



# What is the Role of Assessment in Improving Teaching & Learning in Schools?

Dr. Carla Evans, Senior Associate

Center for Assessment ([cevens@nciea.org](mailto:cevens@nciea.org))

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# An Analogy

This evidence is what I use to step back and ask myself:

- *Am I getting closer to meeting my goals or am I getting further away?*
- *And what do I need to do to adjust so I can meet my goals?*



# Connecting the Dots

- The scale provides me with evidence, but it is not the treatment or the intervention. The treatment or intervention is diet and exercise.
- Similarly, formal assessment provides evidence but is not the treatment or intervention.
- **Good instruction and learning are the treatment and intervention in schools.**



*What Supports and Improves  
Instruction and Learning in Schools  
from the Research Literature?*

# Three Ways to Support Good Instruction and Learning in Schools

1 Implement  
High-Quality  
Instructional  
Materials

2 Increase  
Students'  
Sense of  
Belonging

3 Focus on  
Formative  
Assessment  
Strategies

# High-Quality Curriculum & Instructional Materials (HQIM)

- Ensure more equitable instruction
- Bring concrete coherence to the classroom
- Actively improve a teacher's pedagogy through their use

For a related reading, see Polikoff, M. (2021). *Beyond standards: The fragmentation of education governance and the promise of curriculum reform*. Harvard Education Press.

## Materials Matter

We provide free reports that help you evaluate instructional materials because high-quality content matters to teachers, to kids, and to our collective future.

Select a subject to browse reports

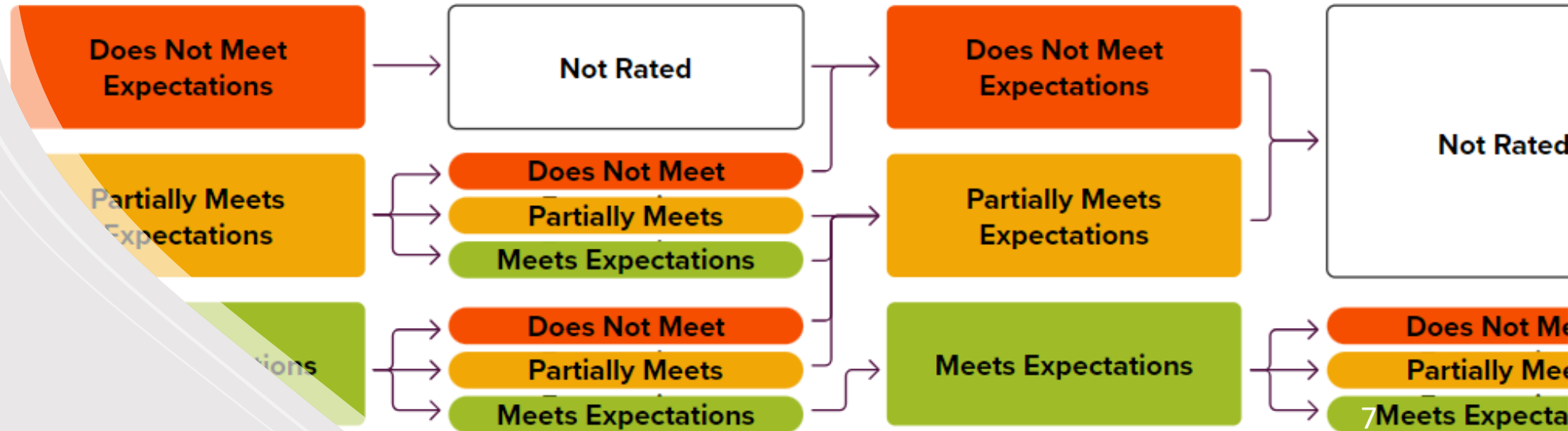
- ELA
- Math
- Science
- Explore All Reports

### GATEWAY 1

### GATEWAY 2

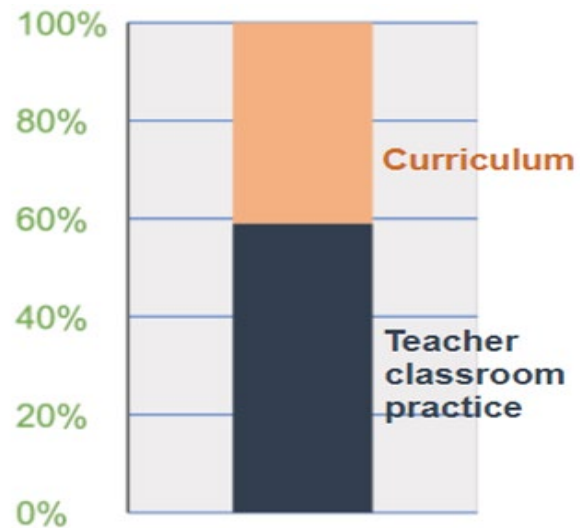
### ALIGNMENT

### GATEWAY 3

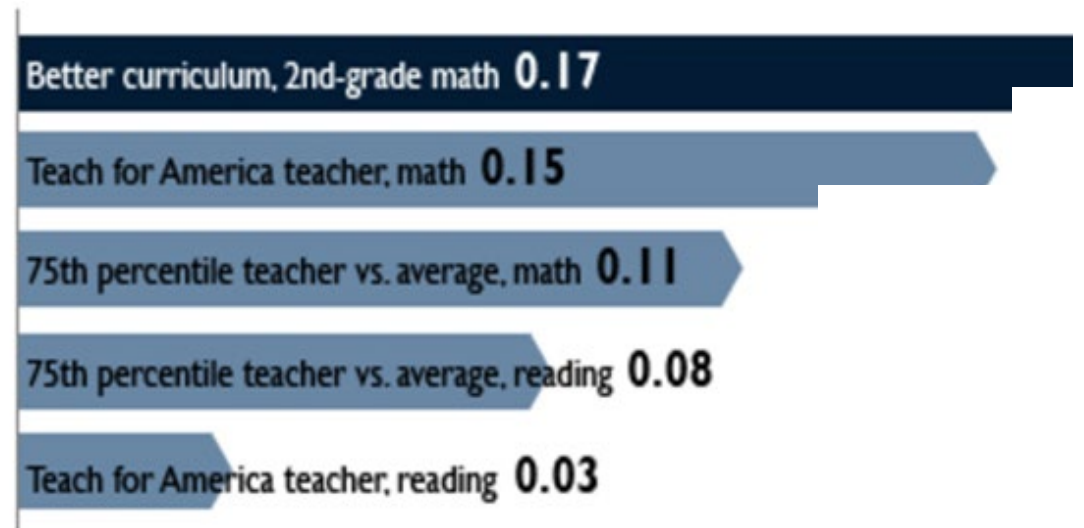


# Research demonstrates HQIMs matter to student outcomes

Students in an integrated improvement model gained an estimated **four months of learning** over two years relative to students in the comparison group, 41% of which was **attributable to instructional materials**



Research demonstrates **high quality instructional materials has the largest effect** size of selected interventions on student test scores.





# But teachers are often creating their own materials



**TEACHERS SPEND 7-12 HOURS PER WEEK**

searching for and creating instructional resources (free and paid),<sup>8</sup>  
drawing from a variety of sources, many of them unvetted.

<https://edreports.org/impact/why-materials-matter#s05>

See also: Silver, D. (2021). A Theoretical Framework for Studying Teachers' Curriculum Supplementation. In *Review of Educational Research* (Vol. 92, Issue 3). <https://doi.org/10.3102/00346543211063930>; Kaufman, J. H., Tosh, K., & Mattox, T. (2020). *Are U.S. Teachers Using High Quality Instructional Materials?* <https://doi.org/https://doi.org/10.7249/RR2575.11-1>.

In the most recent **2022-23 Survey of American Instructional Resources**, RAND found that above all other curriculum materials, **teachers are creating their own once a week or more**, on average, based on the following percentages:

|         | Elementary | Middle | High School |
|---------|------------|--------|-------------|
| ELA     | 37%        | 56%    | 72%         |
| Math    | 22%        | 50%    | 54%         |
| Science | 34%        | 57%    | 65%         |

<https://www.rand.org/education-and-labor/projects/airs.html>

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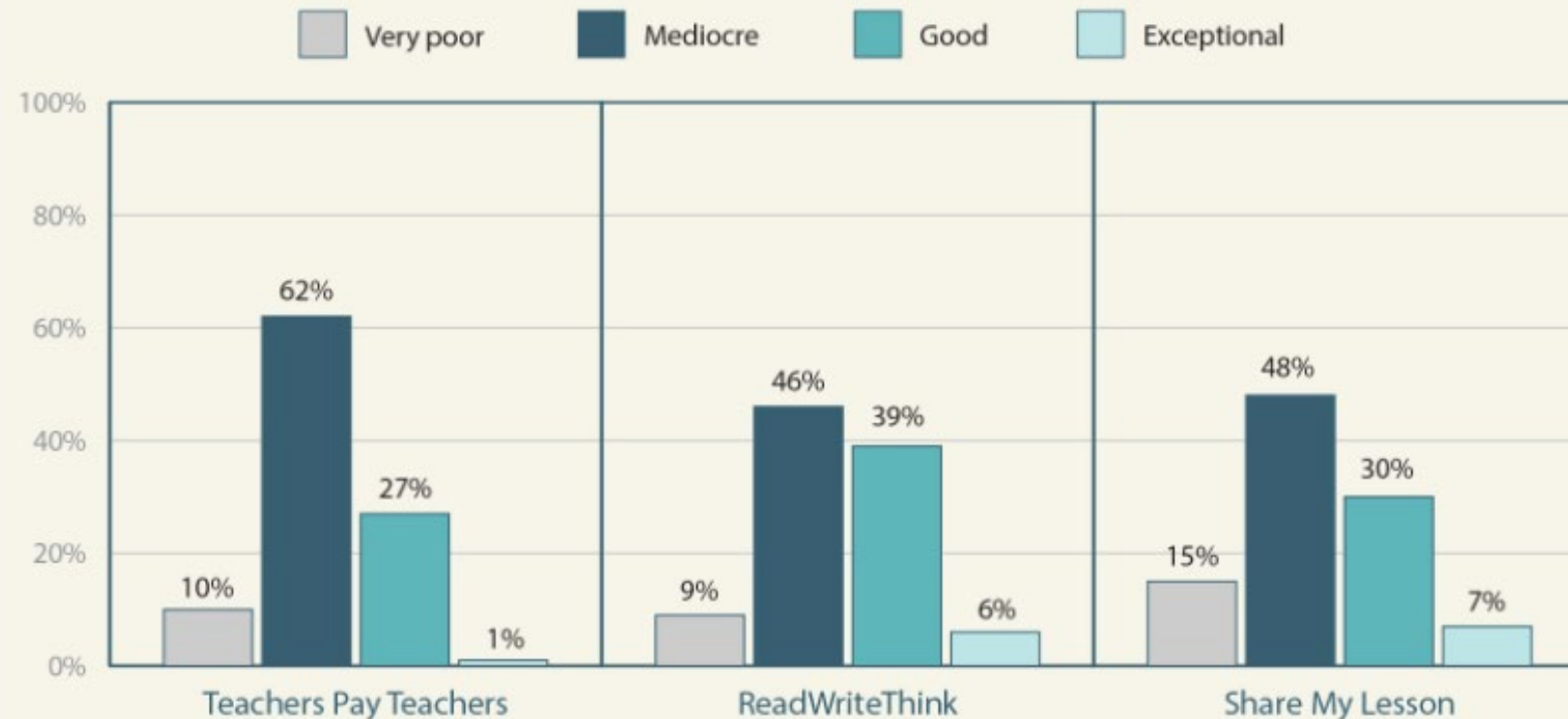
## RAND American Instructional Resources Survey (AIRS) Project

Through the American Instructional Resources Survey (AIRS), RAND is investigating the use of instructional materials in K-12 English language arts, mathematics, and science classrooms across the United States. AIRS is intended to examine the factors related to the use of standards-aligned curricula, and how curriculum use and supports for curriculum use are related to teaching. The AIRS project has been made possible through generous support from the [Bill & Melinda Gates Foundation](#), the [Charles and Lynn Schusterman Foundation](#), and the [Overdeck Family Foundation](#).

### Recent Findings

# Yet teacher developed materials are often “mediocre” overall

FIGURE 1. Overall Ratings of Supplemental Materials

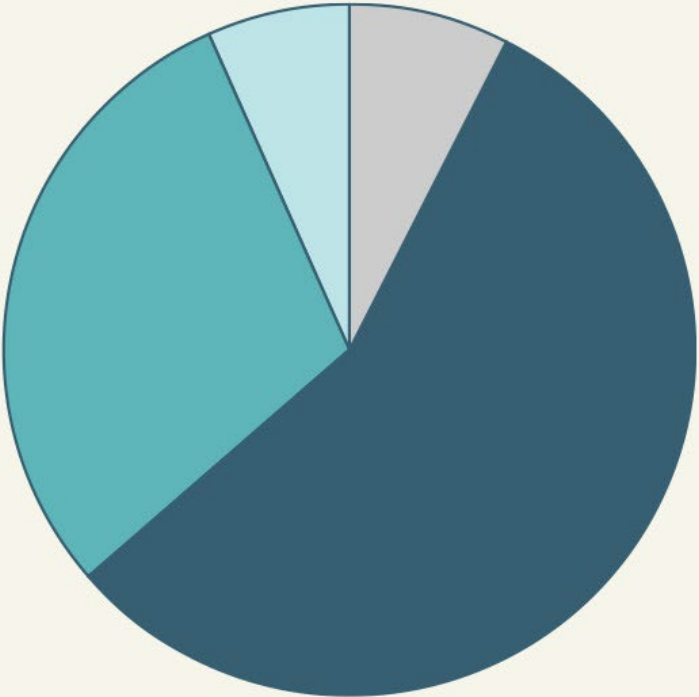


Source: Polikoff, M., with Dean, J. (2019, December). The Supplemental-Curriculum Bazaar: Is What's Online Any Good? Thomas B. Fordham Institute.

# Not well-aligned to standards

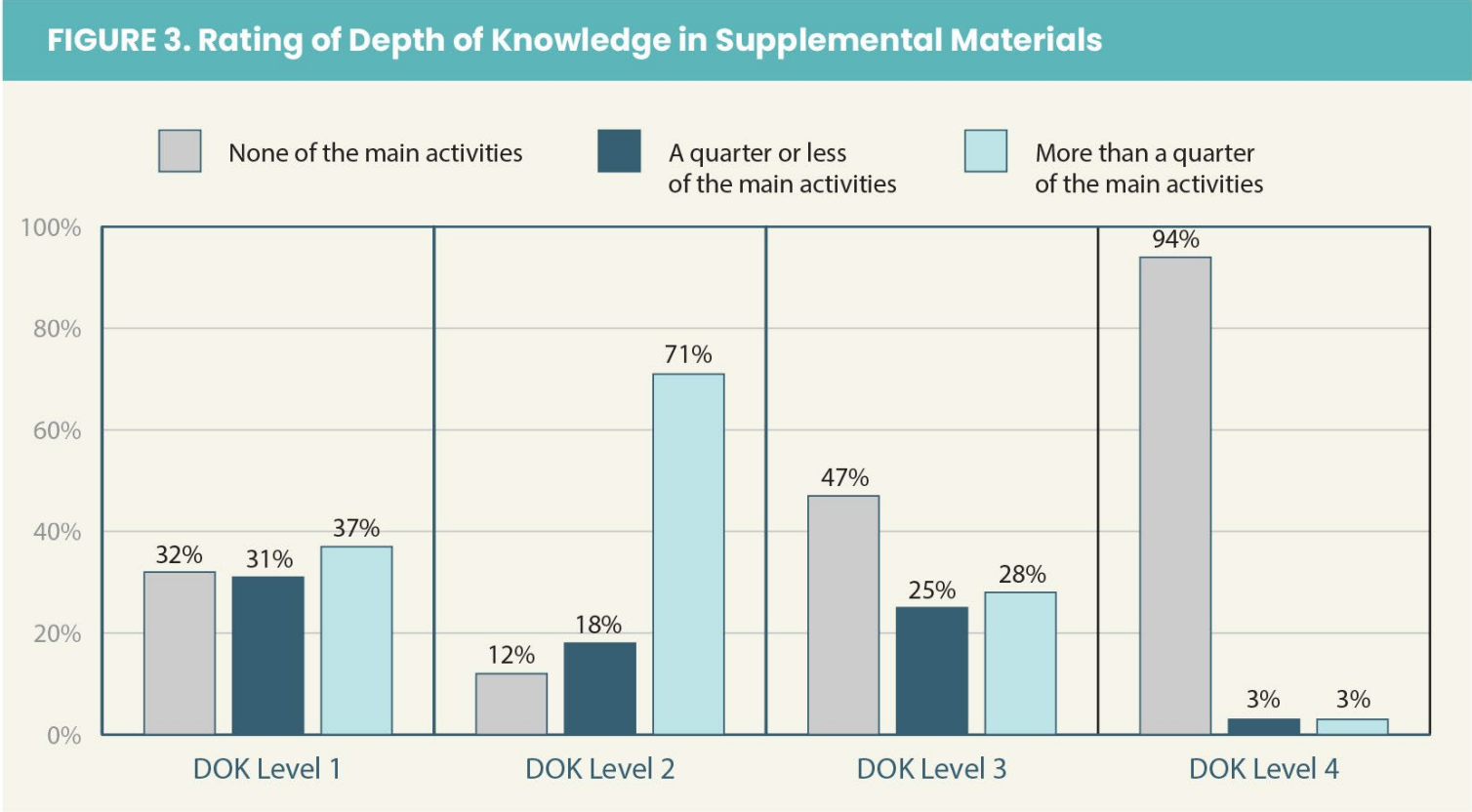
**FIGURE 2. How Well Supplemental Materials Align to Standards**

- Not aligned (8%)
- Weakly aligned (56%)
- Mostly aligned (30%)
- Fully aligned (7%)



Source: Polikoff, M., with Dean, J. (2019, December). The Supplemental-Curriculum Bazaar: Is What's Online Any Good? Thomas B. Fordham Institute.

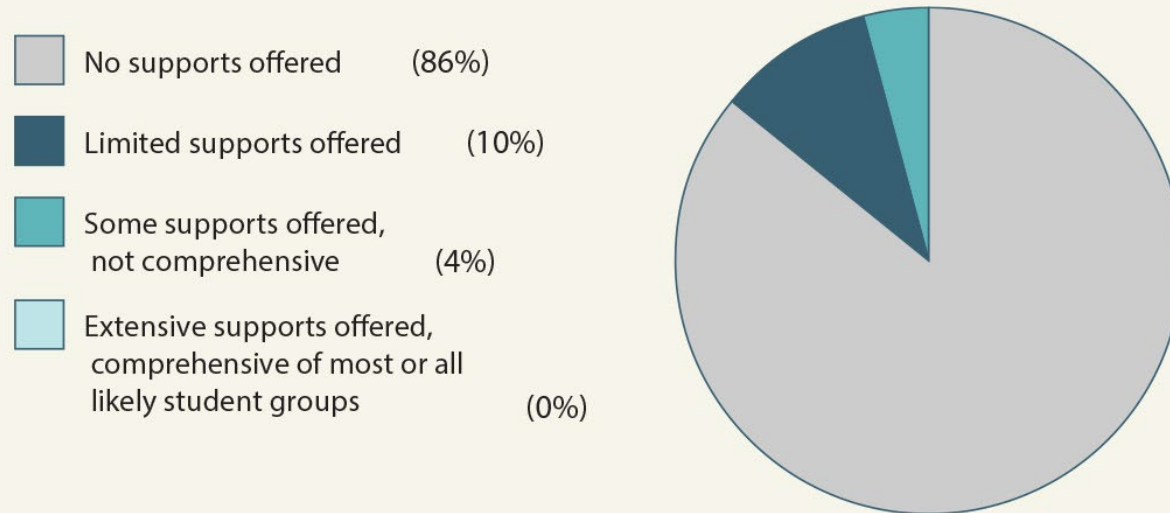
# Focused on fact recall and procedural knowledge and skill



Source: Polikoff, M., with Dean, J. (2019, December). The Supplemental-Curriculum Bazaar: Is What's Online Any Good? Thomas B. Fordham Institute.

# And do not offer teachers support for teaching diverse learners

**FIGURE 4. Rating of Diversity of Learning Supports in Supplemental Materials**



Source: Polikoff, M., with Dean, J. (2019, December). The Supplemental-Curriculum Bazaar: Is What's Online Any Good? Thomas B. Fordham Institute.

## Tangible Ways to Support High-Quality Instructional Materials Implementation

**Use EdReports** to evaluate the quality of your curriculum materials ideally before you purchase them.

**Explain to teachers** why HQIM are important and **why to minimize curriculum supplementation** from the internet.

**Ask teachers to implement the curriculum provided to them with integrity** (notice I did not say fidelity) and hold them responsible for doing so through frequent informal observations and conversations.

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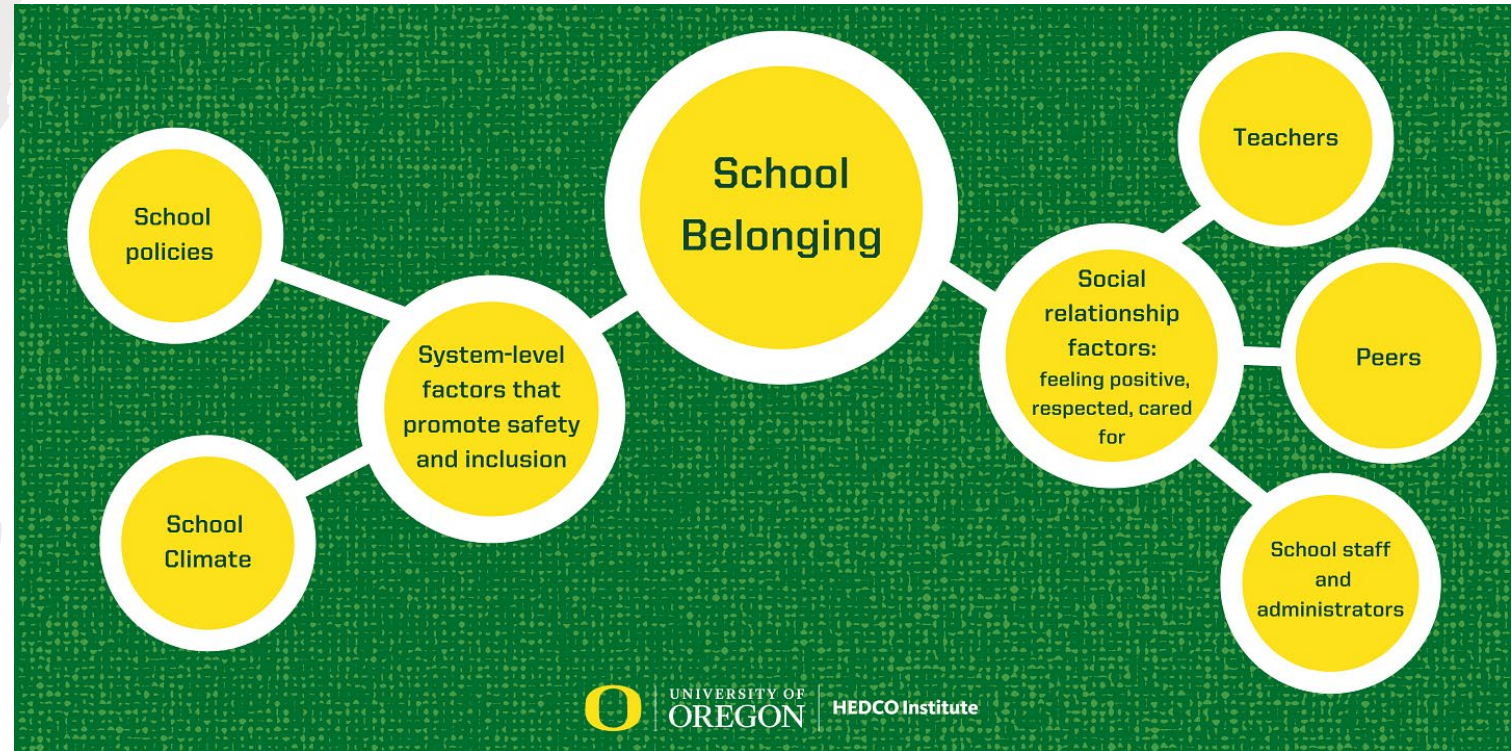
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# Sense of Belonging:

A student's feeling of identity, inclusion, and acceptance as a member of their school community.



Definition taken from: [https://www.oregon.gov/ode/educator-resources/assessment/Documents/SEED\\_Survey\\_Preliminary\\_Specifications\\_and\\_Blueprints.pdf](https://www.oregon.gov/ode/educator-resources/assessment/Documents/SEED_Survey_Preliminary_Specifications_and_Blueprints.pdf)

Image taken from: <https://hedcoinstitute.uoregon.edu/blog/3/what-school-belonging>

# Some Examples

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- I have friends at school
- My classmates care about me
- There are adults at my school who are like me and my family
- I feel welcome at my school
- There are adults at my school who care about me
- I feel safe talking with adults at my school
- I feel safe talking with students at my school
- I have classmates who are like me and my family

[https://www.oregon.gov/ode/educator-resources/assessment/Pages/Student Educational Equity Development Survey.aspx](https://www.oregon.gov/ode/educator-resources/assessment/Pages/Student_Educational_Equity_Development_Survey.aspx)



There is an increasing number of students worldwide who report not feeling a sense of belonging to their school.



Allen et al., (2021). Impact of School-Based Interventions for Building School Belonging in Adolescence: A Systematic Review. *Educational Psychology Review*, 34, 229-257, <https://doi.org/10.1007/s10648-021-09621-w>

# Why Is Belonging Important?

A student's sense of belonging predicts a wide variety of educational and developmental outcomes.



Sense of belonging has a meaningful association with **psychological constructs** (e.g., motivation, behavior, social-emotional competencies), **health domains** (e.g., mental health, high-risk substance use) and **academic outcomes** (e.g., attendance, achievement, high school graduation).

Korpershoek, H., et al. (2020). The relationships between school belonging and students' motivational, social-emotional, behavioral, and academic outcomes in secondary education: A meta-analytic review. *Research Papers in Education*, 35(6), 641-680. <https://doi.org/10.1080/02671522.2019.1615116>

Rose, I. D., et al. (2022). The relationship of school connectedness to adolescents' engagement in co-occurring health risks: A meta-analytic review. *The Journal of School Nursing*, 40(1), <http://dx.doi.org/10.1177/10598405221096802>

Oregon Department of Education (2023). Student Sense of Belonging in Schools: Connection to Outcomes [Results from Statewide SEED Survey]. <https://www.oregon.gov/ode/educator-resources/assessment/Documents/SenseofBelongingOutcomes.pdf>

# And There Is Good News...

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**Sense of belonging is malleable**, which means it can be improved in schools!

Educators can help students feel a stronger sense of belonging in how the school learning environment is set up.

- **Teacher support was one of the strongest predictors of school belonging in Allen et al.'s (2018) meta-analysis.**

Allen, K., et al. (2018). What schools need to know about fostering school belonging: A meta-analysis. *Educational Psychology Review*, 30, 1-34.  
<https://doi.org/10.1007/s10648-016-9389-8>



There are many ways to foster a school culture and climate where all students feel welcome and cared for. For example:

**Create space for identity:** Provide opportunities for students to share their identities and experiences.

**Greet students:** Greeting students at the door can set a positive tone and help them feel invested in their learning.

**Establish norms:** Work together with students to create classroom norms and expectations.

**Celebrate diversity:** Help students understand and respect differences.

**Build relationships:** Positive teacher-student relationships are a key aspect of quality teaching and can encourage students to participate.

**Embrace different perspectives:** Encourage students to express different views and share their ideas.

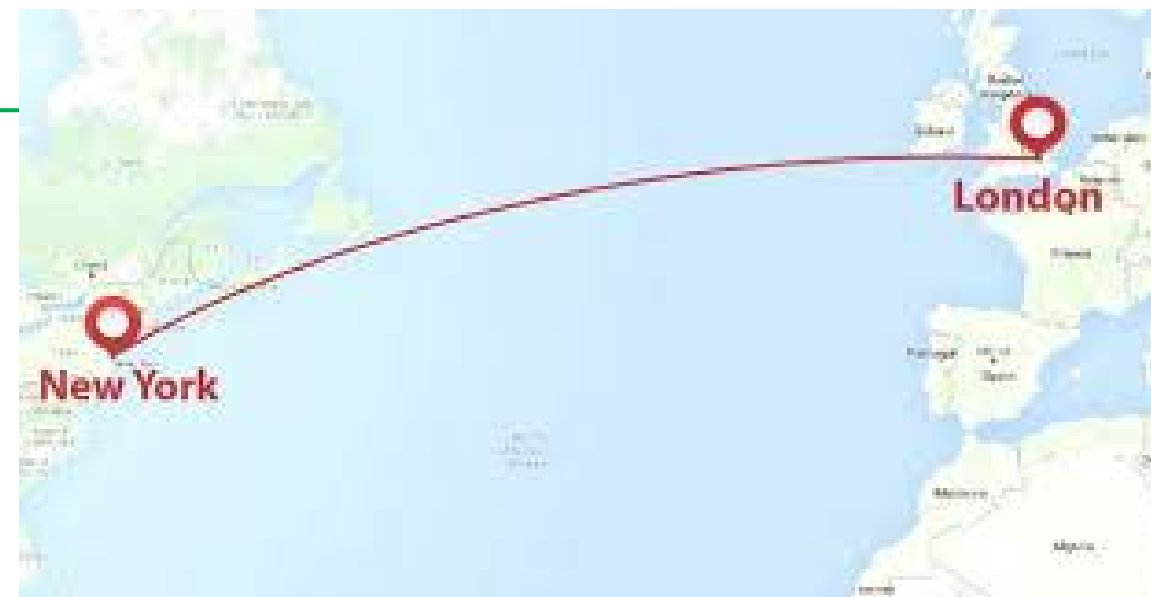
**Collaborate with families:** Work closely with families to help children develop a sense of belonging.

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# Plane Analogy



## Summative

Teachers use classroom summative assessments such as end-of-unit tests to ***"sum up" what students have learned about a particular set of content standards to that point in time.*** This information is then communicated to students and parents typically using grades, scores, or reports.

## Formative

Teachers and students use sets of formative assessment practices to ***adjust and modify their instruction or learning strategies during a unit of instruction.*** The feedback ***makes student thinking visible and occurs daily and weekly*** to support student learning.

Black, P., & Wiliam, D. (2009). Developing the theory of formative assessment. *Educational Assessment, Evaluation and Accountability*, 21(1), 5–31.  
<https://doi.org/10.1007/s11092-008-9068-5>

Council of Chief State School Officers. (2018). *Revising the Definition of Formative Assessment* (p. 2). <https://ccsso.org/resource-library/revising-definition-formative-assessment>

# Not This, But That...

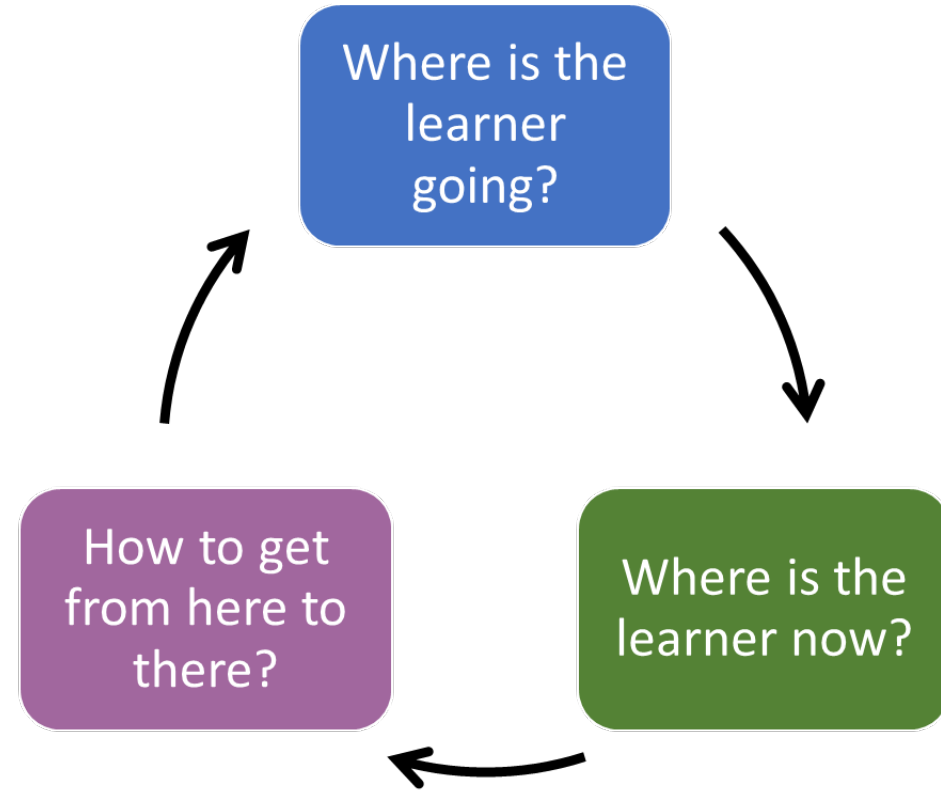
Formative assessment is not a “thing”. It is not an exit ticket, quiz, item bank, etc.

Formative assessment is a *process* that involves sets of practices teachers and students employ.

Formative assessment is not scored or graded.

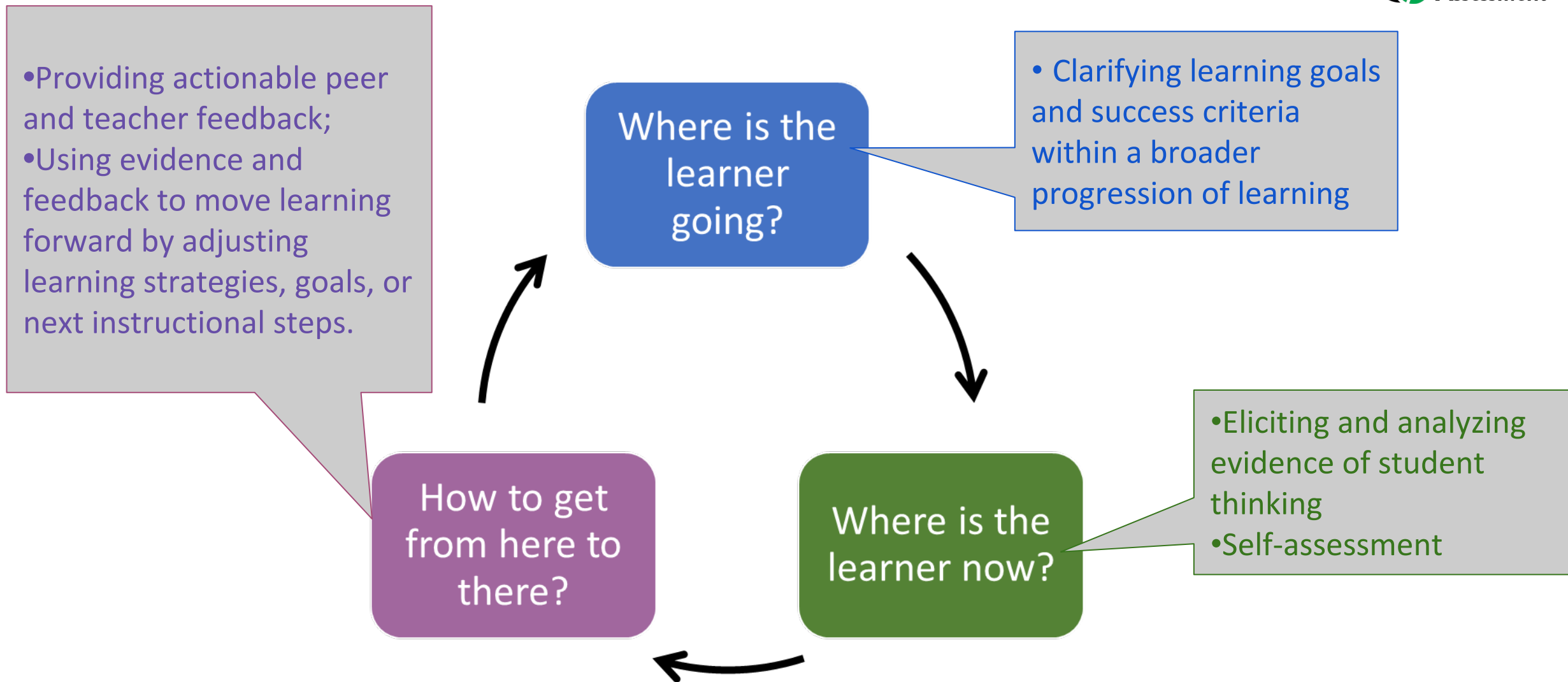
Formative assessment provides qualitative feedback about where and how to improve.

# Formative Assessment Process



William, D. (2018). *Embedded formative assessment* (2nd ed.). Solution Tree Press.

Heritage, M. (2010). *Formative assessment: Making it happen in the classroom*. Corwin.



William, D. (2018). *Embedded formative assessment* (2nd ed.). Solution Tree Press.

Brookhart, S. M. (2010). *Formative assessment strategies for every classroom* (2nd ed.). ASCD.

## Tangible Ways to Support High-Quality Formative Assessment Implementation

Make formative assessment the focus of leadership and peer-to-peer walk-throughs (see [Walk-Through Protocol](#)).

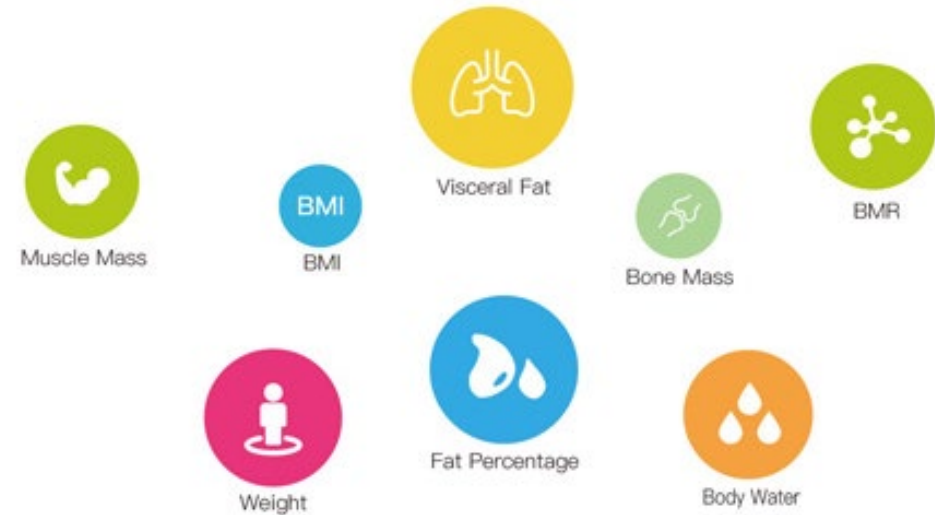
Make formative assessment the focus of grade level, departmental, or common planning meetings (see [Teacher PLC Protocol](#)).

Make formative assessment practices the focus of professional learning.

*Both Protocols and Other Formative Assessment Professional Learning Materials Available here: <https://sites.google.com/view/rvusd/home> (all open source)*

# In Closing....

- You are embarking on a new year with a new state assessment. This is exciting!
- **Just remember: MAST will not fix the problem. It is an outcome measure.**
- The treatment or intervention in schools for improving student achievement is good instruction and learning.



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*Thank you!*



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