Plan, Do, Study, Act

Engaging in Systems Level Change to support positive outcomes for youth

Why is Data-Based Decision Making Important?

- DBDM helps educators (a) make informed decisions that lead to improved student achievement, (b) gain an objective picture of what needs to be improved, (c) focus on what is important, (d) discover what is working and what is not, and (e) monitor and celebrate movement toward desired outcomes.

- DBDM takes place within the broader context of what is happening in the school, district, and state, not in isolation of a one time event. Kowalski, Lasley, & Mahoney, 2008

Benefits of DBDM

- Supports school leaders to analyze, identify, and solve problems;

- Helps school leaders differentiate between knowledge and beliefs;

- Leads educators to invest in gathering important additional data that are missing;

- Focuses important discussions on outcomes rather than on individual's styles or preferences;

- Leverages political support

(Ancess, Barnett, & Allen, 2007)

Why use data to make decisions?

- Recall the adage, "What gets measured and monitored gets improved"?

- Without monitoring and measuring activities, all you have are gut feelings, hunches, opinions, and unsupported professional judgment.

- DBDM helps improve the success of students and schools by grounding decisions in descriptive (qualitative) or numerical (quantitative) evidence.

- More access to better information enables educational professionals to test their assumptions, identify needs, and measure outcomes.
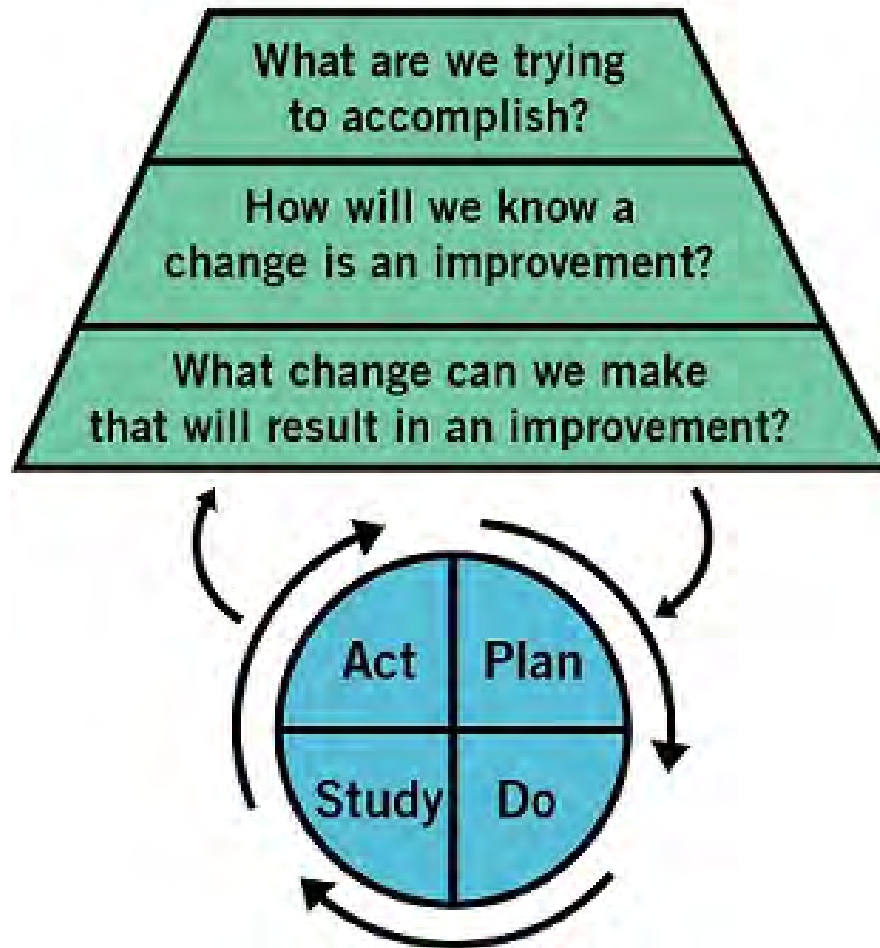
A Tale of Three High Schools Across Two Atolls

Three Questions and a Cycle

Model for Improvement

What are we trying to accomplish?

How will we know a change is an improvement?

What change can we make that will result in an improvement?

Act | Plan
Study | Do

Step 1: Set an Aim

- What do we need to do?

- For whom?

- By when?

Model for Improvement

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Study | Do
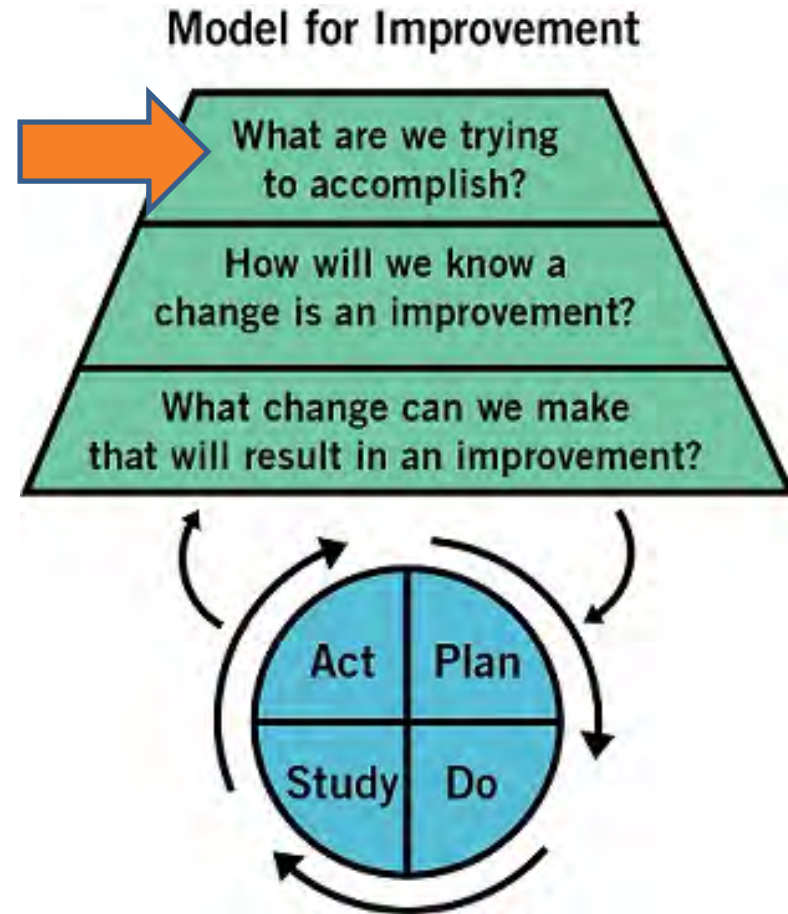
Step 1: Set an Aim

- How good?
- For whom?
- By when?

- Bold
- Realistic
- Clear
- Concise
- Measureable
- Meaningful

Which is the better aim statement?

1. Increase post-school outcomes.

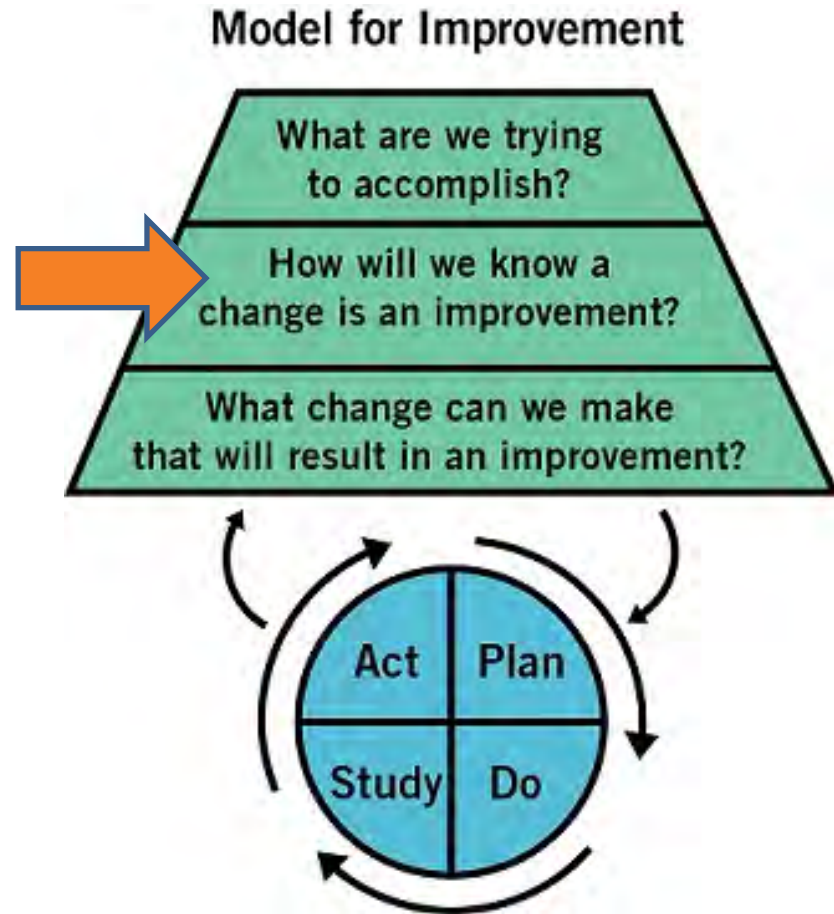2. Increase the number of youth competitively employed 1-year out of high school from 44% to 75%.

Majuro, Laura, & Kwajalein High Schools

What are we trying to accomplish: increasing the number of youth with disabilities graduating with a standard high school diploma from 17% to 40%.

Step 2: Establish Measures

- Outcome measures
- Process measures
- Balancing measures

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Step 2: Establish Measures

Outcome Measures	→	Where are we going?
Process Measures	→	What are We Doing?
Balancing Measures	→	What else is Happening?

Which measure is which?

- Average number of youth who participated in work-based learning opportunities

  Process

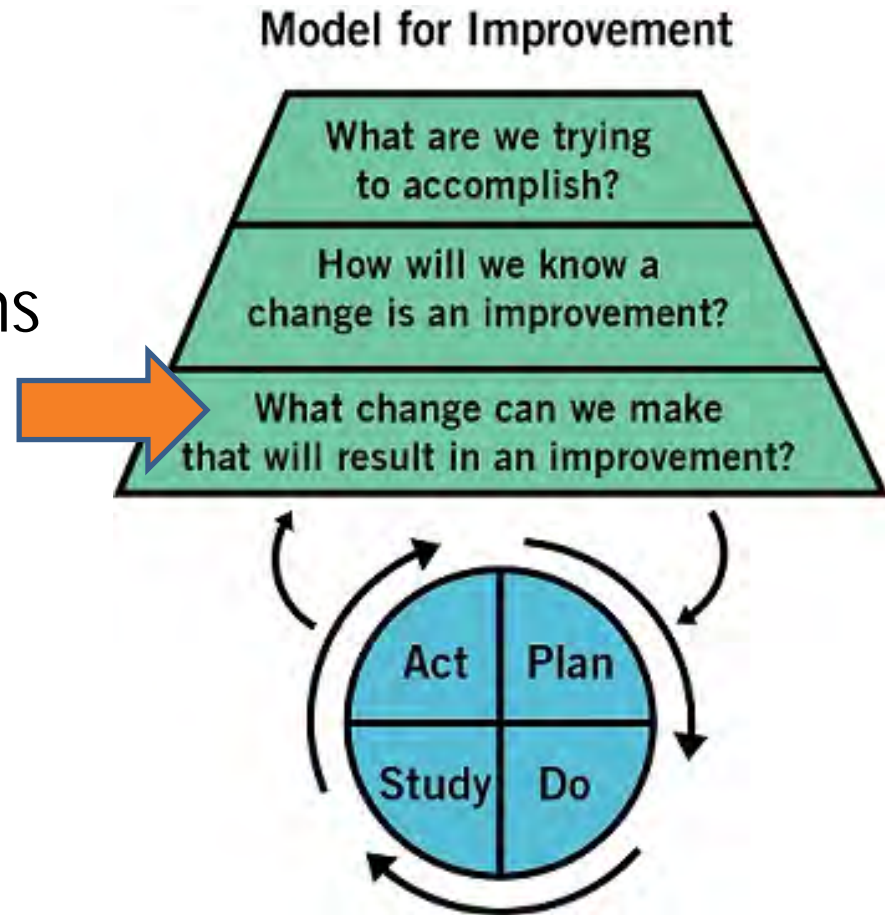- Parent and student satisfaction with services

  Balancing

- Rate of youth in competitive integrated employment one year out of high school

  Outcome

Step 3: Developing Changes

- Process analysis tools
- Benchmarking
- Technological solutions
- Creative thinking
- Change concepts

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Change Concepts

- Improve community partnerships
- Increase Family Engagement
- Improve student Career Awareness
- Improve self-determination/ self-advocacy skills
- Increase student self-care independent living skills
- Enhance Student Supports
- Design diagnostic data systems

Majuro, Laura, & Kwajalein High Schools

- **Marshall Island High School's (MIHS)** SMART Goal is: By the end of May 2018, all students with disability attendance will increase from 50% to 80%.

- **Laura High School's** (LHS) SMART goal is: By the end of the school year 2017-2018, LHS will increase the level of involvement of the parents of students with IEP's from 50% to 80% by having more parent meetings to discuss transition planning so that parents can offer more input in their child's IEPs.

- **Kwajalein High School's** SMART goal is: By 2018, to increase the number of students with disabilities (SWD) participating in the MISAT to 100% and 25% of SWD reading at proficiency level, Kawajalein Atol Schools will implement collaborative teaching and planning among teachers.
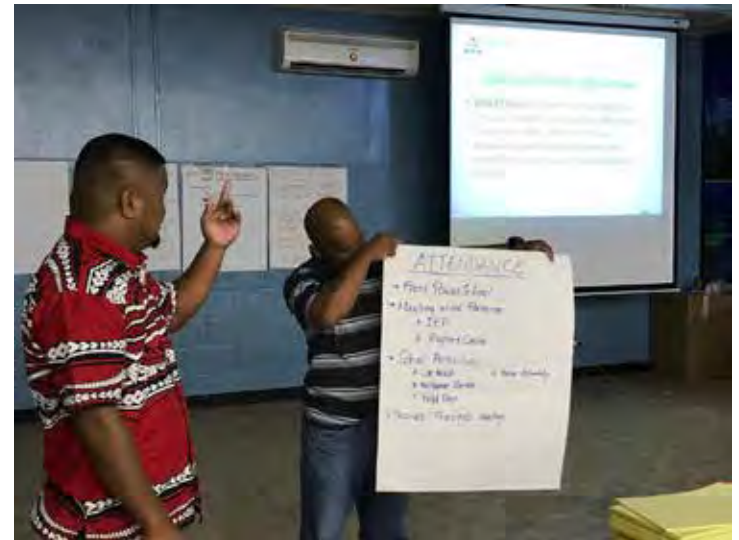
What changes could improve outcomes for youth with disabilities?

Step 4: Testing Changes

Model for Improvement

What are we trying to accomplish?

How will we know a change is an improvement?

What change can we make that will result in an improvement?

Act | Plan
Study | Do

Step 4: Testing Changes

- Plan
  - Questions & predictions
  - Who/what/where/when?
- Do
  - Observe the test
  - Document results
- Study
  - Draw charts and graphs
  - Analyze the data
- Act
  - Refine the change and plan for the next cycle

Marshall Island High School: At Mid-Year Check in

- At mid-year check in MIHS had achieved a positive one on the goal attainment scale indicating a slightly greater than expected change. They are on track to achieving a larger than expected change by year end.
  - The average number of days students with disabilities were absent from school in the 1st quarter was 2.9 out of 48 (**mean attendance 94%**).
  - The average days in the 2nd quarter was 4.3 out of 33 days (**mean attendance 87%**).
  - It is important to note that there are several students with excessive absences (> 10 days) in the 2nd quarter that skew the overall data. When these outliers are removed, the average number of days missed during the 2nd quarter is 2.3 out of 33 days (a decrease in 0.6 days; **mean attendance 93%**).

Laura High School

- At mid-year check in, LHS had achieved a negative one on the goal attainment scale indicating they are on track to meet their goal by year end.

    - LHS has conducted three meetings for the parents with students with disabilities at the school.

    - The focus of the meetings was components of the IEP and the special education process. Parents were involved and participated in the activities that were conducted in the meetings.
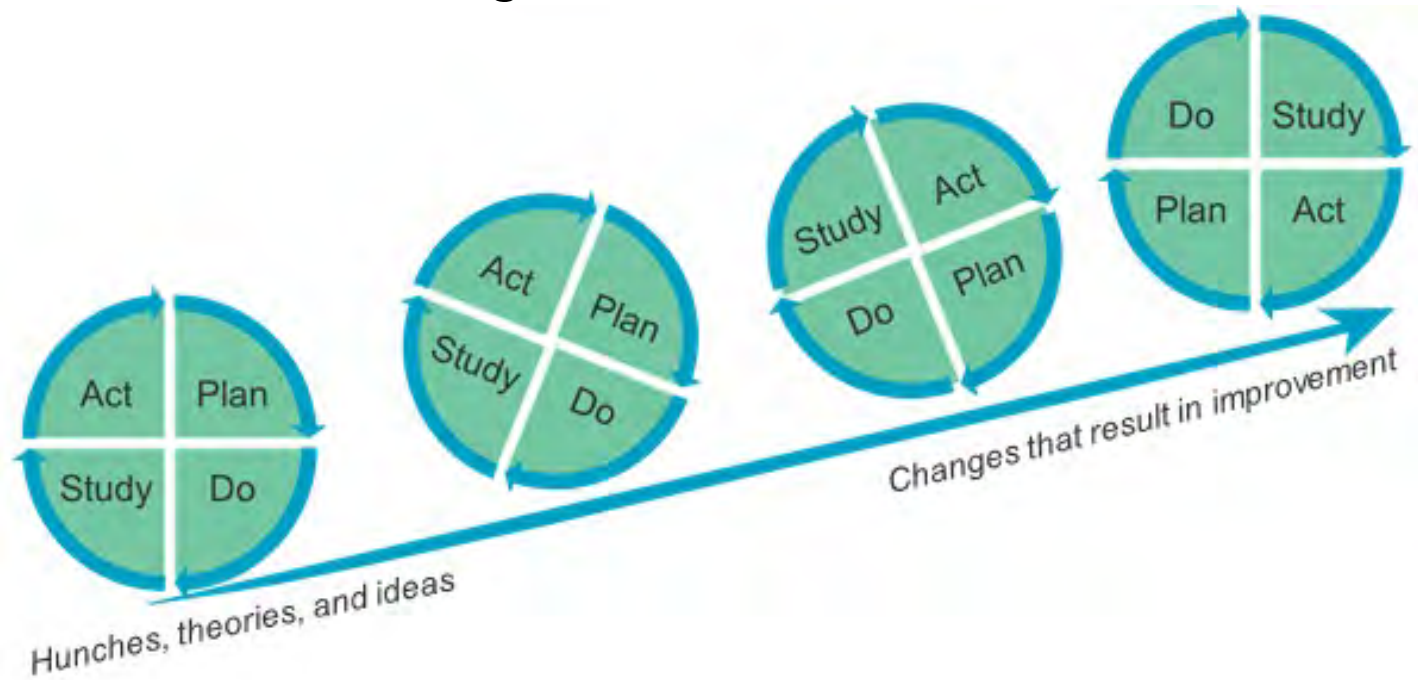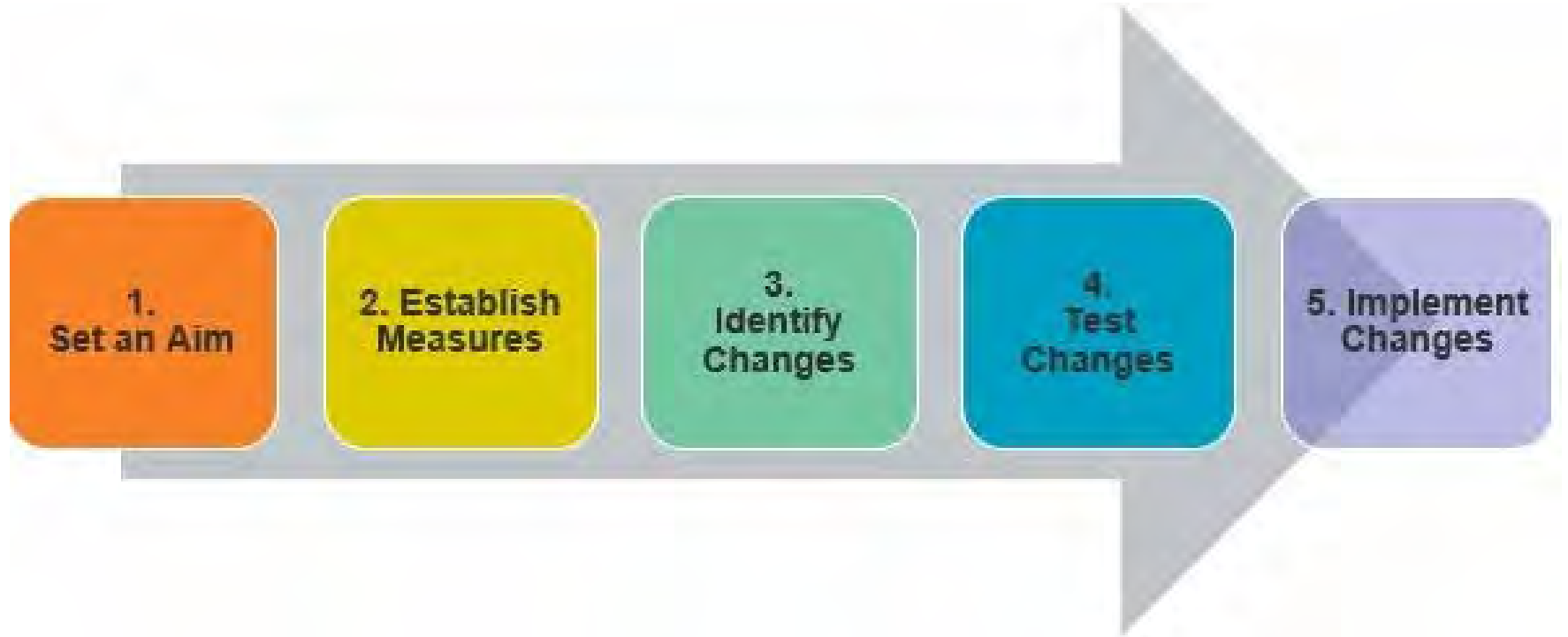
Date	Percent of Parents in Attendance	Location of Meeting
November 27, 2017	14/23 (61%)	School
January 18, 2018	12/23 (52%)	School
March 25, 2018	15/23 (65%)	Community
April 2, 2018	TBD	Community

Kwajalein High School

- At mid-year check in Kwajalein Atoll schools achieved a negative one on the goal attainment scale indicating they were on track to achieve their goal by year end.
  - Kwajalein High School met their goal of 100% attendance rate during statewide testing (from approximately 21% attendance rate)
  - Because all students with disabilities participated on the statewide assessment, they now have a more accurate picture of performance rates of students with disabilities in their schools.

Linking PDSA Test Cycles

- Start small
- Think ahead
- Don't wait to begin!

Changes that result in improvement

Hunches, theories, and ideas

Review: Using the PDSA to Improve Student Outcomes

1. Set an Aim
2. Establish Measures
3. Identify Changes
4. Test Changes
5. Implement Changes

How Can We Improve?

1. Will. You must have the will to improve

Model for Improvement

What are we trying to accomplish?

How will we know a change is an improvement?

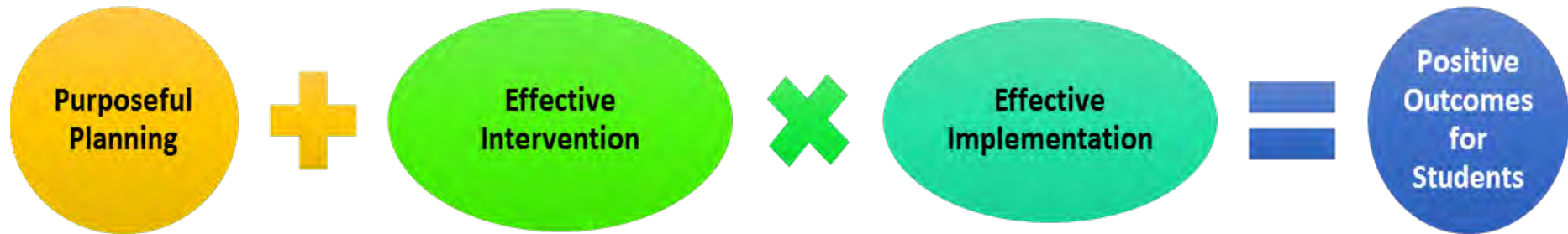What change can we make that will result in an improvement?

Act | Plan
Study | Do

3. Execution. You must make it real.

2. Ideas. You must have ideas about alternatives to the status quo.

Reasons for Engaging in Plan, Do, Study, Act

- Provide objective information

- Increase info about the change (Positive/negative)

- Give some expectation of the change impact

- Show if the gains are retained

- Involve the staff in the changes

- Provide economic impacts

PDSA: A dynamic process

- Dynamic process of spiraling back and forth among reflection, data collection, and action

- Does not follow a linear pattern

- Does not follow a causal sequence from problem to action
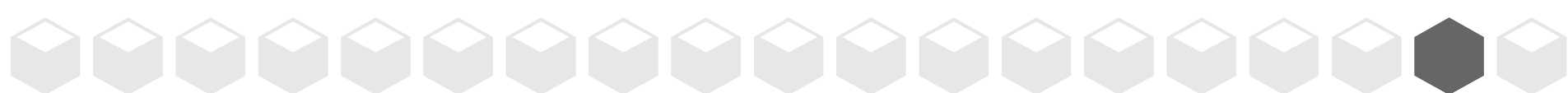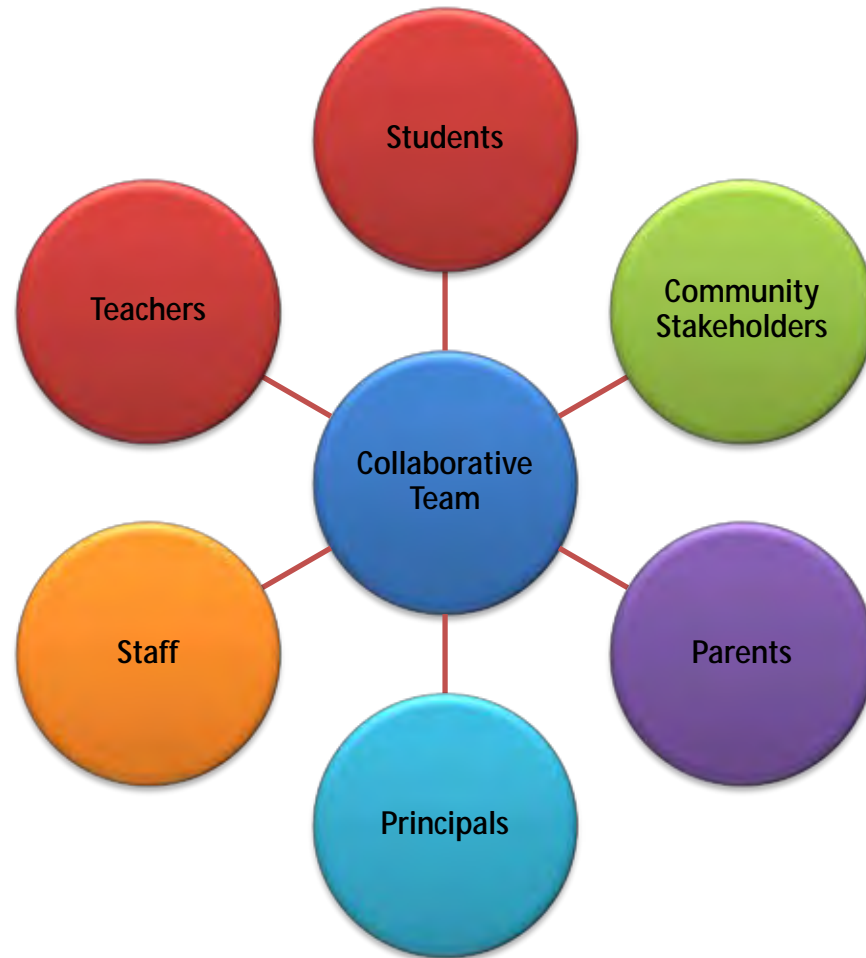
Collaboration

What are the steps we need to take?

- Identify a problem
- Collect and Organize Data
- Interpret Data
- Develop an Action Plan (Plan)
- Implement Action Plan (Do)
- Evaluate Action Plan and Reflect on Progress (Study, ACT)

3 Questions for Improvement

- What are we trying to accomplish (goal)?

- How will we know that change is an improvement (measures)?

- What change can we make that will result in an improvement?

Model for Improvement

Formula to
Support Successful Outcomes

Purposeful Planning + Effective Intervention × Effective Implementation = Positive Outcomes for Students

Adapted from Fixen & Blasé (2009)

The Charge: Moving from Plan to Do
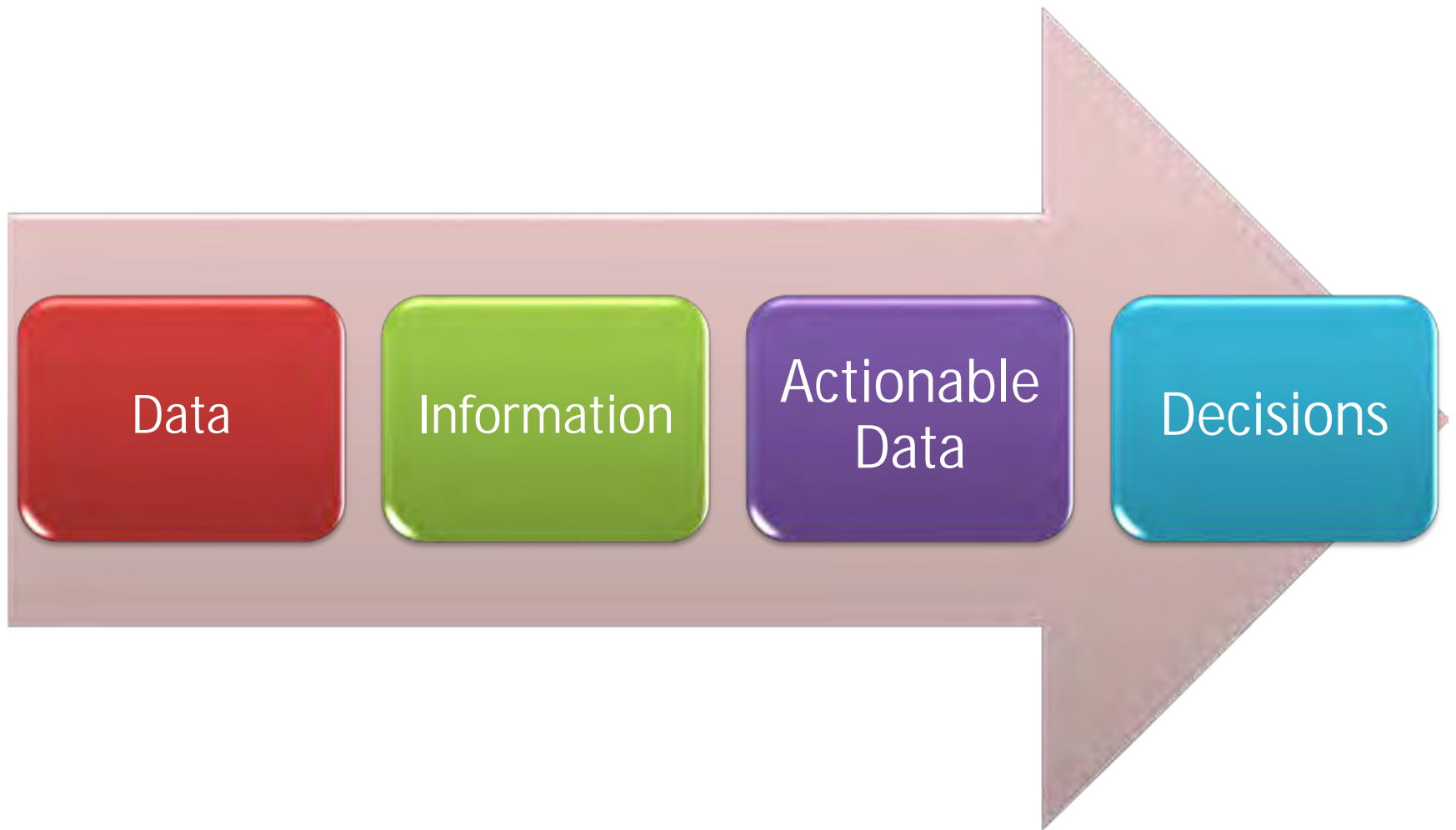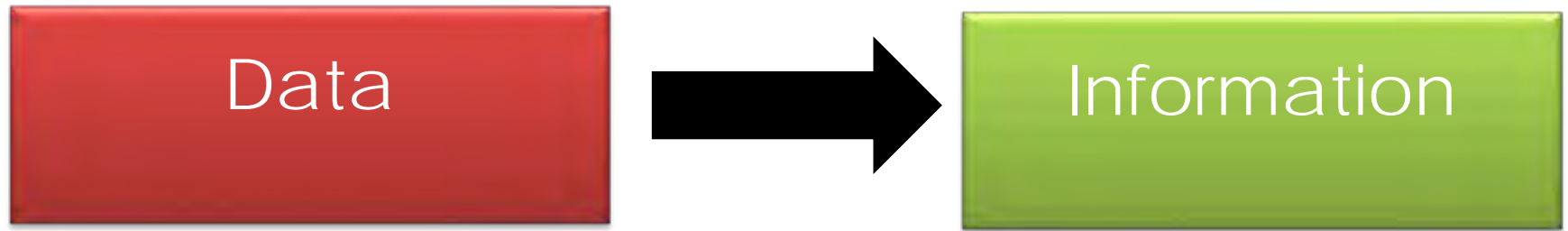
| Data | → | Information |

- When numbers are interpreted and meaning is made of data

- Data are organized in a meaningful way to generate information

- View data graphically to identify patterns in youth's in-school transition experiences and programs

Information	→	Actionable Data

When stakeholders

- synthesize information from various sources

- apply judgment to prioritize information

- consider the merits of different possible solutions

Information

Information is obtained through interpretation that leads to making meaning from the data.

For example:

- Knowing the outcomes of specific subgroups of youth with disabilities

- Identifying patterns in students' in-school transition experiences

Alverso City Compliance of Transition Component of IEPs Using Indicator 13 Checklist A
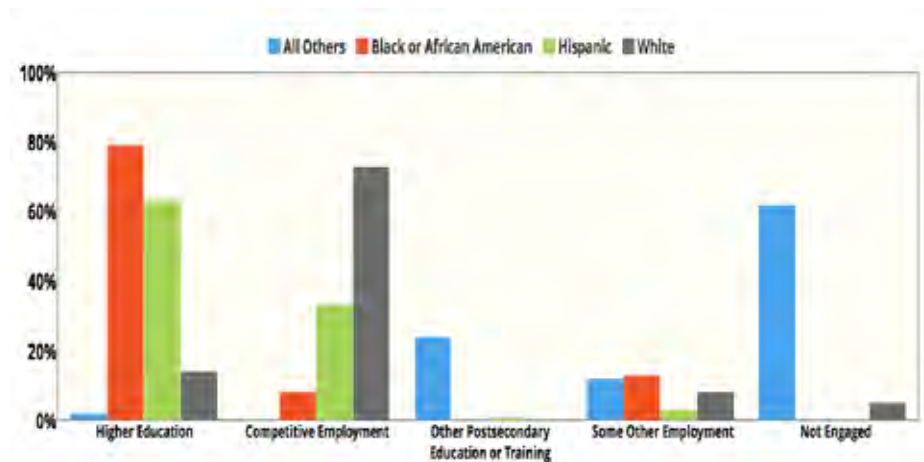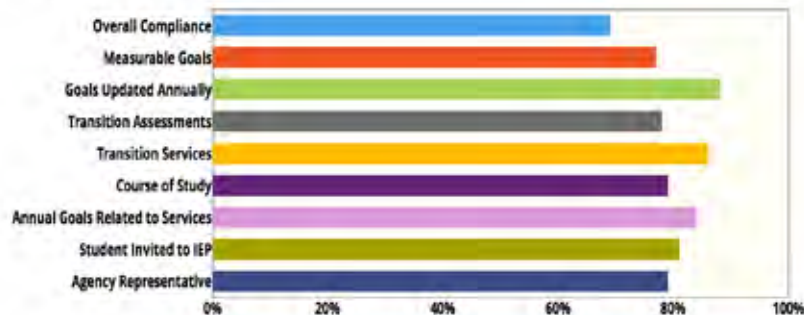
Actionable Data: Prioritize Needs

- Synthesis information
  - What are your data saying?

- Use professional judgment to prioritize the information
  - In your data comparisons, are you OK or not OK with differences between groups?

- Weigh relative merits of possible solutions

Getting Started with DBDM

- Start by asking the right questions.

- Prior to collecting data, **be clear on what question you want answered**.

- Decide what you want to know as well as what data are available to help you answer your questions.

What's needed to link data use for decision making to outcomes for youth?

- Quick and easy access to relevant data

- Capacity to analyze and interpret data

- Dedicated time to review data, identify appropriate strategies, plan, implement, and evaluate meaningful actions likely to improve transition programs.

.....remember this is a Stakeholder Team effort

NTACT
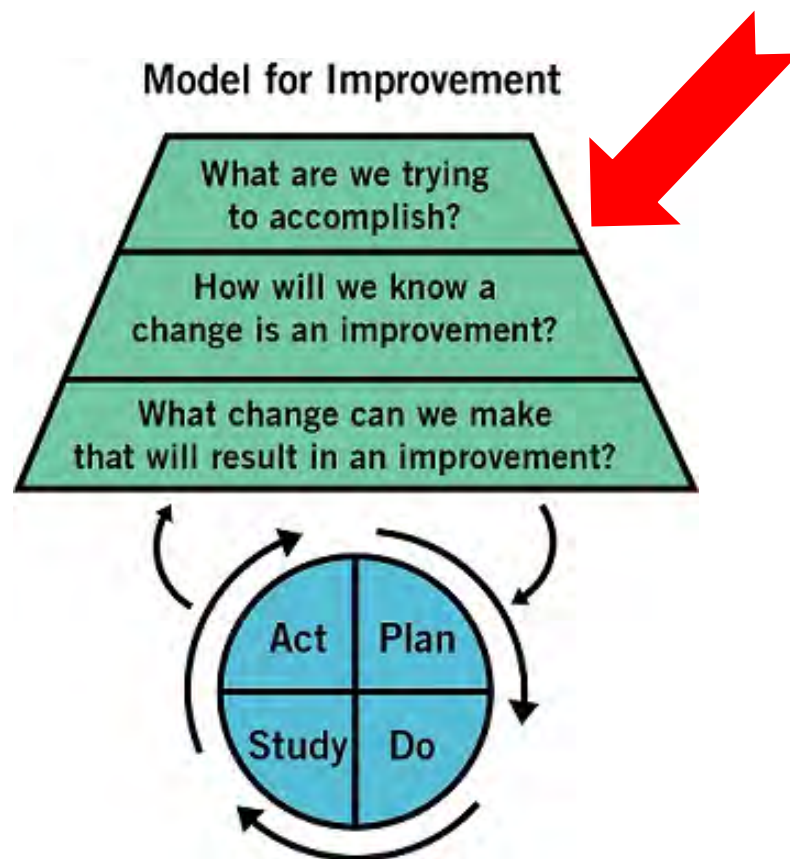National Technical Assistance Center on Transition

Data-based decision making: It's a process!

1. Review data (e.g., post-school outcomes, current policies, procedures, predictors of post-school success, implementation of EBPs)

2. Interpret the data (e.g. identify patterns)

3. Prioritize needs based on data and context

4. Establish S.M.A.R.T. goals related to improving outcomes for youth with disabilities

5. Select specific strategies designed to improve post-school outcomes (e.g., evidence-based practices)

6. Make Decisions & Plan Actions

7. Monitor and evaluate results

8. Do it all again!!!
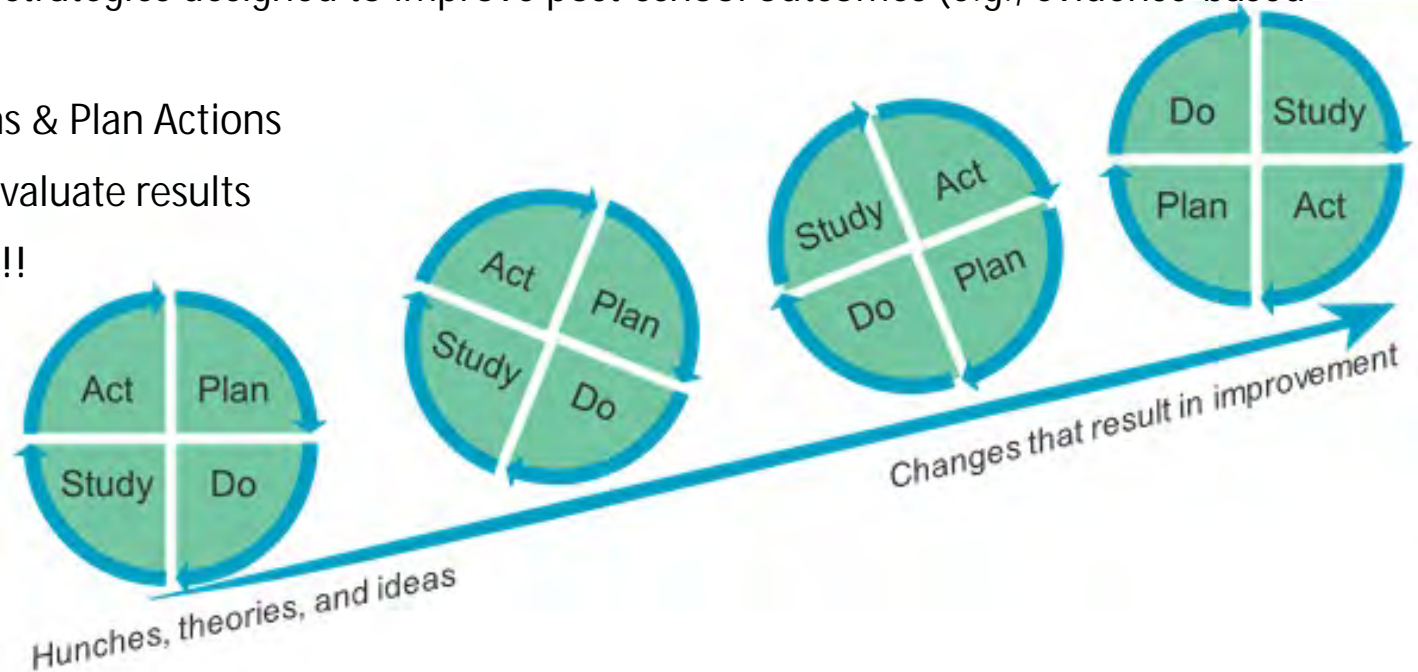
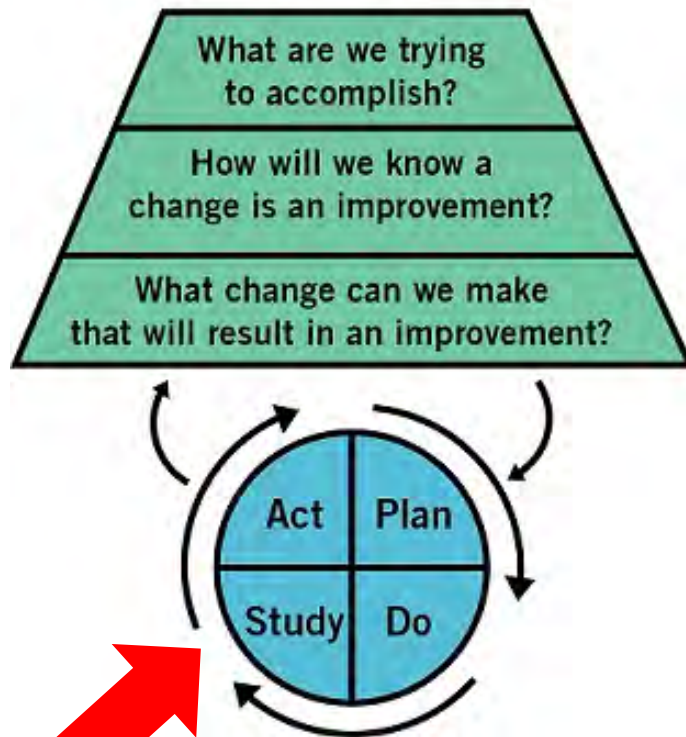# How does all this apply to what you are during this institute?

- During CBI, you will be working on the trapezoid that sits atop the PDSA model

- Based on your content topic, you will identify barriers and determine potential solutions (documented in breakout session notes)

- You will prioritize needs based on impact and effort (see Action Priority Matrix)

- You will report back to the INSTRC staff about your focus and priorities (CADRE session feedback form)

Model for Improvement

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How does all this apply to what you will do in the fall?

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Act | Plan

Study | Do

- You will engage in Plan, Do, Study, Act.

Invites You to...

NTACT — National Technical Assistance Center on Transition

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