

Unlocking the Power of Data for Continuous School Improvement

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WELCOME!

**UNLOCKING THE POWER OF
DATA FOR CONTINUOUS
SCHOOL IMPROVEMENT**

COSA
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OUTCOMES

Everyone understands—

- **The Continuous School Improvement (CSI) Framework.**
- **What and how data are important for continuous school improvement planning.**

WHAT IS THE HARDEST PART FROM YOUR PERSPECTIVE?

- *Beliefs that all children can learn.*
- *Schools honestly reviewing their data.*
- *One vision.*
- *One plan to implement the vision.*
- *Curriculum, instructional strategies, and assessments clear and aligned to standards.*
- *Staff collaboration and use of data related to standards implementation.*
- *Staff professional learning to work differently.*
- *Rethinking current structures to avoid add-ons.*

THINGS WE KNOW ABOUT IMPROVING STUDENT LEARNING

- Quality of classroom instruction is the single greatest predictor of student learning and achievement.
- Principal leadership is second . . .

Robert J. Marzano

THINGS WE KNOW ABOUT DATA USE

For data to be used to impact classroom instruction, there must be structures in place, to—

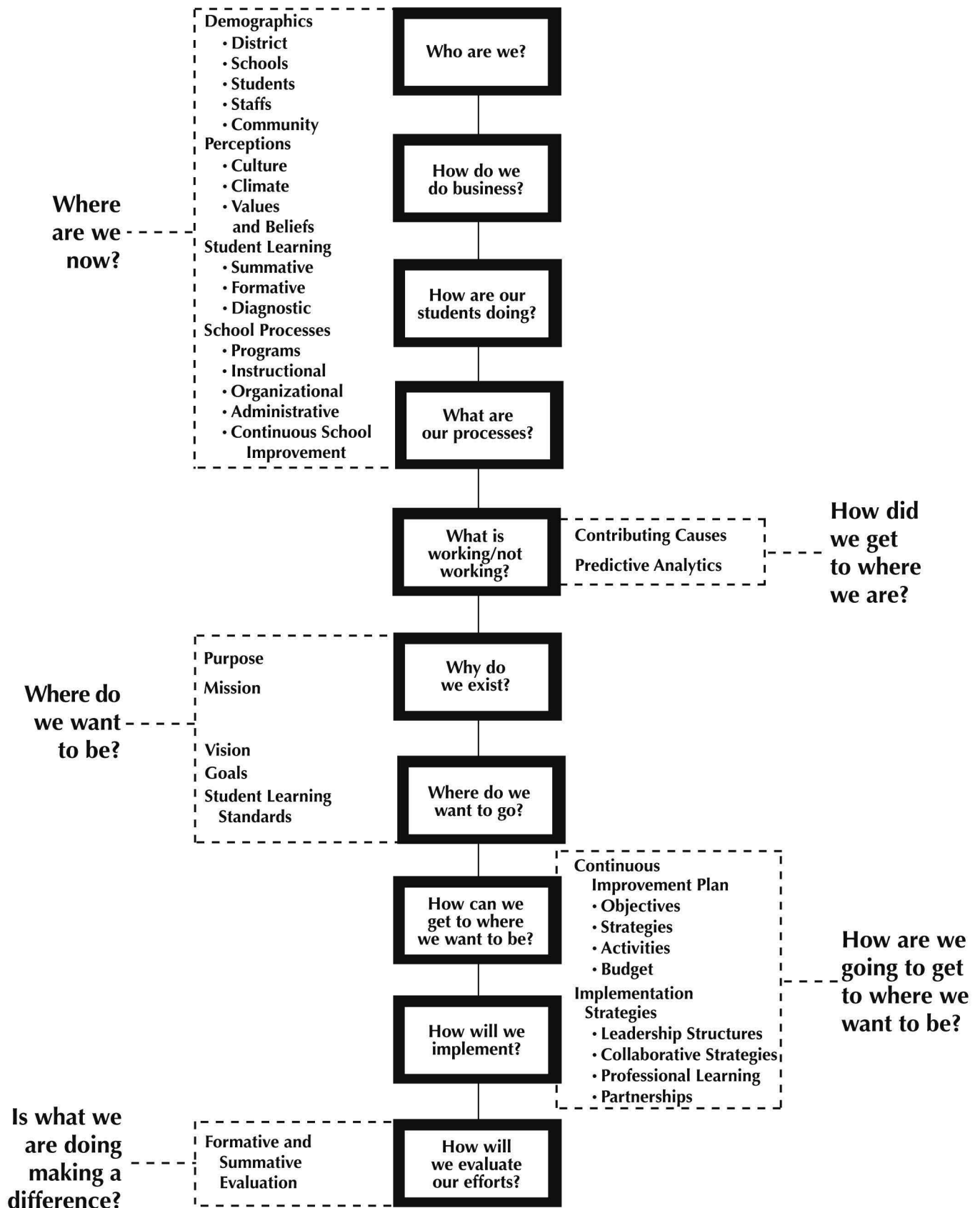
- Implement a shared schoolwide vision.
- Help staffs review data and discuss improving processes.
- Have regular, honest collaborations that cause learning.

LEARNING DEFINITION

Learning is the process through which experience causes permanent change in knowledge or behavior.

Cognitive Psychology

CONTINUOUS SCHOOL IMPROVEMENT FRAMEWORK



Bernhardt, V.L. (2013). *Data Analysis for Continuous School Improvement*. Third Edition. New York, NY: Routledge. Page 14. Reproducible.

DIFFERENCES IN ACTIONS BETWEEN SCHOOL FOCUSED ON COMPLIANCE AND COMMITTED TO CONTINUOUS IMPROVEMENT

Key Components	Schools Focused on Compliance	Schools Committed to Continuous School Improvement...
Data Analysis	Blame students for poor results (e.g., our results are not very good because our population lives in poverty). Use student learning data, only, to close gaps. Focus on “Bubble Kids.”	Embrace whom they have as students, learn how to meet their needs, and ensure that all achieve. Have all staff use demographic, perceptions, student learning, and school processes data to understand how to— <ul style="list-style-type: none"> • meet the needs of students, • understand what is working and what is not working, • use what is working to serve all students, and • predict and prevent failures, and optimize successes.
Problem Solving	Use problem solving in a reactive fashion. They tend to add fixes when problems occur.	Prepare staff to know how to problem solve together to get to and eliminate contributing causes, in a proactive fashion.
Vision	Focus only on meeting compliance. Add programs and interventions to what they are already doing when change is needed.	Have a vision about doing whatever it takes to improve teaching and learning. Use data to inform the schoolwide vision that is created, embraced, and implemented by all staff members. The vision clarifies what teachers will teach, how teachers will teach and assess, and how everyone in the organization will treat each other, related to student learning standards. The vision provides the means for strategic, fast action-the scenarios have been played through.
Planning	Write school improvement plans to close gaps related to compliance. School goals are limited to improving test scores versus improving student learning. Reactive to compliance reports, these plans are usually about “fixing the kids” by prescribing add-on interventions.	Proactively write continuous school improvement plans to implement a vision that improves learning for all students and prepares them for college and careers. The plan interweaves the leadership structure, professional learning, and partnerships needed to implement the vision.
Leadership	Have top-down leadership that requires a focus on compliance and closing gaps. Areas of emphasis change as leaders change.	Create shared decision-making structures that support each other as they implement the vision, and improve learning for all students.
Professional Learning	Use professional learning as a carrot and a stick. “If we are failing in this area, everyone has to go to this workshop.” Without new information, teachers do the same things over and over and hope for different results.	Understand that collaboration is required to improve teaching and learning. They build structures for all staff to collaborate and learn together. Time is dedicated for collaborative teams to review and make meaning of classroom and schoolwide data, and to discuss and apply options for improving student learning.
Partnerships	Create one-way partnerships with parents, community, and businesses to raise money and get stuff.	Embrace and plan for win-win partnerships as a means of implementing the vision and creating college and career-ready graduates.
Evaluation	Use evaluation when required for external accountability.	Use data to continuously improve all aspects of the learning organization.
Compliance	Focus on what is being measured for compliance purposes only, and are expert at gap analysis. Are content with the status quo as long as it meets compliance requirements.	Focus on creating and improving the learning organization to ensure learning for all students in all subject areas, so all students can be college and career ready. Accountability and compliance are a part of the process, but not the sole focus.

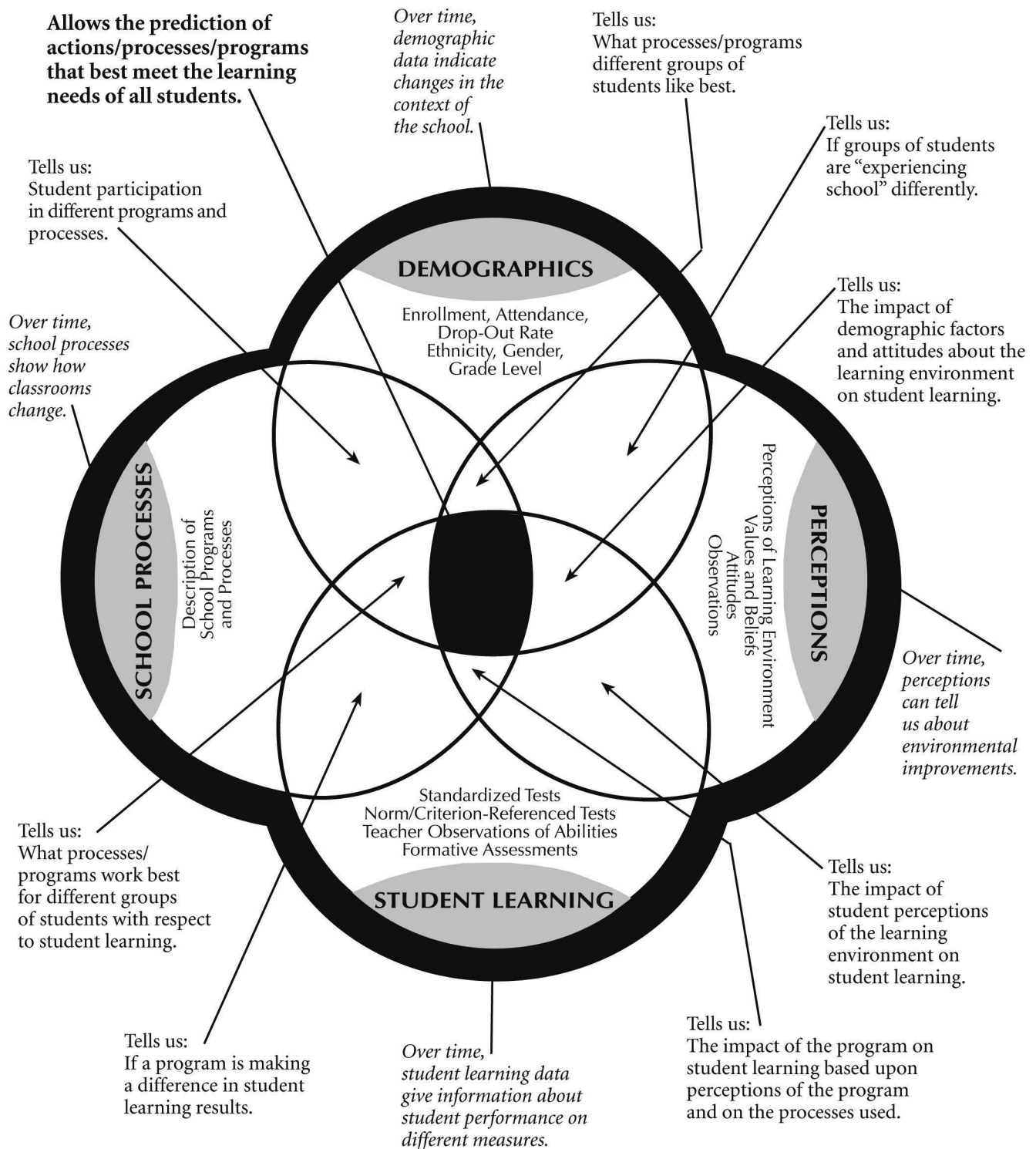
DATA-INFORMED DECISION MAKING
Reasons to Collect and Use Data—

- Find out where you are
- To understand how you got there
- Plan
- Evaluate
- Predict
- Clean up your system

**“Our future will be shaped by
the assumptions we make
about who we are and
what we can be.”**

- Rosabeth Moss Kanter

Multiple Measures of Data



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DEMOGRAPHICS ARE IMPORTANT DATA

- Describe the context of the school and school district.
- Help us understand all other numbers.
- Are used for disaggregating other types of data.
- Describe our system and leadership.

WHAT STUDENT DEMOGRAPHIC DATA ELEMENTS CHANGE WHEN LEADERSHIP CHANGES?

- Enrollment
- Gender
- Ethnicity/Race
- Attendance (Absences)
- Expulsions
- Suspensions
- Language Proficiency
- Indicators of Poverty
- Special Needs/Exceptionality
- IEP (Yes/No)
- Drop-Out / Graduation Rates
- Program Enrollment

STUDY QUESTIONS Demographic Data	DEMOGRAPHIC DATA	
	1. What are the school's demographic strengths and challenges?	
	Strengths	Challenges
	2. What are some implications for the continuous school improvement plan?	
Implications for the continuous school improvement plan.		
3. Looking at the data presented, what other demographic data would you want to answer the question Who are we?		
Other data . . .		

DEFINITIONS

- **STRENGTHS:** Something positive that can be seen in the data. Often leverage for improving a challenge.
- **CHALLENGES:** Data that imply something might need attention, a potential undesirable result, or something out of a school's control.

EXAMPLE STRENGTHS

- **The school is small.**
- **Our teacher-student ratio is small.**
- **Students are diverse.**

EXAMPLE CHALLENGES

- **Students are diverse.**
- **The number and percentage of students living in poverty has doubled in the past 3 years.**
- **We have a large percentage of students identified for special education services.**

DEFINITIONS

- **IMPLICATIONS FOR THE SCHOOL IMPROVEMENT PLAN** are placeholders until all the data are analyzed. Implications are thoughts to not forget to address in the school improvement plan. Implications most often result from *CHALLENGES*.

EXAMPLE CHALLENGES

- **Students are diverse.**
- **The number and percentage of students living in poverty has doubled in the past 3 years.**
- **We have a large percentage of students identified for special education services.**

EXAMPLE IMPLICATIONS FOR THE SCHOOL IMPROVEMENT PLAN

- **Do staff have the professional learning they need to best teach students who live in poverty, are at-risk, and diverse?**
- **Staff needs to make sure all processes provide equal access to learning, regardless of background (i.e., homework, assignments that require money, same expectations.)**

**PERCEPTIONS ARE
IMPORTANT DATA**

- **Help us understand what students, staff, and parents are perceiving about the learning environment.**
- **We cannot act different from what we value, believe, perceive.**

PERCEPTIONS INCLUDE

- **Student, Staff, Parent, Alumni Questionnaires**
- **Observations**
- **Focus Groups**

SCHOOL PROCESSES

**Schools are perfectly designed to get the results they are getting now.
If schools want different results, they must measure and then change their processes to create the results they really want.**

**SCHOOL PROCESSES ARE
IMPORTANT DATA**

- **Tell us about the way we work.**
- **Tell us how we get the results we are getting.**
- **Help us know if we have instructional coherence.**

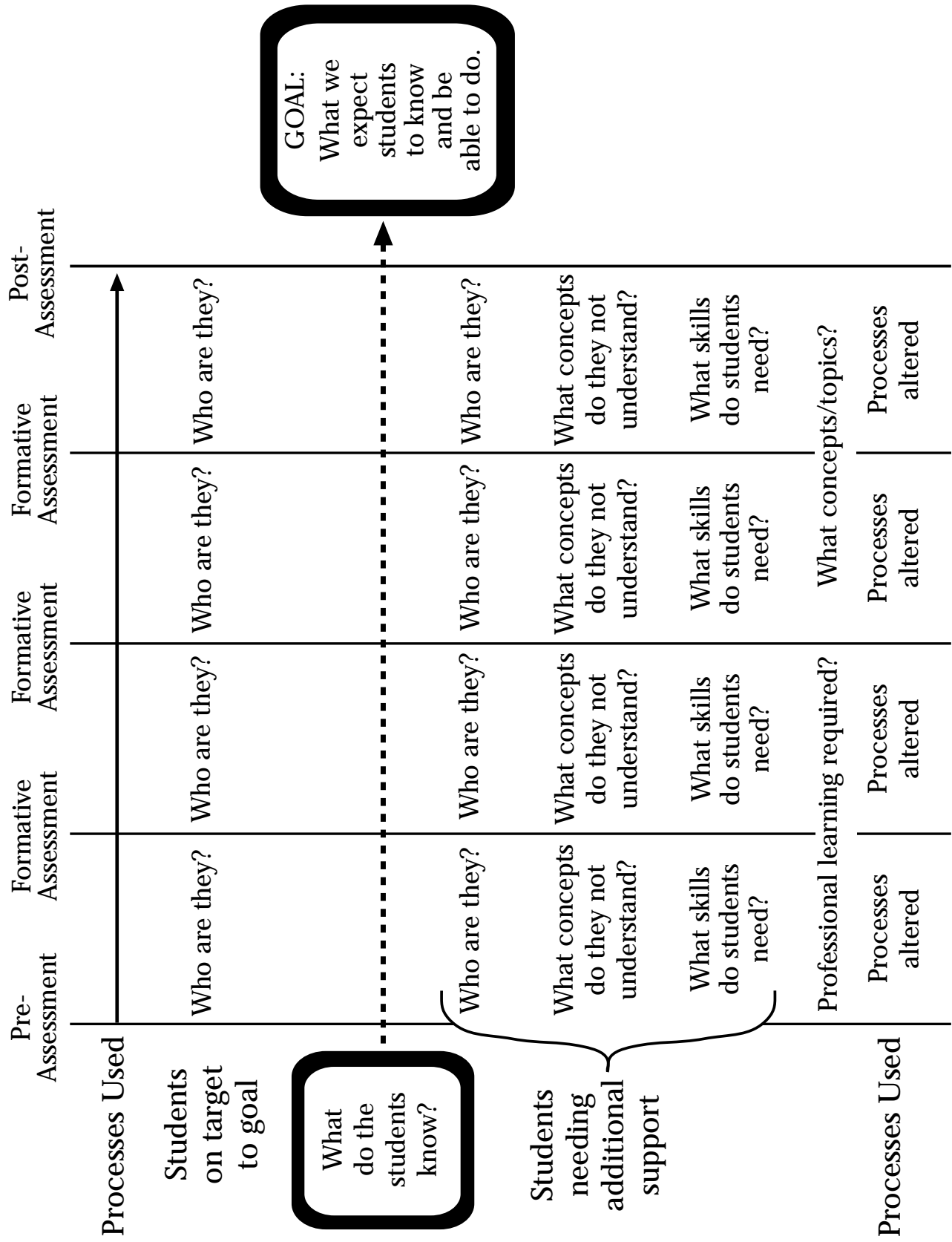
**STUDENT LEARNING ARE
IMPORTANT DATA**

- **Know what students are learning.**
- **Understand what we are teaching.**
- **Determine which students need extra help.**

SCHOOL PROCESSES EXAMPLES

Instructional Processes	Organizational Processes	Administrative Processes	Continuous School Improvement Processes	Programs
<ul style="list-style-type: none"> • Academic conversations with students • Classroom assignments (types of tasks, choices, projects, collaboration) • Classroom discussions (teacher talk, student-to-student talk, student-to-teacher talk) • Differentiated instruction • Direct instruction • Flipped classrooms • Grading • Homework • Immersion • Inclusion • Inquiry process • Standards implementation • Student reflection and self-assessment • Technology integration • Tutoring 	<ul style="list-style-type: none"> • Data Teams • Data use • Inquiry process • Instructional coaching • Leadership structure (Leadership teams) • Mentoring • Mission • Parent involvement • Policies and procedures • Professional discussions and support • Professional Learning Communities • Professional reflection • Response to Intervention (RtI) • Teaching assignments • Teacher collaboration • Teacher evaluation • Teacher hiring • Teacher observations • Teacher renewal (professional learning) 	<ul style="list-style-type: none"> • Attendance program • Class sizes • Data collection • Dropout prevention • Discipline strategies • Effective communication • Enrollment in different courses/programs/program offerings • Graduation strategies • Leadership turnover rates • Number and use of support personnel • Policies and procedures • Retentions • Scheduling of classes • Student groupings • Teacher assignments • Teacher certification • Teacher hiring • Teacher turnover 	<ul style="list-style-type: none"> • Continuous school improvement planning • Contributing cause analysis • Data analysis and use • Evaluation • Leadership • Mission • Professional learning • Partnership • Self-assessment • Vision 	<ul style="list-style-type: none"> • 9th Grade Academy • A+ • Accelerated Reader/Math • Advanced Placement • After School • AVID • At-Risk • Bilingual • Counseling • Dropout Prevention • English as a Second Language • Gifted and Talented • International Baccalaureate • Interventions • PBIS • Science Fairs • Service Learning • Special Education
<p style="text-align: center;">Implications for the Continuous School Improvement Plan</p>				

Data-Driven Decision Making Model



Strengths, Challenges, and Other Data Implications, and Other Data

SOMEWHERE ELEMENTARY SCHOOL STRENGTHS, CHALLENGES, IMPLICATIONS, AND OTHER DATA	SOMEWHERE ELEMENTARY SCHOOL STRENGTHS, CHALLENGES, IMPLICATIONS, AND OTHER DATA
STUDENT LEARNING DATA 1. What are the strengths? English Language Arts Math Science Social Studies Physical Education Art Music Career/Technical Education 2. What are the challenges? 3. What are the implications? 4. What are the other data?	GOVERNMENT ELEMENTARY SCHOOLS STRENGTHS, CHALLENGES, IMPLICATIONS, AND OTHER DATA PERCEPTUAL DATA 1. What are the strengths? 2. What are the challenges? 3. What are the implications? 4. What are the other data?

Demographics, Perceptions, Student Learning, School Processes

DEMOGRAPHICS 1. What are the demographics? 2. What are the implications? 3. What are the other data?	STUDENT LEARNING 1. What are the strengths? 2. What are the challenges? 3. What are the implications? 4. What are the other data?
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Look for Implication Commonalities

DEMOGRAPHICS 1. What are the demographics? 2. What are the implications? 3. What are the other data?	STUDENT LEARNING 1. What are the strengths? 2. What are the challenges? 3. What are the implications? 4. What are the other data?	PROCESS DATA 1. What are the strengths? 2. What are the challenges? 3. What are the implications? 4. What are the other data?
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Part 1— Comprehensive Data Analysis to School Improvement Implementation

Aggregate Implications for the Continuous School Improvement Plan

INSTRUCTION 1. What are the strengths? 2. What are the challenges? 3. What are the implications? 4. What are the other data?	ASSESSMENT 1. What are the strengths? 2. What are the challenges? 3. What are the implications? 4. What are the other data?	CURRICULUM 1. What are the strengths? 2. What are the challenges? 3. What are the implications? 4. What are the other data?	BEHAVIOR 1. What are the strengths? 2. What are the challenges? 3. What are the implications? 4. What are the other data?	VISION/PLAN 1. What are the strengths? 2. What are the challenges? 3. What are the implications? 4. What are the other data?	PROFESSIONAL LEARNING 1. What are the strengths? 2. What are the challenges? 3. What are the implications? 4. What are the other data?
COLLABORATION 1. What are the strengths? 2. What are the challenges? 3. What are the implications? 4. What are the other data?	LEADERSHIP 1. What are the strengths? 2. What are the challenges? 3. What are the implications? 4. What are the other data?	PARTNERSHIPS 1. What are the strengths? 2. What are the challenges? 3. What are the implications? 4. What are the other data?	DATA 1. What are the strengths? 2. What are the challenges? 3. What are the implications? 4. What are the other data?	CLIMATE 1. What are the strengths? 2. What are the challenges? 3. What are the implications? 4. What are the other data?	SPECIAL EDUCATION 1. What are the strengths? 2. What are the challenges? 3. What are the implications? 4. What are the other data?

THE FUTURE

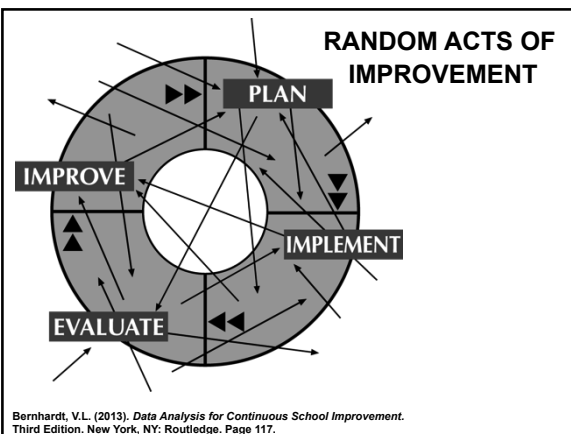
The *FUTURE* is not some place we are going to, but one we are creating.

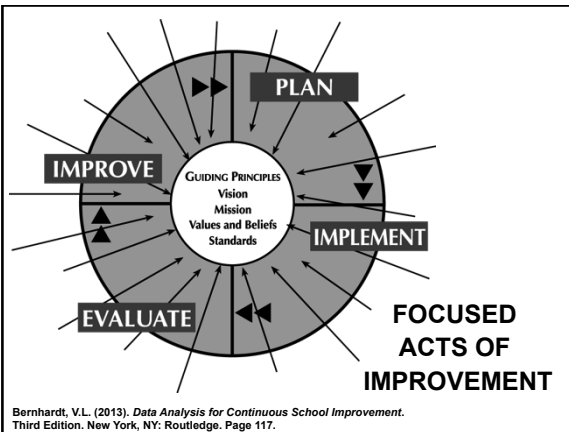
The paths are not to be found, but made, and the activity of making them, changes both the maker and the destination.

John Schaar
Professor and Political Theorist

PRECONDITIONS FOR SCHOOL IMPROVEMENT

- **Instructional Coherence.**
- **A Shared Vision for School Improvement.**
- **Data-Informed Decision Making.**







LEADERSHIP

“Leadership is the capacity to translate vision into reality.”

Warren G. Bennis

LEADERSHIP

- **Assists everyone in the organization in implementing the vision.**
- **Structures in alignment with the vision.**
- **Roles and responsibilities.**
- **Effective meetings.**

ELEMENTS OF EFFECTIVE LEADERSHIP STRUCTURES

Important elements of *effective leadership structures* include:

- **Partitioning of all school staff in a manner that makes sense for supporting the implementation of the vision.**
- **Clarifying purposes and roles and responsibilities of all teams.**
- **Identifying times to meet and keeping them sacred.**

STRUCTURES FOR COLLABORATION

“Collaboration is vital to sustain what we call profound or really deep change, because without it, organizations are just overwhelmed by the forces of the status quo.”

Peter Senge

STRATEGIES FOR TEACHERS

- **Using data to improve teaching and learning will not happen on its own.**
- **We must build the collaborative structures, inspire the vision of effective teaching and data use, and encourage strategies to make it all happen.**

STRATEGIES THAT LEAD TO EFFECTIVE DATA USE

Five preconditions for effective use of student learning data:

1. **The use of appropriate data;**
2. **A shared vision;**
3. **Leadership encouragement and support;**
4. **Structures for collaboration; and**
5. **Strategies to support each other in the attainment of new teaching skills.**

QUALITY PLANNING

“Vision without action is merely a dream. Action without vision just passes the time. Vision with action can change the world.”

Joel A. Barker

SCHOOL IMPROVEMENT PLANS

What are the components of an excellent continuous improvement plan?

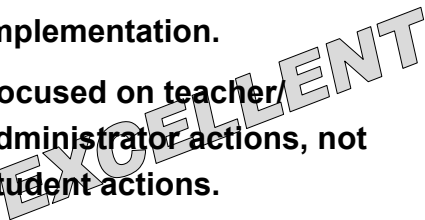
SCHOOL IMPROVEMENT PLANS

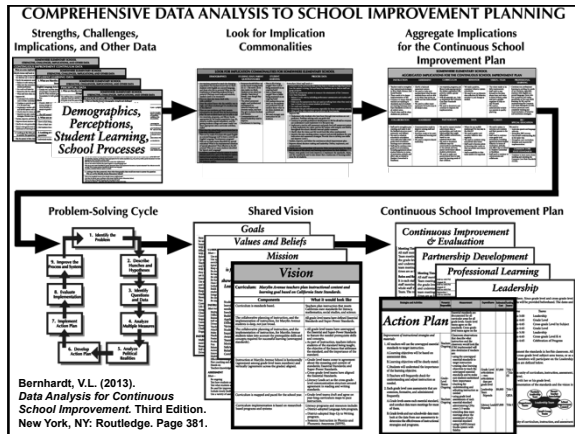
- Implement *Shared Vision*.
- Include all staff from where they are . . .
- Support staff in implementing the vision.
- Bring all staff forward.



SCHOOL IMPROVEMENT PLANS

- Grounded on standards implementation.
- Focused on teacher/administrator actions, not student actions.
- Monitor vision implementation.





“You’ve got to think about big things while you’re doing small things, so that all the small things go in the right direction.”

- Alvin Toffler

“However beautiful the strategy, you should occasionally look at the results.”

Winston Churchill
Former British Prime Minister
As quoted at INSEAD Knowledge

**CONTINUOUS IMPROVEMENT
AND EVALUATION**

**“Continuous improvement
causes us to think about
upstream process improvement;
not downstream
damage control.”**

Teams & Tools

**CONTINUOUS IMPROVEMENT
AND EVALUATION**

- **Evaluate all parts of the system.**
- **Align elements to vision.**
- **Systems thinking.**
- **Next steps.**

**MONITORING SCHOOL
PROGRAMS AND PROCESSES**

**If you are not monitoring
and measuring program
implementation, the
program probably
does not exist.**

EVALUATING SCHOOL PROGRAMS AND PROCESSES

You cannot evaluate a program that you cannot describe.

MONITORING AND EVALUATING PROGRAM IMPLEMENTATION

If you can describe what a program will look like when implemented, you can monitor its implementation, and evaluate its impact.

Thank You!
Enjoy your Conference!

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