# Leadership

* Identified a target goal
* Empowered teachers through decision making and problem solving
* Believed in the capacity of both teachers and students
* Recognized the power of a cohesive staff
* Protected and scheduled time for teachers to meet
* Supported the fidelity of implementation of an evidence-based practice in a tiered system of supports

# Content Knowledge/Assessment Data- Questions that Led the Process

* What categories (e.g. force, motion, energy, and matter) were challenging to students?
* What were the greatest number of test items per category? How did students perform within these categories?
* What units are present in multiple grade levels? For example, scientific investigation crosses over all three grade levels.
* What vocabulary are students most familiar with? What vocabulary might be challenging?
* What additional skills do students need to demonstrate competency with in answering the questions? For example, interpreting graphs, scientific notation, or reading the periodic chart .

# Literacy and Learning

* The Strategic Instruction Model™️ Content Enhancement Routine- The Unit Organizer Routine was implemented across all three grade levels.
* The Unit Organizer Routine supports students in organizing, understanding, and recalling information.

The Unit Organizer and How it Supports All Phases of Learning ( Hattie , Visible Learning)

| Surface Phase of  Learning | Unit Organizer  Components | Deep Phase of  Learning | Unit Organizer  Components | Transfer Phase of  Learning | Unit Organizer  Components |
| --- | --- | --- | --- | --- | --- |
| Leveraging prior knowledge  ES=0.67 | Current Unit Past Unit and Bigger Picture | Concept Map  ES=0.60 | The Unit Map and the Expanded Map | Transform conceptual knowledge  ES=0.85 | Student’s Personal Schema -Expanded Map  -Student generates new Self -Test Questions on Expanded Map |
| Vocabulary  ES=0.67 | The Unit Organizer with the Expanded Map | Questioning  ES=0.48 | Self -Test Questions and co-construction with students | Questioning  ES=0.48 | New Self-Test Questions on Expanded Map |
| Mnemonics  ES. O.45 | The Unit Organizer and the Expanded Map | Metacognitive Strategies  ES=0.69 | Unit Relationships |  |  |
| Spaced practice  ES= 0.71 | Unit Self -Test Questions | Feedback  ES=0.75 | Self-Test Questions  -Student’s Personal Schema Expanded Map |  |  |
| Organizing and transforming  ES=0.85 | The Unit Map and the Expanded Map | Spaced practice  ES=0.71 | Unit Self -Test Questions |  |  |
| Feedback  ES=0.75 | Unit Self -Test Questions |  |  |  |  |

# Learning Activities

* Review science information from cross grade levels using the Unit Organizer and the Expanded Map.
* Review provided hands-on activities in stations for all students representing science information from cross grade levels.
* Student participation in state released items practice test prior to actual state assessment with the intent to build confidence and stamina as they move closer to the actual test date.
* Students construct their personal Expanded Maps.

# Outcomes for SY 2017-18

* **89% Pass rate for all students in the middle school in Science 8**
* **79% Pass rate for students with disabilities in the middle school in Science 8**
* **70% Accreditation Benchmark Met – Fully Accredited Status**
* Pass rates for this same group of students with disabilities in other content areas:

Reading- 39%

Math 8- 45%

Civics and Economics- 64%



70% Science

Pass rate (accreditation benchmark)

Other Comparisons:

* 44% State pass rate for students with disabilities in Science 8
* 51% State pass rate for student with disabilities in Science
* 71% Pass rate for students with disabilities in a Co-Teaching Initiative Project School (2 years) in Science 8
* NONE of the other VTSS Project Schools in Science 8 met or exceeded the pass rate for all students or students with disabilities:
  + 73% of the VTSS Project Schools did not meet the 44% State pass rate for students with disabilities in Science 8
  + 55% of the VTSS Project Schools met the 70% or above pass rate for all students in Science 8