Our vision is to foster a culture in which students will challenge themselves to achieve excellence through perseverance, innovation, and collaboration.

AP at HHS Essential Skills and Instructional Best Practices

Social Sciences

Essential Understandings

1. Read and make meaning from primary sources
2. Establish big picture time frames in order to determine cause and effect for events and actions
3. Think critically, engage in conversation about historical topics

Instructional Best Practices to Incorporate at Every Level

1. Read and analyze primary sources for… (don't just teach from textbooks)
    a. For author's purpose, point of view, and reasoning
    b. For skill building in reading comprehension in historical documents
    c. For skill building in chart, map, graph
    d. Evidence-based writing
    e. Experiment with mnemonic associations (persons/places/things/times)
2. Select documents with other subject areas in mind; evaluate, analyze, and synthesize
3. Plan with the big picture in mind, considering historical themes
4. Incorporate Socratic seminar or other opportunities for students to engage personally with historical content

English/Language Arts

Essential Skills

1. Read, understand, and respond to a wide range of texts.
2. Develop complex vocabulary skills.
3. Write in a range of modes for a variety of purposes.
4. Articulate verbal skills for effective oral communication in a variety of modes.

Instructional Best Practices to Incorporate at Every Level

1. Conduct regular Socratic seminar or similarly formal approach to debate/discussion
2. Read complex grade-level or higher text
3. Writing with a focus on process (brainstorming, research, outlines, rough drafts, editing, revision, final product)
4. Increase focus on informational texts, especially as background knowledge to support more traditional texts
5. Provide pragmatic vocabulary development using recognized strategies (Frayer model, definition maps, etc.)
6. Model reading, writing, and interacting with texts.

Sciences

Essential Skills

1. Content-based skills
    a. **Graphing:** identifying the independent and dependent variable, manipulating and responding
    b. **Nature of science:** design a hypothesis, experiment; evaluate experiment, results
    c. **Reading comprehension:** utilize complex scientific journals, respond to appropriate text-dependent questions
2. Academic skills
    a. **Text annotation**
    b. **Study skills:** read ahead, prepare for the day's instruction; create notecards; construct test questions
3. Math skills
    a. **Statistics:** calculate, graph means; standard deviation
    b. **Scientific notation:** conversions to and from
    c. **Dimensional analysis:** conversion – using factoring method
    d. **Algebra:** manipulating simple equations (e.g. volume)

Instructional Best Practices to Incorporate at Every Level

1. Incorporate math skills consistently, and where appropriate
    - Convert units, manipulate equations (e.g. velocity), ratios (e.g. Punnett squares)
2. Incorporate opportunities for students to organize data, graph data
    - Eventually expect them to do it independently via gradual release
3. Provide opportunities for students to evaluate data, present evidence to back a claim
    - The conclusion refers to the data/evidence
4. Expect students to design their own experiments
    - Prompt to ask how the experiment can answer a different question
5. Preview new content and how it relates back to the prior unit