Seminole County Public Schools
Marzano Common Language of Instruction
Featuring the Marzano Model
Instructional (Teaching)

Seminole County Public Schools’ Common Language of Instruction featuring the Marzano Model is a glossary with key terms for instruction. The glossary is not intended to include all terms in the Marzano Model or reference materials.

Numbered indicators with descriptors are listed on the attached Learning Map.

Academic Games: Games or activities used to engage students. Games stimulate attention because they involve the discovery of the missing information. Games should focus on academic content so that they represent a form of review.  
(Indicators: 14, 19, 24)

Academic Notebook: The academic notebook is a structured place for students to take notes, create non-linguistic representations of vocabulary and other academic concepts, and revise their thinking after they more deeply interact with new content. Academic notebooks have been adapted by Dr. Robert Marzano to include a systematic focus on vocabulary. There are six steps involved in building academic vocabulary. The first three steps are to assist the teacher in direct instruction. The last three steps are to provide the learner practice and reinforcement.  
(Indicators: 12, 13, 20)

Acknowledging Adherence to Rules and Procedures: Verbal and non-verbal behaviors that communicate positive reinforcement for following rules and procedures. This might take the form of telling the class as a whole, or as individual students, that they did a nice job carrying out a procedure.  
(Indicators: 34, 35)

Activity: Guided learning experiences planned and facilitated by the teacher that take place in a class.  
(Indicators: 10, 14, 17, 18, 19)

Advanced Organizer: Information presented at the beginning of a lesson to be used by the students to link what is known with what is to be learned, or to help students organize material.  
(Indicators: 10, 14)
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Analogy Activities: The process of identifying the relationship between two sets of items; identifying similarities and differences between relationships.

(Indicator: 17)

Anticipation Guide: A checklist of statements written by a teacher to activate existing knowledge prior to instruction. Students agree or disagree with the items on the list.

(Indicators: 8)

Assignment: Learning experiences designed to be completed independently in class or as a homework opportunity to extend classroom learning.

(Indicators: 10, 14, 19)

Attack Errors: Attempt(s) to disprove a point by discrediting the person making the point.

(Indicator: 18)

Body Representation: A technique that involves having students briefly act out important content.

(Indicators: 10, 19, 27)

Celebrating Success: The reinforcing of effort and providing of recognition for student accomplishments. Knowledge gains for each student should be recognized and celebrated as a student makes progress moving up the continuum on a scale.

(Indicator: 3)

Choral Response: Sometimes associated with ineffective didactic instruction, when used appropriately, choral or unison response can be used to engage students. It is best accomplished when important information is stated in a short phrase or sentence and students appear to be having difficulty with the information. The purpose is to review an important generalization or principle about which there seems to be some confusion.

(Indicators: 14, 26)
Chunking Content: Presenting small parts of new material at a given time; the more students know about a subject, the larger the chunks can be.

(Indicator: 9)

Classifying Activities: The process of grouping things that are alike into categories based on their characteristics.

(Indicator: 17)

Classroom Meetings: Whole-class meetings facilitated by the teacher, with all students invited to participate. These meetings can be useful in the design and maintenance of rules and procedures. Their scheduled regularity is determined by the teacher. Classroom meetings can help shape the environment to produce a classroom that is respectful of individuals and accommodates the learning process.

(Indicator: 4)

Classroom Routines: Procedures executed at the level of automaticity that minimize disruption and maximize instructional time.

(Indicator: 4)

Clear Claim: Students providing evidence to support an assertion of fact.

(Indicator: 18)

Common Language of Instruction: A research-based framework that describes and defines teaching.

Comparison Activities: The process of identifying similarities and differences among or between things and ideas.

(Indicator: 17)

Complex Questions: Questions that ask students to go beyond what was presented in a critical input experience. These may be essential or multi-step questions.

(Indicator: 11; Design Questions 2, 3, 4)

Concept Attainment: Leading students to a concept by asking them to compare and contrast examples (exemplars) that contain the characteristics (attributes) of the concept with examples that do not contain those attributes.

(Indicator: 10)
Crisp Transitions: Clear expectations for transitions in a lesson keep the pace conducive for teaching and learning. Marzano suggests teachers construct rules and procedures to ensure clear transitions in the following areas: general classroom behavior, beginning and ending of the school day period, transitions and interruptions, use of materials and equipment, group work, and seatwork and teacher-led activities.

(Indicator: 4)

Critical Input Experience: When students engage in one or more of the following activities: read a section of the textbook, listen to a lecture, observe a demonstration, be part of a demonstration, or watch a video regarding content that is critical to a learning goal. If students understand the content provided in these activities, they have a good start toward the accomplishment of the learning goals. To increase understanding, teachers should facilitate students’ actively processing the content.

(Indicators: 6, 10, 14, 19)

Declarative Knowledge: Informational knowledge; for example: events during the Normandy invasion in World War II, characteristics of a cell, or the rules of baseball. Declarative knowledge is developed through review, revision, error analysis, and identification of similarities and differences.

(Design Questions 1, 2, 3)

Deepen Understanding: Extended processing of new information so that students do not lose knowledge they initially understand on a surface level.

(Indicators: 17, 18, 19)

Design Questions: Questions teachers ask themselves as they are designing learning experiences for their students.

(Learning Map)
Direct Cost Consequences:  Direct cost involves explicit and concrete consequences for inappropriate behavior. Typically, direct cost consequences are applied when a negative behavior has progressed beyond a point where it can be addressed by withitness. Two examples of direct cost interventions are: time out and overcorrection.

(Indicators: 33, 34)

Distributed Practice:  Practice sessions provided over longer periods of time to help students develop and maintain fluency of skills or processes.

(Indicator: 19)

Dramatization Enactment:  Groups of students physically act out or symbolize to content from a critical input experience. Students should be expected to explain how their enactment represents the important information from the critical input experience.

(Indicators: 10, 27)

Effective Relationships:  According to Marzano, there are two complimentary dynamics that constitute an effective teacher-student relationship. The first is the extent to which the teacher gives students the sense that he/she is providing guidance and control both behaviorally and academically. The second is the extent to which the teacher provides a sense that teacher and student are a team devoted to the well being of all participants.

(Indicator: 56)

Elaborative Inferences (Interrogations):  An inferential question that has the following basic design: “Why would that be true?”

(Indicator: 11)

Emotional Objectivity:  Keeping a type of emotional distance from the ups and downs of classroom life and not taking outbursts, or even students’ direct acts of disobedience, personally.

(Indicator: 38, 56)
Enacted on the Spot: Teaching behaviors and activities a teacher can plan for to react to situations that occur in the moment; these can be required/enacted at any point in a lesson. For example, these behaviors address the following questions: What will I do when students disengage? What will I do when students fail to follow rules and procedures? How will I recognize when students are successful following rules and procedures? How will I develop and maintain effective relationships with my students? How will I communicate high expectation for all students?

(Indicators: 24, 34, 41)

Errors in Reasoning: The four types of errors in reasoning are: faulty logic, attacks, weak references, and misinformation. Students should be apprised of these as they generate and test hypotheses about new content.

(Indicator: 18)

Facilitate Processing: Teacher designs a learning experience that helps students review or practice new content in order to deepen their understanding. The teacher's role is to guide the practice through the structure of the task or, by circulating, to check for understanding.

(Indicators: 10, 14, 19)

Faulty Logic: An assumption or conclusion that is incorrect based on incorrect reasoning or data. For example, assuming something that has occurred once will occur on a systematic basis.

(Indicator: 18)

Feedback: Feedback provides students with information regarding their progress toward a learning goal. Clear learning goals are needed to give effective feedback.

(Indicator: 2)

Final Status Scores: The score representing achievement towards a learning goal that a student achieves when the unit of instruction is complete.

(Indicator: 2)

Flow Chart: A graphic representation, using symbols interconnected with lines, of the successive steps in a procedure or system.

(Indicator: 12)

Fluency: Development of a skill or process to the level of automaticity or controlled processing.

(Indicator: 19)
Formative Approach to Assessment: Any assessment used by educators to evaluate student knowledge and understanding of particular content, and then to adjust and plan further learning experiences accordingly to improve student achievement in that area. Formative assessments are administered while students are learning new information and skills. Frequency of these assessments is directly related to student academic achievement.

(Domain 1 – Monitoring, Indicator: 2)

Friendly Controversy (Competition): This is the process of engaging students in dialogue regarding topics about which they have differing opinions. Issues must be chosen carefully to avoid heated debate.

(Indicator: 30)

Give One-Get One: A technique teachers can use to help students build a base of knowledge by sharing information with one another. Students choose a partner and share either an answer to a question or a data set they have created. Partners compare notes and add new information to their own answer or data set. This can be used with academic notebook work.

(Indicator: 25)

Graphic Organizer: Any chart, graph, table, drawing, or other graphic device that is used for brainstorming, organizing ideas, or planning. Graphic organizers are one of the most popular ways for students to represent knowledge they have encountered in a critical input experience. Some examples include: story maps, Venn diagrams, flow charts, matrices, histograms, and pie charts.

(Indicator: 12)

Group Contingency Consequences: Holding the class as a whole responsible for the behavior of any or all members of the class. There are two kinds of group contingencies, interdependent and dependent. Interdependent group contingency involves the whole class receiving positive consequences only if all members meet or exceed a particular expectation. With dependent group contingency, positive and negative consequences are dependent on the behavior of one student or a small group of students who have been targeted for behavioral change. The guiding principle behind dependent group contingency is that peer pressure will influence behavioral change.

(Indicator: 34)
Group Processing/Cooperative Learning: One of the benefits of processing information in groups is that it can enhance the processing of new information because interacting in groups provides students with multiple reference points. Groups should be established to facilitate active processing of information during a critical input experience. Groups can be as small as pairs or as large as five. These groups should be guided by operating rules.

(Indicators: 7, 15, 10)

Guided Practice: Teacher designed practice sessions that provide well-structured learning experiences for students; this involves the gradual shaping of a procedure facilitated by teacher guidance. Students engage in the cognitive processing activities of organizing, reviewing, rehearsing, summarizing, comparing, and contrasting during guided practice.

(Indicator: 19)

High Expectancy Students: Those students a teacher expects to perform well for one reason or another.

(Indicator: 41)

High Probability Strategies: Research-based strategies have a high probability of raising student achievement if they are used; in part (segment) or type of lesson that is appropriate for the strategy and at the appropriate level of implementation. The simple presence or absence of an instructional strategy does not define effectiveness, but it is rather the teacher’s expertise in the “art of teaching” in adapting that strategy to the classroom within the context of lesson segment that produces gains in student achievement.

(Domain 1)

Homework: Any teacher defined task intended for students to perform outside school hours.

(Indicator: 16)

Impromptu Games: Academic games a teacher initiates as a result of student feedback

(Indicators: 24, 25, 26, Monitoring)

Independent Practice: Task during which which students practice skills or processes with no guidance from the teacher or peers. Students have enough experience with the content to use it.

(Indicators: 16, 19)
Indicators (Elements): Thin slices of teacher behavior showing research-based instructional strategies for teaching and learning.

(Learning Map)

Inferential Questions: Questions that require students to elaborate on information they have experienced.

(Indicator: 11)

Informal Fallacies: An argument in which the stated premises fail to support their proposed conclusion.

(Indicator: 18)

Instructional Strategy: Techniques used by teachers to facilitate students’ learning. For example: previewing content by scanning a text, activating prior knowledge using a KWL activity, deepening understanding by using a comparison matrix, or generating and testing hypotheses by posing a problem to solve.

(Domain 1, Design Questions 2, 3, 4)

Interact with New Knowledge: Students are given the opportunity to process small chunks of new content in pairs, triads, or slightly larger groups.

(Design Question 2)

Intriguing (Unusual) Information: Unusual information may be intriguing to students when parts of the information are missing. For example, while a fact such as, “the earth is the only planet not named for a pagan god,” may have little practical value, it will probably capture students’ attention. Teachers can systematically provide interesting facts related to topics being addressed in a unit of instruction.

(Indicators: 8, 32)

iObservation: A multi-purpose, web-based online tool that aids in the teacher feedback and evaluation process, to include recording observation data and evaluations, teacher observation protocols, conferencing and discussion groups, and a resource library for professional development.
**Jigsaw:** A cooperative learning technique in which students are assigned to four-person heterogeneous groups and are assigned topics on which they are to become experts. Students with the same expert topic from different teams meet in groups to discuss and research their topic. After they have become topic experts, they come back and teach the materials to their home group.

*(Indicator: 10)*

**Key Junctures:** The places in the content where teachers stop to check for understanding by having students process information in small groups.

*(Indicator: 10, Monitoring)*

**Knowledge Gain:** The currency of student success in a formative assessment system. Focusing on knowledge gain provides a legitimate way to recognize and celebrate student achievement.

*(Indicators: 2, 3)*

**KWL Strategy:** A three column graphic organizer that helps students to think about what they already know about a topic, to decide on what they want to know, and to monitor what they are learning or have learned about the subject.

*(Indicator: 8)*

**Learning Goals:** A statement of what students will know or be able to do. Dr. Marzano suggests two formats, one for procedural knowledge or strategies, skills, and processes (represented as: “Students will be able to …”), and one for declarative knowledge or information (represented as: “Students will understand…”). Once teachers develop an awareness that the focus of a learning goal is declarative knowledge it is appropriate to set aside the convention of using the verb *understand* and use more specific verbs, such as *describe, explain, identify,* etc.

Example of a declarative goal:  *The student will understand the differences between various planets in the solar system.*

Can be written as:  *The student will be able to explain the similarities and differences between various planets in the solar system.*

*(Indicator: 1)*
Learning Map: Visual representation of the four domains:
1. Classroom Strategies and Behaviors,
2. Planning and Preparing,
3. Reflecting on Teaching, and
4. Collegiality and Professionalism with Indicators, and
Design Questions based on the Marzano Art and Science of Teaching Framework

Lesson Segments: Parts of a lesson, each of which has important characteristics. Each segment contains different roles for teachers and students. Each segment has multiple indicators, which can be successfully met by a variety of actions. The Marzano framework contains three general categories of lesson segments: lesson segments addressing content, lesson segments enacted on the spot, and lesson segments involving routine events. The ten design questions are organized under each segment.

(Domain 1)

Linkages: Connections between content previously addressed in class and content that is about to be presented in a critical input experience.

(Indicators: 8, 14)

Lively Pace: An instructional pace that maintains high levels of student engagement.

(Indicator: 28)

Low Expectancy Students: Those students a teacher does not expect to perform well for one reason or another. Teachers can have low expectations because of a student’s ethnicity, socio-economic status, previous teacher perceptions, and/or school records. Teachers must actively seek to behave in a manner that is not controlled by biased patterns.

(Indicators: 39, 40, 41)

Macro-strategies: Set of interacting instructional strategies; common components of macro-strategies are summarizing, note-taking, nonlinguistic representation, etc.

(Indicator: 10)
Massed Practice: Guided practice sessions provided to students frequently over time.

*(Indicator: 19)*

Mini-debates: A friendly controversy technique to engage students in sharing their opinion on an issue related to the content being addressed in an upcoming unit of instruction. For example, before an upcoming unit on global warming, a teacher may engage students in a mini-debate about the imminent danger and how quickly action should be taken.

*(Indicators: 10, 30)*

Mnemonics: Techniques that help students memorize information such as facts. Students must understand information before a memory technique is employed.

*(Indicator: 12)*

Monitor: To oversee, supervise, or regulate students’ depth of understanding of new content.

*(Domain 1, Indicator: 26)*

Multiple Perspectives: Interacting in groups helps students get multiple reference points for learning new content. It allows students to see how others process information and it allows each student to see how others react to his/her processing of information.

*(Indicators: 7, 10, 15)*

Non-linguistic Representation: Mental images associated with one's experiences; for example, a student who has studied and understands the defining characteristics of the cell will have mental images associated with that information. Activities that help students with non-linguistic processing of information include: creating graphic representations, making physical models, generating mental pictures, drawing pictures or pictographs, and engaging in kinesthetic representations of the content.

*(Indicators: 12, 13, 19)*

Non-verbal Behavior (Indications): A teacher's physical actions are interpreted by students as indications of the teacher's mood and attitude toward students. Marzano suggests that there are certain non-verbal behaviors every teacher should unconsciously practice and engage in: smile at students at appropriate times, forms of encouragement, look students in the eye when addressing them, appropriate physical proximity to communicate concern but not invade personal space, and look interested in what students are saying.

*(Indicator: 37)*
Note-Taking: Note-taking is closely related to summarizing in that it requires students to translate information from a critical input experience into their own abbreviated form.

(Indicator: 12)

Occupying all Quadrants: Occupying the whole room either physically or visually; this is a behavior typically associated with withitness.

(Indicator: 33)

Overtly Adjusts: When a teacher changes an instructional plan as a result of student feedback and explicitly shares that decision to shift plans with students.

(Indicator: 24, Domain 1 – Monitoring)

Overt Linkages: A previewing technique that points out the connection between content previously addressed in class and content that is about to be presented in a critical input experience.

(Indicator: 8)

Pacing: Pacing involves the execution of administrative tasks and transitions from one activity to another. There should be an overall logic to the manner in which a lesson proceeds and students should be aware of this logic.

(Indicator: 28)

Physical Layout to Focus on Learning: The creation of physical conditions that facilitate and support teaching and learning. Desk arrangement should provide access to any student within four steps from where the teacher spends most of his/her time. The arrangement should also allow for easy storage of and access to materials and a clear traffic pattern. The arrangement should also allow for flexibility in grouping students.

(Indicator: 5)

Physical Movement: Physical movement refers to any activity that allows students to move their body position. Physical movement enhances student engagement because it increases energy. Some examples of appropriate physical movement to engage students are: stand and stretch, body representation, give one-get one, vote with your feet.

(Indicator: 27)
Pictograph: A pictorial representation of numerical data or relationships, especially as a graph, but having each value represented by a proportional number of pictures.

(Indicator: 12)

Playful Dialogue: Dialogue that engages students using appropriate humor or levity.

(Indicators: 24, 56)

Previewing: Any activity that starts students thinking about the content they will encounter in a critical input experience.

(Indicators: 6, 8, 10)

Probing Incorrect Answers: Interactions that allow the teacher to acknowledge what the student knows and delve more deeply into what the student does not understand. These interactions also communicate to students that their response is valued. Rephrasing and breaking complex questions into smaller parts are two probing strategies a teacher could use.

(Indicators: 10, 14, 19, 41)

Probing Questions: Questions intended to provoke deeper thought about an issue at hand.

(Design Questions 2, 3, 4, 9)

Procedural Knowledge: Knowledge that is oriented towards skills, strategies, or processes; over time, this knowledge is shaped by the learner. When fully developed, procedural knowledge can be performed at the level of automaticity or controlled processing. This is developed through practice over time. Some examples are: performing long division, reading a contour map, or editing an essay for mechanics.

(Design Questions 1, 2, 3)

Prompt: Teacher behavior that encourages students to engage in an academic activity by using verbal and non-verbal cues, i.e. teacher proximity to student(s), hand signals, or facial expressions.

(Indicator: 24)
Reciprocal Teaching: Reciprocal teaching refers to an instructional activity that takes place in the form of a dialogue between teacher and students regarding segments of text. The dialogue is structured by the use of four strategies: summarizing, question generating, clarifying, and predicting. The teacher and students take turns assuming the role of teacher in leading this dialogue.

(Indicators: 10, 7)

Re-engage: When students are not attending to the instructional activities occurring in class they need to be re-engaged. Five areas can provide useful insights into how teachers might increase student engagement:

1. high energy, use of physical activity, maintaining a lively pace, enthusiasm, and intensity;
2. use of academic games and puzzles;
3. the self-system, which controls what we decide to attend to;
4. mild pressure during questioning activities; and
5. mild controversy and competition, through use of mini-debates and inconsequential competition.

(Design Question 5)

Response Cards: A technique for engaging students and obtaining group feedback. When a teacher asks a question, each student in the class records their response individually; on a cue from the teacher, the students hold up their response cards. The teacher uses the group feedback from the response cards to guide subsequent interactions with students.

(Domain 1 – Monitoring; Indicator: 26)

Response Chaining: Linking or chaining student responses. Response chaining begins by asking a question to which a specific student responds. The teacher then asks the class as a whole to vote regarding the accuracy of the response, using three options: correct, partially correct, or incorrect. If the response is correct, a new question is posed; if it is partially incorrect or wholly incorrect, fellow students make the necessary changes until the original response is rendered correct. A new question follows this refinement process.

(Indicators: 26, 40, 41)

Rubric: A rubric is used to assess a specific skill or task such as a project, writing sample, or art work.

(Indicator: 2)
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**Scale:** A scale is a continuum that identifies progressive levels of student knowledge and skills connected to a specific learning goal. It serves as a tool to inform instruction and provided formative feedback to students. **In 2013-2014, scales will be utilized for formative assessments to track student progress and inform instruction.**  
*(Indicators: 1, 2)*

**Scan:** To peer out at, or observe repeatedly or sweepingly, in the classroom; to survey.  
*(Monitoring; Indicators: 24, 33)*

**Schema:** Prior knowledge.  
*(Indicators: 10, 14)*

**Self-assess (Monitor):** The act of paying attention to one’s own work or understanding to make sure that it is clear and makes sense.  
*(Indicator: 2)*

**Student Response System:** An electronic system that provides educators with the ability to actively engage students and easily assess student achievement using a hand-held device.  
*(Monitoring; Indicator: 26)*

**Student Status:** Where a student is at a given point in time during the learning process, as articulated by their placement on a scale for that particular topic or skill. This progress can be tracked by teachers and/or students and posted publicly or privately.  
*(Indicator: 2)*

**Summarize:** The student’s creation of a personalized, condensed account of the information gleaned from a critical input experience.  
*(Indicators: 12, 13, 20)*

**Tangible Recognition:** Providing students with some symbol or token for appropriate behavior. Of all interventions that can be implemented to recognize adherence and lack of adherence to classroom rules and procedures, tangible recognition is the one that has the most potential of being misused.  
*(Indicator: 35)*
The Marzano Art and Science of Teaching Framework: 10 design questions; 3 lesson segments; 4 domains:
- Domain 1 includes 41 indicators of instructional strategies;
- Domain 2 includes 8 indicators for planning and preparing;
- Domain 3 includes 5 indicators for reflecting on teaching; and
- Domain 4 includes 6 indicators for collegiality and professionalism

(Token Economies: A tangible recognition technique by which students receive some type of chit for appropriate behavior or the cessation of inappropriate behavior. Token economies appear most effective if chits are awarded for positive behavior and taken away for negative behavior.

(Indicators: 34, 35)

Tracking Student Progress: Student Progress is tracked by the student and teacher relative to a goal and scale. One of the defining features of the process of formative assessment, this practice allows teachers to better approximate a student’s true score at the end of a particular interval of time.

(Indicator: 2)

Verbal Behavior (Indications): In order to show low expectancy students that they are respected and valued, a teacher should consciously and systematically engage in the following behaviors: engage in playful dialogue when appropriate, demonstrate gratitude for students’ responses by thanking them for their efforts, point out what is correct and incorrect about student responses, and restate the question.

(Indicators: 41, 56)

Vote With Your Feet: An activity that involves physical movement, in which the teacher posts three to four signs in the corners of the room and asks students to gather around the one that: best approximates their thinking, represents a topic they want to know more about, or indicates whether they feel a response is incorrect, partially correct, or correct. Student can also move in and out of discussion using this technique.

(Monitoring; Indicators: 24, 26, 27, 30)

Wait Time: An aspect of effective questioning, this term refers to the amount of time a teacher waits for a student or students to respond to a question. Students should be allowed adequate processing time before being expected to respond.

(Indicators: 26, 41)
Weak Reference: Using sources that have no credibility.
(Indicator: 18)

Withitness: Teacher awareness of potential problems and quick attention to those situations. Four general actions constitute withitness: being proactive, occupying the entire room, noticing potential problems, and using a series of graduated actions.
(Indicator: 33)