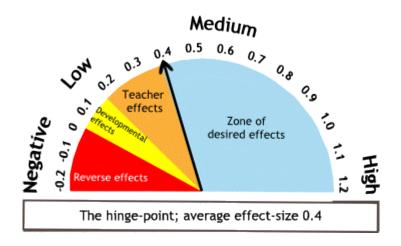
INSTRUCTIONAL FRAMEWORK

An instructional framework provides a structure that helps teachers design and deliver instruction. It identifies the most effective strategies that impact student learning and creates a common language for instruction.



The fundamental purpose of school is to ensure that ALL STUDENTS LEARN and merely that all students get taught.

-John Hattie



- 1. Clear learning goals are posted and/or communicated; lesson directly correlates to the learning target; students know what is expected of them.
- 2. Students know whether they will be successful or not on assignments; there is evidence that students track their own progress on learning.
- 3. Teacher provides informative feedback to students on what they have done correctly and how they can improve and make progress toward meeting specific criteria.
- 4. Teacher is highly organized in the presentation of the subject matter; understands content; speaks powerfully and passionately avoiding verbal hesitancies and fillers; reduces distance between teacher and students by moving away from barriers (e.g., desk, podiums); manages classroom behavior; cares about students and their learning progress.
- 5. Students take advantage of multiple opportunities to demonstrate learning; instructional strategies focus on higher order thinking, critical thinking, real-world application, and problem-solving.
- 6. Students actively engage with the content; new information is linked to prior knowledge; students take notes, use manipulatives, use graphic organizers; students are asked to recall information; analogies are used.
- 7. Various levels of questioning are evident; students independently practice skills.
- 8. Students apply general principles to specific problems; students generalize their learning beyond the particular topic or task at hand; students apply previously learned knowledge and skills; students engage in problem solving.
- 9. Uses a variety of formative assessment techniques; assesses learning progress before or during the learning process itself; instruction is adjusted as a result of formative results.
- 10. Teacher crafts a question or series of questions to prompt focused discussion, all or most students engage in the discussion in a safe learning environment, and students learn from each other.
- 11. Instruction is aligned with the district guaranteed and viable curriculum, and teachers provide students with the instruction and support to achieve the intended learning target.

tmany96. (2019, April 30).

"Does prioritizing standards lead to prioritizing strategies? Are all essential standards equally important? (no) Are all instructional strategies equally impactful? (no) So, if we prioritize the essential standards, shouldn't we prioritize our instructional strategies?"

[Twitter post]. Retrieved from https://twitter.com/tmany96/status/1123395784949452800?s=20

Note: Click on the Table of Contents heading to quickly navigate to the document section.

Contents

Change log	4
What is an instructional framework?	
1. Clear Learning Goals	7
2. Students Track Learning	g
3. Teachers Provides Informative Feedback	11
4. Teacher is Highly Organized	13
5. Multiple Opportunities	15
6. Engage Students with Content	17
7. Levels of Questioning	19
8. Application of Principles	20
9. Formative Assessment	22
10. Crafting Questions	23
11. GVC Alignment	24
References	25

Change log

Change #	Date	Change	Why Changed
1	9/2021	Plan descriptors developed	Clarity for staff

What is an instructional framework?

An instructional framework provides a structure that helps teachers design and deliver instruction. It identifies the most effective strategies that impact student learning and creates a common language for instruction.

Highly Effective Learning & Teaching

Our expectations for highly effective teaching and learning is defined by our instructional framework. This framework is based on the work of John Hattie (2012) and identifies the most effective strategies to maximize student learning.

- 1. Clear learning goals are posted and/or communicated; lesson directly correlates to the learning target; students know what is expected of them.
- 2. Students know whether they will be successful or not on assignments; there is evidence that students track their own progress on learning.
- 3. Teacher provides informative feedback to students on what they have done correctly and how they can improve and make progress toward meeting specific criteria.
- 4. Teacher is highly organized in the presentation of the subject matter; understands content; speaks powerfully and passionately avoiding verbal hesitancies and fillers; reduces distance between teacher and students by moving away from barriers (e.g., desk, podiums); manages classroom behavior; cares about students and their learning progress.
- 5. Students take advantage of multiple opportunities to demonstrate learning; instructional strategies focus on higher order thinking, critical thinking, real-world application, and problem-solving.
- 6. Students actively engage with the content; new information is linked to prior knowledge; students take notes, use manipulatives, use graphic organizers; students are asked to recall information; analogies are used.
- 7. Various levels of questioning are evident; students independently practice skills.
- 8. Students apply general principles to specific problems; students generalize their learning beyond the particular topic or task at hand; students apply previously learned knowledge and skills; students engage in problem solving.
- 9. Uses a variety of formative assessment techniques; assesses learning progress before or during the learning process itself; instruction is adjusted as a result of formative results.
- 10. Teacher crafts a question or series of questions to prompt focused discussion, all or most students engage in the discussion in a safe learning environment, and students learn from each other.
- 11. Instruction is aligned with the district guaranteed and viable curriculum, and teachers provide students with the instruction and support to achieve the intended learning targets.

Hattie's Rankings

The <u>MetaX database</u> provides valuable, current data on variables that have the greatest impact on student achievement. <u>Learn more about the MetaX here!</u>

WHY?

John Hattie discusses the importance of "what works best" in this YouTube video: <u>John Hattie on How to Advance Achievement.</u>

What is the research that formed our instructional framework?

Our instructional framework was formed from the work of John Hattie and Robert Marzano. John Hattie (2018) examined over 1,500 meta-analyses of 90,000 studies involving 300 million students to identify what is most effective (effect size) in education. Hattie (2012) uses the barometer of influence to illustrate the hinge-point of effectiveness. Hattie notes,

...the finding that most changed my way of thinking: when you look at the distribution of all 50,000-plus effect sizes, almost everything works. All that is needed to enhance achievement is a pulse. This indicates that it is not enough to merely provide evidence you have a positive effect on achievement; we need to also identify a level of evidence that might be considered the minimum level for claiming a worthwhile positive effect. ...the 0.40 hinge point is important because it is close to the average effect we can expect from a year's schooling. (Hattie, 2012, pp. 15-16)

Robert Marzano has conducted decades of education research. In Marzano's research of effective instructional strategies, he noted,

...there are two possible users for an instructional technique: teachers and students. A strategy intended to be used by teachers is one that specifies how the teacher should behave to help students learn specific content or improve a specific skill. For example, providing students with advanced organizer questions...is intended to be used by teachers to help student learn informational knowledge. A strategy intended for students is one that identifies behaviors students can engage in to better learn specific content or a specific skill. For example, outlining is a technique that is designed to be use by students to help them learn information al knowledge. (Marzano, 1998, p. 67)

In our instructional framework the most observable, effective strategies used by teachers and by students are identified. This framework guides our complex instructional work: in the classroom, across departments and grades, and throughout the system. The framework gives us strategic tools for feedback, reflection, and professional learning.

The Correlation between Proficiency and State Assessments

View Robert Marzano's (2019) illustration on the correlation between proficiency and state assessment results.

How were the descriptors written?

During a district professional learning day, teachers worked collaboratively at all buildings to describe the levels of proficiency for the framework component assigned to the school.

1. Clear Learning Goals

Clear learning goals are posted and/or communicated; lesson directly correlates to the learning target; students know what is expected of them.

Descriptors

1	2	3	4
No evidence observed.	Learning goals are vague; lesson connection to the target learning goal is unclear; non-student friendly language is used, so students may not understand the target learning goal.	Clear learning goals are posted and communicated; lesson directly correlates to the target learning goal; students know what is expected of them.	Learning goals are embedded in the lesson and revisited throughout the lesson; students progress toward the target learning goal in the lesson; student can clearly articulate what is expected of them.

Hattie/Marzano Language

John Hattie highlights how important it is for you (and your students) to be clear about what you want them to learn in each lesson. According to Hattie, teacher clarity is one of the most potent influences on student achievement. Robert Marzano agrees, including lesson goals in his top 5 list of factors that affect how well students do at school.

Hattie states that lesson goals:

- Clearly state what you want your students to learn
- Can focus on *surface* or *deep* learning (or both)
- Must be challenging for the students relative to their current mastery of the topic
- May be grouped (i.e. a single lesson may have more than one goal)
- Need to be shared with the students

Marzano also found that posing questions at the start of a lesson is an effective way to focus students: For example:

- How do you add mixed fractions with different denominators? That's what you must know by the end of this lesson.
- What is the difference between elements and compounds? ...
- Why is Persuasive Essay A better than Persuasive Essay B? ...
- When (what period) were Egypt's great pyramids built? ...

Hattie suggests using questions a slightly different way:

- What are today's lesson goals?
- What do I already know that will help me achieve these goals?
- What actions will I need to do to ensure I achieve these goals?

Killian, S. (2015)

What it looks like...

See the *Using Scales with Learners* section of our **Instructional Cycle Framework**.

Strategies & Resources

- Providing scales & rubrics
- Knowing your learning target
- Learning maps

2. Students Track Learning

Students know whether they will be successful or not on assignments; there is evidence that students track their own progress on learning.

Descriptors

1	2	3	4
No evidence observed.	Students are unsure of the criteria for the assignment; no evidence of students tracking progress, but teacher can produce when asked; students are somewhat knowledgeable about the measures for success.	Students know whether or not they will be successful or not on assignments; there is evidence that students track their own progress on learning.	Students are confident about the their chances of meeting the criteria on an assignment; when asked, students can verbalize their progress toward meeting the criteria; students are aware of what they know and how likely they are to perform.

Hattie/Marzano Language

Expectations students set for their work; Self-reported grades comes out at the top of all influences. Children are the most accurate when predicting how they will perform. In a <u>video</u> Hattie explains that if he could write his book Visible Learning for Teachers again, he would re-name this learning strategy "Student Expectations" to express more clearly that this strategy involves the teacher finding out what are the student's expectations and pushing the learner to exceed these expectations. Once a student has performed at a level that is beyond their own expectations, he or she gains confidence in his or her learning ability.

Example for Self-reported grades: Before an exam, ask your class to write down what mark the student expects to achieve. Use this information to engage the student to try to perform even better.

What it looks like...

Ask students this question...

What is your learning goal?

Student should cite a relevant skill or concept

Example: I am learning to add rational numbers.

Non-example: To finish this assignment.

Where are you on your path to reach your goal? How have you been tracking your success?

Student should cite elements of the learning intentions (standards).

Examples: I have mastered adding positive and negative integers, but I am still working on adding positive and negative fractions.

I monitor my progress toward my learning goal with ongoing feedback from my teacher.

Non-examples: I don't know. My teachers tell me. I check our online reporting system.

Can you tell me about the roles your group mates and you have?

Student should cite his/her specific contributions to the task/goal of collaboration.

Students should have different roles that equally allow them to engage with the learning intentions.

Strategies & Resources

• 3 Tips on Student Self-Reported Grades

3. Teachers Provides Informative Feedback

Teacher provides informative feedback to students on what they have done correctly and how they can improve and make progress toward meeting specific criteria.

Descriptors

1	2	3	4
No evidence observed.	Teacher provides feedback to students on what they have done correctly or incorrectly, but the feedback is too broad to focus on a specific skill or improvement and/or students are given little feedback on how to progress.	Teacher provides informative feedback to students on what they have done correctly and how they can improve and make progress toward meeting specific criteria.	In addition to evident criteria, teacher provides feedback in a clear and concise way that encourages higher level thinking from the students. Feedback is given in multiple ways to meet individual needs on what students have done correctly or incorrectly, and how they can improve, and how they can make progress toward meeting specific criteria.

Hattie/Marzano Language

According to Hattie and Timperley (2007) feedback is one of the most powerful influences on learning and achievement, but this impact can be either positive or negative. They developed a model of effective feedback that identifies the particular properties and circumstances that make it work. Feedback on task, process and self regulation level is far more effective than on the self-level (e.g. praise which contains no learning information). Descriptive feedback is closely related to providing formative assessment (see above). In an interview Hattie emphasized that the most powerful feedback is that given from the student to the teacher. This feedback allows teachers to see learning through the eyes of their students. It makes learning visible and facilitates the planning of next steps. The feedback that students receive from their teachers is also vital. It enables students to progress towards challenging learning intentions and goals.

Examples: Related to the notion of "feed up, feed back and feed forward" teachers must answer three feedback questions: "Where am I going? How am I going? Where to next?" Constantly ask the students in order to maximize the feedback from the learner back to the teacher. Create a classroom climate where error is welcomed. In this short <u>video</u> John Hattie talks about what feedback means and how to make feedback work effectively for learning in the classroom.

It is important that you give your students feedback after they engage with any new material. This:

- Highlighting what is right and wrong, or good and bad about their work
- Helping students to see how they can improve

Robert Marzano highlighted that students need to be given feedback while there is still time to improve (i.e. before finishing a topic or assigning a formal assessment task). John Hattie agreed with this but went further, showing that novice or struggling students need immediate feedback, while more experienced students do

better when they receive delayed feedback. Hattie also discovered that different types of students need distinct types of feedback (see How to Give Feedback: The Advanced Guide).

Hattie also highlighted that feedback is a two-way street, where student results tell the teacher the degree to which their efforts are working (or not). When teachers see feedback this way, it has an even larger impact on their students' subsequent results.

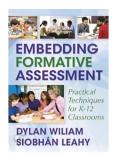
What it looks like...

- A link to a more comprehensive explanation by Hattie.
- Blog providing 20 tips about effective feedback--Reynolds.
- Tips for providing effective feedback—Center for Innovation in Research and Teaching.

Strategies & Resources

*Note: due to copyright requirements, resources are available to CCSD1 staff only.

• Don't forget to reference our #1 resource...this book has numerous techniques for formative assessment.



- John Hattie's Top Ten Visible Learning Takeaways Number Ten: Feedback.
- Progress Monitoring Tools to Make Learning Visible.

4. Teacher is Highly Organized

Teacher is highly organized in the presentation of the subject matter; understands content; speaks powerfully and passionately avoiding verbal hesitancies and fillers; reduces distance between teacher and students by moving away from barriers (e.g., desk, podiums); manages classroom behavior; cares about students and their learning progress.

Descriptors

1	2	3	4
No evidence observed.	Teacher struggles with presenting material in an organized fashion; does not always communicate in a dynamic fashion or verbal hesitancies interfere with communication; teacher teachers from a distance or often from behind a barrier. At times student behavior may interrupt learning. Interaction with students does not always display caring.	Teacher is highly organized in the presentation of the subject matter; understands content; speaks powerfully and passionately avoiding verbal hesitancies and fillers; reduces distance between teacher and students by moving away from barriers (e.g., desk, podiums); manages classroom behavior; cares about students and their learning progress.	Presentation of material is highly engaging, highly organized, and masterfully delivered. Mastery of the content is evident. No verbal hesitancies were observed. Teacher uses distance skillfully to enhance delivery of content, moving around the room to keep students engaged. Teacher ensures each student is making learning progress. A caring environment is pervasive.

Hattie/Marzano Language

According to Hattie teacher credibility is vital to learning, and students are very perceptive about knowing which teachers can make a difference. There are four key factors of credibility: trust, competence, dynamism and immediacy. In an interview Hattie puts it like that: "If a teacher is not perceived as credible, the students just turn off."

Examples for teacher credibility: Earn trust by showing trust towards pupils. Appear highly organised in the presentation of the subject matter. Develop a powerful style of speaking that uses few verbal hesitancies such as "OK" or "you know". Reduce distance between teachers and students by moving or moving away from barriers (e.g., desk, podiums). Source: cie.asu.edu (Links to an external site.)

What it looks like...

Examples of the Four Elements of Hattie's Credibility.

An excerpt:

There is a strong link between teacher credibility and student achievement. It is your students' views about your credibility that matter – not your own views.

You can increase your perceived credibility by:

Forging trusting relationships with your students

Knowing your stuff, teaching it well and effectively managing your students' behaviour

Being passionate about what you teach, about being a teacher, and about helping each of your students succeed

Strategies & Resources

- Teacher Credibility: If You Build It, They Will Learn (Here's How)
- Boosting Your Teacher Credibility

5. Multiple Opportunities

Students take advantage of multiple opportunities to demonstrate learning; instructional strategies focus on higher order thinking, critical thinking, real-world application, and problem-solving.

Descriptors

1	2	3	4
No evidence observed.	Students are given an opportunity to demonstrate learning; instructional strategies focus on knowledge and comprehension skills with little evidence of higher order thinking, critical thinking, realworld application, and problem solving.	Students take advantage of multiple opportunities to demonstrate learning; instructional strategies focus on higher order thinking, critical thinking, realworld application, and problem-solving.	Students create opportunities to demonstrate learning; students demonstrate/apply higher order thinking, critical thinking, realworld applications and problem-solving skills.

Hattie/Marzano Language

If you want students to internalize new information, you need to expose them to it several times.

When exploring how to enhance students' vocabulary, Robert Marzano found that it was critical for teachers to expose students to the same word multiple times. When each exposure was coupled with an explicit comment about the word and its meaning, students' vocabulary acquisition doubled.

John Hattie picks up on the significance of multiple exposures by revealing the critical importance of techniques such as rehearsal and review. Put simply, rehearsal means going over material until you can remember it, while review involves going over things you have learnt previously.

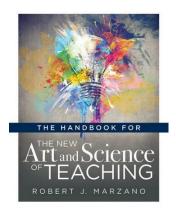
He also stresses the merit of giving students time to practice doing the things they have learned to do. When spaced out over time, Hattie found that having students practice things led to a 26 percentile improvement in their marks.

On a more cautious note, Hattie warned that practice without feedback can be dangerous as it leads to students internalizing the wrong things.

What it looks like...

Check out these sections from *The Handbook for the New Art and Science of Teaching*. Your instructional coach can provide you a copy if needed!

- Structured practice sessions
- Examining errors in reasoning
- Revising knowledge



Strategies & Resources

- Teaching Strategies to Promote Critical Thinking
- Teaching Problem Solving
- How to Increase Higher Order Thinking

6. Engage Students with Content

Students actively engage with the content; new information is linked to prior knowledge; students take notes, use manipulatives, use graphic organizers; students are asked to recall information; analogies are used.

Descriptors

1	2	3	4
No evidence observed.	Attempts where made to get students engaged with the content, but some students are intermittently engaged. Some connections are being made through the use of prior knowledge.	Students actively engage with the content; new information is linked to prior knowledge; students take notes, use manipulatives, use graphic organizers; students asked to recall information; analogies are used.	All students are actively engaged with the content. Students apply prior knowledge or skills to make decisions or solve problems without being prompted.

Hattie/Marzano Language

While it is essential to actively teach students what they need to know and be able to do, it is also important to get them to actively engage with the content.

Marzano and Hattie agree that this starts with students actively linking your newly provided information with their prior knowledge of the topic. Students need to engage with the content as soon as they hear it by:

- Adding it to what they already know, or
- Using it to clarify some of the faulty assumptions they currently hold

Your students can then engage with your information in other ways. Hattie talks about the value of getting kids to take notes. Marzano also found there was great value in having your students take notes, and getting them to work with physical manipulatives. Also, he found that the simple act of asking students to recall information that you have just taught them (i.e. asking basic questions) had a substantial impact on how well they mastered the material. All these strategies are useful, but they only allow students to engage with the material at a surface level.

Robert Marzano also found several ways for students to engage with the material in ways that help them deepen their understanding beyond surface knowledge. These include the use of graphic organizers that show how information is connected (e.g. steps, cause-effect, in comparison to, hierarchical classification). It also includes the use of analogies, such as:

- Persuasive devices are to a writer what tools are to a trade, or
- The Magna Carta offers citizens whit a referee offers a game of soccer.

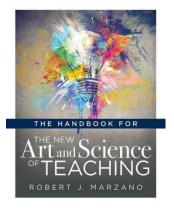
See Marzano's: The Highly Engaged Classroom and Classroom Instruction That Works

These are practical strategies that exemplify the higher levels of the <u>SOLO taxonomy</u> (an alternative to Bloom) that Hattie also advocates.

What it looks like...

Check out these sections from *The Handbook for the New Art and Science of Teaching*. Your instructional coach can provide you a copy if needed!

- Processing content
- Recording and representing content
- Previewing
- Reviewing content



Strategies & Resources

- Tips from Dr. Marzano The Highly Engaged Classroom
- Activating Prior Knowledge

7. Levels of Questioning

Various levels of questioning are evident; students independently practice skills.

Descriptors

1	2	3	4
No evidence observed.	Lower level of questioning is utilized with surface-level information recall; majority of questions are fact recall. Questioning may only involve a few students. Students have few opportunities to practice skills on their own.	Various levels of questioning are evident; student independently practice skills.	Deliberative practice reinforces students to think for themselves, make connection between previous and new learning, and reinforces deeper conceptual understanding. Students generate own questions and are allowed to respond to others. Teacher promotes student justification and reasoning of answers.

Hattie/Marzano Language

Most effective questions are high order "why, how and which is best" questions that cause students to really think; they need to be given time and do better in pairs than alone; important to analyze the questions students ask, too.

Quality questioning is a process that begins with prior planning and involves intentionality in questioning to activate thinking of all students throughout a class period.

Independent practice is where students must complete the work by themselves without any help. Students must be able to understand the concept that was taught and complete it on their own.

What it looks like...

Quality Questioning: Replacing monologue with dialogue

Strategies & Resources

- Engineering better practice...for students.
- Asking Questions to Improve Learning
- Chart for Planning Questioning
- Marzano Questioning Fact Sheet
- Unleashing the Potential of Classroom Questioning

8. Application of Principles

Students apply general principles to specific problems; students generalize their learning beyond the particular topic or task at hand; students apply previously learned knowledge and skills; students engage in problem solving.

Descriptors

1	2	3	4
No evidence observed.	Students are directed how to solve a problem based on teacher led discussion with a defined problem and a single outcome. Little application of knowledge, mostly information recall utilized.	Students apply general principles to specific problems; students generalize their learning beyond the particular topic or task at hand; students apply previously learned knowledge and skills; students engage in problem solving.	Students solve problems by understanding the problem, coming up with a plan of action, implementing a plan, and reviewing the results. Students are able to explain response with detailed reasoning; either independent or student led. Students utilize deductive processes through knowledge application instead of inductive processes.

Hattie/Marzano Language

Robert Marzano found that helping students apply their knowledge deepens their understanding.

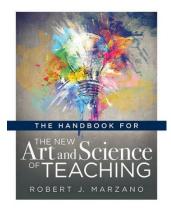
Knowledge application is a deductive process whereby students apply general principles to specific case studies or problems. Marzano found that teaching students how to think deductively and giving them guided practice in doing so helps them generalize their learning beyond the particular topic or task at hand. Hattie confirmed that deductive processes (i.e. general principle applied to specific situation) is much more effective than inductive teaching (i.e. asking students to discover general principles from observing specific situations).

Knowledge application also involves problem-solving. Robert Marzano's synthesis of research revealed that problem-solving had a large effect (d = 0.54) on students' understanding. Marzano believes that problems should require students to apply previously learned knowledge and skills – and Hattie agrees. When problem-solving is used in this way, Hattie found a similar effect size (d = 0.61) to Marzano. However, when a problem is used to stimulate discovery learning, the opposite is true (d = 0.15). Hattie also emphasized the importance of teaching students how to solve problems, e.g. understand the problem \rightarrow come up with a plan of action \rightarrow implement the plan \rightarrow review the results

What it looks like...

Check out these sections from *The Handbook for the New Art and Science of Teaching*. Your instructional coach can provide you a copy if needed!

- Examining errors in reasoning
- Engaging student in cognitively complex tasks
- Generating and defending claims



Strategies & Resources

- Teaching Problem Solving
- Making Learning More than a "Classroom Exercise"
- Extending Learning Across Time & Space: The Power of Generalization
- Solving a Teaching Problem: Students can't apply what they've learned
- <u>Teaching problem-solving skills</u>

9. Formative Assessment

Uses a variety of formative assessment techniques; assesses learning progress before or during the learning process itself; instruction is adjusted as a result of formative results.

Descriptors

1	2	3	4
No evidence observed.	Uses only one formative assessment technique, assesses learning progress only at the end of the learning process. Rarely using formative results to adjust instruction.	Uses a variety of formative assessment techniques; assesses learning process before or during the process itself. Instruction is adjusted as a result of formative results.	Students demonstrate their own understanding through self- evaluation using formative assessment. Learning is monitored in an ongoing fashion and instructional adjustments are made immediately in response to formative results. Teachers uses formative results as a measure of his/her effectiveness.

Hattie/Marzano Language

According to Hattie (2012) and Black & Wiliam (2001) formative evaluation refers to any activity used as an assessment of learning progress before or during the learning process itself. In contrast with formative assessment, the summative assessment evaluates what students know or have learned at the end of the teaching, after all is done. Watch this video.

To learn more about the difference between formative and summative assessment methods. In another <u>video</u>. You can learn from teachers who describe their experience with formative evaluation.

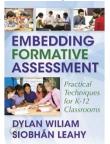
Example for formative evaluation: Spend the same amount of time or even more on formative assessment as you spend on summative assessment. Give descriptive feedback to students: What is the goal? Where are you in relation to it? What can you do to close the gap?

What it looks like...

Dylan Wiliam: Feedback on learning

Strategies & Resources

Don't forget to reference our #1 resource...this book has numerous techniques for formative assessment.



10. Crafting Questions

Teacher crafts a question or series of questions to prompt focused discussion, all or most students engage in the discussion in a safe learning environment, and students learn from each other.

Descriptors

1	2	3	4
No evidence observed.	Teacher asks questions that prompt discussion, but discussion may be vague, unfocused, limiting in scope or engages a limited number of students.	Teacher crafts a question or series of questions to prompt focused discussion, all or most students engage in discussion in a safe learning environment, and students learn from each other.	Teacher crafts an essential question or series of questions to facilitate throughtful, sustained discussions. All students engage in and participate in the discussion in a safe learning environment. All students learn from each other.

Hattie/Marzano Language

Classroom discussion is a method of teaching, that involves the entire class in a discussion. The teacher stops lecturing and students get together as a class to discuss an important issue. Classroom discussion allows students to improve communication skills by voicing their opinions and thoughts. Teachers also benefit from classroom discussion as it allows them to see if students have learnt the concepts that are being taught. Moreover, a classroom discussion creates an environment where everyone learns from each other.

Examples for an effective classroom discussion: Create a series of questions for the students to think about. Allocate enough time in the lesson for an elaborate discussion. Make sure that students can freely express their opinion without being laughed at or ridiculed.

What it looks like...

• Kagan Structure: Stand Up, Hand Up, Pair Up

Strategies & Resources

- Classroom Discussions
- Teaching with Discussions
- Asking Questions to Improve Learning
- Inside the Fishbowl: A Tool for Student Discussions
- John Hattie's Top Ten Visible Learning Takeaways Number Seven: Classroom Discussion
- More Talking in Class, Please
- 3 Ways to Ask Questions that Engage the Whole Class

11. GVC Alignment

Instruction is aligned with the district guaranteed and viable curriculum, and teachers provide students with the instruction and support to achieve the intended learning targets.

Descriptors

1	2	3	4
No evidence observed.	Instruction is not clearly aligned to district guaranteed and viable curriculum, or students are not receiving the instruction and support to achieve the intended target learning goals.	Instruction is aligned with the district guaranteed and viable curriculum, and teachers provide students with the instruction and support to achieve the intended target learning goals.	Majority of students can express their learning goals when asked and are receiving support to achieve those goals; classroom instruction is clearly aligned to the district guaranteed and viable curriculum.

Hattie/Marzano Language

Our Guaranteed and Viable Curriculum (GVC) delineates the curricular framework for our standards-referenced teaching and learning and is defined as (DuFour et al., 2016, pg 113-126):

- Guaranteed: gives students access to the same essential learning outcomes regardless of who is teaching the class
- Viable: well-articulated set of knowledge and skills that every child should learn in grades K-12 that can be taught for understanding in the time available.

What it looks like...

• Mike Mattos on How to get insanely clear about learning outcomes and learning objectives

Strategies & Resources

Teacher Clarity is to Collective Teacher Efficacy As...

References

- Hattie effect size list: 256 influences related to achievement. (2014). Retrieved April 17, 2019, from https://visible-learning.org/hattie-ranking-influences-effect-sizes-learning-achievement/
- Hattie, J. (2009). Visible learning: A synthesis of over 800 meta-analyses relating to achievement. New York, NY: Routledge.
- Hattie, J. (2012). Visible learning for teachers: Maximizing impact on learning. New York, NY: Routledge.
- John Hattie & Helen Timperley: Visible learning and feedback. (2013). Retrieved April 15, 2019, from https://visible-learning.org/2013/02/john-hattie-helen-timperley-visible-learning-and-feedback/
- Killian, S. (2015). 8 strategies Robert Marzano & John Hattie agree on. Retrieved April 15, 2019, from http://www.evidencebasedteaching.org.au/robert-marzano-vs-john-hattie/
- Marzano, R. J. (1998). A theory-based meta-analysis of research on instruction. Aurora, CO: Mid-continent Regional Educational Laboratory. Retrieved from http://www.peecworks.org/peec/peec_research/I01795EFA.2/Marzano%20Instruction%20Meta_An.pdf
- Visible Learning Plus. (2018). The research of John Hattie. Retrieved April 15, 2019, from https://www.visiblelearningplus.com/content/research-john-hattie
- Waack, S. (2013). Glossary of Hattie's influences on student achievement. Retrieved April 15, 2019, from https://visible-learning.org/glossary/