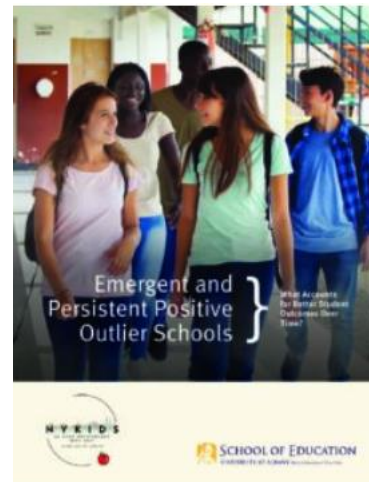


## **NYKids' 20<sup>th</sup> Anniversary Study of Emergent and Persistent Positive Outlier Schools:**

**What Accounts for Better Student Outcomes Over Time?**

### **NYKids' COMPASS TOOL**



**University at Albany**

**School of Education**

**2025**

NYKids' 20<sup>th</sup> Anniversary Study of Emergent and Persistent Positive Outlier Schools: What Accounts for Better Performance Over Time?

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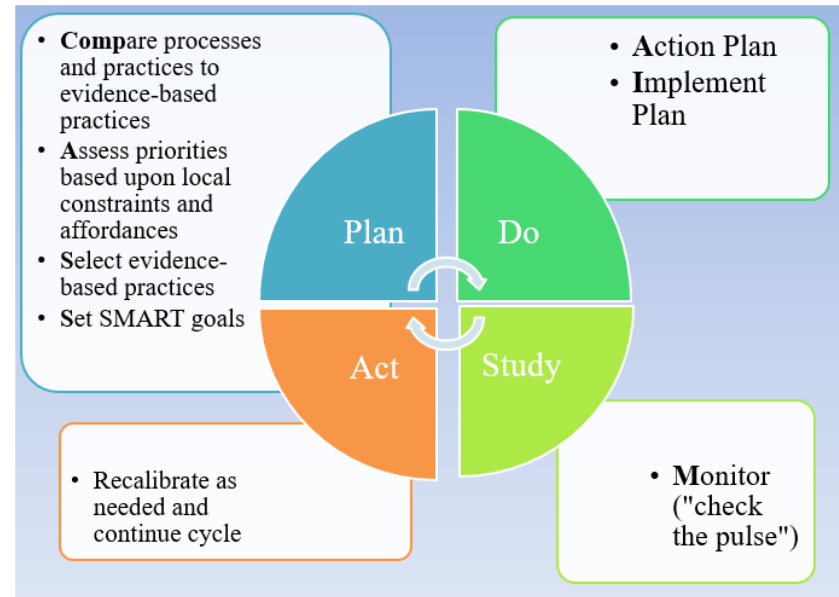
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## COMPASS Introduction

The NYKids mission is to **inform** educators, policymakers, and the public about how schools are doing in supporting youth learning and development, to **inspire** innovative and successful practices through positive outlier research, and to **improve** schools through the use of NYKids' tools and direct continuous improvement support.

This tool is informed by improvement science principles (see Appendix A) and is based on seven case studies of schools NYKids identified as emergent or persistent positive outliers in our *NYKids' 20th Anniversary Study of Emergent and Persistent Positive Outlier Schools: What Accounts for Better Student Outcomes Over Time?*. Each school case study is available at [www.ny-kids.org](http://www.ny-kids.org) and highlights from them appear throughout this tool.

We sincerely hope that this tool helps support your improvement efforts and we invite you to utilize the NYKids repository of resources and find other information about research design and sampling methods at [www.ny-kids.org](http://www.ny-kids.org)



## Overview of COMPASS+AIM Steps

Step 1: **COMP**are your practices to positive outlier schools

Step 2: **Ass**ess priorities

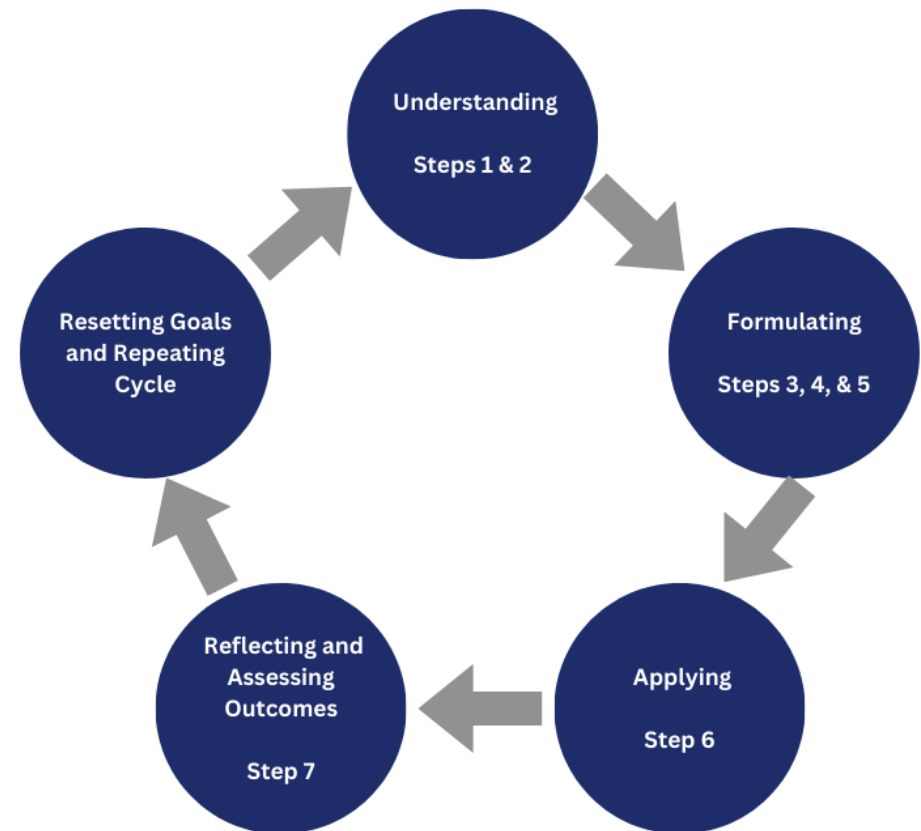
Step 3: **Se**lect levers for improvement

Step 4: **Se**t SMART Goals

Step 5: **A**ction plan

Step 6: **I**mplement plan

Step 7: **M**easure outcomes

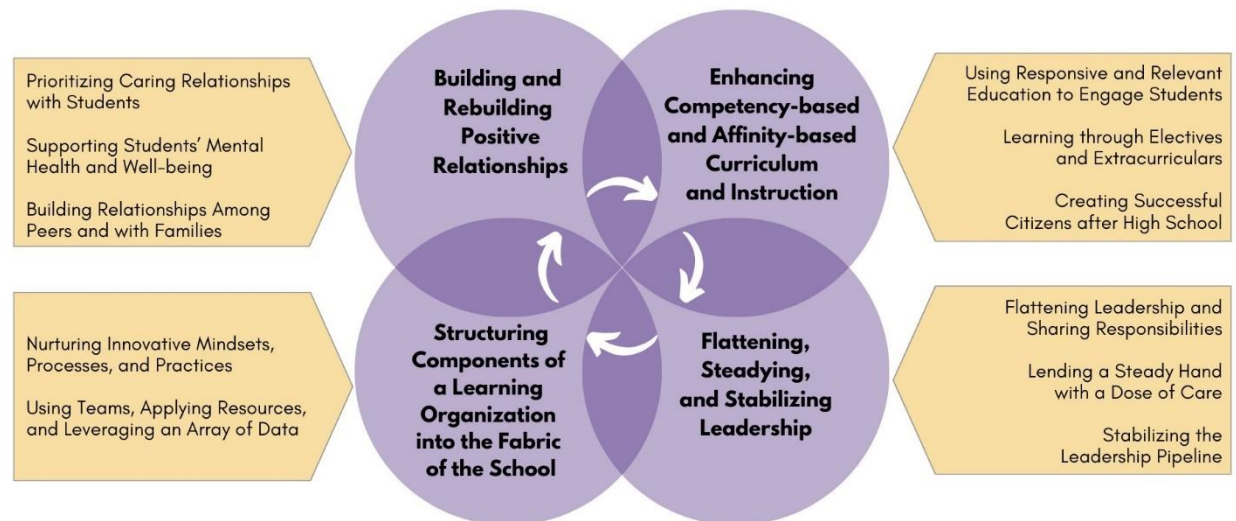


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## Step 1: Compare Your School to Positive Outlier Schools

### An overview of promising practices

1. Building and Rebuilding Positive Relationships
2. Enhancing Competency-based and Affinity-based Curriculum and Instruction
3. Flattening, Steadying, and Stabilizing Leadership
4. Structuring Components of a Learning Organization into the Fabric of the School



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### ***Element 1: Building and Rebuilding Positive Relationships***

Assess to what extent your school or district is like the following...

	Very Much (2)	Somewhat (1)	Not at All (0)
<b>1. Building positive relationships with students is seen as a shared responsibility among the entire staff. Student well-being is prioritized above academic success and seen as a necessary component to engagement.</b>			
<b>2. Staff members seek to support students with a variety of mental health resources and social-emotional learning opportunities that are embedded in curricular and extracurricular programming.</b>			
<b>3. Relationship-building among peers is seen as an important piece of school culture and promoted through various programs and activities. Family engagement is accomplished by giving family members voice and welcoming their opinions about their children's schooling. Despite recent challenges, the relationship between the school and community remains positive due, in part, to trust built prior to the pandemic.</b>			
<b>Total</b>			

***Element 1: Here you may identify an area needing attention (i.e., an effect or outcome you do not want) and map potential causes for “somewhat” or “not at all” assessments.*** See Fishbone Diagram example in Appendix B.

## ***Element 2: Enhancing Competency-based and Affinity-based Curriculum and Instruction***

Assess to what extent your school or district is like the following ...

	Very Much (2)	Somewhat (1)	Not at All (0)
<b>1. Educators inquire into students' interests and knowledge bases and incorporate them into curricular elements. Issues that are relevant to students' lives outside of school are connected to learning opportunities within classrooms.</b>			
<b>2. A range of electives and extracurriculars are provided to students and often based on students' interests. These opportunities allow students to pursue success in valued ways beyond academics and often serve as a way to engage families and the community.</b>			
<b>3. Students are supported in their pursuits after high school – whether this involves college or entering the workforce. Robust CTE programs prepare students for a range of careers in which they may be interested while credit-bearing college courses are available to students seeking postsecondary education. Educators' goal for students is to create students who will be active members of their communities.</b>			
<b>Total</b>			



***Element 2: Here you may identify an area needing attention and map potential causes for “somewhat” or “not at all” assessments.*** See Fishbone Diagram example in Appendix B.

### ***Element 3: Flattening, Steadying, and Stabilizing Leadership***

Assess to what extent your school or district is like the following ...

	Very Much (2)	Somewhat (1)	Not at All (0)
1. Staff, including instructional and noninstructional staff, understand what the mission and vision of the school and district are and know what their roles and responsibilities in achieving the mission, advancing toward the vision and addressing current priorities are. They understand that they are co-decision makers and empowered agents in advancing toward the school and district vision and addressing current priorities.			
2. Staff, including instructional and noninstructional staff, trust that regardless of who is in a designated leadership role, they follow through with already-begun initiatives and pursue new ones. Staff understand that those in designated leadership roles are in their positions for good reasons, one of the most important of which is that they share beliefs and values about the school and the community and have a vision for the school and district that aligns with their own. Staff understand that leader changes may be disruptive but have confidence that the school and district culture and climate will stay steady regardless of leader changes. New hires are clear about their roles and responsibilities in advancing toward the school vision and feel cared for by their colleagues.			
3. Staff, including instructional and noninstructional staff, know that every staff member's knowledge and skills are essential to identifying and addressing priorities for youth and families. Staff trust that if they have made a strong case for a change or a request for a resource, including professional learning resources, that those in designated leadership positions will advocate for having their needs met and resources allocated. Generally, if staff members seek opportunities to grow in their practice and take on leadership roles and responsibilities, they are supported in doing so.			
<b>Total</b>			

***Element 3: Here you may identify an area needing attention and map potential causes for “somewhat” or “not at all” assessments.*** See Fishbone Diagram example in Appendix B.

### ***Element 4: Structuring Components of a Learning Organization into the Fabric of the School***

Assess to what extent your school or district is like the following ...

	Very Much (2)	Somewhat (1)	Not at All (0)
<b>1. Staff, including instructional and noninstructional staff, tend to align individual and group learning opportunities to school and/or district. Staff generally perceive a responsibility to, and know how to, communicate with caregivers and community members to close gaps in understanding. Staff in designated leadership roles nurture a “learning mindset” and do this in part by modeling a proactive and collaborative stance toward making sense of current and future challenges and what to do about them.</b>			
<b>2. A variety of teams, PLCs, and/or committees make data and interpretations of data available to instructional and noninstructional staff, which inform necessary changes within or across classrooms or settings (e.g., extracurriculars) in the school.</b>			
<b>3. Staff, including instructional and noninstructional staff, have sufficient human technological support to do their work and coordinate their efforts with colleagues. In general, the coordination of efforts to address complex and dynamic challenges is purposeful and crosses functions, units within schools, and/or across schools.</b>			
<b>Total</b>			

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***Element 4: Here you may identify an area needing attention and potential causes for “somewhat” or “not at all” assessments.*** See Fishbone Diagram example in Appendix B.

## Step 2: Assess Priorities in Your School

For each of the themes record your individual total (column 1). Then with your group members add all individual totals and divide by the number in your group (column 2). In column three identify priorities from top->bottom: the lower the group average = the greater priority. Consider your community needs and resources as you determine your priorities.

	<b>Your Individual Total</b>	<b>Group Average (Add All Individual Totals/#in Group)</b>	<b>Priority</b>
<b>1. Building and Rebuilding Positive Relationships</b>			
<b>2. Enhancing Competency-based and Affinity-based Curriculum and Instruction</b>			
<b>3. Flattening, Steadying, and Stabilizing Leadership</b>			
<b>4. Structuring Components of a Learning Organization into the Fabric of the School</b>			



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Once you have identified your priority area:


- ✓ refer to the levers for improvement in Step 3
- ✓ review the cross-case report section(s) of interest to get an overview of the promising practices
- ✓ see the suggested exemplar case studies and identify promising practices



### Step 3: Select Levers for Improvement (note: Steps 3 and 4 are iterative - can be flipped)


*Check those actions that might have impact in your context; consider these levers in light of your goals.*



<p><b>1. Building and Rebuilding Positive Relationships</b></p> <p><i>Case in Point: Crown Point Central School</i></p> <p><a href="https://ny-kids.org/wp-content/uploads/Crown-Point-Case-Study-23_24-Study.final.pdf">https://ny-kids.org/wp-content/uploads/Crown-Point-Case-Study-23_24-Study.final.pdf</a></p>	<p>Other cases to refer to:</p> <ul style="list-style-type: none"> <li>✓ Brookfield Central School <a href="https://ny-kids.org/wp-content/uploads/Brookfield-Case-Study-23_24-Study.FINAL.pdf">https://ny-kids.org/wp-content/uploads/Brookfield-Case-Study-23_24-Study.FINAL.pdf</a></li> <li>✓ Fillmore Central School <a href="https://ny-kids.org/wp-content/uploads/Fillmore-Case-Study-23_24-Study.FINAL.pdf">https://ny-kids.org/wp-content/uploads/Fillmore-Case-Study-23_24-Study.FINAL.pdf</a></li> </ul>
<p><b>Prioritizing Caring Relationships with Students</b></p>	<p> <b>To push this lever:</b></p> <ul style="list-style-type: none"> <li>✓ Foster a school culture of everyone taking collective responsibility for building close adult-youth relationships.</li> <li>✓ Place emphasis on adults addressing youth mental health and SEL needs alongside academics in professional learning time.</li> </ul>
<p><b>Supporting Students' Mental Health and Well-being</b></p>	<p> <b>To push this lever:</b></p> <ul style="list-style-type: none"> <li>✓ Communicate to, and celebrate with, community members and families what is being done to support youth well-being.</li> <li>✓ Establish programs and/or partner with outside organizations dedicated to enhancing all students' mental health and supporting their social-emotional well-being.</li> </ul>




	<ul style="list-style-type: none"> <li>✓ Create teams composed of educators, support staff, and mental health professionals to identify students exhibiting mental health struggles.</li> </ul>
<b>Building Relationships among Peers and with Families</b>	<p> <b>To push this lever:</b></p> <ul style="list-style-type: none"> <li>✓ Implement programs to connect students at different grade levels and across peer groups led by educators who can model and then gradually invite youth to take up leadership roles.</li> <li>✓ Use technology to engage and connect with family members through different mediums (texts, emails, letters home, or apps).</li> <li>✓ Design, and ideally co-design with youth and families, programs, activities, and events.</li> </ul>



<p><b>2. Enhancing Competency-based and Affinity-based Curriculum and Instruction</b></p> <p><i>Case in Point: Brookfield Central School</i></p> <p><a href="https://ny-kids.org/wp-content/uploads/Brookfield-Case-Study-23-24-Study.FINAL.pdf">https://ny-kids.org/wp-content/uploads/Brookfield-Case-Study-23-24-Study.FINAL.pdf</a></p>	<p>Other cases to refer to:</p> <ul style="list-style-type: none"> <li>✓ Alfred-Almond Jr/Sr High School <a href="https://ny-kids.org/wp-content/uploads/Alfred-Almond-Case-Study-23-24.FINAL.pdf">https://ny-kids.org/wp-content/uploads/Alfred-Almond-Case-Study-23-24.FINAL.pdf</a></li> <li>✓ Malverne Senior High School <a href="https://ny-kids.org/wp-content/uploads/Malverne-Case-Study-23-24-Study.FINAL.pdf">https://ny-kids.org/wp-content/uploads/Malverne-Case-Study-23-24-Study.FINAL.pdf</a></li> </ul>
<p><b>Using Responsive and Relevant Education to Engage Students</b></p>	<p> <b>To push this lever:</b></p> <ul style="list-style-type: none"> <li>✓ Consistently inquire into students' interests and preferences to enhance relevance in teaching and learning.</li> <li>✓ Draw on community values and history to create responsive curricular offerings (e.g., agricultural programs in rural areas) and extracurricular offerings.</li> </ul>
<p><b>Learning through Electives and Extracurriculars</b></p>	<p> <b>To push this lever:</b></p> <ul style="list-style-type: none"> <li>✓ Invite students to choose from a range of electives, clubs, and extracurriculars that pique their interests.</li> <li>✓ Provide opportunities and support for students to initiate clubs.</li> </ul>

	<ul style="list-style-type: none"> <li>✓ Design and employ schedules which give students flexibility to engage in chosen activities and a sense of ownership over their time.</li> </ul>
<b>Forming Good Citizens after High School</b>	<div>  <b>To push this lever:</b> </div> <ul style="list-style-type: none"> <li>✓ Recognize the importance of “soft skill” development such as teamwork, respect, and civic-mindedness alongside academic learning and be purposeful about building this skill development into students’ in-school and after-school experiences.</li> <li>✓ Work with regional BOCES to enhance Career and Technical Education (CTE) offerings available to students seeking to enter the workforce after high school.</li> </ul>

<p><b>3. Flattening, Steadying, and Stabilizing Leadership</b></p> <p><i>Case in Point: Alfred-Almond Jr/Sr High School</i></p> <p><a href="https://ny-kids.org/wp-content/uploads/Alfred_Almond-Case-Study-23_24.FINAL.pdf">https://ny-kids.org/wp-content/uploads/Alfred_Almond-Case-Study-23_24.FINAL.pdf</a></p>	<p>Other cases to refer to:</p> <ul style="list-style-type: none"> <li>✓ Brookfield Central School <a href="https://ny-kids.org/wp-content/uploads/Brookfield-Case-Study-23_24-Study.FINAL.pdf">https://ny-kids.org/wp-content/uploads/Brookfield-Case-Study-23_24-Study.FINAL.pdf</a></li> <li>✓ LaFayette Junior-Senior High School <a href="https://ny-kids.org/wp-content/uploads/LaFayette-Jr_Sr-HS-Case-Study-23_24-Study.FINAL.pdf">https://ny-kids.org/wp-content/uploads/LaFayette-Jr_Sr-HS-Case-Study-23_24-Study.FINAL.pdf</a></li> </ul>
<p><b>Flattening Leadership and Sharing Responsibilities</b></p>	<p> <b>To push this lever:</b></p> <ul style="list-style-type: none"> <li>✓ Reduce the power differential (e.g. whose ideas get recognized and taken up) between staff closest to kids and those in designated leadership positions.</li> <li>✓ Afford staff a balanced degree of autonomy to use their professional judgement in their practice yet with clear messaging about shared responsibilities for advancing the mission and addressing current priorities.</li> <li>✓ Create a strong culture of professionalism, mutual respect, and collaboration among teachers.</li> </ul>
<p><b>Lending a Steady Hand with a Dose of Care</b></p>	<p> <b>To push this lever:</b></p> <ul style="list-style-type: none"> <li>✓ Ensure that new hires are both the right fit for the school and community and provide them with support as they adapt to their new position in the school.</li> <li>✓ Distinguish between technical problems (i.e., problems with clear solutions within the scope of authority for</li> </ul>

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	<p>leaders to address), and complex or dynamic problems (i.e., problems that require coordinated efforts among people across an organization, organizations, or community).</p> <ul style="list-style-type: none"> <li>✓ Maintain supportive, open, and honest communications when there are staff changes.</li> </ul>
<b>Stabilizing the Leadership Pipeline</b>	<p> <b>To push this lever:</b></p> <ul style="list-style-type: none"> <li>✓ Nurture a culture of trust and mutual support to set the groundwork for staff to take leadership roles.</li> <li>✓ Encourage staff to take on leadership roles with the provision of mentoring and guidance for them to achieve early successes.</li> </ul>

<p><b>4. Structuring Components of a Learning Organization into the Fabric of the School</b></p> <p><i>Case in Point: Malverne Senior High School</i></p> <p><a href="https://ny-kids.org/wp-content/uploads/Malverne-Case-Study-23_24-Study.FINAL.pdf">https://ny-kids.org/wp-content/uploads/Malverne-Case-Study-23_24-Study.FINAL.pdf</a></p>	<p>Other cases to refer to:</p> <ul style="list-style-type: none"> <li>✓ Roxbury Central School <a href="https://ny-kids.org/wp-content/uploads/Roxbury-Case-Study-23_24-Study.FINAL.pdf">https://ny-kids.org/wp-content/uploads/Roxbury-Case-Study-23_24-Study.FINAL.pdf</a></li> <li>✓ Alfred-Almond Jr/Sr High School <a href="https://ny-kids.org/wp-content/uploads/Alfred_Almond-Case-Study-23_24.FINAL.pdf">https://ny-kids.org/wp-content/uploads/Alfred_Almond-Case-Study-23_24.FINAL.pdf</a></li> </ul>
<p><b>Nurturing Innovative Mindsets, Processes, and Practices</b></p>	<p> <b>To push this lever:</b></p> <ul style="list-style-type: none"> <li>✓ Communicate current and potential challenges to caregivers and community members in a purposeful and understanding manner. Refrain from using “educator speak” with parents and caregivers.</li> <li>✓ Provide frequent and useful professional learning opportunities to teaching staff with the explicit intent of building a community of “lifelong learners.”</li> <li>✓ Be systematic about identifying high-priority problems and inviting trialing potential solutions. Track impacts on solutions through data and consistently review and interpret data.</li> </ul>
<p><b>Using Teams, Applying Resources, and Leveraging an Array of Data</b></p>	<p> <b>To push this lever:</b></p> <ul style="list-style-type: none"> <li>✓ Invite staff to work on school improvement teams including teachers on special assignment (TOSA) if possible to reduce strain on team members.</li> </ul>

	<ul style="list-style-type: none"><li>✓ Leverage technologies to make sense of the large amount of data available for analysis and review.</li><li>✓ Use multiple forms of both quantitative (e.g., test scores) and qualitative (e.g., student surveys, teacher's knowledge of student interests) data to make adjustments.</li></ul>
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## Step 4: Setting SMART (+IE\*) goals

*A SMART goal is...*

- **Strategic and Specific** – Linked to district and school goals and strategic plan, focused on students, and targeted to what is likely to have the greatest impact on student outcomes. Answers the question – What exactly do we want to improve? (Underlying question – Why is this important?)
- **Measurable** – The success toward meeting the goal can be measured in student outcomes. Answers the question – What measures will we use to assess effectiveness? (Underlying question – How will we know if we are making progress toward our goals?)
- **Attainable** – Can be achieved in a specific amount of time, with resources available. It should be a stretch from current outcomes. Answers the question – When will actions be implemented and with what resources?
- **Results Oriented /Relevant/Rigorous** – Aligned with district and building goals and focused on increased student outcomes in a defined area. Answers the question – How does this goal relate to our school/district mission and what our community values?
- **Time Bound** – Has a clearly defined time frame including a target date. Answers the question – When will progress toward the goal be assessed?



- \*Add an “I” and “E”<sup>1</sup> – Inclusion and Equity for students – Have we focused our attention on inclusive policies, processes, and practices and equity of opportunity for all students to learn and thrive (looking beneath averages)?

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<sup>1</sup> SMART-IE goals is an idea shared in collaborative work groups hosted by Shift. See <https://shift-results.com/>

### ***Suggested Process for Setting SMART Goals***

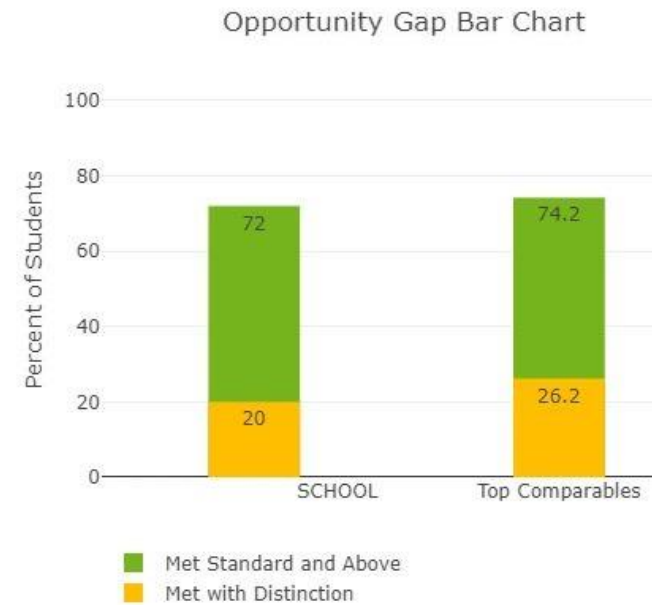
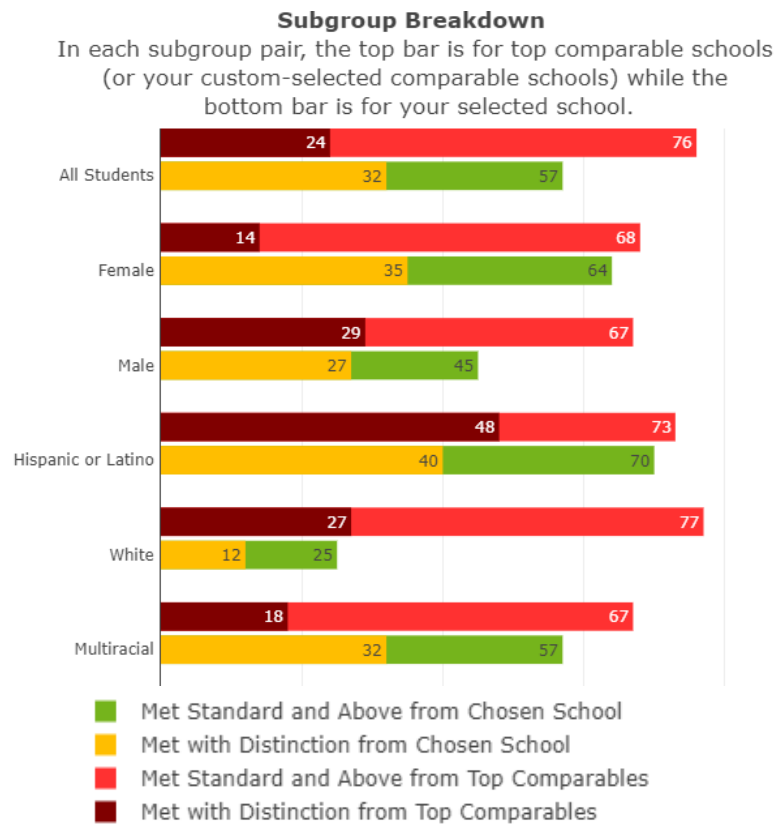
- **4.1:** Review steps 1-3. What are your priority areas? What levers for improvement did you select as most likely to have the greatest impact on student experiences and outcomes? Use the space below for notes.
  
- **4.2:** Review other resources, including the Know Your Schools website (see “performance tracker” at <https://knowyourschoolsny.org/>).
  
- **4.3:** Begin drafting SMART goals using the SMART goal template as a guide.
  
- **4.4:** Record specific actions attached to each of the goals you have decided on and using suggested levers (or adaptations of levers) from this tool and/or other research.

#### **4.2 Primer on NYKids Performance Tracker (<https://knowyourschoolsny.org/>)**

The Know Your Schools Database User Guide: Select “Find Your School” to learn more about student outcomes. You have many choices of ways to display your data, as well as ways to compare your data to other schools’. For example,

- Do you have an “opportunity gap” (>-10% i.e., significant gap) with comparison schools?

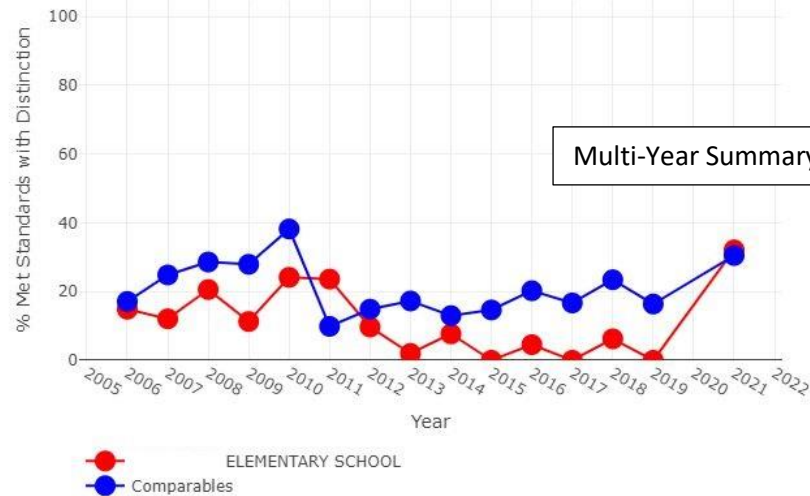
- How are your sub-groups doing?



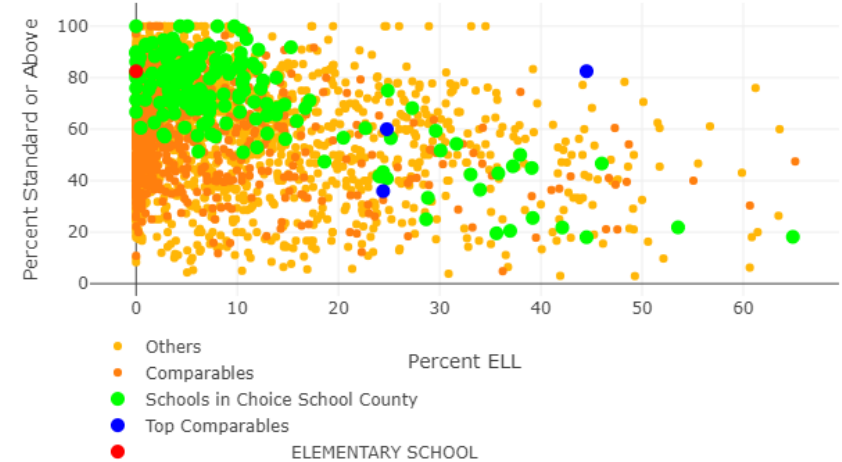
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### % Met Standards with Distinction

(click on a point to see the top comparables)

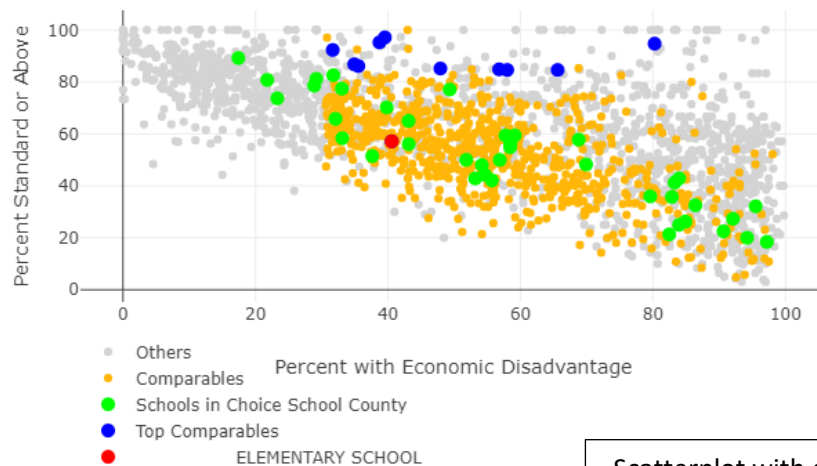


### Performance by Percent ELL



Scatterplot with comparison to 2 schools of user's choice.

### Performance by Percent with Economic Disadvantage






Scatterplot with comparison to "top comparable" schools.

Views of your school's student performance over time can inform your SMART goal and aim setting especially with pinpointing student subgroup outcome targets. Ask: Where do we see variability?

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### 4.3. Drafting SMART(+IE\*) Goals

**Examples:** Assign individuals in your group the role of SMARTIE goal judge (Is this goal strategic, measurable, attainable, results-oriented/relevant/rigorous, time-bound and focused on inclusion and equity?). Remember that the best goals are student experience- and outcome-centered. Use the examples below to help craft your goals.

<b>Example 1:</b> <i>We will improve school climate.</i>		This goal is too vague to support everyone's understanding of what needs change and how to achieve an improvement.
<b>Example 2:</b> <i>By the end of the XX school year, BOE, SDM, faculty, staff, students and administration will co-design a process for gathering a diverse array of stakeholders' input into creating a more welcoming and inclusive climate.</i>		This goal is pretty good. Despite not focusing specifically on students, it has most features of a good SMARTIE goal and may be appropriate. It also includes a process measure (i.e., "on the way") vs. an outcome measure (i.e., ultimate impact on students).
<b>Example 3:</b> <i>By the end of the XX school year, every student in [our school] will report higher levels of belonging.</i>		This goal is simple yet great! It includes all the features of a SMARTIE student-centered goal. The next task is to line up how "belonging" would be supported and measured.

#### ***4.4. Goal -> Aim -> Action Plan Worksheet***

**Use your goal to inform your aim statement and connect it to your action plan.**

**GOAL**

**AIM: What specifically in the near term (e.g., this school year) are we trying to accomplish?**

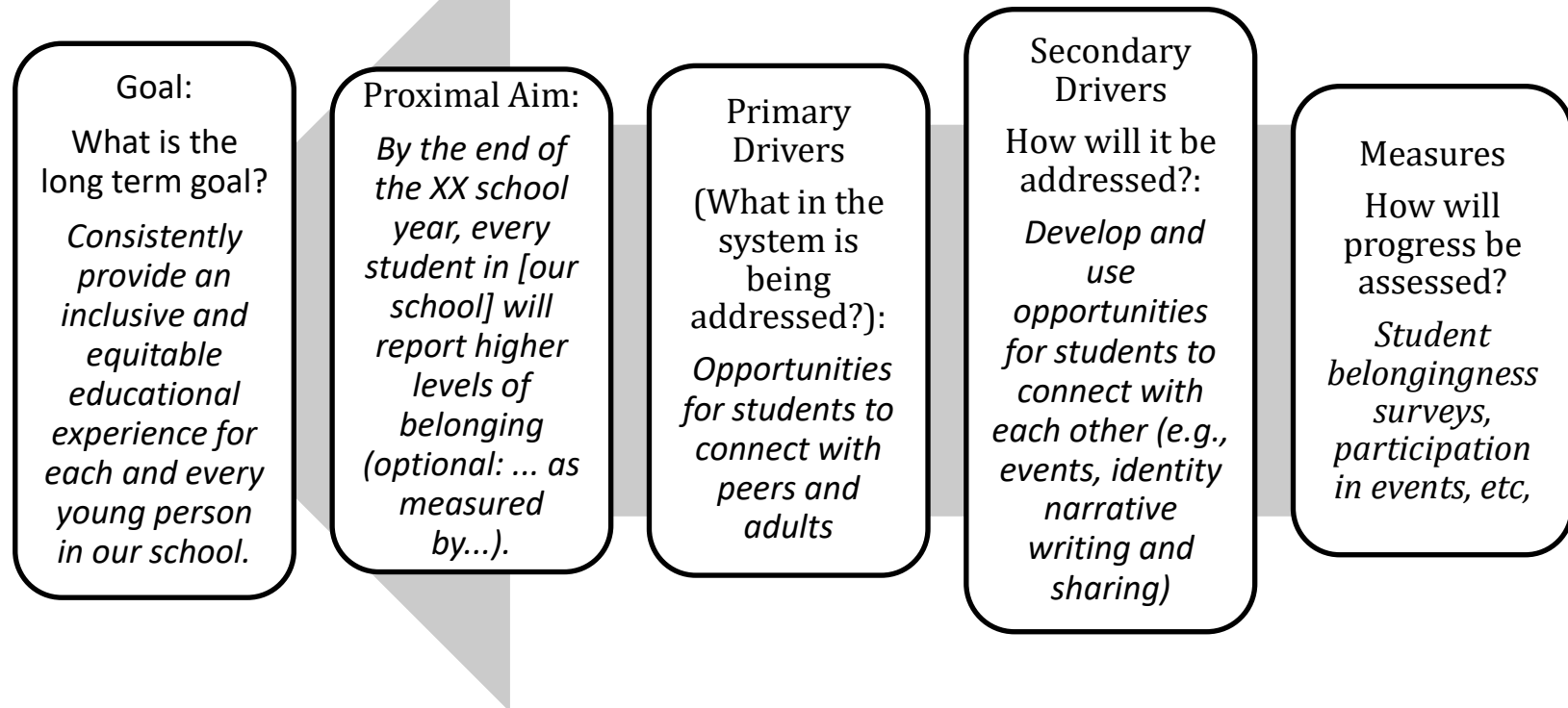
## Step 5: Action Planning

Steps 5-7 (Action plan; Implement; Measure) are designed to assist improvement teams in meeting their goals by suggesting strategies such as articulating aims, identifying levers and related drivers, and designing a measurement plan to gauge progress. These strategies are based on following improvement principles:

***Make the work problem-specific and user-centered and see the system that produces your outcomes.***

- *Articulate connections between distal goals (i.e., longer term/overarching), proximal aims (i.e., near or “on-the-way”), drivers, and measures.*
  - *A distal SMARTIE goal example: Consistently provide an inclusive and equitable educational experience for each and every young person in our school.*
  - *A proximal aim: By the end of the XX school year, every student in [our school] will report higher levels of belonging.*
- *Identify “primary drivers” (i.e., **what** contributes directly to achieving your aims?)*
  - *Opportunities for students to connect with peers and adults.*
- *Identify “secondary drivers” (i.e., **how** will you achieve your aims via your primary drivers?)*
  - *Develop and use opportunities for students to connect with each other (e.g., events, identity narrative writing and sharing).*





## Step 6: Implementing

***Improvement Principle: We cannot improve what we cannot measure.***

School District:

School:

Team Members:

Date/School Year:

**Goal:**

Specific Activities & Action Step	Who is Responsible?	Time Frame or Target Date	Evidence of Impact
<i>What action will take place to achieve this goal?</i>	<i>Who will participate and be responsible for initiating or sustaining these action steps?</i>	<i>What is a realistic time frame for the start and end of these activities?</i>	<i>What specific measures will we use to assess progress and impact?</i>

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## Step 7: Measuring

### ***Improvement Principles: Anchor improvement in disciplined inquiry and focus on variability***

Working with your “evidence of impact” (i.e., measures) from Step 6 you can then monitor and study your progress.

For each of your data sets **ask:** *Does this require quantification of data (e.g., checking for “how often,” “how much,” “to what extent”) or descriptions of qualities of data (“in what way,” “how”) or both?*

For *quantitative* data, a variety of fairly expensive software programs are available (e.g., SPSS); however, some resources that you may already have available or are free are:

- Excel (allows for some statistical analysis and is often available with other Microsoft packages)
- The R Project: <https://www.r-project.org/>
- VassarStats: <http://www.vassarstats.net/>

For *qualitative* data, a variety of fairly expensive software programs are also available – some with short-term free trials (e.g., NVivo, HyperResearch, AtlasTi); however, some free trial or relatively inexpensive resources that may be helpful are:

- Qualitative and Mixed-method software: <https://www.dedoose.com/>

**The objective** will be to display your data in ways that answer questions about your progress toward your goals.

*What are the relationships between offering **students new opportunities to connect with their peers** and the percentage of students who **report higher levels of belonging** in the first term of the school year? (Data source option: tracking of participation in events; these data are quantitative and can be represented in a graph.)*

*How **effective** do students feel events are in making them feel a sense of belonging? (Data source options: student surveys, empathy interviews or focus groups; these data are qualitative and can be represented in a cluster chart of major themes noting outliers if evident and exemplar quotes.)*

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## Appendix A. Continuous Quality Improvement and Improvement Science Principles

Why identify SMART goals and aims?

**The Six Core Principles of Improvement (from the Carnegie Foundation for the Advancement of Teaching: <http://www.carnegiefoundation.org/our-ideas/six-core-principles-improvement>)**

- 1. Make the work problem specific and user centered.** It starts with a single question: “What specifically is the problem we are trying to solve?” It enlivens a co-development orientation: engaging key participants early and often in continuous improvement work.
- 2. Variation in performance is the core problem to address.** The critical issue is not what works, but rather what works, for whom and under what set of conditions. Aim to advance efficacy and equity of opportunity.
- 3. See the system that produces the current outcomes.** It is hard to improve what you do not fully understand. Go and see how local conditions shape work processes. Make your hypotheses for change public and clear.
- 4. We cannot improve at scale what we cannot measure.** Embed measures of key outcomes and processes to track if change is an improvement. Schools are complex organizations. Anticipate unintended consequences and measure these too.
- 5. Anchor practice improvement in disciplined inquiry.** Engage rapid cycles of Plan, Do, Study, Act (PDSA) to learn and improve quickly. That failures may occur is not the problem; that we fail to learn from them is.
- 6. Accelerate improvements through network communities.** Embrace the wisdom of “crowds.” We can accomplish more together than even the best of us can accomplish alone. Look to connect with others in and outside of your organization to accelerate learning.

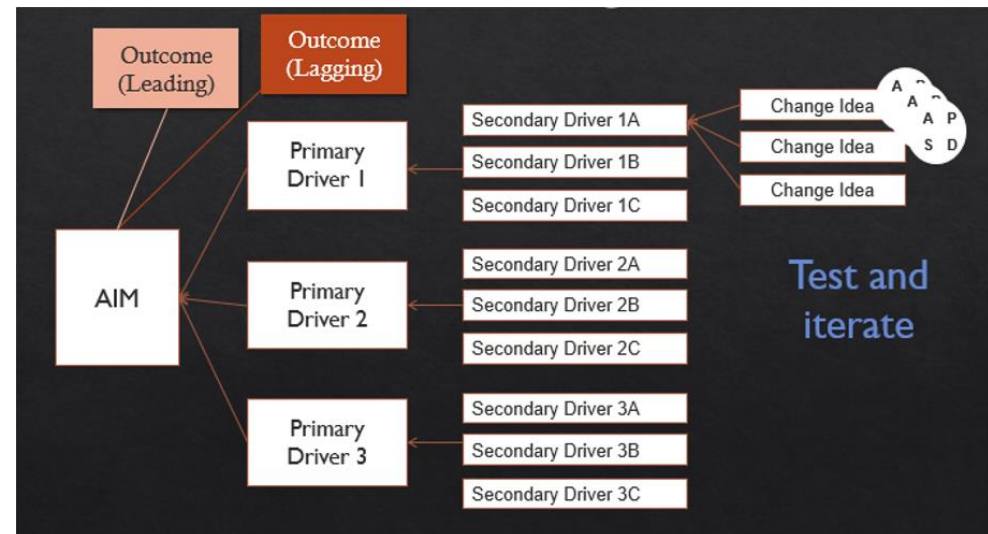
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## Why identify drivers, change ideas, and measurements?

We can use continuous improvement methods to increase our odds of improvement successes through an early definition of the project's aim and early agreement on our organization's theory about what changes are necessary to achieve aims. The factors that influence the achievement of the aim are called "drivers." A driver diagram depicts the relationship between the aim, the primary levers that contribute directly to achieving the aim, and the secondary levers that are necessary to push the primary levers.

A driver diagram represents the team members' current shared understanding of "cause and effect" in the system. It sets the stage for defining the "what" and "how" elements of improvement efforts and the specific changes that are expected to lead to the desired outcome.

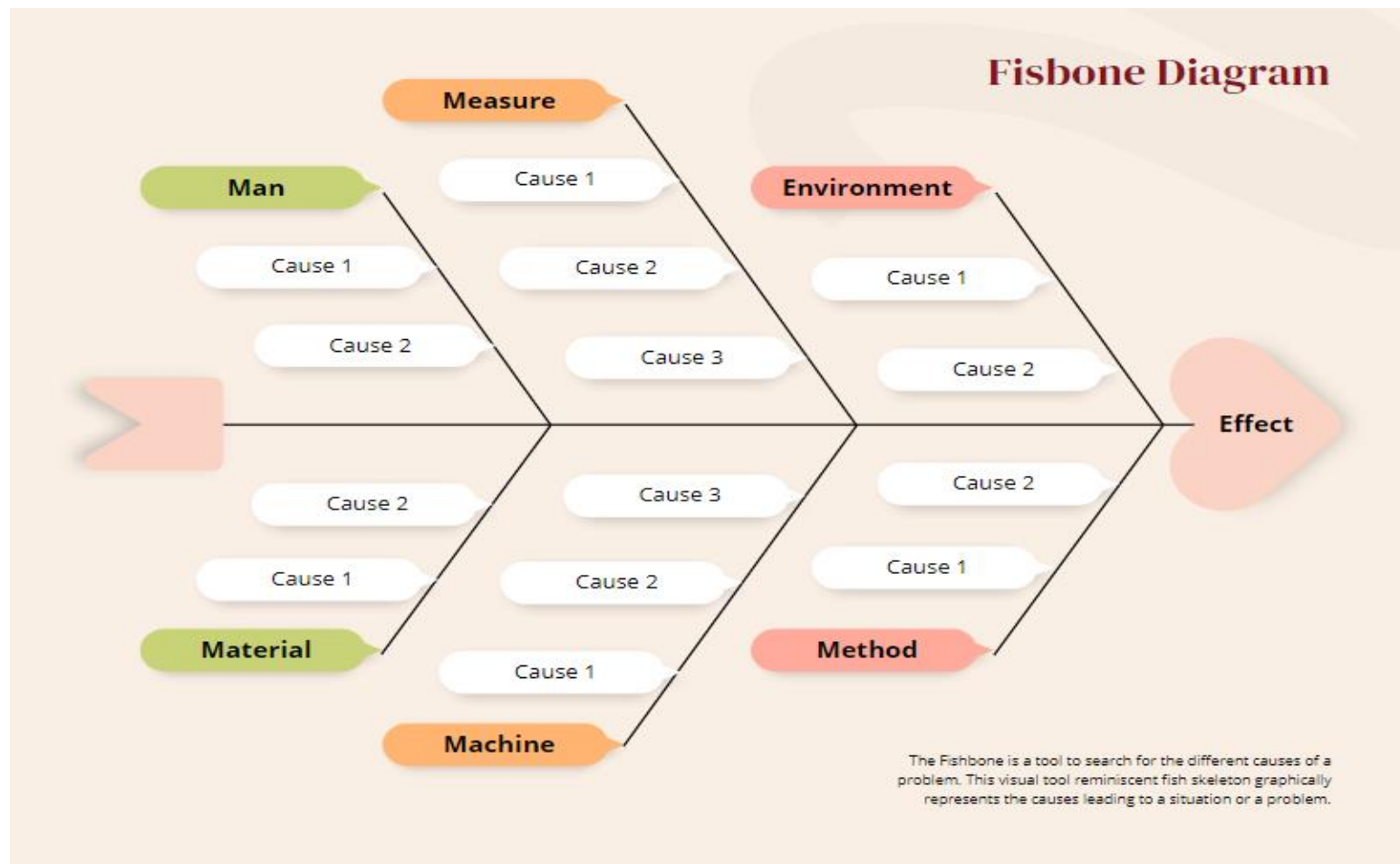
Creating a driver diagram is a useful process for planning an improvement effort as it helps to define which aspects of the system will be addressed and monitored. It also helps identify if the changes made are effective and if the underlying causal theories are correct.



Driver diagrams assist teams in staying focused and on course when they are used as regular references for the improvement work. The diagram should be updated regularly as the team acquires new knowledge and experience and shared widely so that all stakeholders understand the "why" behind change efforts.

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## Appendix B. Fishbone Diagram



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## Recommended Resources

### NYKids-related research and resources:

Wilcox, K.C., Leo, A., Tobin, J. & Guay, P., & Khan, M. I. (2024). *Emergent and persistent positive outlier schools: What accounts for better student outcomes over time?* NYKids. School of Education, University at Albany, State University of New York.  
<https://ny-kids.org/wp-content/uploads/NYKids-2024-Report.pdf>

*Know your Schools~for NY Kids: A web-based data source.* <https://knowyourschoolsny.org/>

NYKids School Improvement Resources: <https://ny-kids.org/school-improvement/>

Wilcox, K.C., Lawson, H.A., & Angelis, J. (2017). COMPASS-AIM: A university/P-12 organizational intervention for continuous improvement. *Peabody Journal of Education*. doi: 10.1080/0161956x.2017.1368654

Wilcox, K. C., Angelis, J. I., & Lawson, H. A. (2015). *Developing capacities for evidence-guided continuous improvement*. Paper presented at the National Center for Scaling Up Research, Nashville, TN.  
[http://www.scalingupcenter.org/data/files/gallery/ContentGallery/Wilcox\\_Angelis\\_Lawson\\_Final.pdf](http://www.scalingupcenter.org/data/files/gallery/ContentGallery/Wilcox_Angelis_Lawson_Final.pdf)

### Other research and resources:

Bryk, A. S., Gomez, L. M., Grunow, A., & LeMahieu, P. G. (2015). *Learning to improve: How America's schools can get better at getting better*. Cambridge, MA: Harvard Education Press.

Bryk, A. (2020). *Improvement in action*. Cambridge, MA: Harvard Education Press. ISBN: 1682534995

Daly, A., & Finnigan, K. (Eds.). (2016). *Thinking and acting systemically: Improving school districts under pressure*. Washington, DC: American Educational Research Association.

Peurach, D. J., Russell J.L; Cohen-Vogel, L., Penuel, W. R, (Ed.). (2022). *The foundational handbook on improvement research in education*. Rowman & Littlefield.

NYKids' 20<sup>th</sup> Anniversary Study of Emergent and Persistent Positive Outlier Schools: What Accounts for Better Performance Over Time?