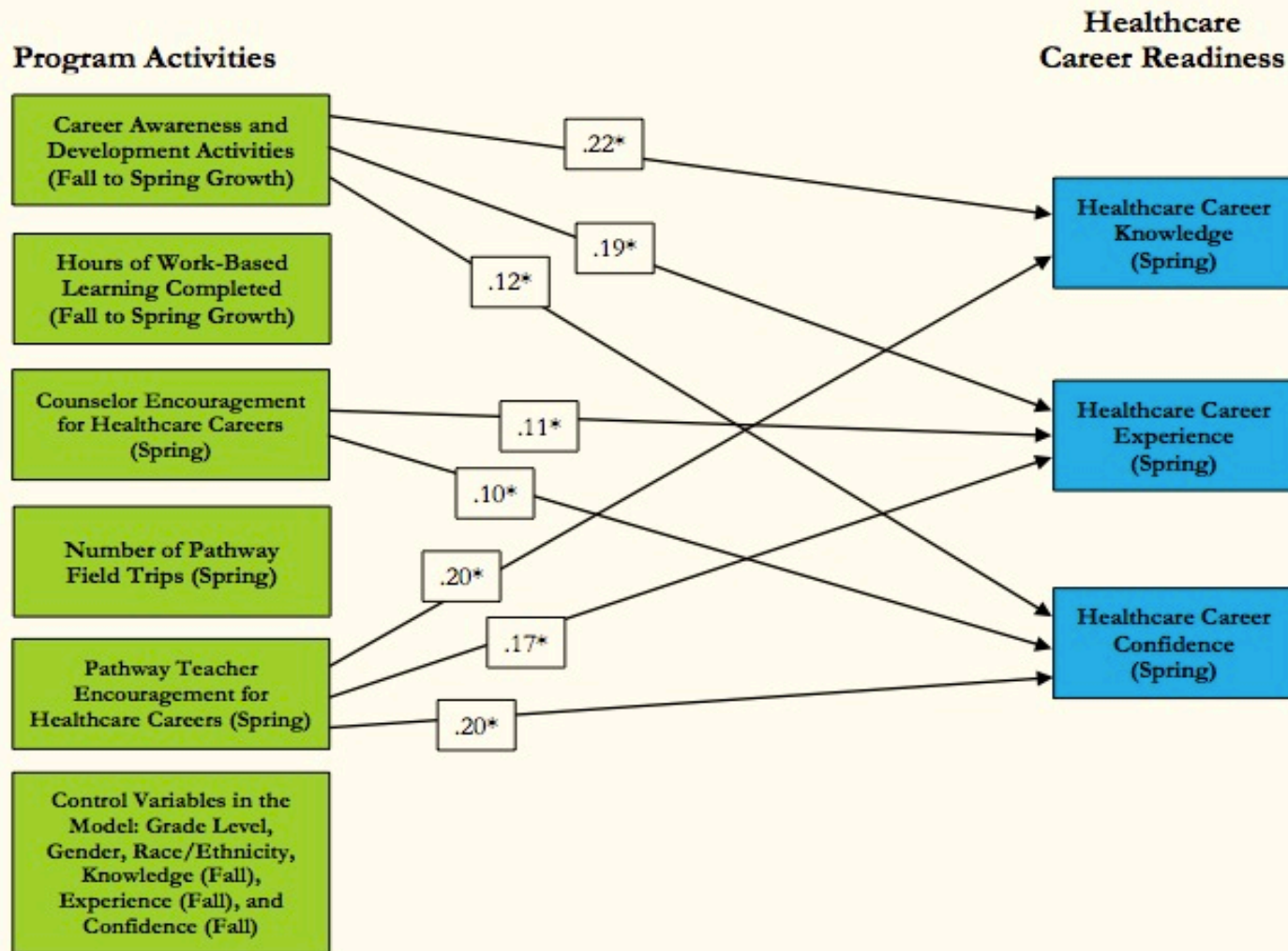- ○ Not at all
- ○ A little
- ○ Some
- ○ A lot

24. How often does your school provide you with opportunities to volunteer to help out in your community (by working at a community event, visiting the elderly, tutoring students, visiting patients in a hospital setting, etc.)?

- ○ Never
- ○ A few times a year
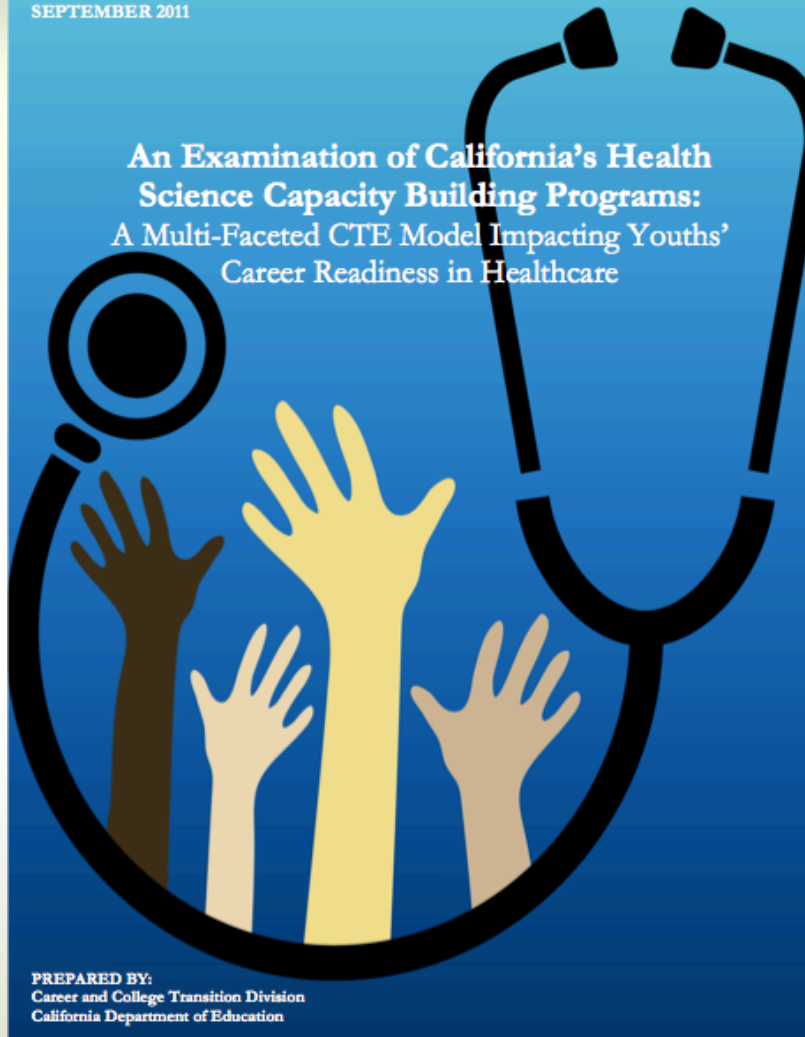- ○ Once a month
- ○ Once a week
- ○ Multiple times a week

25. How often does your health careers academy provide you with opportunities to volunteer to help out in your community (by working at a community event, visiting the elderly, tutoring students, visiting patients in a hospital setting, etc.)?

- ○ Never
- ○ A few times a year
- ○ Once a month
- ○ Once a week
- ○ Multiple times a week

Path Model

2011 Evaluation Report

Contact

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