



DATA QUALITY INSTITUTE

Building State Capacity for Reporting Perkins Data

Making CTE Data Meaningful, Accessible, and Actionable

Mimi Lufkin, NAPE

&

Krishnan Sudharsan, OCTE, Michigan

U.S. Department of Education
Office of Vocational and Adult Education
Division of Academic and Technical Education



Who is NAPE?

DATA QUALITY INSTITUTE 2013



National Alliance for Partnerships in Equity (NAPE)

Professional Development

Provide tools and curricula for educators through conferences, presentations, webinars, and formal training.

Research and Evaluation

Develop reports. Identify research-based promising practices. Provide input to others' research.

Technical Assistance

Develop tools and resources for LEAs. Provide consulting services. Offer expertise on access, equity, and diversity issues.

Public Policy and Advocacy

Work with federal agencies. Educate legislators on equity and diversity issues. Develop policy briefs. Alert membership of policy issues.

NAPE's Professional Development Suite of STEM Equity Pipeline Programs

DATA QUALITY INSTITUTE 2013

STEM Equity Pipeline™

PIPESTEM™

Working with institutional leaders to improve enrollment, retention, & completion of girls & under-represented populations in STEM programs of study

STEM Equity Teacher Training

Training teachers to use pedagogy that improves enrollment, retention, & completion of girls & under-represented populations in STEM courses

STEM Equity Counselor Training

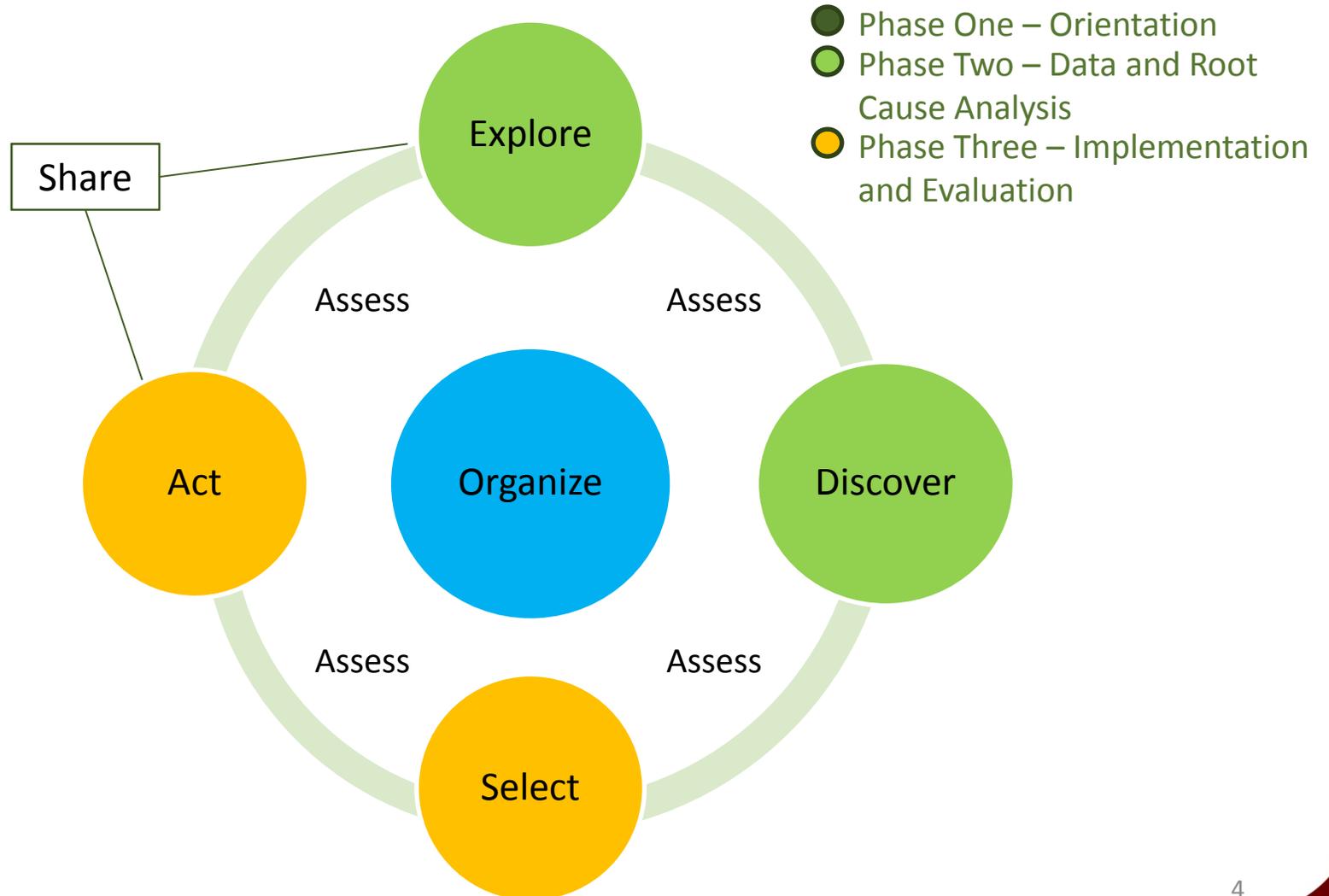
Coaching counselors to encourage girls & under-represented populations in STEM careers

Tools & Resources

Tools to support teachers' & counselors' learning & assist their students, e.g., camps, partner orgs, print & media resources, & curriculum

Program Improvement Process for Equity™

DATA QUALITY INSTITUTE 2013



Overview

DATA QUALITY INSTITUTE 2013

- Why is data important?
- What is a data dashboard?
- What was Michigan doing prior to building dashboards?
- Example of Michigan nontraditional dashboard
- Example of NAPE dashboard for Georgia

Why is Data Important?

DATA QUALITY INSTITUTE 2013

- \$200 (Data)
- *“The amount of money in my checking account is \$200.”* (Information)
- *“I need to deposit another \$300 dollars in order to not bounce the check that I just wrote.”* (Knowledge)
- *“I should balance my check book henceforth, so that I don’t let this kind of situation happen again.”* (Wisdom)

What are Data Dashboards?

DATA QUALITY INSTITUTE 2013

- Business intelligence (BI)
- *“Turning data into knowledge to support informed decision making.”* – Definition
- 4 steps in any BI cycle
 - Accurate answers
 - Valuable insight
 - On-time information
 - Actionable conclusions

Business Intelligence Technologies in an Organization

DATA QUALITY INSTITUTE 2013



Dashboard Definition

DATA QUALITY INSTITUTE 2013

“A dashboard is a visual display of the most important information needed to achieve one or more objectives; consolidated and arranged on a single screen so the information can be monitored at a glance.”

– Stephen Few

Characteristics of a Dashboard

DATA QUALITY INSTITUTE 2013

- All visualizations fit on a single computer screen
- Show most important KPIs to be monitored
- Interactivity such as filtering and drilling down can be used in a dashboard
- Not designed exclusively for executives
- Effective dashboards are easy to understand and use
- Automatic data updates without any user assistance

Visual Analysis Tools

DATA QUALITY INSTITUTE 2013

- *“...tools that offer the ability to select various date ranges, pick different products, or drill down to more detailed data”*
- Highly interactive and functionality like filtering and drilling down
- Primarily used to find correlations, trends, outliers (anomalies), patterns, and business conditions in data
- Tableau software used by Michigan OCTE

Michigan's Secondary CPIs

DATA QUALITY INSTITUTE 2013

- 1S1: Academic Attainment in Reading
- 1S2: Academic Attainment in Mathematics
- 2S1: Technical Skill Attainment
- 3S1: School Completion
- 4S1: Student Graduation Rate
- 5S1: Placement
- 6S1: Nontraditional Participation
- 6S2: Nontraditional Completion

Prior to Data Dashboards

DATA QUALITY INSTITUTE 2013

- Excel and PDFs
- 8 core performance indicators
- 25 regional Excel sheets (25*8 = 200 graphs and tables)
- 53 Career Education Planning Districts (53*8 = 424 graphs and tables)
- Massive production effort, more time spent in production than on analysis

Examples of Data Dashboards

DATA QUALITY INSTITUTE 2013

- Michigan CPI dashboard
- Georgia CPI dashboard for special populations
- NAPE is building capacity to create equity dashboards for states, regions, schools, etc.

Questions?

DATA QUALITY INSTITUTE 2013

Krishnan Sudharsan

sudharsank@michigan.gov

517-241-7652

Mimi Lufkin

mimilufkin@napequity.org

610-593-8038

