

# **African Americans and Their Impact on American History**

**Participants:** Gilles Fortin, Mary Fortin, Emily Sullivan

## **Overview of Purpose**

With our continued focus on diversity and curriculum integration, students should be exposed to a wider variety of literature to include the impact African Americans made upon the history of the United States. This will be accomplished through exploring biographies of African Americans who have made a significant impact on the history of the United States.

In addition, students will learn about the civil rights issues that have plagued this group of people, beginning with the slavery issue of the 1700-1800s. The students will write their biographies using the strategies of the 6+1 writing traits program within the 4 Blocks management program.

This project is cross-curricular, encompassing ELA, social studies and art. Research materials and writing activities will be geared toward the ability level of each student, providing a differentiated approach.

In the area of Fine Arts, students will closely examine works of contemporary African American artists such as Faith Ringgold and delve into the life story behind the artist. Our hope is that this unit will foster respect and understanding for people of different ethnic backgrounds.

## **NYS Learning Standards Addressed:**

### **ELA Standards Covered**

- **Standard 1:** Students will read, write, listen, and speak for information and understanding.
- **Standard 2:** Students will read, write, listen, and speak for literary response and expression.
- **Standard 3:** Students will read, write, listen, and speak for critical analysis and evaluation.
- **Standard 4:** Students will read, write, listen, and speak for social interaction.

### **Social Studies Standards Covered**

- **Standard 1:** the history of the United States and New York State
- **Standard 2:** civics, citizenship, and government

### **Arts Standards Covered**

- **Standard 1:** creating and participating in the Arts
- **Standard 2:** knowing and Using Arts materials and Resources
- **Standard 3:** responding to and analyzing works of art
- **Standard 4:** understanding the cultural contributions of the arts

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## **Applying Differentiated Instruction and Six Traits Writing to the Jr. Great Books Program**

**Participant(s):** Mary Gertsch-Cochran & Sarah McCarty

**Overview:**

Students participating in the ELA component of Odyssey School-Wide Enrichment utilize the Jr. Great Books series. The learning units that are currently underway focus primarily on discussion of stories through literature circles. This pilot would introduce a writing component to the program by developing anchor activities for each story unit. The anchor activities would differentiate instruction through the Six +1 Traits writing model.

**Length of Instructional Time:** Weekly or bi-weekly anchor activities for each story, from October through May.

**Grade Level, Age of Audience:** Grades 2-4, or grades 2-5, depending on pilot week time constraints.

**NYS Learning Standards Addressed:**

**ELA Standards:**

- **Standard 1:** Students will read, write, listen, and speak for information and understanding.
  - **Standard 2:** Students will read, write, listen, and speak for literary response and expression.
  - **Standard 3:** Students will read, write, listen, and speak for critical analysis and evaluation.
  - **Standard 4:** Students will read, write, listen, and speak for social interaction.
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## **“Caching” in on Topography and Locus**

**Participants: Karen Bisso, Scott Keeney and Tim Mulligan.**

**Overview:**

Consultant Teacher Model (CTM) classes have been an integral feature of the Secondary Special Education program for the last 9 years. In CTM classes, a mainstream content teacher is paired with a Special Education teacher designed to bring their areas of expertise together in the delivery of instruction to classified students and those in need of AIS services. Effective placement of students into this program allows for classified and AIS students to be exposed to the support services necessary for them to be academically, socially and behaviorally successful.

Both teams use alternate learning strategies and a keen awareness of learning styles to deliver instruction to classified and at-risk 9<sup>th</sup> grade students. Many of these students are 15 and 16 year olds in the 9<sup>th</sup> grade due to previous academic failures(s). This unit will be attacked with students who participate in both Earth Science CTM (300 minutes/week) and Math A Part 1 CTM (200 minutes/week). The Earth Science CTM has been in existence for the last 6 years while Math A Part 1 is a young 3.

The amount of work devoted to creating a coordinated curriculum at this level, as well as the time necessary for reflection and modification due to the nature of the student involved is extensive. Steering the unit will be Earth Science’s Contour Interval instruction while Math A will incorporate simultaneously, instruction on Locus, the set of all points that meet given conditions. Lecture, lab, plotting on coordinate planes and familiarity with GPS devices will culminate in an activity using the new adventure of “Geocaching” to celebrate the

accommodation of all instruction in both disciplines. Students will use GPS devices to locate various points.

They will then use their knowledge of locus to locate the mark of answer points. Thus, a “Treasure Hunt” using Locus and GPS will be constructed. Students will see real life applications of the often misunderstood algebraic curriculum and how interrelated Science and Math can be. The unit is projected to take approximately 2 weeks of class time in both disciplines. Due to the fact that all students will be in both programs and the flexibility allowed when a common teacher (the Special Education teacher) is in place, a multidisciplinary culminating activity will be prepared utilizing creative scheduling.

### **NYS Learning Standards Addressed:**

#### **MST Learning Standard 1:**

Students will use mathematical analysis, scientific inquiry, and engineering design, as appropriate

#### **Standard 2:**

Students will access, generate, process, and transfer information using appropriate technologies.

#### **Standard 3:**

Students will understand mathematics and become mathematically confident by communicating and reasoning mathematically, by applying mathematics in real-world settings, and by solving problems through the integrated study of number systems, geometry, algebra, data analysis, probability, and trigonometry.

#### **Standard 4:**

Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science

#### **Standard 5:**

Students will apply technological knowledge and skills to design, construct, use, and evaluate products and systems to satisfy human and environmental needs.

#### **Standard 6:**

Students will understand the relationships and common themes that connect mathematics, science, and technology and apply to these and other areas of learning. Standard 7- Students will apply the knowledge and thinking skills of mathematics, science, and technology to address real-life problems and make informed decisions.

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## **Chasing Vermeer: Reading the Clues to Comprehension**

**Participants:** Mal Cutaiar, Bryan Gottlob, Kate Messner, Barbara Napper

**Overview:**

The purpose of this unit is to introduce a number of reading comprehension and problem-solving strategies that will be reinforced throughout the school year. Using the young adult novel *Chasing Vermeer* as a jumping off point, students will explore strategies for reading many varieties of text, including novels, articles, textbook materials, mathematical problems, poems, films, songs, and works of art. These strategies will be reinforced in all content areas throughout the school year.

**Grade Level:** 7<sup>th</sup>

**Length of Instructional Time for Unit:** 4 weeks

**NYS Learning Standards Addressed:**

**English Language Arts**

- **Standard 1:** Language for Information and Understanding
- **Standard 2:** Language for Literary Response and Expression
- **Standard 3:** Language for Critical Analysis and Evaluation

**Social Studies**

- **Standard 1:** History of the United States and New York
- **Standard 2:** World History
- **Standard 3:** Geography

**MST**

- **Standard 1:** Analysis, Inquiry, and Design
- **Standard 3:** Mathematics
- **Standard 4:** Science
- **Standard 6:** Interconnectedness: Common Themes
- **Standard 7:** Interdisciplinary Problem Solving

**The Arts**

- **Standard 3:** Responding to and Analyzing Works of Art
- **Standard 4:** Understanding the Cultural Contributions of the Arts

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**Crime Scene Investigation: Forensic Science Course A & B**

**Participants:** Steven Tice, Jill Phaneuf

**Overview:**

This fall Plattsburgh High will offer two half-year Forensic Science courses: Forensics A & Forensics B. The purpose of these courses is to get students to experience a true *applied science*, in the context of Crime Scene Investigations. The two half year courses, if successfully completed, will offer the student one full year of science elective credit.

The course is designed so that the two sections can be challenged independently, neither section is a prerequisite for the other. The course will also be available for optional CAP credit through Clinton Community College. To receive the college credit, students will be required to successfully complete both sections *and* write a suitable research paper.

The course will develop analytical skills that require students to apply science and mathematics to problem solving. Each section of the course will focus on different areas of forensic science; the exam will incorporate learned skills from both sections. Therefore, this project is the proposed final laboratory exam for those students completing both sections.

At the end of the school year in June, this cumulative Laboratory Practical Exam will be used to assess the degree to which students have acquired/mastered Forensic Investigative skills as a group. The task/assessment will take three or four 80 minute periods. Individual assessments will be done separately.

## **NYS Learning Standards Addressed:**

### **MST Standard 1:**

Students will use mathematical analysis, scientific inquiry, and engineering design, as appropriate, to pose questions, seek answers, and develop solutions.

### **Standard 2: Information systems:**

Students will access, generate, process, and transfer information using appropriate technologies.

### **Standard 3: Mathematics:**

Students will understand mathematics and become mathematically confident by communicating and reasoning mathematically, by applying mathematics in real-world settings, and by solving problems through the integrated study of number systems, geometry, algebra, data analysis, probability, and trigonometry.

### **Standard 4: Science:**

Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.

### **Standard 6: Interconnectedness: Common Themes**

Students will understand the relationships and common themes that connect mathematics, science, and technology and apply the themes to these and other areas of learning.

### **Standard 7: Interdisciplinary Problem Solving**

Students will apply the knowledge and thinking skills of mathematics, science, and technology to address real-life problems and make informed decision

## **ELA**

### **Standard 1:Language for Information and Understanding**

Students will read, write, listen and speak for information and understanding

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## **Differentiating Mathematics for All Learners**

**Participants(s):** Lori Darst, Teresa Rhyne, Brenda Bezio, Kristie Hulbert

### **Overview:**

As teachers, not only must we address the important mathematics children need to learn, we also need to help children learn to think, reason, and become proficient problem solvers. New York State has recently adopted new standards in mathematics. Our Pilot Proposal is to create a differentiated learning unit on the content strand Number Sense and Number Operations.

Young children enter elementary school with many different needs, skill levels, and learning histories. Classroom populations are comprised of a general population of children who are at different developmental and skill levels. The multiple intelligences that comprise classrooms must be challenged in a multitude of ways. Differentiating instruction is a necessity in order to meet the individual needs of all learners.

As an integral part of a math program, it is essential to include links to other curricular areas. We will incorporate a number of literature-based activities to teach these lessons. Math journals will be used on a daily basis for students to record their personal understandings about how they solve a problem.

We will focus on three types of differentiated lessons; Tiered Assignments, Ability Grouping, and Interest. Each literature-based lesson will incorporate practical routines for skill and practice in previously taught mathematical concepts and multiple activities that support the Number Sense and Number Operations content strand.

Four primary resources will be used for these lessons: Math Trailblazers, Investigations in Number, Data, and Space (TERC Dale Seymour Publications), First Grade Math – a Month by Month Guide (Vicki Bachman, Math Solutions Publications), and Saxon Math. In addition to these, we will use materials and activities from ‘Math Their Way’ and ‘Box it and Bag It’ as Anchor Activities.

Our Pilot Project will allow us to provide a standards-based Number Sense and Number Operations unit that will meet the needs of most of our students.

**Length of Instructional Time for Unit:** Approximately Two Months

**Grade/Age of level of audience:** All students in K-1

## **New York State Mathematical Strand Addressed:**

### **Statistics and Probability Strand:**

#### **Kindergarten**

- K.N.1: Count the items in a collection and know the last counting word tells how many items are in the collection (1 to 10)
- K.N.2.: Count out (produce) a collection of a specified size 1 to 10
- K.N.3: Numerically label a data set of 1 to 5
- K.N.4: Verbally count by 1's to 20
- K.N. 5: Verbally count backwards from 10
- K.N.6: Represent collections with a finger pattern up to 10
- K.N.7: Draw pictures or other informal symbols to represent a spoken number up to 10
- K.N.8: Draw pictures or other informal symbols to represent how many in a collection up to 10
- K.N.9: Write numbers 1-10 to represent a collection
- K.N.10: Visually determine how many more or less, and then using the verbal counting sequence, match and count 1-10
- K.N.11: Use and understand verbal ordinal terms, first to tenth

#### **First Grade**

- 1.N.1: count the items in a collection and know the last counting word tells how many items are in the collection (1 to 100)
  - 1.N.2: Count out (produce) a collection of a specified size (10 to 100 items), using groups of ten
  - 1.N.3: Quickly see and label with a number, collections of 1 to 10
  - 1.N.4: Count by 1's to 100
  - 1.N.9: Count backwards from 20 by 1's
  - 1.N.10: Draw pictures or other informal symbols to represent a spoken number up to 20
  - 1.N.14: read the number words one, two, three...ten
  - 1.N.22: Use the words higher, lower, greater, and less to compare two numbers
  - 1.N.23: Use and understand verbal ordinal terms, first to twentieth
  - 1.A.1 Determine and discuss patterns in arithmetic (what comes next in a repeating pattern, using numbers or objects)
  - 1.N.11 Identify that spacing of the same number of objects does not affect the quantity (conservation)
  - 1.N.12 Arrange objects in size order (increasing and decreasing)
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## **Do You Measure Up?**

**Participants:** Pamela Frederick & Sandra Kowalowski

**Overview:**

This unit will cover the topics of ratio and proportion. These topics are found primarily in Key Idea #5 – MEASUREMENT, but through the incorporation of other content and activities, we will address key ideas 3 – 6 also.

Students will address these topics through a variety of activities. First and foremost, students will use algebra skills for calculations. They will also learn to translate language (verbal information) into algebraic expressions /equations.

The golden mean, .61803, is a ratio seen extensively in nature, ranging from the DNA helix at the microscopic level to flowers and spirals in shells, from the proportions of the human body and our EKG heart rhythm to the planets in our solar system. The Ancient Greeks and others discovered this relationship and used it in art and architecture. It is still used today. This relationship will be explored and analyzed in class. Students will then continue to investigate it as an individual project using computers and the Internet. As a culminating activity, students will present their findings to the class.

Other class activities will involve map readings and shadows. The map lab will hone measuring skills using the metric system and require map-reading skills to calculate ratios. Students will use these ratios to form proportions to calculate linear distances between two locations. The shadow lab will allow students to measure objects (including themselves) and their shadows.

They will then use a proportion to calculate the height of an object that is too tall to measure in the conventional sense. This exercise will enlighten the students as to the difficulties involved with measuring in the ‘real world’, which will lead to a discussion of the sources of error in measurement and its effect on calculations.

Finally, students will estimate the height of an object using the  $45^\circ$ - $45^\circ$ - $90^\circ$  triangle ratio. This trigonometric relationship between the two sides of a right triangle will be used to determine the height of the object using a one-to-one relationship. This crude estimation will then be compared to calculations from the shadow lab and results will be discussed in class.

This unit is designed for Pre-Math I or Math I part 1 students and has an instructional time of approximately 10 days.

**NYS Learning Standards Addressed:****Math, Science, & Technology:**

- **Standard 1 Analysis, Inquiry, Design:** Mathematical Analysis 1 - 3
- **Standard 3 Mathematics:** Key Ideas 2 - 6

**English Language Arts:**

- **Standard #3:** Students will read, write, listen & speak for critical analysis and evaluation.
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**Kicking it up a Notch!**

**Participants:** T. Bruno, K. Donelli, R. Durham, D. Favro, N. Garrand, C. Miller, J. Nisoff, N. Strack, M. Walpole

**Overview:**

***“Excellence is in the Details”*** Gregory L. Sullivan

Kicking it up a Notch is an expanded study program for all sixth-grade students. It is intended to build inquiry and critical thinking skills, provide students with opportunities for in-depth study of subject areas, and improve writing skills.

Through the use of literature, documents, periodicals and texts, students will learn to locate, organize, evaluate and synthesize information from a variety of print and electronic sources. They will work both independently and in groups to study within a content area, to develop and revisit ideas, to engage in stimulating discussion and to report their learning in meaningful, creative ways.

Our goal is for our students to develop skills that will build curiosity, encourage them to seek answers to their questions, and help them to enjoy the power and pride that comes with knowledge.

**Content Areas:** Strategies developed will enhance all areas of the curriculum.

**Length of Instructional Time for Unit:** One class period each day (or on alternating days as our scheduling allows), in five-week increments, for the duration of the school year.

**Grade Level of Audience:** Appropriate for upper elementary, middle school, high school—strategies developed will be broad-based to allow for implementation for a wide range of learning levels.

**NYS Learning Standards Addressed:**

**ELA Standards:**

- **Standard 1: Language for Information and Understanding**
- **Standard 2: Language for Literary Response and Expression**
- **Standard 3: Language for Critical Analysis and Evaluation**
- **Standard 4: Language for Social Interaction**

**MST Standards:**

- **Standard 2: Information System**
- **Standard 3: Mathematics**
- **Standard 4: Science**
- **Standard 6: Interconnectedness: Common Theme**
- **Standard 7: Interdisciplinary Problem Solving**

**Social Studies Standards**

- **Standard 2: World History**
- **Standard 3: Geography**
- **Standard 5: Civics, Citizenship, and Government**

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**Know Where You Stand: A Pictorial History of the City of Plattsburgh**

## **Name of Participants: Marjorie Light, Kevin Larkin, Scott Given**

### **Overview:**

In Social Studies, students see an introductory PowerPoint on the history of Plattsburgh via old photographs and postcards. Following lessons on the War of 1812, students go on a historical walking tour of the City of Plattsburgh with Mr. Larkin, armed with digital cameras. Prior to the walking tour, students receive a mini-lesson on digital photography and picture pointers from a special presentation by Mr. Given.

Next, students would add to the knowledge gained from the walking tour by researching the various historical sites they photographed (interviewing, reading primary documents, and/or consulting resources). Then, students would use the 6+1 model in English class to write text to accompany the photographs of the historical buildings and monuments of the City of Plattsburgh.

Following completion of the descriptive text, students use PhotoShop Studio in an after school session to join the photos and text digitally into a well-designed layout. The photo and text spreads would be included in a book about the history of Plattsburgh. Finally, students would import their photos, with a caption, into a PowerPoint presentation, which could be shown to the community and placed on the team website.

### **Content areas:**

- Social Studies 7
- Art 7
- English Language Arts 7

### **Length of instructional time for unit:**

The English and Social Studies teachers will work with the students in two-week consecutive blocks, beginning with Social Studies, then moving to ELA. The art portion will be held tenth period, so that students can use the PC lab and combine the photos and texts using Photoshop.

After the three components of the work are complete, student will then collate and produce the final products. The entire project would be completed well before students leave for December break.

### **Grade/age level of audience:**

7<sup>th</sup> Grade Flamingo Team, which includes the students from three different special education classes, including one 8-1-1 and two 8-1-2 classes (Mrs. McNichols, Mrs. Chase, and Mr. Coakley).

### **NYS Learning Standards Addressed:**

#### **Social Studies Standards:**

- **Standard 1:** History of the United States and New York
- **Standard 3:** Geography
- **Standard 5:** Civics, Citizenship, and Government

#### **ELA Standards:**

- **Standard 1:** Students will read, write, listen, and speak for information and understanding.

- **Standard 2:** Students will read, write, listen, and speak for critical analysis and evaluation.
- **Standard 3:** Students will read, write, listen, and speak for social interaction.

**The Arts Standards:**

- **Standard 1:** Creating, Performing, and Participating in the Arts.
- **Standard 2:** Knowing and Using Arts Materials and Resources.
- **Standard 3:** Responding to and Analyzing Works of Art.

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## **Out of This World**

**Name of Participant(s):** Brandy Ducatte, Lisa Frechette

**Overview:**

With the science committee working on updating the curriculum guide, it has come to the attention of the first grade teachers at Bailey Avenue, that the topic of astronomy is not being taught as thoroughly as it needs to be. Though some of the key ideas are being addressed, the current lessons aren't as focused and in depth as they could be.

We find value in providing instruction on a topic throughout the curriculum. The current social studies textbook and the math Trailblazers program contain some lessons on the topic of astronomy. As a group, we would like to organize and pool our materials, and, research other resources, to enhance the existing unit of study.

We also continue to work hard to implement the Four Blocks framework into our instruction. The group would like to find appropriate literature to use during the self-selected and guided reading blocks. We would also like to develop astronomy lessons that will work in all four of the blocks.

**Length of Unit:** three weeks – fifteen days

**Grade/ Age Level:** grade 1/ ages 6-7

**New York State Standards Addressed:**

**Science Standard 4: The Physical Setting**

- Key Idea 1.1 Describe patterns of daily, monthly, and seasonal changes in the environment
- Key Idea 2.1 Describe the relationship among air, water, and land on Earth.