

AERO Common Core Plus

The Common Core Standards for Mathematics include critical areas for instruction in the introduction for each grade, K-8. The critical areas were designed to bring focus to the standards at each grade by describing the big ideas to use in building curriculum and in guiding instruction.

The AERO Mathematics Indicators were written for assessment purposes. As you examine the AERO Mathematics Indicators, the important point to consider: Does AERO address the critical areas of the common core? In most cases, the content of the AERO Indicators is aligned to the critical areas of the Common Core. Exceptions are, there is a difference in the depth of the introduction of fractions in grade 3 and 4, functions in grade 8, and statistics in grades 6, 7, and 8. However, the major difference is in the Common Core's inclusion of the Mathematical Practices. AERO included the general statements of the National Council Mathematics Teacher process standards which are general statements related to the Practices, whereas the Common Core Standards for Mathematical Practices are very descriptive in describing what student will do with the content. We have now included these Mathematical Practices in the AERO document.

Curriculum is always built around the big ideas of the subject and standards should never be considered as a checklist. **So if your school developed your curriculum around AERO or a set of standards based on the research, your content should already be focused on the critical areas and you should be looking at instruction and assessment defined in the Common Core.**

To create students who are both mathematically powerful and competent learners of mathematics, schools need a balanced math program. A balanced math program focuses on **computational/procedural skills (how the math works)**, the **conceptual understanding (why the mathematics works)** and **problem solving (where the mathematics works)**. Without the implementation of the Mathematical Practices, instruction and assessment focus only on "how the math works".

An intense focus on the critical areas at each grade carried out through the Standards for Mathematical Practice allows depth in learning and creates a balanced math program.