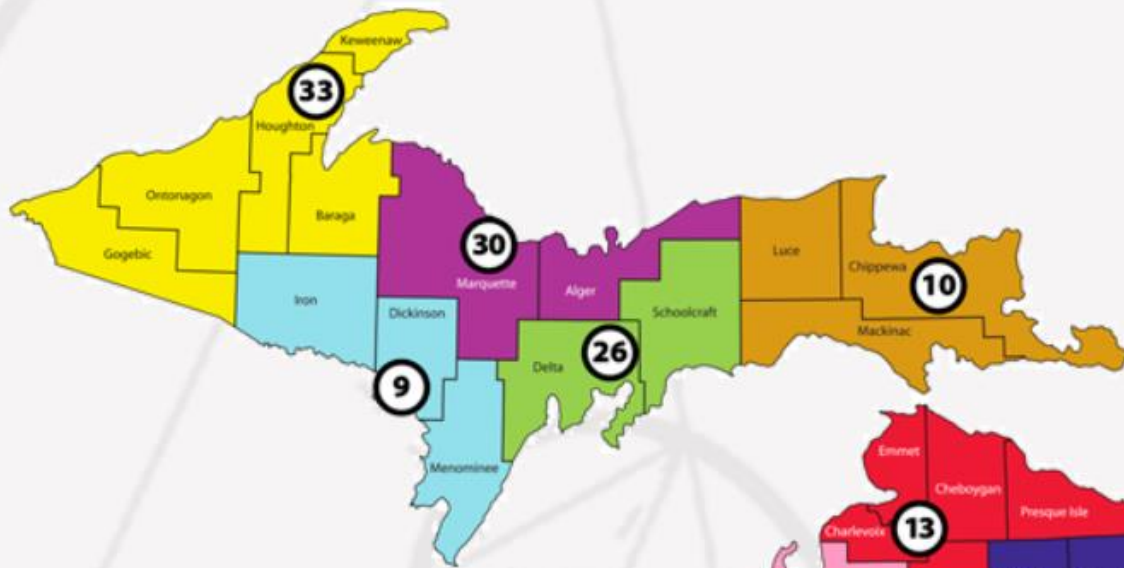


Effective, Engaging Methods for Writing in Science

Kathy Agee

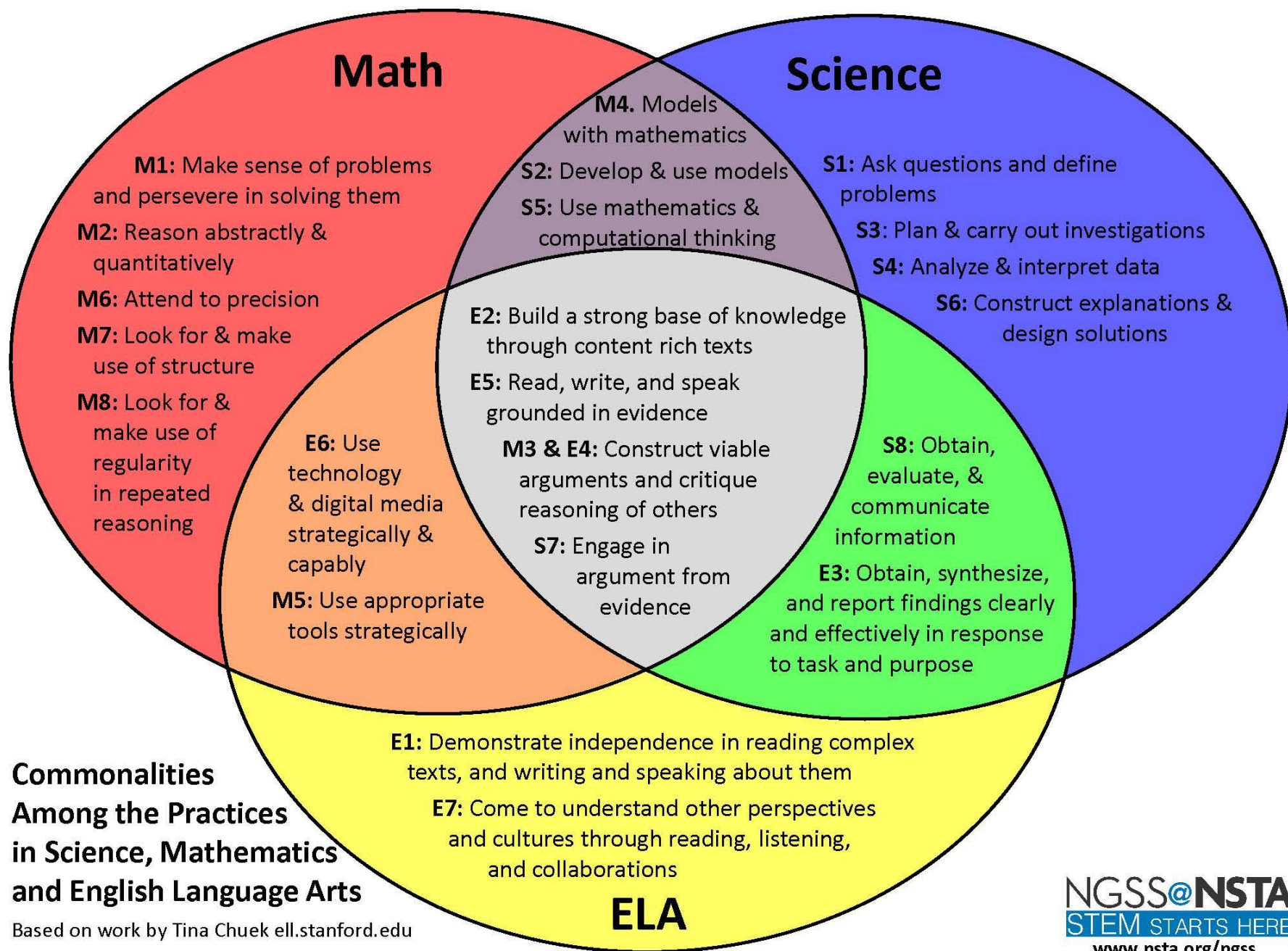
**Regional Math and Science Center
Grand Valley State University**



Silent Argument

Resources

[Online webpage](#)



The Writing Across the Curriculum (WAC) Document:

- Developed by the Michigan Department of Education in conjunction with MSTTA & the Office of School Improvement
- [Online document](#)

The WAC Document has two sections:

▶ **WRITING-TO-LEARN**

▶ **WRITING TO DEMONSTRATE
KNOWLEDGE**

WAC COMMON FORMAT FOR WRITING STRATEGIES

- Name of the strategy
- Definition of the strategy
 - What does it do?
- How does one implement it?
- Examples with science content

WRITING TO LEARN

What is it?

A Writing-to-Learn strategy is one that teachers employ throughout and/or at the end of a lesson to engage students and develop big ideas and concepts.

WRITING TO LEARN

- ▶ Requires higher-level thinking skills
- ▶ Focuses on ideas rather than correctness of details
 - ▶ The WAC lists 15 writing strategies

WRITING TO LEARN

There is a strong connection between
Writing to Learn strategies
and Formative Assessment.

WRITING TO DEMONSTRATE KNOWLEDGE

What is it?

A Writing to Demonstrate Knowledge strategy is one that allows students to show what they have learned by synthesizing information and explaining or applying their understanding of concepts and ideas.

Students write for an audience with a specific purpose. Products may apply knowledge in new ways or use academic structures for research and/or formal writing.

WRITING TO DEMONSTRATE KNOWLEDGE

A Writing to Demonstrate Knowledge assignment:

- Requires a report, essay, project or other more formal paper
- Is a “finished product” which adheres to format and style guidelines or standards.
- May requires a period of weeks of work including revising and editing.
- The WAC includes material on eight different Writing to Demonstrate Knowledge strategies

WRITING TO DEMONSTRATE KNOWLEDGE

Writing to Demonstrate Knowledge
has a strong connection to
Summative Assessment.

TRY A NEW STRATEGY

- COLUMN NOTES (p. 10)
- CONCEPT / VOCABULARY DEVELOPMENT (p. 17)
- METAPHORICAL THINKING (p. 32)
- JOURNALISTIC REPORTING (p. 52)

SAT Questions

➤ Whether substances are medicines or poisons often depends on dosages, for substances that are ----- in small doses, can be ----- in large.

a) useless.....effective

b) mildbenign

c) curative.....toxic

d) harmful.....fatal

e) beneficial miraculous

- Nightjars possess a camouflage perhaps unparalleled in the bird world; by day they roost hidden in shady woods, so ----- with their surroundings that they are nearly impossible to --.

a) vexed....dislodge

b) blended.....discern

c) harmonized.....interrupt

d) impatient.....distinguish

e) integrated....classify

Text in the Middle