

MTSS TOOLKIT

Self-Reflection and Assessment

JCPS ESSENTIAL SYSTEM 2
EFFECTIVE USE OF DATA





MTSS Toolkits

The purpose of the MTSS (Increased Engagement) Toolkits is to present a select group of high-yield practices that not only foster relationships between adults and students, but also improve outcomes for ALL youth. The toolkits will have a laser-like focus on six, research-based, pedagogical practices resulting in increased engagement, more effective tier-one instruction, and ultimately, increased student achievement. The Multi-Tiered Systems of Support (MTSS) Academic Resource Department will provide instructional support to enhance pedagogical-efficacy for all teachers.

Self-Reflection and Assessment

Reflecting on Learning to Empower Student Achievement

(High-Yield Instructional Practices)

Self-Reported Grades

Metacognitive Strategies

Self-Verbalization/Self-Questioning



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Six Essential Systems for a Strong Learning Climate



INSTRUCTIONAL PLANNING AND PRACTICE FOR DEEPER LEARNING

Teams of teachers and administrators collaboratively plan units, lessons, and assessments to reinforce high levels of learning and ensure mastery for all students.

MTSS TOOLKIT: Modes of Instruction & Modes of Student Practice



STANDARDS IMPLEMENTATION

The school identifies essential, grade-level standards that a student must reach to demonstrate high levels of learning and commits to ensure mastery and application for all students. This serves as the foundation for instructional transformation and informs every other system in this process.

MTSS TOOLKIT: Teacher Clarity



INSTRUCTIONAL FEEDBACK AND PROFESSIONAL LEARNING

The District and school have identified common frameworks (leadership, content, pedagogy, systems) and use structured walkthroughs, feedback and coaching, and professional learning to improve leadership and instructional practices.

MTSS TOOLKIT: Feedback Via Engagement

ACADEMIC AND BEHAVIORAL SUPPORT

Teachers use academic and behavioral data to prescribe short- and long-term supports for students to meet and exceed standards and strengthen their sense of belonging.

MTSS TOOLKIT: Classroom Systems That Support Student Behavior

PROGRESS MONITORING AND ANALYSIS OF STUDENT WORK

Teams of teachers and school leadership collect/review/analyze data and student work samples to determine student progress towards meeting mastery and application of standards and performance benchmarks.

MTSS TOOLKIT: Formative Assessment



EFFECTIVE USE OF DATA

The school collects, analyzes, and uses key data points to inform academic and non-academic decision making.

MTSS TOOLKIT: Self-Reflection and Assessment



Blueprint: System 2 - Effective Use of Data

Definition

The school collects, analyzes, and uses key data points to inform academic and non-academic decision making.

Description

In this system, administrators identify clear expectations for the development and implementation of a balanced assessment system that includes both academic and non-academic data. Administrators promote a culture that values consistent assessment practices. Data is created, collected, and used at the classroom, PLC, and school level to identify strengths and weaknesses in individual and collective practices, to learn from one another, to identify areas proving

problematic to students, to improve collective capacity to help all students learn, and to identify students' academic and non-academic needs. Data use supports the school goal of at least a year's worth of growth in reading and math for each student, progress towards graduates meeting academic and career readiness benchmarks, and improving behavioral and attendance outcomes.

Success Criteria

ALWAYS
OFTEN
SOMETIMES
NEVER

DIAGNOSTIC ASSESSMENTS (MAP)								
1	Administered and analyzed in Grades K-11 three (3) times per year (6.2)							
2	Data used to inform: (1.10)							
	a	Instructional planning (1.3)						
	b	Progress monitoring (1.7)						
	c	Academic support (1.6)						
COMMON FORMATIVE ASSESSMENTS								
1	Created collaboratively by teachers (1.5) (1.4) (1.12)							
2	Administered frequently (1.4)							
3	Contains a variety of formats (1.4)							
4	Data used to inform: (1.10)							
	a	Instructional planning (1.3)						
	b	Progress monitoring (1.7)						
	c	Academic support (1.6)						
DISTRICT COMMON ASSESSMENTS (OPTIONAL)								
1	Administered and analyzed two (2) times per year in tested areas (6.2)							
2	Administered and analyzed three (3) times per year in non-tested areas (6.2)							
3	Data used to inform: (1.10)							
	a	Instructional planning (1.3)						
	b	Progress monitoring (1.7)						
	c	Academic support (1.6)						

Success Criteria

ALWAYS
OFTEN
SOMETIMES
NEVER

DEMONSTRATIONS OF LEARNING					
1	Products and artifacts of deeper learning based on authentic learning experiences designed to enhance the success skills identified in the District Graduate Profile- Backpack of Success Skills (1.12) (1.9) (2.2)				
2	Classroom or grade-level team rubrics and protocols are used in PLCs to ensure quality (1.12) (1.4)				
3	Digital platform is utilized to collect and curate backpack artifacts (6.2)				
ATTENDANCE					
1	An Attendance Committee meets (2.3) (2.4)				
2	The committee reviews data, creates/revises plans, and provides individual supports through student case management (1.10)				
BEHAVIOR					
1	Overall behavior data is reviewed by a team consisting of teachers, administrators, and support staff (2.9)				
2	Expectations for data entry are shared with staff members and monitored (4.1) (4.8)				
3	A Behavior Plan is created to collect and analyze data and develop improvement practices (2.9) (1.10) (2.3)				
TRANSITION READINESS					
1	The school maintains up-to-date data regarding the number of students who are on track to successfully transition to the next level (1.10) (1.3)				
2	Academic and Transition Readiness data is reviewed frequently by a team consisting of teachers, administrators, and support staff (2.3) (1.10) (1.3) (2.4)				
3	Data entry is monitored (1.3) (1.10)				

Success Criteria

ALWAYS
OFTEN
SOMETIMES
NEVER

CULTURE AND CLIMATE					
1	A school team analyzes CSS data by student populations (2.9) (2.3) (1.10)				
2	The team develops and implements action plans (i.e. CSIP/PGP) based on data analysis (ex. TELL, CSS). (2.4) (2.2) (2.3)				
3	The team monitors for progress and continuous improvement (2.9) (2.3) (1.10)				

Ensuring Equity

ALWAYS
OFTEN
SOMETIMES
NEVER

1	Analysis of all data sets include disaggregation of student populations including, but not limited to, students of color, ECE, and ELL (1.3) (1.10) (6.1) (6.2)				
2	Racial Equity Improvement Plans include targets and strategies/ activities for students of color, ECE, ELL and other special populations (6.4) (1.5) (1.2) (2.2)				
3	Assessments designed by teachers should be culturally sensitive and responsive to diverse needs and populations (6.4) (6.1)				

RESOURCES:

Principal Performance Standards
 Transition Readiness Name and Need Chart (HS)
 CCR Planning Tool (HS)
 Monthly/Quarterly Data Report
 Dashboards – Equity Scorecard, Behavior, CCR,
 Attendance, CASCADE
 MAP Implementation Guide
 MAP Student Growth Report Reflection Tool
 JCPS Deeper Learning Website
 MTSS Toolkit: Self-Assessment and Reflection



Students can accurately predict how they will perform on a given performance task or assessment and have a clear understanding of what they know. Hattie (2010) describes this phenomenon as “self-reported grades” or “student expectations” and it is one of the most powerful influences in increasing student learning outcomes.

Teaching students to set appropriate goals leads to higher student learning outcomes. Teachers should be aware that some students will struggle with setting realistic and accurate goals. These students often include minority students, students with disabilities, and low-achieving students.

Unfortunately, lower expectations lead to lower self-confidence and lower achievement. In contrast, students who meet or exceed their goals have increased confidence. Minority students and students with disabilities tend to underestimate their achievement (Hattie, 2012).



Definitions

High-Yield Pedagogical Practices

Self-Reported Grades

Allowing students to report their own assessment of their progress toward goals has demonstrated to be both remarkably accurate and a predictor of higher achievement. However, there are two caveats: (1) the effect appears to be less robust with students from minority backgrounds, and (2) this assumes that the goals upon which students are self-assessing represent a challenge (Hattie, 2009).

Metacognitive Strategies

Solving problems involves both the application of a strategy and the consideration and evaluation of that strategy – the latter being metacognitive in nature. Metacognitive strategies are higher-order thinking and involve planning an approach, evaluating progress, and monitoring one's own comprehension. Increasing student metacognitive behaviors leads to more realistic self-evaluations of learning. Other potential metacognitive strategies include self-monitoring, self-regulation, goal setting/planning, time management, seeking help (Hattie, 2009).

Self-Verbalization/ Self-Questioning

This is a form of a metacognitive strategy that is specifically focused on problem solving. It has been found to be especially effective for students experiencing difficulties (i.e., low level learners) (Hattie, 2009).

Teachers can maximize the influence self-reported grades can have on student learning outcomes by understanding their students' perceptions of learning and teaching them metacognitive strategies so they can set accurate learning goals. Metacognitive strategies are strategies students use to think about their learning. All students can be taught metacognitive strategies and how to engage in learning in an active, reflective manner. For example, students can be asked to evaluate their understanding of materials presented at the conclusion of the lesson or the end of the day. Additionally, students can be encouraged to set learning goals at the beginning of a lesson and reflect on the progress they made toward that goal at the end of the lesson. By strengthening students' ability to accurately reflect on their learning, teachers can increase their students' expectations of achievement.

September 2003

Sunday Sun.	Monday Mon.	Tuesday Tues.	Wednesday Wed.	Thursday Thurs.	Friday Fri.	Saturday Sat.
				1	2	3
4	5	6	7	8	9	10
		13	14			

Monday

Tuesday

Thursday

rainy
cold
foggy
snowy
windy
cloudy

Friday

Saturday

Sunday

and Family calendar



Today is Wednesday
The weather is warm



Logic

All of the strategies in this toolkit are in some way related to teaching students to think about problem solving and evaluation – including evaluation of their own performance. As teachers provide opportunities for students to show what they know through questioning and performance tasks, they should also ask the students to reflect on their level of understanding and then analyze this information to help in setting future learning goals.

In addition to frequent checks for understanding through questioning and/or performance tasks, teachers should gauge student understanding by asking the students to reflect on their level of knowledge on the given topic, “If I were to give you an assessment today, how would you perform?” Then, use this knowledge to inform future lessons and engage the learners to exceed their expectations.

Research

As reported by Hattie (2010, 2012), the strategy of self-reported grades has the greatest influence on student learning. Hattie suggests teachers should use this knowledge in their classrooms by assessing student perceptions of learning and challenging students to exceed those expectations. He argues that when students exceed their own expectations, their confidence increases which sets the stage for future learning. Two strategies teachers can use in the classroom to help students develop the skills to accurately self-report grades are goal setting and metacognition (Nhouyvanisvong, 2015).

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. London: Routledge.

Hattie, J. (2012). *Visible learning for teachers: Maximizing impact on learning*. New York, NY: Routledge.

Nhouyvanisvong, A. (2015). Accelerate student achievement for all by increasing student self-assessment and expectations. Naiku. Retrieved from www.naiku.net.



Deeper Learning Connections

Students need a mix of knowledge, skills, and dispositions to prepare them to be successful and engaged citizens. One of these important skills is the ability to self-assess and reflect. The assessment process itself helps students think critically and problem solve. Self-reflection and assessment also helps students internalize knowledge which can then be applied in future situations. If students are to be owners of their learning, they must be taught how to measure their own progress and determine next steps.

Self-assessment skills are not only a vital tool in Project-Based Learning (PBL) but also in creating a lifelong skill for growth beyond school. When students engage in self-assessment as well as peer assessment, they become more skilled at critiquing in general and better at self-critique. PBL provides rich opportunities for developing students' assessment skills not only in the process of refining their projects, but also in their authentic presentations of learning. Growing students as assessors of their own learning creates an environment where students are motivated and take ownership of their own learning.



Considerations

Culturally Responsive

Assessment tools should be designed to uncover what students already know and understand while capitalizing on students' strengths, based on a growth model. To meet the needs of culturally diverse students, teachers should: select measures validated for the population being assessed, integrate ongoing performance assessment, tap into student strengths, integrate curriculum-based assessments, and recognize learning is demonstrated by a continuum of performance rather than discrete skills displayed at designated points in time. For example, open-ended statements allow students to engage in self-reflective practices. Culturally responsive practices invite students to explore complex identities, consider their experiences, and analyze the level of opportunities. Respecting different cultures means recognizing that symbols, traditions, heroes, and idioms differ and are appropriately reflected in assessment.

Early Childhood

In early childhood, care must be taken when encouraging children to reflect on or assess their own performance. Two scenarios are common with young children. The first is they might overstate their performance (e.g., "I'm the best painter in the world!"). This is common developmentally and is generally not a concern. The second scenario occurs when young children see the discrepancy between their performance and that of an adult or older child and are discouraged by it. For example, a child might say something like, "You write my name. You write it better than me." In both these common scenarios, young children often attribute their performance to their innate qualities rather than the effort they put into the task or their age. This is potentially detrimental to their self-esteem.



INTRODUCTION

Exceptional Child Education

Metacognitive strategies are particularly effective for exceptional students. It is important for teachers to provide specific instruction of problem solving skills. Additionally, teaching students to use mnemonic devices will increase their ability to remember information, allow them to practice problem solving strategies, and provide them the opportunity to assess their own learning. Strategies should be taught through explicit instruction with ample guided practice in applying strategies and mnemonics in various learning applications. The QRAC (Question, Read, Answer, Check) mnemonic is an example of a strategy that can be taught to increase comprehension through self-questioning.

Additionally, exceptional students can struggle with motivation. One way to address this in the classroom is through teaching the students how to set goals and monitor their own progress. Self-monitoring of progress allows students to regulate their own learning and evaluate their performance based on the established goals and increases both self-management and self-determination. Contingency contracts are helpful tools for increasing motivation. Contingency contracts can be used for both academics and behavior. Students and teachers set goals on a contract and agree upon the terms.

Project-Based Learning (PBL):

Within PBL, it is vital that the teacher consider the following:

- **Tracking Goals:** Students can create their own goals within the parameters of the project. These can be qualitative or quantitative. The students can keep track of their progress.
- **Self-Reflections:** Student answer reflective questions about what they are learning, where they are struggling, and what they need to do next.
- **Student Surveys:** Surveys provide a blend of the objective and the subjective and can help students to self-assess. So, they might use a Likert scale, selecting specific words from a bank, or ranking items. This added structure helps students make sense out of something that can feel abstract.
- **Self-Assessment Rubrics:** Students are able to look at the different progressions of the rubric to determine where they are and where they need to head.
- **Checklists:** These can be a powerful diagnostic tool that students use before, during, and after a task. When students use checklists, they are learning how to make sure their work meets the needed success criteria.
- **Journals:** These provide a place for students to reflect on their progress on the project.

APPLICATION

Vignettes From:

Elementary School

Middle School

High School

Student Led Conference (All Content Areas)

Literacy

Mathematics

Social Studies

Science

Related Arts / Electives



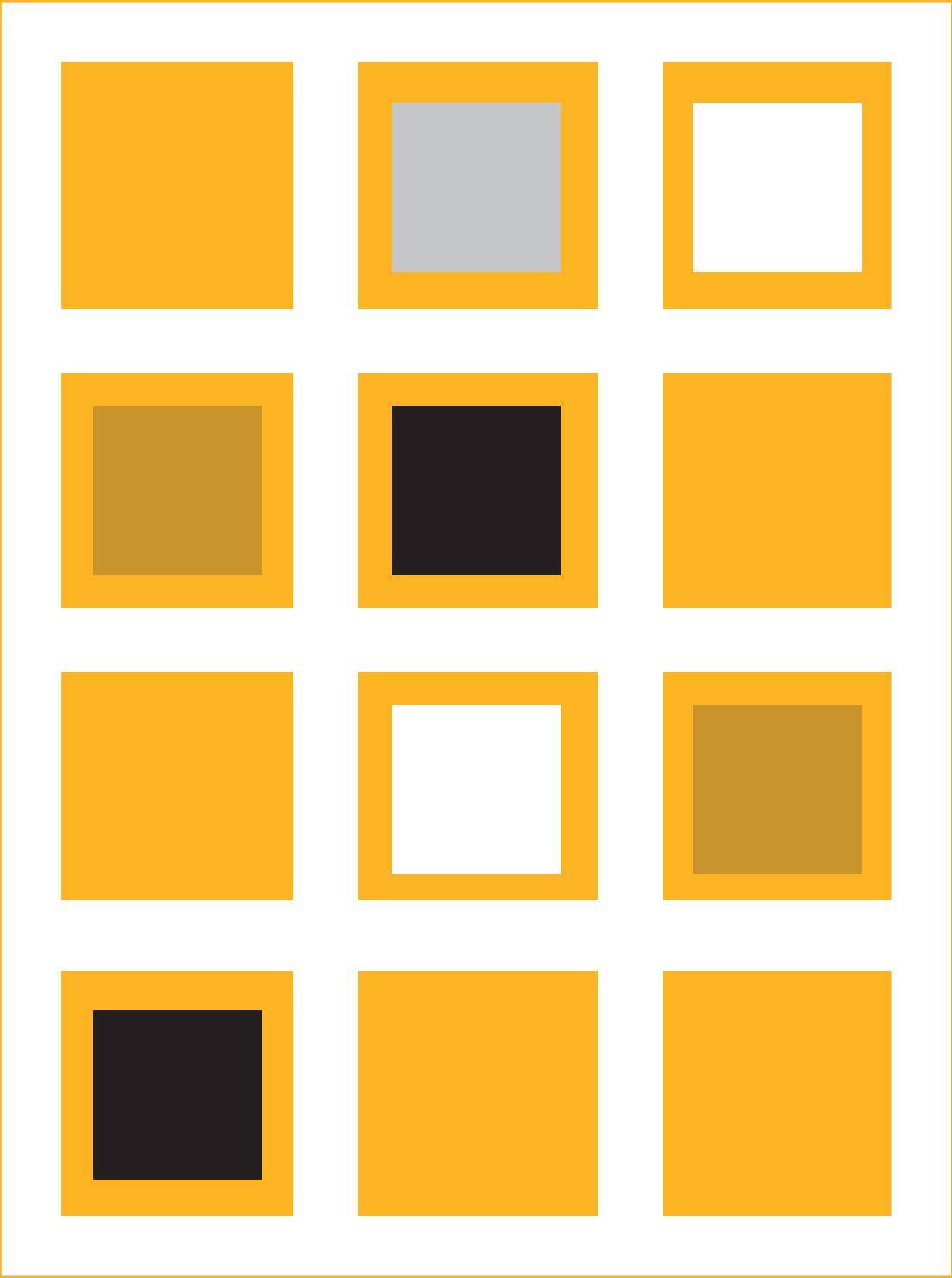
Student Led Conference (All Content Areas)

The following vignette is an example of a teacher using student self-reported grades and goal setting to increase engagement (particularly focusing on metacognitive strategies).

Every fall, Ms. Minton asks her students to do their own preparations for Parent-Teacher Conferences. Each student prepares a folder with their best work from across content – a summary of what they have been reading, an example from their reader's notebook, a project, and three different writing samples that reflect the genres that the class has focused on this semester. Then, the student creates a cover page for the folder with their three strengths, something that I am finding difficult or challenging, and then three goals.

The students practice with partners and with the teacher for several days before the actual conference. When parents or caregivers arrive for the conference, the student begins the conference by sharing his/her work along with goals. Next the teacher joins the conference and along with parents/caregivers, they discuss the goals and other aspects of the student's learning.

At the spring conference, the student shares his/her progress on the goals that were set in the fall and once again, prepares and shares the next chapter of his/her literacy development.



Literacy

Elementary

The following vignette is an example of a teacher creating a classroom culture where students set goals for writing and continue to evaluate their performance in relation to those goals.

Mr. Pendleton wanted to create a culture in his classroom where students gain ownership over their own learning through goal setting and self-evaluation. He took the following steps in supporting his students in setting writing goals and evaluating themselves on those goals:

Step One:

Mr. Pendleton located an exemplar of a student narrative sample. (There are many student examples in the Lucy Calkins Writing Pathways resource). The class looked at the narrative and discussed what they thought the writer had done really well. Mr. Pendleton made notes all around the story. He then showed students the rubric for narrative writing from Lucy Calkins. He facilitated students in comparing their findings with the rubric.

Step Two:

Mr. Pendleton typed up a chart for students, essentially organizing the information from the note-taking the day before when they analyzed the exemplar writing piece. This went directly into the students' writing binders.

Step Three:

Mr. Pendleton then asked students to analyze their own writing. Students had been writing different pieces in their writer's notebook. "Look at this list we came up with. What are you doing well and what are you missing? What seems like a manageable skill for you that you might be able to improve this week?"

Step Four:

Students chose one or two skills/strategies from the chart they had co-created. They quickly wrote their goal(s) on a sticky note and placed it on a class goals chart located on the wall.

Step Five:

Mr. Pendleton jotted down the goals on a mini-chart for himself that he could carry around while conferring with students. As he met up with students he was able to ask, "How is it going? What changes have you made to work toward the goal? What's working for you? What isn't working?" He created some visuals for students to support them in reaching their goals.

Step Six:

Every day, ten to fifteen minutes before the workshop was complete, he completed a check-in. He asked that every student to examine his/her writing to seek evidence of growth. If they did not find any evidence, they were to focus on this task in isolation for a few minutes, making changes as needed.

Step Seven:

Each week, Mr. Pendleton had his students re-evaluate their goals to see if they still matched their needs. When Mr. Pendleton conferred with students he was able to coach and guide students in their decision making. This was one more way he could give students a choice and provide support. It was also another opportunity for students to be thoughtful and reflective within the writing process, a skill that carried far beyond writing.

Mr. Pendleton determined that some possible next steps were to: Create some "goal groups," or provide time for peer conferencing regarding their progress.



Literacy

Middle/High

The following vignette is an example of a teacher using a metacognitive strategy to increase students' awareness of their own thinking, ability to self-assess learning, and activation of prior knowledge to organize and anchor new content.

Mrs. Mendoza is using a Read-Think-Wonder chart in her class to promote metacognitive thinking. After reading *Stargirl*, Mrs. Mendoza directs her students' attention back to the symbolic use of light throughout the novel. The students quickly began discussing how authors frequently use light in stories as a symbol of hope, positivity, strength, and connectedness. Sensing their interest, Mrs. Mendoza introduces the Read-Think-Wonder chart that students will complete in partner groups to foster their metacognitive thinking. Mrs. Mendoza's goal is for students to recognize their own knowledge regarding the symbolic use of light in *Stargirl*.

She instructs the students to recall from previous readings what they know about the use of light in novels. As students are sharing their thoughts, she records their responses on the board. Mrs. Mendoza follows up by asking her students, "What are other examples of places where light is used symbolically and how is it used?" As students respond, she provides feedback to help connect their prior knowledge to the task that they will complete regarding the use of light in the novel.

At the completion of the class discussion, Mrs. Mendoza provides the class with the Read-Think-Wonder chart. She provides very clear directions as to how the chart will be used as a tool to help organize their thoughts and clearly demonstrate their thinking process as they analyze the use of light in the novel. Adapted from Ritchhart, R., Church, M., & Morrison,

READ What do I infer? What is my evidence?	
THINK What do I think about what I infer? What are my examples?	
WONDER What do I infer? What is my evidence?	

K. (2011). *Making thinking visible: How to promote engagement, understanding, and independence for all learners*. San Francisco, CA: Jossey-Bass.

As students are working on their charts, Mrs. Mendoza is walking the room, facilitating their thinking by asking clarifying questions and saying, "You have come up with some great inferences that we have not yet discussed!" With help from their teacher, the students continue to add to the chart examples of how light is used in the novel using prior knowledge as a way to guide their thinking.

Frey, N., Hattie, J., & Fisher, D. (2018). *Developing Assessment-Capable Visible Learners, grades K-12: Maximizing skill, will, and thrill*. Thousand Oaks, CA: Corwin Literacy.

2x.



Mathematics

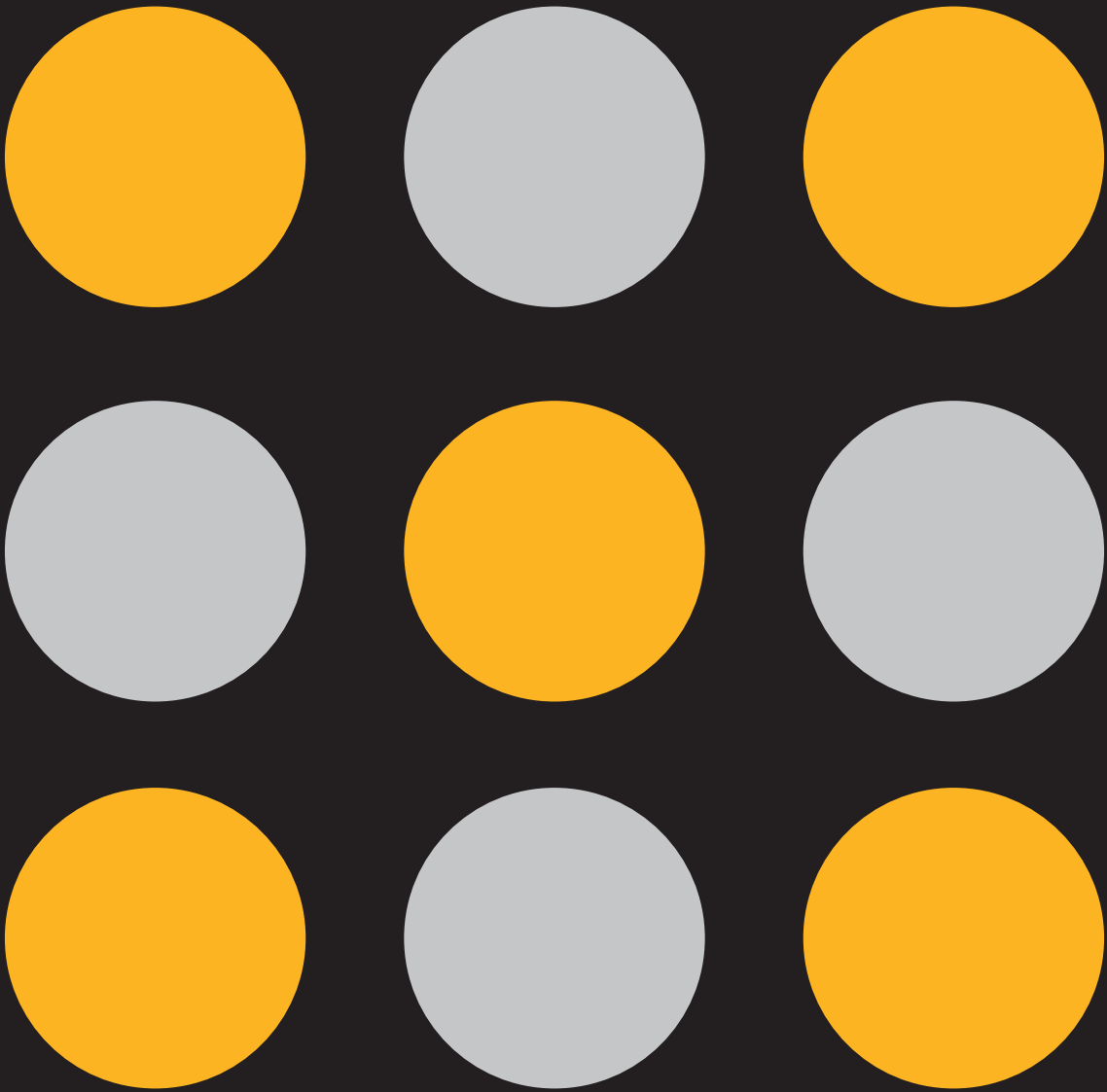
Elementary

The following vignette is an example of a teacher using student self-verbalization by having the student become the teacher and the teacher become the student.

Using the children's book *Two of Everything* (Hong, 1993) as a context, Ms. Curran presented the idea to Will of a "doubling pot." Following the plot line of this humorous story she had a paper pot where she first would place a number of colored circular counters and Will had to show what happened as a result by demonstrating the new number of counters. Then they recorded the corresponding multiplication equation. After several times Ms. Curran said, "O.K., Will, it is your turn to be the teacher. You need to give me a problem, make sure I am showing the counters properly and writing the correct equation." Will placed seven counters in the pot. Ms. Curran modeled exactly how they had Will line up the counters in a one-to-one correspondence matching the line of seven put in the pot – but adding one extra counter. Ms. Curran asked, "Did I do that correctly? Do I have the right number of counters?" At first, Will said, "Yes" but then immediately rethought and said "No." He took away the extra counter saying, "That's too many." Then to get her answer, Ms. Curran started counting the counters one at a time. "No," Will stated, "you can't count them by ones you need to skip count." This emphasis was made by Ms. Curran as she previously asked Will to skip count in his head the number of counters. He modeled her behavior exactly with his response. As she started counting 2, 4, 6, Ms. Curran paused, and Will chimed in to help her saying "8," and "10." Then he paused and knowing he needed the extra time, Ms. Curran encouraged him by saying, "Try counting in your head." Will called out,

"12" and "14." Then Will had her write and read the multiplication equation $7 \times 2 = 14$. This episode demonstrated that Will related the two equal groups of counters, he recognized the importance of moving away from counting by ones to skip counting, and that he knew the equation meant seven groups of two equals fourteen. Ms. Curran explicitly modeled this approach without "telling" him what to do mathematically by giving him answers along the way. This built up Will's ability to take responsibility for his learning while self-assessing the correct components in the process of doubling in multiplication.

Hong, L. T. (2017). *Two of everything: A Chinese folktale*. Chicago, IL: Albert Whitman & Company.



Mathematics

Middle / High

The following vignette is an example of a teacher using student self-assessment to use their mistakes to reflect on the structure and coherence of one's own action (Hattie, 2018).

Ms. Oakley gave a benchmark assessment to her math class. Instead of grading the assessment herself, she decided to have each student reflect on his/her assessment and explain how they arrived at the chosen answers. Students were given a self-assessment organizer which included the following information:

- The question number and learning target for that question
- Correct/incorrect columns
- Simple mistake/guessed/don't get it columns (for incorrect answers)
- Analysis section for students to explain why an answer was chosen
- Revision section for students to rework the problems and explain where mistakes occurred

Ms. Oakley divided her class into homogeneous pairs so students who made similar mistakes became partners. Students were given individual time to complete their student reflection. Then Ms. Oakley set a timer for the pairs to compare the analysis and revision sections. At the end of the class, Ms. Oakley intentionally chose the problems she wanted to discuss as a class. Her criteria included high-error frequency and essential standard focused problems. This provided the entire class with an opportunity to discuss the different approaches to solving the problem. Each student submitted the self-assessment with their completed revisions and a summary statement including learning targets that will require more focus for mastery.

Chappuis, J. (2009). Seven strategies of assessment for learning. Portland: Educational Testing Service.



Social Studies

Elementary

This vignette illustrates how a teacher can utilize self-questioning and self-verbalization to support student understanding of national symbols.

Mr. Nacionales is teaching a unit on national symbols in his social studies class. He has been focused on students using self-questioning and self-verbalization strategies in order for students to gain ownership of their learning and progress.

Before the lesson, he engages students in answering the following three questions:

1. What are today's goals?
2. How much do I already know about today's goals? ("Nothing" to "A great deal")
3. I think today's goal will be . . . ("Very hard" to "Very easy")

Here is an example of a graphic organizer he provides to students to support them in answering these three questions:

Today's Goal:

I can identify national symbols and tell what they represent.

Here are pictures of symbols I know:**How much do I already know about national symbols?**

(Circle one choice below)

1. I have never heard of them or I have heard of them but don't know what they are.
2. I have some idea what they are, but don't know when or how to use them.
3. I have a clear idea what they are, but haven't used them.
4. I can explain what they are and what they do, and I have used them.

I think today's goal will be:

1. Very Hard
2. Somewhat Hard
3. Easy
4. Very Easy

**Continued on Next Page >*



Social Studies

Elementary (Cont.)

Mr. Nacionales then teaches the unit over several days. As he shows pictures and videos, he and the students create charts to identify different national symbols and make connections with what the symbols represent. He engages in formative assessment throughout to determine the learning targets that students have mastered. He also asks students to engage in self-questioning and self-verbalization.

He has them answer the following questions:

1. What was today's goal?
2. Did I achieve this goal? ("Not at all" to "Fully")
3. How much effort did I put in? ("Not much" to "A great deal")

Then the students have a chance to think about why they may or may not have achieved their goals. Mr. Nacionales provides the following graphic organizer:

Mr. Nacionales uses these self-evaluations to confer with students regarding their learning. He is able to support students in meeting their goals and gains invaluable understanding of students' progress in meeting the learning targets. This process also allows students to self-evaluate their thinking and metacognition within a task and gain needed confidence in their learning.

Special Note: These graphic organizers could include pictures to support younger learners and students needing more visual representations.

Retrieved from the companion website for Visible Learning for Mathematics, Grades K–12: What Works Best to Optimize Student Learning by John Hattie, Douglas Fisher, Nancy Frey, Linda M. Gojak, Sara Delano Moore, and William Mellman. Thousand Oaks, CA: Corwin, www.corwin.com. Copyright © 2017 by Corwin.

Today's Goal: I can identify national symbols and tell what they represent.

Where am I in meeting my goal?:

1. I don't understand
2. I can do it myself with some help.
3. I understand. I can do it myself.
4. I am an expert. I can teach it.

How much effort did I put in? Put your Heart into it! 4 Heart Effort:

- ♥♥♥♥ I tried my best and never gave up even when the work was hard.
- ♥♥♥ I tried a lot but gave up when the work got really hard.
- ♥♥ I tried a little.
- ♥ I did not try.



Social Studies

Middle / High

The following vignette is an example of a teacher using student self-assessment and goal setting to increase engagement.

Mr. Huffines, a social studies teacher, was preparing for an upcoming unit on “The Impact of African American Political Leaders.” When previously teaching the topic, he gave an assignment where students would research and present findings on political leaders and the impact of their leadership on African Americans. Although he gave a variety of ways that students could present their findings (i.e., written report, PowerPoint® presentations, posters, etc.), many of the outcomes did not meet his expectations. Upon further reflection, he concluded that:

1. He needs to be more explicit when communicating his performance expectations to students.
2. He needs to engage the students in self-assessing their own performance.
3. He needs to have students engaged in goal setting.

Mr. Huffines started with revising the assignment rubric to make sure it included student-friendly language. On the day he introduced the assignment, Mr. Huffines gave each student a copy of the rubric, displayed the rubric on the interactive whiteboard, and explicitly described the expectations of each area of the rubric. He also informed the class that each of them would be responsible for using the rubric to grade their own performance. Mr. Huffines would then hold an individual conference with each student to compare his graded rubric with their graded rubric.

To ensure that students were engaged in the assignment, Mr. Huffines had them set goals. He told the class, “Now that we have reviewed the assignment and you know what is expected of you, we are going to set a goal. So, what is your goal for this assignment? I want you to write down in your notebook what grade you would like to earn on this assignment and how you plan to accomplish it.” After giving them time to reflect, Mr. Huffines collected the goals and would share them at certain times during the unit to remind the students of the goals they had set for themselves.



Science

Elementary

The following vignette is an example of a teacher introducing the use of self-reported grading to students to increase motivation and ownership of learning within a cooperative learning environment.

Ms. Ford wanted to increase her students' ownership of and motivation for learning. She wanted to push her learners to exceed their current expectations and with the help of her PLC team, developed the following learning project in conjunction with their upcoming unit on Light and Sound Waves.

1. Ms. Ford identified learning objectives for the unit with her PLC team and developed a common formative assessment to gather data on students' current level of understanding. The pre-assessment was divided into sections highlighting the learning objectives for the unit.
2. Based on their results from the pre-assessment, Ms. Ford grouped her students using common misconceptions and misunderstandings. She met with each of the groups and reviewed the assessment. Using this data, she worked with the groups on goal-setting regarding performance on the upcoming unit. They created data/goal/tracking folders that they regularly referred to throughout their learning on Light and Sound Waves.
3. Ms. Ford repeated the following sequence throughout the unit:
 - Introduce a new learning objective and pre-assessment.
 - Ensure common goals and expectations within all groups.
 - Identify success criteria in a whole-group setting.
 - Meet with groups to goal-set on individual objectives.
 - Ask students to track progress on the formative assessments.
 - Guide and assist students in self-assessment and self-reported grading, using the identified success criteria as a rubric.
4. Prior to their summative assessment, the groups would review their folders and goals and work together to prepare for their final assessment. Students would work together in groups to grade their summative assessment and compare it to their initial and ongoing goals.



Science

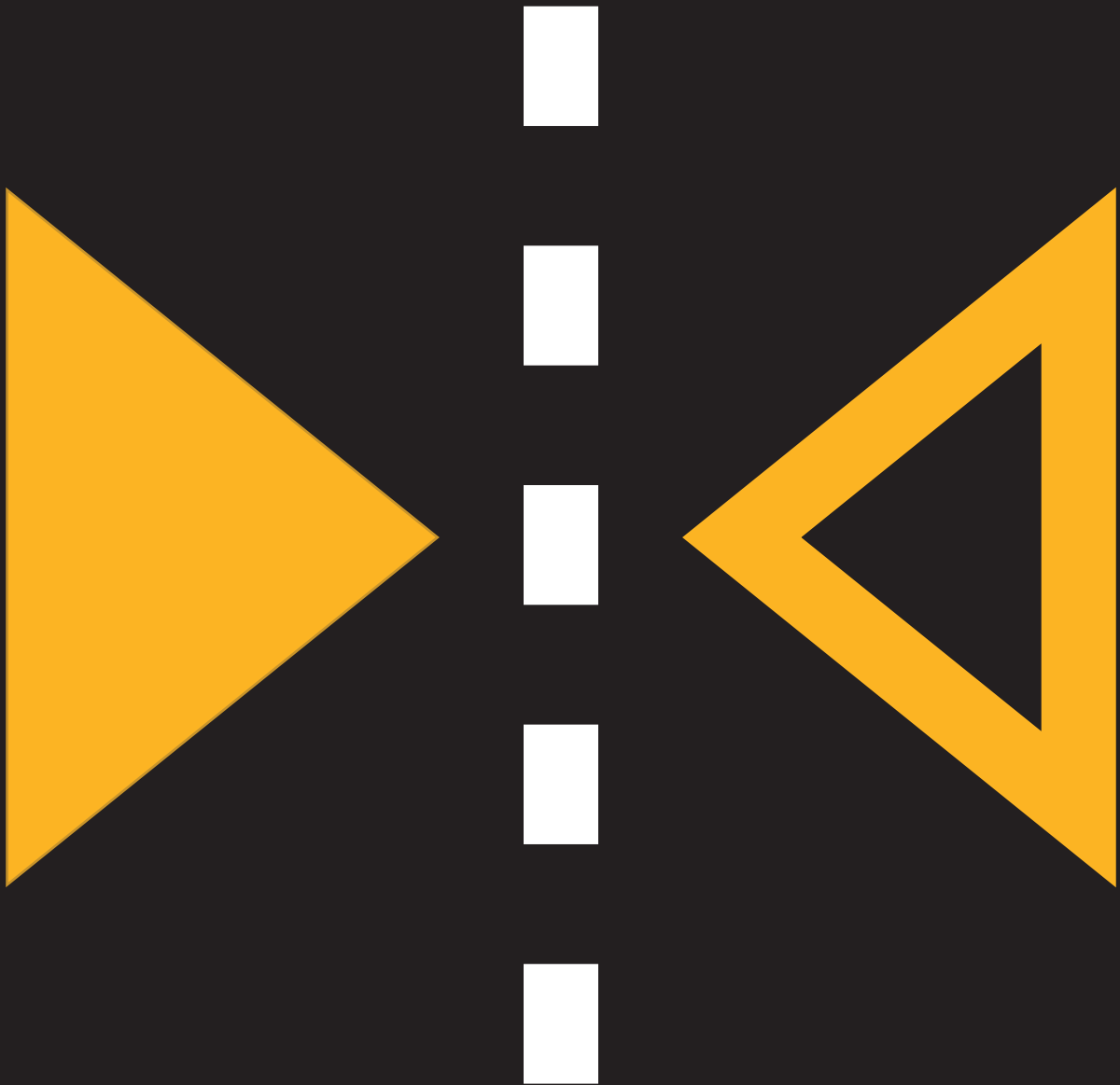
Middle / High

The following vignette is an example of a teacher using student grade prediction and tracking to help students set challenging expectations of their learning.

Ms. Simone teaches middle school science. It is the beginning of the school year, and Ms. Simone has some concerns about a challenging group of eighth-grade students in her first-period class. Two students in particular—Jason and Tiana—are already showing signs of disengagement and withdrawal during instructional activities. Both students have a long history of earning low grades in their core academic subjects. Ms. Simone suspects these students do not expect to perform well in class, and therefore do not put forth much effort to participate in the learning process. Ms. Simone begins researching strategies she could use to help these students increase their confidence in their learning.

She decides to begin having the students predict their expected grades and track their earned grades using a student expectations chart. Ms. Simone hopes that by first learning her students' expectations of themselves, she can help them set expectations appropriate to their learning pace and abilities, and then—most importantly—attempt to exceed those expectations. She hopes that once Jason and Tiana meet or exceed expectations they set for themselves, they will gain confidence in their learning ability.

Before beginning the next assignment—a vocabulary worksheet assigned as homework—Ms. Simone introduces Jason and Tiana to the student expectations chart and asks them to write down the grade they think they will earn on this assignment. After grading and returning the assignments, Ms. Simone asks Jason and Tiana to compare their earned score to their predicted score. Comparing predicted and earned scores allows Jason and Tiana to reflect on any discrepancies and provides insight into whether they are meeting their expectations. When students properly develop this higher-order thinking skill, they are more apt to set, accurately predict, and exceed their own expectations.



Related Arts / Electives

Elementary

The following vignette is an example of a teacher using a self-reflection tool at the end of a STEM lesson to assess student learning habits and individual expectations for future learning goals.

Mrs. Helm, a STEM Lab teacher, introduced rhythmic composition to her students using vocal or instrumental skills. She introduces the basic functionality of the Garage Band software, how to start a new project and use of the Loop Browser. Students will be introduced to concepts of meter, beats per minute, time signature, and musical patterns. By the end of the lesson, students will be able to insert audio and midi loops into a project, create a simple composition of their own, and change the tempo and time signature of a song.

At the end of this 90- minute investigation, Mrs. Helm will have her students complete a self-reflection on their learning that includes the following questions:

Three interesting things I learned this week are:

- 1.
- 2.
- 3.

One thing I am proud of from today's lesson is:

One thing I would have improved during today's lesson is:

Next time, I want my teacher to do the following:

By talking with students about their learning and not just about particular projects, Mrs. Helm developed a clearer picture of her students' learning habits and expectations they set for themselves. These reflections were also useful in helping students set goals for their future learning.

Chappuis, J. (2009). Seven strategies of assessment for learning. Portland: Educational Testing Service.



Related Arts / Electives

Middle / High

The following vignette is an example of a teacher using self-questioning in a Socratic Circle format to engage students at the early phase of skill acquisition.

Ms. Sellers teaches orchestra to students with little to no instrumental experience. For one of the first lessons of her instrument introduction unit, she sets up a Socratic Circle in the middle of her classroom. She tells her students it is important for them to get acquainted with the style and sound of the various orchestral instruments before students begin their playing lessons/sessions. Students get out their new journal/music notebook and are instructed to create four columns with the headings: Name of Song, Instruments I Hear, Questions to Share, and Answers from the Group. Then Ms. Sellers tells them she will play three songs and provides an example of what the self-generated graphic organizer should look like. She models this self-questioning lesson by playing a portion of the song, Danse Macabre, and filling out the first three parts of her chart for the whole class to see:

Name of Song	<i>Danse Macabre</i>
Instruments I Hear	<i>Flute, clarinet</i>
Questions to Share	<i>What is the difference between a flute and a clarinet? Which has the softer sound?</i>
Answers from the Group	

She then plays the Water Music and gives time for students to write their questions. When finished, each student gets a turn to share out a question and asks for input from the group. As the circle progresses more and more students share their questions but realize that they already have the answer. Then Ms. Sellers plays a different song and continues the process.

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. London: Routledge.

Strategies for Implementation

The following are strategies that teachers can begin implementing in their classroom tomorrow:

1. Embed “think-aloud” strategies into your teaching, thinking aloud through your own learning process as you provide examples for the students. *
2. Clearly communicate to your students the high expectations you have of them. *
3. Embed goal-setting into your daily lessons. Teach students how to set goals and monitor their progress, particularly in project-based learning.
4. Teach students to use self-questioning when reading passages.
5. Have students check their work against a rubric to self-assess before turning it in for a grade.
6. Explicitly teach students what reflection is and allow them to practice during class time. In other words, provide feedback on their reflections. Highlight portions and ask questions to get them to add depth.
7. Embed self-monitoring into daily work: teach students how to monitor their task engagement.
8. Teach students to question everything. This teaches students that learning is active, not something that happens to them.
9. Differentiate how students reflect. Give students freedom to choose how they reflect, whether in writing, through video, or in face-to-face conferences.
10. Ask students to share their reflections with others. This can be done through technology applications such as Twitter, Blogger, WordPress, Voxer, Instagram, etc.
11. Use of metacognitive action checklist, learning logs/guides, and/or response journals as tools to reflect on learning before-during-after the lesson.
12. Student-data binders (a place for collecting, analyzing, self-assessing, and monitoring learning from various assessment practices).
13. Small group work that encourages students to share and explain reasoning behind different ways at arriving to the solution (works especially well for math and science courses).
14. Create a “class brain” out of pipecleaners. Throughout the year, students add new learning to the class brain making connections to the previous learning.

**Can also be used in early childhood.*

Teacher Self-Assessment (Success Criteria)

The following reflection questions are designed for teachers to self-assess and/or reflect on Self-Reflection & Assessment practices.

1. Do I allow students to report their own assessment towards progression of their learning goals?
2. Do I embed practices and/or systems within my instruction that allow students to measure status of knowledge to strengthen learning?
3. Are my students aware of their performance and understand their achievement levels?
4. Do I present opportunities for students to reflect on their learning, question their own learning and determine their learning goals?
5. Do I provide opportunities for my students to plan how to approach a given learning task, evaluate progress and monitor their own comprehension?
6. Do I teach students to check for understanding by asking and answering questions before, during and after a lesson?

Resources

ARTICLES:

<http://calla.ws/strategies/strategylist.pdf>

BOOKS:

Chappuis, J. (2009). *Seven strategies for assessment for learning*. Portland, OR: Educational Testing Service.

Frey, N., Hattie, J., & Fisher, D. (2018). *Developing Assessment-Capable Visible Learners, grades K-12: Maximizing skill, will, and thrill*. Thousand Oaks, CA: Corwin Literacy.

Hattie, J. (2012). *Visible learning for teachers: Maximizing impact on learning*. New York, NY: Routledge.

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Hong, L. T. (2017). *Two of everything: A Chinese folktale*. Chicago, IL: Albert Whitman & Company.

Ritchhart, R., Church, M., & Morrison, K. (2011). *Making thinking visible: How to promote engagement, understanding, and independence for all learners*. San Francisco, CA: Jossey-Bass.

WEBSITES:

6 Metacognitive Strategies for Middle and High School Classrooms. (n.d.). Retrieved from <http://www.institute4learning.com/2017/02/07/6-metacognitive-strategies-for-middle-and-high-school-classrooms/>

Empowering students through reflection and feedback. (n.d.) Retrieved from <https://letsgetengaged.wikispaces.com/>

Nhouyvanisvong, A. (2015). Accelerate student achievement for all by increasing student self-assessment and expectations. Naiku. Retrieved from www.naiku.net.

Parker, W. (2015, November 20). 3 Tips on Student Self-Reported Grades. Retrieved from <http://connectedprincipals.com/archives/12103>

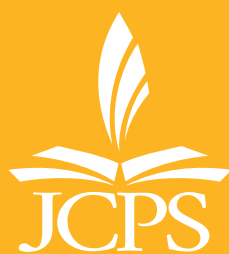
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Michigan Virtual. (2017, March 13). Module 3: self-assessment. Retrieved from https://www.youtube.com/watch?v=Qo_5dJ-dIIQ.

Smithsonian Science Education Center. (2015, November 10). Good thinking! That's so meta(cognitive). Retrieved from https://www.youtube.com/results?search_query=good+thinking+%E2%80%94+that%E2%80%99s+so+meta%28cognitive%29+.



MTSS TOOLKIT

Self-Reflection and Assessment

JCPS ESSENTIAL SYSTEM 2

EFFECTIVE USE OF DATA