What is Strategic Evaluation?

- A systematic process for enhancing knowledge and decision making and action that increases effectiveness
- Involves answering key questions by collecting, analyzing, and using relevant, credible data for purposes of reflection, decision making, and improvement
- Today's most impactful social sector organizations seek strategic learning through evaluation that provides timely information and actionable insights

Why data2insight LLC?

- A team of evaluators and researchers with strong, analytic information design and communication skills
- Practice evaluation science to solve social, environmental, health, and education problems
- Help improve efforts to prevent and/or solve these problems
- Specialize in evaluation of K-20 STEM education programs

Why Effectiveness Optimization?

(based on program theory-driven evaluation science)

Develop common understanding of your programs and intended impacts

- Results in more informed evaluation questions
- Builds communication and trust between stakeholders
- Results in more robust evaluation
- Builds your organization's research and evaluation capacity
- Leads to better decision making
- Increases program(s) effectiveness
- Increases impact

How does Effectiveness Optimization work?

3 steps:

1. **Clarify why or how an organization presumably accomplishes its desired outcomes by creating an impact map**

2. **Frame and prioritize potential research and evaluation questions so that they are concrete, specific, and informed by the impact map**

   2.1 Organization stakeholders identify top 3 to 5 evaluation questions

2.2   Data2insight will design evaluation plan to answer your most important questions over the next year

2.3   Stakeholders align evaluation planning with strategic and operational planning

3. **Answer key evaluation questions**

What will we accomplish today?

In the morning we will:

1. Create an impact map (informed by existing theory of change diagram)
2. Identify key short-term (6-12 months) and mid-term (1-2 years) outcomes that are expected to result from program activities, which in turn are expected to contribute to long-term outcomes (3+years)

In the afternoon we will:

1. Formulate and/or identify a wide range of potential evaluation questions
2. Prioritize evaluation questions

Interdisciplinary graduate traineeship program

- How is dual advising helping trainees develop and/or conduct their PhD research?
- What are the most important big data skills for trainees to develop?
- Which program activities contribute the most to data science tool building and sharing?

Early learning math program

- To what extent did playing math games contribute to increased incidences of children having math and math play experiences in the classroom?
- Did families play the math games that were sent home? If so, how frequently? And, what were the perceived benefits of playing the games?
- Was staff able to extend foundational math concepts to the everyday lives of their students?
- How did teacher/staff and caregiver attitudes change about the value of teaching pre-kindergartners foundational math concepts?
- How did teacher/staff and caregiver understanding of foundation math concepts change over time?

STEM equity professional development program

- What are the factors that need to be considered when matching an intern with a company?
- What knowledge, skills, and experiences are the most important for employers? Interns?
- What are the most effective practices for intern onboarding and management?
- What are the most important functions for the matching organization in order to support a successful match between company and intern?

Youth mentoring program

- What is the relationship between the mentee/mentor relationship and a student's academic achievement?
- To what extent does the school performance of mentored youth correlate with measures of social competence, attitudes toward risky behavior, and parental trust?
- What services are needed to support mentors, mentees, and program staff in ways that contribute to improve academic achievement in addition to development of a healthy relationship?

Interdisciplinary graduate traineeship program

- Percent of trainees using tools developed as part of program
- Number of advisor-trainee interactions (primary and secondary advisor)
- Number of interdisciplinary publications by program participants
- Percent of participants from the underrepresented group targeted for program
- Change in and type of interdisciplinary connections within the cohort

Early learning math program

- Number/percent of children who achieve targeted learning objectives
- Change in teacher attitudes
- Change in children's behaviors
- Change in parent behaviors

STEM equity professional development program

- Number/percent of participants who land a software development job
- Average salary of participants who enter the software development workforce
- Change in average salary of participants (after-before)
- Number/percent of participants who meet or exceed expectations during internship
- Number/percent of participants who take on leadership roles in open source community

Youth mentoring program

- Student GPA and attendance patterns
- Number of behavioral referrals—average across cohort
- Change in growth mindset
- Change in social competence
- Change in attitudes toward risky behavior and parental trust
- Strength of relationship between mentee/mentor

Please describe the elements of today's retreat you enjoyed the most?

What recommendations do you have for improving future refocusing sessions?

How effective was this session at achieving the following goals?

1. Create common understanding about the program's purpose and outcomes

1: Very ineffective   2: Ineffective   3: Somewhat effective   4: Effective
5: Very effective

2. Make the program theory explicit and testable

1: Very ineffective   2: Ineffective   3: Somewhat effective   4: Effective
5: Very effective

3. Provide useful framework for data collection and analysis methods

1: Very ineffective   2: Ineffective   3: Somewhat effective   4: Effective
5: Very effective

4. Frame concrete, specific evaluation questions that will best inform decision making about the development of the program

1: Very ineffective   2: Ineffective   3: Somewhat effective   4: Effective
5: Very effective

If you selected anything less than 4 for achieving any of the goals, what would have made the session more effective?

What did you find most useful about this session? Why?

What can we do to ensure that our work together in the weeks and months ahead is as productive as possible?

Name (optional)